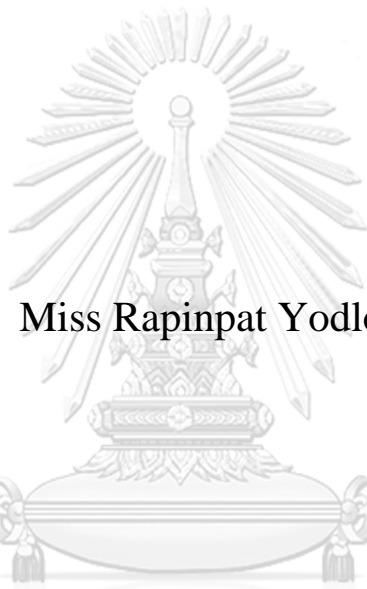


**Sexual Orientation Microaggressions and Mental Health
Concerns: A Conditional Process Modeling of Protective Effects
of Microaffirmations**



Miss Rapinpat Yodlorchai

จุฬาลงกรณ์มหาวิทยาลัย
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ความเป็นมา : ปัญหาสุขภาพจิตของกลุ่มคนที่มีความแตกต่างหลากหลายทางเพศ หรือ LGBTQ+ มีแนวโน้มจะแย่กว่าเมื่อเทียบกับกลุ่มชายรักหญิงหรือหญิงรักชาย การได้รับประสบการณ์การเหยียดเพศวิถีโดยนัย ที่มีความไม่ชัดเจน ไม่ตรงไปตรงมา โดยผู้กระทำตั้งใจหรือไม่ตั้งใจ อาจส่งผลให้บุคคลกลุ่มนี้เกิดปัญหาสุขภาพจิตได้ และในทางกลับกันการได้รับการสนับสนุนเพศวิถีโดยนัยก็น่าจะช่วยป้องกันผลกระทบต่อสุขภาพจิตได้เช่นกัน ในการศึกษากระบวนการเหล่านี้จึงจำเป็นต้องพัฒนามาตรวัดที่ผ่านการตรวจสอบคุณสมบัติการวัดทางจิตวิทยาและเหมาะสมสำหรับมิติวัฒนธรรมไทย **วัตถุประสงค์ :** วิทยานิพนธ์นี้ประกอบไปด้วยไปด้วยสองการศึกษาซึ่งมีเป้าหมายเพื่อ : 1) พัฒนาและตรวจสอบมาตรวัดภาษาไทยที่วัดการเหยียดเพศวิถีโดยนัย (T-SOMG) และการสนับสนุนเพศวิถีโดยนัย (T-SOMF) และ 2) ทดสอบโมเดลการวัดแบบมีเงื่อนไขที่อธิบายความสัมพันธ์ระหว่างการเหยียดเพศวิถีโดยนัย การสนับสนุนเพศวิถีโดยนัย การปกปิดเพศวิถี ความเชื่อทางลบต่อตนเองเรื่องเพศวิถี และปัญหาสุขภาพจิต (ความเครียด อาการวิตกกังวล และอาการซึมเศร้า) **ผลการศึกษา :** การศึกษาที่ 1 เป็นขั้นตอนการพัฒนามาตรวัดการเหยียดเพศวิถีโดยนัย (T-SOMG) และการสนับสนุนเพศวิถีโดยนัย (T-SOMF) ด้วยการวิเคราะห์ที่ผสมผสานระหว่างการทบทวนวรรณกรรม การปรึกษากับผู้เชี่ยวชาญ และการสัมภาษณ์เชิงลึกกับบุคคลในกลุ่มตัวอย่าง 20 คนที่เป็น LGBTQ+ เพื่อพัฒนาข้อควรระวังสำหรับมาตรวัด หลังจากนั้นนำไปวิเคราะห์องค์ประกอบเชิงสำรวจและองค์ประกอบเชิงยืนยัน ตรวจสอบความตรงเชิงเหมือนและความตรงเชิงข้ามแนก รวมทั้งวิเคราะห์ความเที่ยงด้วยการวิเคราะห์ความสอดคล้องภายในด้วยสัมประสิทธิ์โอมเก้า (ω_T) โดยเก็บข้อมูลจากผู้เข้าร่วมการศึกษา 384 คน ได้มาตรวัดการเหยียดเพศวิถีโดยนัย (T-SOMG) จำนวน 18 ข้อ แบ่งออกเป็น 2 องค์ประกอบ ได้แก่ การเหยียดเพศวิถีโดยนัยแบบตัวต่อตัว 9 ข้อ และการเหยียดเพศวิถีโดยนัยแบบบรรยากาศทั่วไป 9 ข้อ ค่าสัมประสิทธิ์โอมเก้าอยู่ที่ 0.92 ทั้งสององค์ประกอบ และมาตรวัดการสนับสนุนเพศวิถีโดยนัย (T-SOMF) จำนวน 13 ข้อ แบ่งออกเป็น 2 องค์ประกอบ ได้แก่ การสนับสนุนเพศวิถีโดยนัยแบบตัวต่อตัว 8 ข้อ และการสนับสนุนเพศวิถีโดยนัยแบบบรรยากาศทั่วไป 5 ข้อ มีค่าสัมประสิทธิ์โอมเก้าอยู่ที่ 0.90 และ 0.92 ตามลำดับ โดยทั้งสองมาตรวัดได้ผ่านการตรวจสอบคุณสมบัติการวัดทางจิตวิทยาทั้งความตรงและความเที่ยงในเกณฑ์ดีมาก การศึกษาที่ 2 เก็บข้อมูลกับผู้เข้าร่วมการศึกษา 307 คน โดยใช้มาตรวัดการเหยียดเพศวิถีโดยนัย (T-SOMG) และการสนับสนุนเพศวิถีโดยนัย (T-SOMF) ที่พัฒนาขึ้นจากการศึกษาที่ 1 พร้อมกับมาตรวัดมาตรฐานของตัวแปรต่าง ๆ ได้แก่ การปกปิดเพศวิถี ความเชื่อทางลบต่อตนเองเรื่องเพศวิถี และปัญหาสุขภาพจิต (ความเครียด อาการวิตกกังวล และอาการซึมเศร้า) วิเคราะห์สมมติฐานงานวิจัยด้วยโมเดลการวัดแบบมีเงื่อนไข โดยมีการปกปิดเพศวิถี และความเชื่อทางลบต่อตนเองเรื่องเพศวิถี เป็นตัวแปรส่งผ่าน และการสนับสนุนทางเพศวิถีโดยนัย เป็นตัวแปรกำกับ ผลการวิเคราะห์โมเดลการวัดแบบมีเงื่อนไข พบว่า การเหยียดเพศวิถีโดยนัยส่งผลทั้งทางตรงและทางอ้อมต่อสุขภาพจิต โดยอธิบายความแปรปรวนของปัญหาสุขภาพจิตได้ถึงร้อยละ 31.6. นอกจากนี้พบว่า ความเชื่อทางลบต่อตนเองเรื่องเพศวิถี เป็นตัวแปรส่งผ่านแบบอนุกรมลำดับที่ 1 และการปกปิดเพศวิถีเป็นตัวแปรส่งผ่านลำดับที่ 2 กล่าวคือ เมื่อบุคคลเจอเหตุการณ์การเหยียดเพศวิถีโดยนัย จะส่งผลให้มีความเชื่อทางลบต่อตนเองเรื่องเพศวิถีและทำให้เกิดการปกปิดเพศวิถีของตนเอง และนำไปสู่ปัญหาสุขภาพจิต รวมถึงพบว่าการสนับสนุนเพศวิถีโดยนัย เป็นตัวแปรกำกับความสัมพันธ์ระหว่างประสบการณ์การเจอการเหยียดเพศวิถีโดยนัยกับปัญหาสุขภาพจิต และอาจกล่าวได้ว่า เมื่อบุคคลได้รับการสนับสนุนเพศวิถีโดยนัยบ่อยครั้งจะทำให้ความสัมพันธ์ทางตรงเชิงลบระหว่างการเหยียดเพศวิถีโดยนัยและปัญหาสุขภาพจิตเบาบางลง แต่การสนับสนุนเพศวิถีโดยนัยไม่ได้กำกับความสัมพันธ์ระหว่างการเหยียดเพศวิถีโดยนัยและตัวแปรส่งผ่านทั้งสองตัวแปร **สรุป :** การศึกษานี้ได้พัฒนามาตรวัดการเหยียดเพศวิถีโดยนัย (T-SOMG) และการสนับสนุนเพศวิถีโดยนัย (T-SOMF) ที่เหมาะสมทางวัฒนธรรม เพื่อการประเมินประสบการณ์ของกลุ่ม LGBTQ+ คนไทย ผลจากการวิเคราะห์โมเดลการวัดแบบมีเงื่อนไขช่วยส่งเสริมความเข้าใจเกี่ยวกับกระบวนการทางสุขภาพจิตของกลุ่มประชากรนี้ และเน้นถึงปัญหาจากการเหยียดเพศวิถีโดยนัยที่ส่งผลต่อสุขภาพจิต รวมถึงความสำคัญของการสนับสนุนเพศวิถีโดยนัย ที่ช่วยลดอิทธิพลทางลบจากการเหยียดเพศวิถีโดยนัยต่อปัญหาสุขภาพจิตได้

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Rapinpat Yodlorchai : Sexual Orientation Microaggressions and Mental Health Concerns: A Conditional Process Modeling of Protective Effects of Microaffirmations. Advisor: Assoc. Prof. PANRAPEE SUTTIWAN, Ph.D. Co-advisor: Prof. Susan E. Walch, Ph.D.

Background: Mental health disparities existed globally for sexual minority populations compared to heterosexuals. Experiences of subtle discrimination called microaggressions contributed to poor mental health outcomes. Conversely, microaffirmations may buffer these negative effects. To further study these processes among lesbian, gay, bisexual, queer/questioning (LGBQ+) Thais, culturally validated tools were needed to quantify microaggression and microaffirmation experiences within Thailand's high-context culture. *Objectives:* This two-part study aimed to: 1) develop and validate Thai language scales measuring microaggressions and microaffirmations related to sexual orientation; and 2) test a conceptual moderated mediation model elucidating relationships between microaggressions, microaffirmations, sexual orientation concealment, internalized heterosexism, and mental health concerns (stress, anxiety, depression). *Study Summary: Study One* - Utilizing a three-phase mixed-methods approach involving a literature review, expert consultation, and in-depth interviews with LGBQ+ Thais, scale items were developed to reflect the cultural context. Rigorous psychometric analyses, including exploratory and confirmatory factor analyses, refined the item pools and confirmed the factor structures of the *Thai Sexual Orientation Microaggressions Scale (T-SOMG)* and the *Thai Sexual Orientation Microaffirmations Scale (T-SOMF)* (total $N = 384$). The final 18-item T-SOMG contains two subscales assessing Interpersonal and Environmental Microaggressions (McDonald's $\omega = 0.92$ for both). The 13-item T-SOMF comprises two subscales: Interpersonal and Environmental Microaffirmations ($\omega_T = 0.90$ and 0.92 , respectively). All of these findings exhibit strong psychometric properties, characterized by excellent reliability, robust convergent validity, clear discriminant validity, and a well-fitting model. *Study Two* - Using a separate community sample of 307 Thai sexual minorities, distinct from the participants in Study One, the newly developed scales were completed, along with standardized measures of internalized heterosexism, concealment, depression, anxiety, and stress. Advanced statistical modeling using serial mediation and conditional process analysis was conducted to test the hypothesized conceptual model. Results support the hypothesized model wherein microaggressions both directly and indirectly (via increased sexual orientation concealment) impacted mental health concerns. Microaggressions accounted for 31.6% of the variance in mental health. The path from microaggressions to concealment was mediated by internalized heterosexism. Microaffirmations mitigate the direct connection between microaggressions and mental health problems. As levels of microaffirmations increase, this relationship becomes less significant. *Conclusion:* This two-part study provides rigorous evidence for the reliability and validity of the T-SOMG and T-SOMF as culturally appropriate tools for assessing experiences among Thai LGBQ+ individuals. Findings also contribute significantly to the scientific understanding of minority stress processes and the protective effects of microaffirmations in this population.

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Chapter 1

Introduction

The primary aim of this doctoral dissertation was to enrich our understanding of the microaggressions that impacted the mental well-being of sexual minorities. We explored the psychological mechanisms that mediated and moderated the impact of microaggressions on mental health outcomes. In particular, we focused on the potential mitigating role of microaffirmations via a conditional process analysis. Specifically, we investigated whether internalized heterosexism and sexual orientation concealment mediated the relationship between stigma-related stressors (microaggressions) and mental health issues (anxiety, depression, and stress). Additionally, we examined if microaffirmations moderated these pathways. We applied Hatzenbuehler's (2009) psychological mediation framework to a sample of Thai sexual minorities aged 18 and above. This research promoted a respectful attitude in a society where historical practices have persistently propagated pervasive patterns of inequality.

This chapter gave an overview of mental health disparities among sexual minority individuals and discussed the theoretical framework that elucidated the prevalence of mental health issues. It reviewed the definition and measurement of microaggression, integrated relevant literature and provided evidence supporting the two mediators and one moderator affecting how microaggressions influenced mental health concerns. This review augmented and provided a foundational base for the proposed hypothesis model. The chapter also delineated the study's aims, research questions, and hypotheses.

Throughout this dissertation, the term "microaggression" referred to sexual

orientation microaggression, while “microaffirmation” pertained to sexual orientation microaffirmation. The author used the term “sexual minority” to describe individuals who do not identify as heterosexual or whose sexual orientation deviates from societal norms. This term was chosen for its capacity to encompass emerging identities (EIs) such as pansexual, asexual, demisexual, and various sexual orientations not currently recognized. Moreover, the term “sexual and gender minority” included both sexual orientation and recognized and unrecognized gender identities.

At a fundamental level, “stressors” were defined as “any condition with the potential to stimulate the adaptive machinery of the individual” (Pearlin, 1999, p. 163). More precisely, “stigma-related stressors” were stressors that originated from individuals with minority status in society, such as race, gender, or sexual orientation.

Lastly, heterosexism represented a form of oppression that systematically mistreated, neglects, or exploits certain individuals (those from oppressed/marginalized/stigmatized groups) based on their sexual orientation while favoring others (privileged group). As an ideological system that denied and stigmatized non-heterosexual forms, heterosexism operated at individual, institutional, and cultural levels (Herek, 1995). It assumed heterosexuality as the norm, thus framing non-heterosexuals as abnormal and favoring heterosexuals. This bias overlooked the needs, concerns, and life experiences of sexual and gender minorities (Szymanski, 2004; Szymanski & Chung, 2003; Szymanski et al., 2008).

Background of the Study

Substantial empirical evidence indicated greater mental and physical health concerns among sexual and gender minorities compared to their heterosexual counterparts. (Cochran, 2001; Gilman et al., 2001; King et al., 2008; Zeeman et al.,

2018). Increased instances of depression (Borgogna et al., 2019; Diaz et al., 2001; Fergusson et al., 1999), anxiety (Borgogna et al., 2019; Gilman et al., 2001; King et al., 2008), and greater rates of suicidal ideation (King et al., 2008; Perez-Brumer et al., 2017) were common among this group.

In their systematic review of 16 studies on sexual orientation and the prevalence of mental health concerns or conditions, Cochran and Mays (2013) found that sexual minority individuals reported higher levels of depressive distress, major depression, generalized anxiety disorder, panic attacks, and alcohol and drug dependency than heterosexual individuals. Sexual minority men exhibited higher rates of major depression, generalized anxiety disorder, panic attacks, alcohol dependency, and drug dependency than heterosexual men. Similarly, sexual minority women revealed a higher prevalence of major depression, generalized anxiety disorder, and alcohol dependency than heterosexual women.

Empirical evidence consistently showed that experiences of stigma-related stressors (i.e., discrimination, harassment, victimization, and microaggression) among sexual and gender minorities provoked undue stress leading to mental health morbidity (Herek et al., 2009a; Jackson et al., 2019; Meyer, 1995, 2003; Tucker et al., 2016) and physical health problems (Hatzenbuehler, 2009; Pascoe & Smart Richman, 2009; Walch et al., 2016; Williams & Mohammed, 2009). Moreover, the lack of protective laws against discrimination toward sexual and gender minority individuals correlated with lower earnings and poverty determinants among these populations, at least in the US (Badgett et al., 2013; Sears, 2019).

In Thailand, mental disorders among sexual and gender minorities were underreported and under-diagnosed, with no recognition of non-heterosexual

identities. Nonetheless, several studies have noted high levels of depression and stress within these communities (Pearkao, 2013). Transgender adolescents transitioning from male to female, in particular, reported higher depression rates, familial rejection, loneliness, and suicidal ideation compared to cisgender or heterosexual males (Yadegarfard et al., 2014). Additionally, victimization was correlated with elevated depression levels among lesbians (Boonkerd & Rungreangkulkij, 2014).

Approximately 3.6 million Thai individuals aged 15 years and over, equating to 5.1% of the total population, were identified as LGBT (L = lesbian, G = gay, B = bisexual, T = transgender) in 2020 (LGBT Capital, 2020). This sizable demographic illustrated a significant public health concern. Although Thailand was often viewed as an LGBTQ+ (lesbian, gay, bisexual, transgender, queer, plus other non-heterosexual or cisgender identities) friendly destination, recognized for its relative tolerance towards sexual and gender minority individuals, it remained a deeply conservative nation beneath the surface. Indeed, The World Value Survey 2020 found that half of the Thai participants deemed homosexuality as unjustifiable (Inglehart et al., 2020). Widespread institutional discrimination persisted, reflected in the absence of legal recognition for same-sex marriages and civil partnerships, and the lack of acknowledgment of sexual and gender minorities. This lack of recognition established a misleading social dynamic where prejudicial beliefs can be easily dismissed as the primary cause of ambiguous or unclear offensive incidents.

The limited scope of sex education in Thai schools, particularly regarding sexual orientation and gender identity, hindered young people's understanding and acceptance of sexual and gender minority individuals (Buck & Parrotta, 2013; Gegenfurtner & Gebhardt, 2017). This absence of comprehensive education could

lead to increased incidents of bullying and aggressive behavior towards these minorities (Russell et al., 2016; Snapp et al., 2015).

While social movements and equal rights initiatives significantly shifted attitudes and behaviors, fostering public awareness, the Thai government and its institutions have failed to fully mitigate prejudice and hostility towards sexual and gender minority individuals effectively. Heterosexism, a societal issue where heteronormativity was normalized and enforced, remains prevalent. Discrimination against non-heterosexuals persisted, often evolving into more covert and subtle forms. As societal norms shifted, heterosexism often manifested not as overt acts but as daily subtle and indirect instances. Overt or blatant forms of discrimination, deemed unacceptable due to social pressures and cultural influences, evolved into more covert and subtle forms. Sue et al. (2007) proposed a unified conceptualization for these non-overt forms of oppression, termed microaggressions.

Microaggressions are defined as subtle derogatory slights, insults, or indignities directed towards individuals of minority status(es), even if unintentional or unconscious on the part of the perpetrator (Sue, 2010b). They represent a subtle form of oppression or stigma-related stressors that negatively impact marginalized individuals, potentially leading to disputes about what constitutes an insult due to the ambiguity in interpreting such incidents. Empirical studies have shown an association between microaggressions and adverse mental health outcomes (Bissonette & Szymanski, 2019; Kaufman et al., 2017; Kulick et al., 2017; Sarno et al., 2020; Swann et al., 2016; Timmins et al., 2020; Woodford et al., 2014).

In contrast to microaggressions, microaffirmations refer to subtle or minor acts of acceptance, inclusion, or validation toward marginalized individuals (Rowe, 2008).

Microaffirmations may include verbal statements, nonverbal behaviors, or environmental cues that communicate positive recognition and support for minority group members. Experiencing microaffirmations could provide individuals with needed emotional resources to cope with stigma-related stressors. Initial research indicated microaffirmations may help reduce psychological distress among minority populations (Flanders, 2015; Sterzing & Gartner, 2020). Further research grounded in cultural and developmental perspectives is critically needed to elucidate microaffirmations' potential capacity to disrupt harmful minority stress processes and promote resilience among marginalized populations.

Significance of the Study

This dissertation held considerable significance, primarily due to its potential impact on understanding and aiding Thailand's sexual minority population. It comprised two intertwined studies, each focused on different aspects of the sexual minorities' experiences.

The initial study involved the development and validation of the Thai Sexual Orientation Microaggressions Scale (T-SOMG) and the Thai Sexual Orientation Microaffirmations Scale (T-SOMF). These culturally relevant tools were specifically designed to capture the unique experiences of sexual minorities in Thailand, thus filling a significant gap in research. This initiative aimed to shine a light on an underexplored area and equip researchers with robust instruments for further studies.

The second study intricately examined the complex relationships between microaggressions, internalized heterosexism, sexual orientation concealment, and mental health issues within the sexual minority population. Using a conditional process model, it also evaluated the moderating role of microaffirmations.

Specifically, it explored how microaffirmations might mitigate the direct and indirect detrimental effects of microaggressions on mental health.

Collectively, these studies contributed to the global academic conversation about sexual minorities' experiences. The insights obtained could inform the design of mental health interventions, the development of anti-discrimination policies, and the implementation of inclusivity training, within and beyond the Thai context. Consequently, this dissertation represented a critical step toward promoting health equity among sexual minorities and improving their overall well-being.

Purpose of the Study

This dissertation included two studies aimed at enriching the understanding of mental health professionals and researchers. They delved into the experiences of sexual minority individuals, examined the factors affecting their mental health outcomes, and suggested strategies to enhance the quality and efficacy of mental health care for these individuals.

Study One aimed to uncover the prevalence of various forms of microaggressions and microaffirmations among Thai sexual minorities. It intended to develop and validate the Thai Sexual Orientation Microaggressions Scale (T-SOMG) and Thai Sexual Orientation Microaffirmations Scale (T-SOMF), thereby exploring unique positive and negative experiences of sexual minority individuals.

Study Two sought to explore a conditional process model that proposed internalized heterosexism and sexual orientation concealment mediate the relationship between microaggressions and mental health issues, with the moderating influence of microaffirmations. This investigation involved four specific objectives: exploring the relationship between microaggressions and mental health issues; understanding the

mechanism underlying this relationship; determining the moderating effect of microaffirmations; and assessing the mediating roles of internalized heterosexism and sexual orientation concealment. By addressing these objectives, Study Two aimed to provide a comprehensive understanding of the complex interactions between these variables among sexual minority individuals in Thailand.

Sample Selection Criteria

The sample for the two studies consisted of Thai sexual minorities aged 18 and above, residing in Thailand, specifically focusing on individuals identifying within the LGBTQ+ spectrum. It is important to note that while this study aimed to examine sexual orientation microaggressions, individuals identifying as transgender (T) were not included due to the specific focus on sexual orientation-related experiences rather than gender identity-related microaggressions. This distinction was made to ensure a concentrated investigation into the nuances of sexual orientation microaggressions within this particular demographic.

Operational Definition of Key Terms

To ensure precise and unambiguous communication of critical concepts within this dissertation, key terms in the context of this study were defined as follows:

- **Microaggressions** (Independent variable) - Subtle and often unintentional derogatory slights, insults, or indignities directed towards sexual minority individuals are termed microaggressions. In this study, they are operationalized as the level of perceived microaggressions experienced by individuals over the past year. Participants self-reported using the 18-item Thai Sexual Orientation Microaggressions Scale (T-SOMG), developed in Study One. Higher average scores denote more regular encounters with microaggressions.

- **Microaffirmations** (Moderator) - Subtle gestures that recognize and embrace sexual minorities, fostering inclusivity and belonging. These gestures, usually unintentional, can be both expressed and perceived without direct awareness. In this study, they are defined by the level of perceived microaffirmations experienced by individuals over the past year. Participants self-reported their experiences using the 13-item Thai Sexual Orientation Microaffirmations Scale (T-SOMF), developed in Study One. Higher mean scores signify more frequent experiences of microaffirmations.
- **Internalized Heterosexism** (Mediator) - The internalization of a negative self-concept and negative perception of one's own sexual minority identity as a product of living within a heterosexist society. In this research, we utilize the Revised Internalized Homophobia Scale (IHP-R) by Herek et al. (2009b) for measurement. The IHP-R comprises five original items, which are freely accessible for non-commercial academic and research purposes, along with an added item modified by the researcher. Participants' responses were averaged, with higher mean scores indicating more profound internalized heterosexism.
- **Sexual Orientation Concealment** (Mediator) - The act or intention of hiding one's sexual minority status from others. In this study, this behavior is assessed using the 6-item Sexual Orientation Concealment Scale (SOCS) by Jackson and Mohr (2016). This scale is freely available for non-commercial research without author permission. Participants self-reported their tendencies on a scale ranging from 1 (not at all) to 5 (all the time). Higher mean scores signify a greater propensity for individuals to conceal their sexual orientation.
- **Mental Health Concerns** (Dependent variable) - Refer to a set of psychological

and emotional states that affect an individual's well-being. In this study, mental health concerns are operationalized based on participants' self-reported levels of stress over the past month and anxiety and depression over the preceding two weeks. The combined scores from stress, anxiety, and depression assessments are used in analyses, where higher scores denote heightened distress in each domain. The instruments utilized, available free of charge, are the 4-item Perceived Stress Scale-4 (PSS-4) by Cohen et al. (1983), the 7-item Generalized Anxiety Disorder scale (GAD-7) by Spitzer et al. (2006), and the 9-item Patient Health Questionnaire scale (PHQ-9) by Kroenke et al. (2001).

Outline of Dissertation Research

This dissertation comprised two distinct yet closely intertwined investigations, each constructed to amplify our comprehension of the encounters confronted by sexual minority individuals in Thailand. Chapter 2 commenced by providing a robust literature review, paving the path for the empirical inquiries that follow.

In Chapter 3, we unfurled the first empirical investigation, which encapsulated the formulation and validation of two innovative measures aimed at assessing the frequency and impact of both microaggressions and microaffirmations experienced by the Thai LGBTQ+ community. This endeavor bridged a noteworthy gap in the existing research.

Chapter 4 detailed the second empirical exploration, delving into the intricate relationship between microaggressions and mental health concerns or psychological distress, in form of stress, anxiety, and depression. This segment of the study scrutinized the potential mediating effects of internalized heterosexism and sexual orientation concealment within this relationship. Furthermore, it probed the

moderating role of microaffirmations, evaluating their potential to buffer or alleviate the said relationship.

Finally, Chapter 5 amalgamated the insights gathered from the preceding chapters, discussing their implications within larger frameworks. This concluding chapter pondered the contributions of the investigations to the broader field and proposed potential directions for future research, with the overarching objective of enhancing the experiences of sexual minority individuals in Thailand.



Chapter 2

Literature Review

In this chapter, evidence drawn from Meyer's (2003) minority stress framework, Hatzenbuehler's (2009) psychological mediation framework, and related research studies will be presented. These foundational concepts and research findings formed the basis for the hypotheses proposed in the forthcoming conditional process model. To provide context, we first explored two prominent theories that shed light on the heightened prevalence of mental health concerns among sexual minorities:

Minority Stress Theory

Meyer (2003) theorized that the occurrence of mental and physical health issues among marginalized groups correlated with a unique form of social stress or stigma-related stress, distinct from general stressors experienced by all individuals (refer to Figure A 1 in Appendix A). Meyer's minority stress model built on three assumptions:

- Uniqueness - minority stress represented an additional stressor affecting all individuals, requiring greater adaptive effort than that required by non-stigmatized people.
- Chronicity - minority stress correlated with relatively stable underlying social and cultural structures that persisted over time.
- Social Basis - minority stress stemmed from social processes, institutions, and structures beyond individual events or conditions and other non-social characteristics of the individual or group.

Individuals from marginalized populations encountered distinct minority-specific stressors, which compounded the general life stress experienced by all

individuals. The concept of minority stress, encompassing both distal and proximal stressors, played a pivotal role in mediating the relationship between social status and psychopathology. Distal stressors constituted external events or conditions, independent of the individual, such as discrimination, harassment, victimization, and microaggressions. In contrast, proximal stressors were subjective and reliant on individual perception and appraisal, encompassing factors such as the expectation of rejection, concealment of sexual orientation or gender identity, perceived stigma, and internalized stigma. Furthermore, marginalized individuals shared common challenges while also facing unique experiences shaped by factors such as race, gender, sexual orientation, disability, or ethnicity, which influenced their experiences in distinct ways.

A growing body of evidence suggested that stressors related to minority status uniquely predicted psychological stress. For instance, Wei et al. (2008) found that perceived discrimination directly affected depressive symptoms while controlling for perceived general stress. Meyer (2003) also included coping and social support within the minority stress model as moderators interacting with stressors in predicting adverse mental health outcomes.

Psychological Mediation Framework

Hatzenbuehler (2009) expanded upon Meyer's framework with three hypotheses. Firstly, sexual minority individuals encountered more intense stress exposure due to stigma. Secondly, stigma-related stress impacted an individual's coping abilities, general emotional dysregulation, social/interpersonal interactions, and cognitive processes, thereby elevating the risk for psychopathology. Thirdly, these processes mediated the relationship between stigma-related stress and

psychopathology. This framework emphasized general psychological processes such as coping strategies, emotion regulation, social or interpersonal interactions, and cognitive processes as mediators that stigma-related stressors activated, leading to adverse mental health outcomes (refer to Figure A 2 in Appendix A).

Hatzenbuehler's integrative mediation framework incorporated group-specific psychological processes as mediators between stigma-related stress and harmful mental health outcomes (refer to Figure A 3 in Appendix A). Group-specific mediators included proximal stressors such as expectations of rejection, internalized stigma, and concealment. He also proposed that some variables in his framework could act as either mediators (e.g., social support) or moderators.

Theory Comparison

While both Meyer's Minority Stress Theory (2003) and Hatzenbuehler's Psychological Mediation Framework (2009) addressed the unique stressors and ensuing mental health issues in sexual minorities, they approached these issues from different perspectives.

Meyer's theory (2003) spotlighted external minority stressors like discrimination, underscoring their relationship with mental health disparities. It proposed minority-specific proximal stressors (e.g., internalized stigma, rejection sensitivity, and identity concealment) as mechanisms but did not elaborate on general psychological processes (e.g., emotion regulation, rumination, and social support). Alternatively, Hatzenbuehler's framework (2009) delved deeper into individual mediating mechanisms, outlining general processes like rumination and emotion regulation alongside minority-specific mediators like internalized stigma. It presented an integrated, testable model examining how diverse mechanisms linking stress to

psychopathology operated concurrently.

In essence, while Meyer offered a sociological conceptualization focused on minority groups' external stressors, Hatzenbuehler provided an expanded psychological model detailing mediators. Utilizing both frameworks facilitated a multidimensional understanding of minority stress processes – recognizing sociocultural influences while also unpacking individual pathways through which stigma impacted mental health. Integrating macro- and micro-level insights was imperative for elucidating complex experiences of oppression.

Microaggressions

Pierce (1970) introduced the term “microaggression” to capture “demeaning slights or insults directed at individuals belonging to oppressed groups” (Torino et al., 2018, p. 3). Microaggressions constituted subtle, yet potent forms of discriminatory behavior that allowed privileged groups (such as heterosexuals) to assert, maintain, or express their dominance over marginalized groups (such as sexual minorities) based on race, gender, or sexual orientation. These insensitive messages often stemmed from implicit bias, subtly demeaning individuals from stigmatized groups and implying their alienation or inferiority.

The subtlety and ambiguity of microaggressions could make it challenging for the victims to discern if an offense had occurred. These incidents often escaped the consciousness of well-intentioned individuals, creating a psychological quandary for the victims about whether to take offense or determine a response. Victims commonly grappled with the implications of these incidents, which might have caused even more distress than overt bias because they were difficult to definitively attribute to group bias (Leets & Giles, 1997; Williams & Mohammed, 2009). Moreover, these

individuals may have avoided attributing the incident to bias to prevent feeling overly sensitive (Sue, 2018).

Manifestation of Microaggressions

The perception of oppression, whether it mirrored actual oppressive encounters or not, was crucially significant. It typically conveyed a sense of rejection or exclusion of the targeted group and its members, and had the potential to undermine their psychological well-being (Schmitt et al., 2014) by impinging on their needs for inclusion and acceptance (Wirth & Williams, 2009). Evidently, perceived discrimination had been linked to both psychological (Jackson et al., 2019) and physical health problems (Pascoe & Smart Richman, 2009). Importantly, the perception of these microaggressions, as captured through self-report assessments of victims' experiences, constituted sufficient evidence to represent the disparity in treatment between privileged and stigmatized groups.

Microaggressions manifested through verbal, nonverbal, or environmental instances. Interpersonal encounters might have involved verbal (such as direct or indirect comments) or nonverbal (body language or physical actions) microaggressions. Environmental microaggressions referred to the cumulative effect of subtle but demeaning cues communicated socially, educationally, politically, or economically to marginalized groups (Sue, 2010b; Sue et al., 2007). Such microaggressions could make individuals feel excluded based on social identity, without necessitating interpersonal interactions. Furthermore, individuals who consistently observed discriminatory behaviors in educational environments may have adopted these attitudes and reproduce the discriminatory behavior.

Microaggressions permeated individuals' daily lives across social groups,

forms of expression, and societal levels. The ensuing discussion outlined the common types of microaggressions, including forms of expression, themes related to sexual orientation microaggressions, and social levels. This taxonomy aimed to enhance understanding, identification, and interpretation of microaggressive incidents.

Sexual Orientation Microaggressions

Microaggressions targeted any social group that was marginalized or oppressed in society, encompassing, but not limited to, race, ethnicity, gender, gender identity, sexual orientation, ability, religion, class, and age (Nadal, 2008; Sue, 2010a, 2010b). Oppression based on social group membership could adopt various forms (e.g., racism, sexism, ageism, heterosexism, ableism, xenophobia) and was unique to each group. Both qualitative and quantitative research on heterosexism had provided myriad examples of microaggressions for each social subgroup (e.g., lesbian, gay, bisexual; Diplacido, 1998; Flanders et al., 2019; Kaufman et al., 2017; Nadal, 2019a) and had implied that heterosexual individuals retained a privileged status while sexual minorities continued to be oppressed within this social group categorization (David & Derthick, 2017; David et al., 2018; Sue, 2010a, 2010b). Nadal et al. (2010) had recognized eight themes of microaggressions:

- *Assumption of abnormality* arose when someone exhibited presumptive attitudes about sexual minorities being oversexualized or perceived as sexual deviants.
- *Assumption of universal LGBTQ experiences* appeared when individuals suggested that all sexual minority individuals formed a homogeneous group.
- *Denial of individual heterosexism* took place when an individual failed to see or admit their own heterosexist biases and insisted that they did not display behaviors indicative of heterosexism.

- *Denial of societal heterosexism* surfaced when someone failed to see or admit to the existence of heterosexist bias in society and asserted that societal heterosexism did not exist.
- *Discomfort or disapproval of LGBTQ experiences* occurred when someone expressed displeasure, dissatisfaction, or condemnation of LGBTQ people or LGBTQ experiences.
- *Exoticization* transpired when someone dehumanized or fetishized sexual minority individuals.
- *Endorsement of heteronormative culture or behaviors* developed when someone believed that heterosexuality was the only normal or acceptable sexual orientation, and that sexual minority individuals should conform to heteronormative norms.
- *Use of heterosexist terminology* happened when someone used heterosexist language to insult or demean sexual minority individuals.

Categories of Microaggressions

Initially, Sue (2010a, 2010b) divided microaggressions into three types based on their manifestations: microassaults, microinsults, and microinvalidations. These forms were differentiated by the conscious intent of the perpetrator, content, and the severity of the messages communicated.

Microassaults were deliberate and conscious acts that communicated discriminatory sentiments through verbal, nonverbal, and environmental means, mirroring traditional overt forms of discrimination (e.g., name-calling, avoidant behavior, or intentionally discriminatory actions). Conversely, microinsults and microinvalidations were unintentional and usually outside the perpetrator's awareness. Microinsults were conveyed through implications that perpetuated

negative stereotypical views of minorities (Tran & Lee, 2014) through exceptionalizing stereotypes or behaviors that appeared complimentary. For instance, suggesting that one should behave like a “normal” person, implying that “normal” referred to heterosexual individuals, constituted a microinsult. Victims of microinsults might be perceived as overly sensitive when they reacted. Microinvalidations were verbal comments or behaviors that excluded, negated, or dismissed the psychological thoughts, feelings, or experiential reality of oppression experienced by a marginalized group member. For instance, when a victim of microinvalidation confronted or complained about a behavior that conveyed a microinvalidation message, someone might respond with a statement like, “Are you jumping to conclusions?” Due to attributional ambiguity, the victims’ reactions to microinvalidations were often regarded as disproportionate, socially unacceptable, or misinterpreted.

Internalized microaggressions

Microaggressions occurred at interpersonal, institutional, and cultural levels, perpetuated by individuals within or outside one’s group (Sue, 2010b). They broadly fell into two categories: interpersonal and environmental (Woodford et al., 2013; Woodford et al., 2017). Interpersonal microaggressions entailed direct social interactions (micro) conveying derogatory messages, whereas environmental microaggressions (macro) mirrored society’s overall heterosexist climate. Despite the typical perpetration of microaggressions by members of privileged groups, marginalized groups could also perpetrate these against each other (Flanders et al., 2015; Galupo et al., 2016).

Internalized microaggressions denoted subtle, derogatory slights, insults, or demeaning behavior directed at sexual minority individuals by other sexual minority

individuals, knowingly or unknowingly (David et al., 2018). This phenomenon involved oppressed individuals perpetrating microaggressive indignities toward themselves (intrapersonal internalized microaggressions) or toward oppressed groups laterally (between or within groups). For example, lesbians might have used heterosexist language to refer to bisexual women (interpersonal between-group microaggressions) or gay men demeaning other gay men based on appearance (internalized within-group microaggressions). Oppressed group members might have internalized these stereotypical threats, engaging in disrespectful and damaging behavior toward themselves, within-group, and between-groups. This might have even more detrimental psychological effects than external microaggressions (David et al., 2018).

Gender could also influence heterosexism. For instance, gay men with high femininity might have faced more internalized microaggressions from other gay men, and these messages might have inflicted more harm than those from out-groups. Conversely, a lesbian with high masculinity might have encountered more insensitive or insulting messages from other sexual minority groups. These messages might have stemmed from sexism that devalues women exhibiting masculinity.

David et al. (2018) argued that microaggressive behavior from members of one's own social group could impact psychological and physical health equally or more than microaggressions from other groups. Like discrimination, within-group internalized microaggressions could have evoked feelings of betrayal, exclusion, and disruption of one's social network from individuals expected to be accepting, understanding, or supportive.

Study and Measurement of Microaggressions

Microaggressions were typically identified and assessed through several methods, including qualitative (Nadal et al., 2011) and quantitative (Nadal, 2019b; Woodford et al., 2014) approaches, which captured the experiences of marginalized groups. Early microaggression studies predominantly employed qualitative methods to understand the construct, manifestation, dynamics, and impact of this phenomenon. As the construct became more defined and precise, the emergence of quantitative research followed, including self-report surveys (e.g., recall-based or daily diary data collection) and experimental studies to measure psychological reactions to microaggressions.

Unlike explicit forms of oppression (e.g., discrimination or harassment), microaggressions were specific to distinct social groups, especially when culture or context shaped communication styles. Therefore, it was crucial to review the psychometric properties of existing microaggression scales before applying them to Thai culture.

Existing measurements could be divided into two categories based on the context of assessment. Firstly, six measures focus on the general context of daily life: *Homonegative Microaggressions Scale* (HMS; Wegner & Wright, 2016; Wright & Wegner, 2012), *Sexual Orientation Microaggression Inventory* (SOMI; Swann et al., 2016), *Experiential Social Climate: Distal and Proximal Environmental Microaggressions Scale* (ESCDPMS; Woodford, Pacey, et al., 2015), *Gender and Sexual Minority Microaggressions scale* (GSMM; Timmins et al., 2017), *Bisexual Microaggression Scales for Women* (BMS-W; Flanders et al., 2019), and *Sexual Orientation Microaggressions Scale* (SOMS; Nadal, 2019b). Second, three scales

were developed for specific contexts: on-campus - *LGBQ Microaggressions on Campus Scale* (LGBQMCS; Woodford, Chonody, et al., 2015), family setting - *LGBTQ Microaggressions and Microaffirmations in Families Scale* (LMMFS; Sterzing & Gartner, 2020), and workplace - *LGBT Microaggression Experiences at Work Scale* (LGBT-MEWS; Resnick & Galupo, 2019).

In terms of measuring the experiences of sexual minority sub-groups, three scales (HMS, ESCDMS, LGBQMCS) assess sexual orientation-related stressors among various sexual minority groups. One scale (BMS-W) focuses on microaggressions specific to bisexual women, while six instruments (SOMI, GSMM, SOMS, LMMFS, LGBT-MEWS) measure microaggressions among LGBTQ individuals without distinguishing between sexual orientation-related stressors or transgender status-related stressors.

Past reviews utilized scales based on experiences from American social contexts, predominantly including White or Black American samples. These may not have represented the experiences of sexual minority individuals in other world regions. Given cultural differences, offensive messages may have varied; while dynamics between privileged and stigmatized groups across cultures may have shared similarities, they were not identical. The intensity, manner, and expressions may have differed. For example, In Thailand, confrontational criticism was heavily avoided, as openly criticizing or challenging someone directly could cause humiliation and damage group harmony (Pimpa, 2012). Losing face was unacceptable in Thai culture, so disagreement was expressed indirectly through rhetorical questions or anecdotes that allowed the other person to save face. On the contrary, American culture endorsed frank, open critique between individuals (Stewart & Bennett, 1991).

Americans valued precise, unambiguous language, encouraging people to “say what they mean” directly instead of hinting. Thus, openly criticizing concepts in debates or offering blunt feedback between managers and employees was commonplace and seen as constructive communication in the U.S.

Microaggressions and Mental Health Concerns

Microaggressions could influence various aspects of life, including education, employment, and healthcare, reinforcing stereotypes about oppressed groups and exposing individuals to stereotype threats. Studies suggested that microaggressions could be harmful, regardless of whether they were perceived (Sue, 2010a; Wang et al., 2011). Due to their subtle and indirect communication style, coupled with attributional ambiguity (Wang et al., 2011) and predominantly unintentional nature, the damaging effects of microaggressions were often underestimated compared to explicit forms of oppression (such as discrimination, harassment, and physical assault). However, in contexts where indirect communication was commonplace and people were familiar with its nuances, the subtle insults within microaggressions might have been more readily apparent to the recipient. With greater exposure to and understanding of indirect communication norms, people in these contexts may have had an easier time detecting the subtle offenses and slights conveyed through microaggressions.

Microaggressions, considered an adverse life event on top of everyday stressors (Hatzenbuehler, 2009; Meyer, 2003; Sue, 2018), may have been perceived as threats to homeostasis by the body. The body responded by adapting to these challenges. However, repeated or prolonged physiological activation, in response to frequent exposure to these stressors, could have induced inflammatory states

potentially resulting in detrimental clinical features of depression and other mental and physical health issues (McEwen, 1998).

A 2011 qualitative study conducted by Nadal et al. explored the effects of microaggressions on mental health outcomes, psychological processes, and coping mechanisms among 26 sexual minority individuals. Their participants reported feeling distressed after an encounter and reported mental health issues such as depression, anxiety, suicidal ideation, self-destructive behaviors, and post-traumatic stress disorder attributed to microaggressions.

Numerous empirical studies utilizing a quantitative approach demonstrated associations between repeated exposure to and experience of microaggressions and cumulative harm among sexual minority individuals. This harm ranged from negative emotional responses and negative feelings about their sexual identity (Wright & Wegner, 2012) to lower self-esteem (Woodford et al., 2014; Wright & Wegner, 2012), suicidal ideation (Salim et al., 2019), and unfavorable mental health outcomes (Deitz, 2015; Schmitt et al., 2014; Timmins et al., 2020).

The term “mental health concerns” within this dissertation referred to psychological or emotional problems characterized by anxiety, depression, and stress symptoms, which resulted in response to stressors that exceed adaptational capacity or resources. This section focused on a total of twelve empirical studies examining the impact of sexual orientation microaggressions on anxiety, depression, and stress. A summary of each study’s characteristics and its effect size of microaggressions on anxiety, depression, and stress was found in Appendix B, Table B 1.

Nine studies employing cross-sectional and/or prospective design methods revealed that sexual minority participants (regardless of race and gender) who had

higher experiences of microaggressions reported heightened levels of depression, with a small to medium effect size (Bissonette & Szymanski, 2019; Kaufman et al., 2017; Kulick et al., 2017; Sarno et al., 2020; Swann et al., 2016; Timmins et al., 2020; Whicker, 2016).

Similarly, five studies showed a positive correlation between microaggressions and anxiety symptoms (Flanders, 2015; Seelman et al., 2017; Whicker, 2016; Woodford et al., 2014), with effect sizes ranging from .24 to .45 (small to medium). Moreover, four studies indicated a positive correlation between microaggressions and perceived stress among sexual minority participants, with a small to medium effect size (Flanders, 2015; Seelman et al., 2017; Whicker, 2016; Woodford et al., 2014).

The literature review demonstrated the need for further research to advance the field's understanding of the experience of microaggressions and their causal relation to mental health concerns. It was important to note that the published research on this topic had been conducted predominately in the United States and other Western nations, which limited the generalizability of findings to non-Western cultures and regions. This section discussed two hypothesized mediators expected to predict the outcomes and a moderator that mitigates the impact of microaggressions on mental health. Examining mediating processes and moderators may have helped bridge the apparent gap in understanding mental health concerns among sexual minority individuals, particularly in understudied cultural contexts.

Mediators

Numerous cross-sectional and prospective studies utilized Hatzenbuehler's (2009) integrated psychological mediation framework had established that general

psychological processes (e.g., rumination, emotion regulation) and group-specific processes (e.g., expectation of rejection, internalized heterosexism, sexual orientation concealment, also known as proximal stressors in Meyer's 2003 Minority Stress Model) served as pivotal mediators between stigma-related stressors (e.g., microaggressions, heterosexist experiences) and psychological outcomes (e.g., stress, depression, anxiety). Table B 2 in Appendix B provided supportive evidence of these indirect effects. The many significant relationships predicted by Hatzenbuehler's framework had been extensively tested.

Internalized Heterosexism

Internalized heterosexism refers to the absorption of negative societal attitudes towards sexual minority identity into one's self-concept (Shidlo, 1994; Szymanski, 2004; Szymanski & Chung, 2003; Szymanski et al., 2008). This internalization, conscious or not, results from the societal assumption of heterosexuality as the norm and non-heterosexuality as abnormal. According to Meyer's (2003) and Hatzenbuehler's (2009) framework, the ambiguity of microaggressions might encourage the internalization of self-negative attitudes due to the lack of an identifiable source to blame (Szymanski et al., 2008). This internalization can lead to harmful mental health outcomes.

Internalized Heterosexism and Mental Health Concerns

A meta-analysis of 31 studies, encompassing 5,831 individuals, by Newcomb and Mustanski (2010) unveiled a significant correlation between internalized heterosexism and increased depressive and anxiety symptoms among sexual minority men and women. This association was reinforced by the research of Kaysen et al. (2014) and Szymanski and Henrichs-Beck (2014), which affirmed the link between

internalized heterosexism and mental health issues in sexual minority women. A longitudinal study conducted by Pachankis et al. (2018) on young adult gay and bisexual men demonstrated that experiences of discrimination and sensitivity to gay-related rejection were linked to depression and social anxiety over an eight-year period. These studies substantiated a reliable correlation between internalized heterosexism and mental health issues across sexual minority men and women.

Seven studies explicitly examined internalized heterosexism (Deitz, 2015; Denton et al., 2014; Feinstein et al., 2012; Puckett et al., 2016; Szymanski & Ikizler, 2013; Timmins et al., 2020; Walch et al., 2016) substantially supported its mediating role in Hatzenbuehler's (2009) framework. This accentuated the need for further investigation into the mechanism linking stigma-related stressors and negative mental health outcomes.

Sexual Orientation Concealment

Sexual orientation concealment involved individuals' tendency to hide their minority status. Schrimshaw et al. (2013) suggested that while associated, concealment and disclosure of one's sexual orientation represented distinct dimensions. They cited research by Larson and Chastain (1990) who found a modest negative correlation ($r = -.27$) between concealment and disclosure measures. This indicated the constructs were related yet not merely two ends of the same spectrum. Individuals modified their behavior and expectations to align with the situation when encountering positive and negative experiences. In open, free, and candid environments, they were more likely to express personal feelings, thoughts, and identities, thereby reducing their propensity to hide their actual identity. However, in closed environments, they were less inclined to reveal themselves and may even

heightened their concealment (D'augelli & Grossman, 2001; Denton et al., 2014).

Sexual Orientation Concealment and Mental Health Concerns

Concealing one's sexual orientation potentially shielded sexual minorities from prejudiced events and distress, but it could also have led to long-term psychological burdens due to the demands required for successful concealment (Pachankis, 2007). Moreover, the concealment of sexual orientation was associated with depression and anxiety symptoms among sexual minority women (Lehavot & Simoni, 2011) and non-gay-identified, behaviorally bisexual men. This relationship was mediated by internalized homophobia (Schrimshaw et al., 2013).

Consistent results were reported among bisexual women. Dyar and London (2018) found that internalized bi-negativity positively correlated with depression and anxiety. In addition, Jackson and Mohr (2016) reported that both concealment behavior and motivation positively correlated with depression.

However, limited evidence supported Hatzenbuehler's framework for its mediating roles. Therefore, it was worthwhile to examine sexual orientation concealment as the mechanism between stigma-related stressors and psychological outcomes among Thai sexual minority individuals.

Moderator

The moderately to significantly high rates of mental health concerns among various populations, especially among sexual minorities, underscored the importance of investigating both negative and positive experiences within this demographic. It was well-established that positive experiences (i.e., social support, community connectedness, relationships, and LGBTQ identity affirmation) could serve as effective countermeasures to stressors (Hatzenbuehler, 2009; Meyer, 2003; Pascoe &

Smart Richman, 2009). Such experiences could stem from interpersonal or environmental factors across diverse settings, including family, friends, workplace, schools, among others.

The model proposed herein posited that microaffirmations could interact with stressors to lessen or mitigate the probability that stigma-related stressors would result in detrimental mental health outcomes. Microaffirmations, proactive and affirmative acts that may or may not be directly pertinent to ambiguously objectionable incidents (Grant et al., 2003), served as a protective factor per Fergus and Zimmerman (2005). It was critical to distinguish between microaffirmations and microaggressions, the latter being a risk factor, viewing them not as two ends of the same continuum but as distinct constructs.

The researcher's decision to select microaffirmations as a moderator variable was driven by the desire to understand the nuanced experiences of Thai sexual minorities, who encountered both subtly negative (microaggressions) and positive (microaffirmations) experiences. While Thai culture may not always overtly encourage sexual minorities to express their identities, small affirmative acts towards these individuals were prevalent. This study hypothesized that these acts had significant psychological impact.

Microaffirmations

Microaffirmations, as defined in this research as positive social interactions associated with one's sexual orientation, were subtle or minor acts of acceptance and acknowledgment that fostered inclusivity and a sense of belonging, mostly unconsciously from both the sender and the receiver (Rowe, 2008). When individuals received positive or affirmative self-recognition, it could alleviate external stress or

internalized minority stressors by reducing the perceived threat or challenge.

Microaffirmations could appear in both interpersonal interactions and environmental contexts as suggested by Sterzing and Gartner (2020). Interpersonal microaffirmations were acceptance and affirmation directed subtly or on a small scale towards sexual minority individuals by their social group members. For instance, a colleague inviting you and your same-sex partner to a work dinner party or friends using your preferred pronouns are forms of interpersonal microaffirmations.

Conversely, environmental microaffirmations were cues in the environment that encouraged the acceptance and acknowledgment of sexual minority individuals and LGBTQ communities. Examples included inclusive language used in laws, policies, and public discourse or your workplace having inclusive policies. These environmental cues conveyed broader acceptance. The literature review focused on favorable microaffirmations and events related to sexual orientation.

Microaffirmations and Mental Health Concerns

Positive sexuality-related experiences, including social support, peer relations, and microaffirmations, could assist sexual minority individuals during significant transitions, such as coming out to family, friends, or other social settings. Sufficient microaffirmations might provide an invaluable emotional resource to help cope with stigma-related stressors.

A body of research showed that social support could enhance coping ability or technique, potentially mitigating the threat appraisal of stigma-related stressors on mental health concerns among sexual minority adults (Graham & Barnow, 2013; Szymanski, 2009). Further, heightened levels of sexuality-related support lessened the harmful effects of sexuality-related stressors on mental health among sexual minority

youth (Doty et al., 2010). Dyar and London (2018) found that bi-positive events related to one's bisexual identity predicted decreases in negative feelings, uncertainty about one's bisexual identity, expectations of rejection, anxiety, and depression among bisexual women. These findings suggested that positive experiences rooted in bisexual identity could have fostered resilience and improve mental health outcomes.

However, the sexual orientation of social support providers remained a contentious point. While Sattler et al. (2016) reported that social support from both gay and non-gay individuals buffered the effect of internalized heterosexism on mental health concerns, Mereish and Poteat (2015) had found that only close relationships with sexual minority friends reduced mental health concerns (depression and anxiety) among sexual minority individuals with high internalized heterosexism. However, having friends from both heterosexual and sexual minority groups had been linked with mental health concerns among participants with low internalized heterosexism.

Past research on microaffirmations showed positive identity experiences to be associated with decreased anxiety and stress among bisexual individuals (Flanders, 2015) Further, microaffirmations may have buffered the impact of negative experiences on wellbeing. Sterzing and Gartner (2020) also found that interpersonal microaffirmations within a family setting were inversely related to depressive symptoms and emotional dysregulation. Simultaneously, environmental microaffirmations showed a negative correlation with post-traumatic symptoms and suicide attempts.

The study of microaffirmations was in its infancy, with minimal empirical research into such benevolent acts. Given this cultural context where subtle and

benevolent acts coexisted with displeasing ones, an exploration and examination of these constructs and their related mechanisms were deemed worthwhile. Specifically, existing research had examined if microaffirmations could moderate the association between microaggressions and mental health. Though investigations were few, some hypotheses suggested microaffirmations might alleviate the harmful impacts of microaggressions.

We aimed to delve deeper into the mechanisms of internalized heterosexism and sexual orientation concealment as mediators linking microaggressions and mental health issues. While structural equation modeling provided quantitative tests of direct and indirect effects, the complex lived experiences of sexual minorities warranted further qualitative investigation. Thus, this research focused on elucidating the nuanced pathways through which microaggressions might generate psychological distress, with concealment and internalized negativity as central mediating processes.

Research Questions and Hypotheses

We formulated the research objectives as three main questions, and the conceptual model is depicted in Figure 1.

Question 1: “Which types of microaggressions and microaffirmations are prevalent in Thailand?” This question probes into the range of microaggressions and microaffirmations experienced in Thailand.

Question 2: “What is the potential mechanism linking microaggressions to mental health concerns?” This question aims to investigate the underlying mechanism connecting microaggressions to mental health issues.

Question 3: “Can microaffirmations counteract the negative impact of microaggressions on mental health issues?” This question investigates whether

microaffirmations can alleviate the harmful effects of microaggressions on mental health problems.

The following hypotheses will be tested in light of these research questions:

H1: Mental health concerns will be positively correlated with microaggressions.

H2: Internalized heterosexism will mediate the relationship between microaggressions and mental health concerns partially and positively.

H2.1: There will be a positive correlation between microaggressions and internalized heterosexism.

H2.2: There will be a positive correlation between internalized heterosexism and mental health issues.

H3: Sexual orientation concealment will mediate the relationship between microaggressions and mental health issues partially and positively.

H3.1: There will be a positive correlation between microaggressions and sexual orientation concealment.

H3.2: There will be a positive correlation between sexual orientation concealment and mental health issues.

H4: Microaffirmations will moderate the direct and indirect relationships between microaggressions and mental health issues.

H4.1: The direct correlation between microaggressions and mental health issues will be moderated by microaffirmations, with the correlation being stronger for sexual minorities with a lower level of microaffirmations and weaker for those with a higher level.

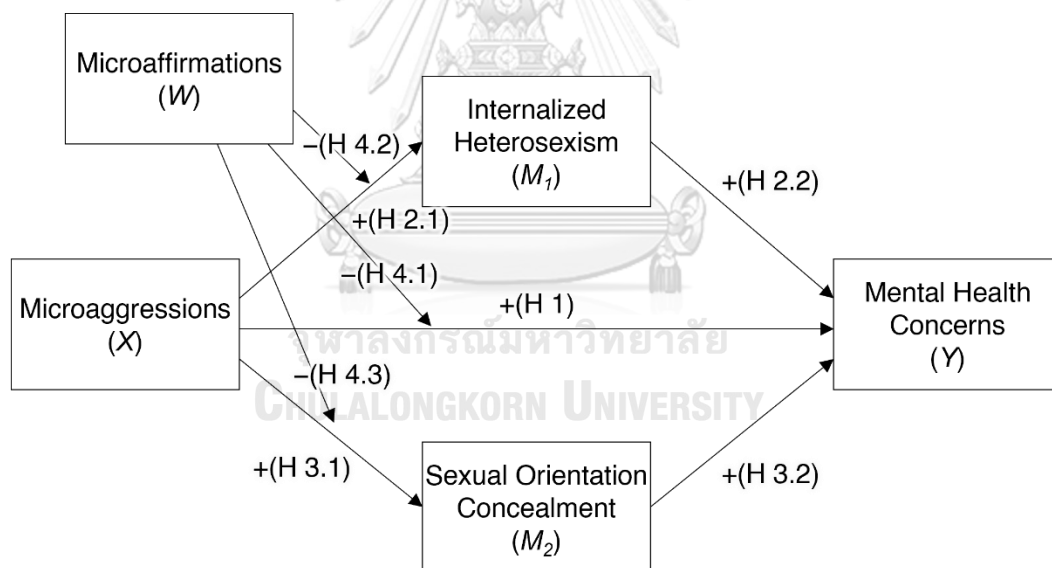
H4.2: The indirect effect of microaggressions on mental health issues through internalized heterosexism will be moderated by microaffirmations. The

indirect effect through internalized heterosexism will be stronger for sexual minority individuals with lower levels of microaffirmations and weaker for those with higher levels.

H4.3: The indirect effect of microaggressions on mental health issues through sexual orientation concealment will be moderated by microaffirmations. The indirect effect through sexual orientation concealment will be stronger for sexual minority individuals with lower levels of microaffirmations and weaker for those with higher levels.

Figure 1

The Proposed Conceptual Model



Note. The conditional process model posits that the effects of microaggressions on mental health problems may be mediated by internalized heterosexism and sexual orientation concealment and moderated by an individual's experiences of microaffirmations.

Chapter 3

Study One - Measurement Development

Introduction

The construction of culturally sensitive, accurate, and reliable instruments was pivotal for deepening our comprehension of the nuanced experiences faced by sexual minorities. This study aimed to address these requirements by investigating both positive and negative experiences, specifically microaggressions and microaffirmations, of sexual minorities in the Thai context. Despite the existence of current measures of microaggressions, the need to develop a new instrument arose due to contextual and cultural considerations unique to the Thai population. Consequently, we designed a three-phase, mixed-methods community-based study to develop and validate two novel scales: the Thai Sexual Orientation Microaggressions Scale (T-SOMG) and the Thai Sexual Orientation Microaffirmations Scale (T-SOMF).

In Phase 1, qualitative interviews with key informants who identified as sexual minorities were used to explore their encounters with microaggressions and microaffirmations within Thai society. The primary objective was to achieve an encompassing understanding of their cognitive and emotional responses to such experiences.

Drawing upon the insights from the first phase, Phase 2 engaged a different set of participants. The preliminary items that emerged from the initial phase were subjected to a content validity assessment and exploratory factor analysis. This procedure was crucial in assuring the statistical integrity and validity of our scales, rooting them firmly within the lived experiences of Thai sexual minorities.

Finally, in Phase 3, the refined instrument was administered to another cohort of participants to ascertain its generalizability and reliability. The goal was to establish the T-SOMG and T-SOMF as dependable instruments for broader use within the research community.

By employing a methodologically rigorous and culturally attuned approach, this study offered practitioners and researchers validated tools that encapsulate the unique microaggressions and microaffirmations experienced by LGBTQ+ individuals in Thailand. In doing so, it paved the way for future research and interventions tailored to address the specific stressors and protective factors relevant to this population.

Phase 1 - Interviews and Item Generation

The primary objective of this phase was to develop representative measurement items that capture the construct of interest by examining the form of microaggressions and microaffirmations. To achieve this, we conducted a thorough literature review, key informant interviews, and expert consultation to derive the initial measurement items.

Methods

Participants

In Phase 1 of Study One, a total of 20 participants were recruited. The age mean was 29.1 with a standard deviation of 7.9. In terms of the assigned sex at birth, the distribution was equitable with 50.0% ($n = 10$) identifying as male and 50.0% ($n = 10$) as female. The sexual orientation was spread across lesbian ($n = 5$, 25.0%), gay ($n = 6$, 30.0%), and bisexual identities, but there was a higher representation of bisexuals ($n = 9$, 45%). For gender identity, men ($n = 9$, 45%) and women ($n = 10$,

50%) had nearly equal representation, and there was a small presence of non-binary participants ($n = 1$, 5%). Most participants were residing in Bangkok ($n = 6$, 30.0%), and the majority were university degree holders ($n = 7$, 35.0%). The predominant religion was Buddhism ($n = 12$, 60.0%) and the employment status was mostly regular full-time ($n = 9$, 45.0%). In terms of relationship status, single/not dating ($n = 7$, 35.0%) and dating ($n = 7$, 35.0%) were equally represented. Demographic information was further displayed in Table B 3 (Appendix B).

Given that sexual minority individuals in Thailand often do not disclose their sexual orientation openly, identifying target participants posed a challenge. Consequently, when deciding on a method for key informant selection and sampling, we determined that convenience and snowball sampling were the most suitable techniques for this study. The inclusion criteria were communicated via word of mouth, specifying the desired key informants as individuals who: (a) self-identified as lesbian, gay, bisexual women or men, queer, attracted to more than one gender, attracted to the same sex, or did not identify as heterosexual, (b) were 18 years of age or older, (c) resided in Thailand, and (d) were willing to engage in a dialogue about microaggressions and microaffirmations.

Design and Procedure

The one-hour face-to-face interviews with key informants were conducted individually to maintain privacy and comfort while asking about positive and negative experiences related to their sexual orientation. The interview sessions were held in June and July 2019. The interview guide included questions focused primarily on the concept of sexual orientation microaggressions and microaffirmations, how, where, and when they were perpetrated, such as, *“What kind of subtle behavior, action,*

statement, or question have people made you feel offensive or objectionable as a sexual minority person, including ambiguous situations? (พฤติกรรม การกระทำ หรือคำพูดแบบใดที่ทำให้คุณรู้สึกว่าคุณเองถูกเหยียดหรือทำให้คุณเกิดความรู้สึกไม่พึงพอใจ เนื่องจากการที่คุณเป็นคนในกลุ่มคนที่มีความหลากหลายทางเพศ อาจรวมไปถึงเหตุการณ์ที่มีความคลุมเครือ)”, “*What kind of behavior, action, statement have people made you feel encouraged or favorable as a sexual minority person, including ambiguous situations?* (พฤติกรรม การกระทำ หรือคำพูดแบบใดที่ทำให้คุณรู้สึกว่าตนเองได้รับการสนับสนุนหรือทำให้คุณเกิดความรู้สึกได้รับการยอมรับในการเป็นคนในกลุ่มคนที่มีความหลากหลายทางเพศ อาจรวมไปถึงเหตุการณ์ที่มีความคลุมเครือ)”, and “*What stereotypical assumptions have people made about you because you are a sexual minority person?* (ภาพจำหรือการคาดเดาแบบไหนที่คุณมักได้รับจากคนอื่น เนื่องจากการที่คุณเป็นคนในกลุ่มคนที่มีความหลากหลายทางเพศ).”

An initial set of the items (94-items of T-SOMG and 25-items of T-SOMF) was developed from the result of literature reviews, examining various forms of microaggressions and subtle unpleasant experiences, and key-informants interviews (85-items of T-SOMG and 14-items of T-SOMF), including microaggressions and microaffirmations scale from other studies (9-items of T-SOMG and 11-items of T-SOMF), which LGBTQ+ expert and researcher vetted.

Participants who had been interviewed individually reviewed and rated each initial item, using a five-point scale, on the following characteristics:

- (a) Relevance, whether it was relevant to measuring microaggressions and microaffirmations: 1 = Affirmative, 2 = Moderately affirmative, 3 = Mixed feeling, 4 = Moderately offensive, 5 = Offensive (reverse score for T-SOMF)
- (b) Subtlety, whether it was blatant or subtle: 1 = Highly blatant, 2 = Moderately blatant, 3 = Slightly subtle, 4 = Moderately subtle, 5 = Highly subtle

- (c) Commonness, whether it had happened explicitly to oneself: 1 = Unique, 2 = Moderately unique, 3 = Slightly common, 4 = Moderately common, 5 = Common experience
- (d) Impact, whether it induced negative feelings for microaggressions and positive feelings for microaffirmations: 1 = Not at all, 2 = A little, 3 = Moderately, 4 = Quite a bit, 5 = Extremely.

Results

The 36 items of T-SOMG and two items of T-SOMF that averaged a rating of (a), (b), (c), and (d) less than 3.5 from the participants' feedback were dropped for congruence with the primary definition, item clarity, redundancy, and language accessibility. Table B 4 in Appendix B provided a summary of the number of items in each stage.

Discussion

Phase 1 of the study provided a thorough understanding of the experiences of Thai sexual minorities regarding microaggressions and microaffirmations. The diverse participant pool enriched our data, although engaging this population was challenging due to the sensitive topic and cultural stigma.

The qualitative interviews created an open space for participants to share their experiences, highlighting the varied ways in which these subtle behaviors affected their lives. The feedback gathered from these interviews was invaluable in creating the initial items for the Thai Sexual Orientation Microaggressions Scale (T-SOMG) and the Thai Sexual Orientation Microaffirmations Scale (T-SOMF).

Feedback from participants concerning the relevance, subtlety, commonness, and impact of the items helped refine the scales, ensuring their applicability to the

Thai context. Nevertheless, the small sample size and the chosen sampling method may have limited the generalizability of our findings. These factors were considered in the subsequent phases of the study.

Phase 2 - Item Purification and Refinement

This phase aimed to refine the measure that could assess the life events across sexual minorities individuals. Two criteria were employed to refine the measures: (1) each item had to reflect ambiguous or discriminatory for T-SOMG and unclear or pleasant for T-SOMF, and (2) congruency of exposure to microaggressions and microaffirmations experiences. The instrument's validity was assessed using exploratory factor analysis with principal axis factoring to identify the underlying factor structure of the items and understand the core themes of microaggressions and microaffirmations experienced by the population under study.

Methods

Participants

The same sampling method in Phase 1 was applied in this phase. Participants of Phase 2 were recruited via word of mouth and social media, predominantly Facebook and Twitter, which stated that people who (a) self-identified as lesbian, gay, bisexual women, bisexual men, queer, as attracted to more than one gender, as attracted to the same-sex, or not identified as a heterosexual person (b) were age 18 years or older (c) resided in Thailand (d) were interested in a 30-minutes online survey about sexual minority's positive and negative experiences.

For Phase 2 of Study One, the participant pool was larger, with 164 individuals. The average age of the participants was 30.1 years ($SD = 9.7$). The participants predominantly identified as female ($n = 91, 55.5\%$) compared to male (n

= 73, 44.5%). The sexual orientation distribution was diverse, with the largest groups identifying as lesbian ($n = 62$, 37.8%) and gay ($n = 62$, 37.8%). Regarding gender identity, the majority of participants identified as women ($n = 75$, 45.7%), followed by men ($n = 63$, 38.4%), and non-binary individuals ($n = 26$, 15.9%). Most participants were educated to university level ($n = 105$, 64.0%). A clear majority identified as Buddhist ($n = 125$, 76.2%) and were in regular full-time employment ($n = 86$, 52.4%). The largest proportion of participants reported being single and not dating ($n = 73$, 44.5%). The participants' demographic information was further delineated in Table B 3 (Appendix B).

Design and Procedure

The questionnaire survey was designed to reach sexual minority individuals throughout Thailand using an online format via the website formr.org. This allowed for easy accessibility for those located in rural areas and anonymous participation in the survey. The consent form was presented on the first page after participants clicked on the link to enter the survey. It explained the nature of the survey, risks, and benefits. All measures were in Thai. The questionnaires covered demographic variables, a 58-item scale of microaggressions, and a 23-item scale of microaffirmations. Participants were asked to rate each item based on two characteristics: relevance and frequency.

(a) Relevance of the item content was measured using a 4-point scale, with the

following options:

- T-SOMG: 1 = affirmative, 2 = neutral, 3 = ambiguous (to determine whether it is offensive), 4 = offensive
- T-SOMF: 1 = offensive, 2 = neutral, 3 = ambiguous (to determine whether it

is affirmative), 4 = affirmative

- (b) Frequency of personal experience with the items content was measured using a 7-point scale, with the following options: 1 = Never, 2 = Rarely, 3 = Occasionally, 4 = Sometimes, 5 = Frequently, 6 = Usually, 7= Every day.

Results

Sixteen items of T-SOMG and five items of T-SOMF were dropped due to less than 75% of respondents reporting that items reflected objectionable and supportive experiences, respectively. The frequency of experiences was the second criteria to craft the scale, which resulted in 16 items of T-SOMG being dropped due to more than 35% of participants rating 1 = never, and 15% rating 2 = rarely on Frequency characteristics. It was important to note that no items in the T-SOMF scale were dropped based on this criterion.

Exploratory Factor Analysis (EFA)

To explore the underlying dimensions of the psychological constructs and avoid the assumption of error-free items, we employed Exploratory Factor Analysis (EFA) using Principal axis factoring (PAF) as the extraction method (Fabrigar et al., 1999). We applied PAF to the remaining 26 items for the T-SOMG and the remaining 18 items for the T-SOMF using the R program and the “psych” package (Revelle, 2021).

Initially, we adopted the Kaiser-Meyer-Olkin (KMO) and Bartlett’s Test of Sphericity to determine the sampling adequacy. The KMO was 0.93 for both scales, indicating the sample’s adequacy by measuring the degree of common variance among items that could be explained by a latent variable (Hair, Black, et al., 2019; Lorenzo-Seva et al., 2011). Bartlett’s Test of Sphericity was significant (T-SOMG: χ^2

[25] = 133.300, $p < .001$; T-SOMF: $\chi^2 [17] = 32.498, p = .013$), suggesting sufficient correlations among variables (Field, 2013).

Initial eigenvalues, scree plots, and parallel analysis were used to determine factor retention. For parallel analysis, observed eigenvalues that exceeded the 95th percentile of values from randomly drawn samples were retained. Initial eigenvalues from factor analysis suggested retaining either two factors for the T-SOMG or two to three factors for the T-SOMF, as values exceeded the 95th percentile of corresponding eigenvalues from parallel analysis. However, inspection of the scree plots showed a clear inflection point after two factors for both the T-SOMG and T-SOMF measures. Results from parallel analysis also indicated retaining two factors for both measures. Based on these multiple lines of evidence, two factor solutions were retained for the final models of both the T-SOMG and T-SOMF.

The appropriate cutoff value for factor loadings was determined based on recommendations from seminal textbooks. Tabachnick and Fidell (2019) propose minimum loadings of .32 are acceptable, while Hair, Black, et al. (2019) suggest factor loading cutoffs of .40 for sample sizes around 200. Given the exploratory nature of this analysis and the sample of 200 participants, a loading cutoff of .35 was chosen between these established guidelines.

Of the original 26 items in the T-SOMG, we retained a total of 22, explaining 47.0% of the variance after removing 3 items with communalities less than .35 (Eaton et al., 2019) and 1 item with a high cross-loading greater than .32 (Tabachnick & Fidell, 2019). We labeled Factor 1 as “Interpersonal Microaggression,” which comprised 13 items and accounted for 23.6% of the variance. Factor 2, “Environmental Microaggression,” consisted of 9 items and explained 23.4% of the

variance. For the T-SOMF, all 18 items were retained, accounting for 51.9% of the variance. We named the first factor “Interpersonal Microaffirmation,” which consisted of 10 items and explained 24.9% of the variance. The second factor, “Environmental Microaffirmation,” comprised 8 items and explained 27.1% of the variance. Communalities ranged from .36 to .88 for the T-SOMG and from .38 to .91 for the T-SOMF.

Discussion

Phase 2 aimed to refine the scales developed in Phase 1, focusing on maintaining items that reflected commonly encountered, ambiguous or discriminatory experiences (T-SOMG) and small acts or pleasant experiences (T-SOMF) to ensure the scales’ alignment with microaggressions and microaffirmations experiences. The increased sample size enabled us to reach a wider range of individuals within the sexual minority community in Thailand. Additionally, the online survey format ensured anonymity and increased access to individuals outside of urban areas.

Participants’ feedback regarding item relevance and frequency was pivotal in item purification, leading to the removal of 16 items in T-SOMG and five items in T-SOMF that did not adequately reflect the desired experiences. This reiterated the importance of participant feedback in ensuring the scales were relevant and sensitive to the target population’s experiences.

The application of Principal Axis Factoring (PAF) further refined our scales, identifying underlying dimensions of the constructs. The resulting factors within the T-SOMG were categorized as “Interpersonal Microaggression” and “Environmental Microaggression.” These designations were derived from the content of items within each factor. “Interpersonal Microaggression” covered experiences predominantly

occurring within personal interactions, exemplified by items like *“My behavior/mannerism has been mocked because I am LGBTQ+”*. In contrast, “Environmental Microaggression” encompassed experiences stemming from the broader social or environmental context, as seen in items like *“Media use negative language/ connotations when explaining the sexualities of LGBTQ+ individuals.”*

Conversely, in the T-SOMF scale, factors “Interpersonal Microaffirmation” and “Environmental Microaffirmation” were coined to symbolize positive interactions and affirmations. “Interpersonal Microaffirmation” embodies positive personal interactions, such as *“Someone respects my opinion on sexual diversity.”* Meanwhile, “Environmental Microaffirmation” illustrates affirmations from the broader societal context, as seen in items like *“People in society understand and accept that men do not have to be attracted to a woman and vice versa.”*

These factors revealed that microaggressions and microaffirmations occurred both at the interpersonal and environmental level, indicating the influence of social and cultural contexts on individuals’ experiences. However, the study’s limitations, such as reliance on self-reported data and a predominantly urban and educated sample, may have affected the representativeness of the results. These factors should be considered in subsequent phases and future research.

Phase 3 - Measurement Validation

To assess convergent validity, Pearson’s correlations were calculated between the T-SOMG and a perceived discrimination scale, and between the T-SOMF and a social support scale. Positive correlations were expected given the comparable constructs measured by each scale pair. Discriminant validity was evaluated by examining correlations between the T-SOMG and a social desirability scale, and the

T-SOMF and a social desirability scale, with the expectation of finding low correlations. Confirmatory factor analysis was also conducted to verify the underlying factor structure of the T-SOMG and T-SOMF. Reliability was evaluated using McDonald's Omega (ω_T). Taken together, the confirmatory factor analysis, correlations with related and unrelated scales, and reliability testing allowed comprehensive establishment of the psychometric properties of the T-SOMG and T-SOMF.

Methods

Participants

In Phase 3 of Study One, there were 200 participants, with a mean age of 24.7 years ($SD = 5.4$). The majority of the participants were female ($n = 162, 81.0\%$), and the sexual orientation representation was again diverse. The largest group identified as lesbian ($n = 73, 36.5\%$). A majority identified as women ($n = 108, 54.0\%$) in terms of gender identity. Most participants had a university degree ($n = 136, 68.0\%$), and the majority identified as Buddhist ($n = 119, 59.5\%$). The largest employment category was students ($n = 75, 37.5\%$), and most participants were single and not dating ($n = 94, 47.0\%$). Table B 3 (Appendix B) expounded upon the demographic details of the study participants.

Materials

Demographic Variables. Data were collected on age, sexual orientation, sex assigned at birth, gender identity, area of residence, educational level, religious affiliation, employment status, outness, and relationship status.

Prejudice Events. The frequency of experiencing heterosexist harassment, rejection, and discrimination within the past year was measured using the 14-item

Heterosexist Harassment, Rejection, and Discrimination Scale (HHRDS) developed by Szymanski (2006). Originally designed for lesbian and gay individuals, some items were modified to be applicable to LGBTQ individuals. The HHRDS comprises three subscales: Harassment and Rejection (7 items; e.g., *“How many times have you experienced rejection from family members because of your sexual orientation?”*), Workplace and School Discrimination (4 items; e.g., *“How many times have you been treated unfairly by co-workers, fellow students, or colleagues because of your sexual orientation?”*), and Other Discrimination (3 items; e.g., *“How many times have you been treated unfairly by strangers because of your sexual orientation?”*). Each item on the scale was rated on a six-point Likert scale, ranging from 1 (the event has never happened) to 6 (the event occurred almost all the time; more than 70% of the time). An average score was calculated, with higher scores indicating a higher frequency of experiences of heterosexist harassment, rejection, and discrimination in the past year. The psychometric properties of the HHRDS had been examined and validated with samples of sexual minority individuals. Previous studies reported satisfactory internal consistency for the HHRDS subscales, with a lesbian sample demonstrating a coefficient alpha of 0.90 (Szymanski, 2006) and a gay and bisexual male sample showing a coefficient alpha of 0.91 (Szymanski, 2009). The subscales of the HHRDS have demonstrated moderate to high alphas (ranging from 0.78 to 0.89). The validity of the HHRDS subscales was supported by exploratory factor analysis and significant positive associations with overall psychological distress, somatization, obsessive-compulsiveness, interpersonal sensitivity, depression, and anxiety (Lehavot & Simoni, 2011; Szymanski, 2006, 2009). In the present study, the HHRDS exhibited high reliability in a sample of Thai LGBTQ+ individuals, with a McDonald’s omega (ω_T)

value of 0.94 and a Cronbach's alpha (α) value of 0.91.

Social Support. The degree to which participants relied on others' support to manage various life situations was assessed using the 11-item MOS Social Support Survey (MOS-SSS) developed by Sherbourne and Stewart (1991). The survey consisted of four separate subscales measuring different aspects of social support. For the purpose of this study, only two subscales were utilized: "emotional/informational social support" and "positive social interaction." The emotional/informational support subscale included eight items (e.g., "Do you have someone you can rely on to listen to you when you need to talk?"), while the positive social interaction subscale comprised three items (e.g., "Do you have someone to have a good time with?"). Each item on the MOS-SSS was rated on a five-point Likert scale, ranging from 1 (none of the time) to 5 (all of the time). An average score was computed, with higher scores indicating a greater perception of social support. Previous studies reported adequate internal consistency for all subscales of the MOS-SSS, with a coefficient alpha of 0.91 observed in a sample of young bisexual people of color (Sherbourne & Stewart, 1991) and coefficients higher than 0.91 reported by Sherbourne and Stewart (1991). The MOS-SSS was translated into Thai and reviewed by experts. In the current study, the translated scale exhibited excellent reliability, with a McDonald's Omega (ω_T) of 0.98 and a Cronbach's alpha (α) of 0.97.

Social Desirability. The extent to which respondents presented their answers in a socially desirable manner, depicting desirable yet improbable traits, on self-report surveys was assessed using the 13-item short form of the Marlowe-Crowne Social Desirability Scale (MCSDS) developed by Crowne and Marlowe (1960). Items on the scale reflected statements such as "I have never deliberately said something that hurt

someone's feelings." Participants responded to each item using a binary response format, indicating either "True" or "False." A score of one was assigned to each "True" response and zero to each "False" response. The total score was obtained by summing the points assigned to the "True" responses. The MCSDS has demonstrated satisfactory internal consistency in previous studies, with coefficients of 0.94 reported by Wright and Wegner (2012) and 0.65 reported by Jackson and Mohr (2016). In the current study, the scale exhibited acceptable reliability, as indicated by a McDonald's omega value (ω_T) of 0.78 and a Cronbach's alpha value (α) of 0.72.

Design and Procedure

The questionnaire survey was designed to reach sexual minority individuals throughout Thailand by using an online format via the website Google Forms to allow easy accessibility for those located in rural areas. The consent form was on the first page after participants clicked on the link to enter the survey, explaining the nature of the survey, risks, and benefits. All measures were in Thai. Questionnaires covered demographic variables, microaggressions, microaffirmations, prejudice events, social support, and social desirability. Participants were asked to respond to how often they encountered each item of T-SOMG and T-SOMF in the past year.

The total sample size for this phrase was 200 participants. All 200 participants answered the two scales developed for this research. Additionally, as part of assessing convergent and discriminant validity, a subset of 147 participants was randomly selected to comprehensively complete all five research instruments. This decision to have a subgroup complete only the focal scales helped reduce participant burden from lengthy surveys. It also ensured we had sufficient data to conduct comprehensive validity testing on the full set of measures, while minimizing fatigue effects in the

subsample completing the new scales. In essence, the missing data on some instruments for 53 participants was structured intentionally based on the study design and goals. This planned missing data approach allowed us to balance validity analyses for the 5 scales with participant response quality on the newly created focal measures.

Results

One item of T-SOMG was removed because more than 35% of participants rated 1 = never and 15% rated 2 = rarely on that item.

Confirmatory Factor Analysis (CFA)

We used the R program with the latent variable program “Lavaan” (Rosseel, 2012) to conduct a second-order confirmatory factor analysis for 21 items of T-SOMG and 18 items of T-SOMF. We used Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA), Non-Normed Fit Index (NNFI; Tucker Lewis Index; TLI), and the Standardized Root-Mean Square Residual (SRMR) as the main fit indices to validate the model. The criterion for acceptable fit was as follows: CFI and NNFI/TLI were equal to or above 0.90, and SRMR and RMSEA were equal to or less than 0.08 (Awang, 2012; Byrne, 2012; Hair, Black, et al., 2019; Kline, 2005).

In line with the guidelines for confirmatory factor analysis provided by Tabachnick and Fidell (2019) and Hair, Black, et al. (2019), items that had factor loadings below 0.4 or cross-loadings above 0.32 were excluded to enhance the model’s alignment and validity. Upon closer examination of the modification indices, items manifesting notable cross-loadings were distinctly identified. As a result, three items were omitted from the T-SOMG, and five from the T-SOMF due to their inadequate alignment with the intended factors. Beyond these item removals based on

the analysis, the original factor structures for both T-SOMG and T-SOMF were largely maintained without additional substantial changes.

The results of the second-order confirmatory factor analysis (CFA) supported the hypothesized model for T-SOMG and T-SOMF. T-SOMG consisted of 18 items that measured interpersonal and environmental microaggressions, and the fit indices were $\chi^2(133, N = 200) = 274.387, p < .001, \chi^2/df = 2.063$; CFI = 0.924, NNFI/TLI = 0.913, RMSEA = 0.073, which was significantly higher than 0.05 (90 %-CI [0.061; 0.085]), SRMR = 0.059. The standardized factor loadings for the first-order factors varied from 0.58 to 0.81 for the Interpersonal Microaggressions subscale and from 0.45 to 0.88 for the Environmental Microaggressions subscale, indicating that all items had strong relationships with their respective factors. The standardized factor loadings for the second-order factor were 0.74 for Interpersonal Microaggressions and 0.75 for Environmental Microaggressions, indicating that the data supported the second-order CFA model well and that the Microaggressions construct represented the relationship between Interpersonal and Environmental Microaggressions accurately (see Figure A 4 in Appendix A and Table B 5 in Appendix B).

The -SOMF, consisting of 13 items, measures interpersonal and environmental microaffirmations. The fit indices were $\chi^2(63, N = 200) = 121.957, p < .001, \chi^2/df = 1.936$; CFI = 0.957, NNFI/TLI = 0.947, RMSEA = 0.068, significantly greater than 0.05 (90%-CI [0.050; 0.086]), and SRMR = 0.051. Both factors fell within acceptable ranges for the fit indices. The standardized factor loadings for the first-order factors varied from 0.58 to 0.79 for the Interpersonal Microaffirmations subscale and from 0.67 to 0.91 for the Environmental Microaffirmations subscale. These results indicate that all items had moderate to strong relationships with their respective factors. The

standardized factor loadings for the second-order factor were 0.56 for Interpersonal Microaffirmations and 0.61 for Environmental Microaffirmations, indicating strong relationships between the two first-order factors and the second-order factor. These results suggested that the second-order CFA model provided a good fit for the data, reinforcing the validity of the Microaffirmations construct as a representation of the relationship between Interpersonal and Environmental Microaffirmations. For additional details, please refer to Figure A 5 in Appendix A and Table B 6 in Appendix B.

Correlational analyses were conducted between the subscales and total scores of the T-SOMG and T-SOMF scales, and other validated measures (HHRDS, MOS-SSS, MCSDS), with 147 participants. The T-SOMG interpersonal and environmental microaggressions subscales were correlated at 0.47 ($p < 0.001$). The T-SOMF interpersonal and environmental subscales were correlated at 0.36 ($p < 0.001$). These results showed moderate inter-correlations between the T-SOMG subscales, indicating they assess related constructs. The T-SOMF subscales also had significant inter-correlations, though weaker, suggesting they assess more distinct but still related constructs. Based on the magnitude of the coefficients, the T-SOMG subscales appeared more closely related than the T-SOMF subscales.

Convergent and Discriminant Validity

To assess the construct validity of the scales, we performed Pearson correlations ($N = 147$) to check the convergent and discriminant validity. We expected that a positive and significant correlation would exist between the T-SOMG overall scale score and HHRDS, and between the T-SOMF overall scale score and MOS-SSS. We also expected that no significant correlation would exist between the T-SOMG

and T-SOMF overall scale scores and MCSDS. The Pearson correlation results showed that a significant positive association existed between the T-SOMG and HHRDS, $r(145) = .505, p < .001$, and between the T-SOMF and MOS-SSS, $r(145) = .297, p < .001$, which confirmed the convergent validity. Moreover, there was no significant association between the T-SOMG and MCSDS, $r(145) = -.055, p = .508$, or between the T-SOMF and MCSDS, $r(145) = .09, p = .243$, which confirmed the discriminant validity.

Reliability

The “psych” package in the R program was used to compute McDonald’s Omega (ω_T) and Cronbach’s alpha (α) to measure the internal consistency reliability of both scales, as shown in Table B 5 and Table B 6 (Appendix B). For both the INMG and ENMG subscales of the T-SOMG measure, the reliability stood at 0.92, as indicated by McDonald’s Omega (ω_T), and at 0.90 and 0.89 respectively, as per Cronbach’s Alpha (α). Similarly, for the T-SOMF scale, the reliability was measured at 0.90 for INMF and 0.92 for ENMF using McDonald’s Omega (ω_T), while Cronbach’s Alpha (α) yielded values of 0.88 for INMF and 0.91 for ENMF. These figures underscored the high internal consistency reliability of both scales. Moreover, all subscale scores on McDonald’s Omega (ω_T) and Cronbach’s Alpha (α) exceeded the 0.80 threshold, confirming the satisfactory to excellent reliability of these measures Woodford et al. (2014).

Discussion

The third phase of this research, titled ‘Measurement Validation,’ focused on validating the construct and reliability of the microaggressions and microaffirmations measures developed earlier. The involvement of a larger, more diverse sample of

LGBQ+ individuals from Thailand augmented the study's findings. The outcomes from this phase attest to the rigorous process followed to validate these innovative tools.

Exploratory factor analysis (EFA) in Phase 2 first revealed two constructs underlying both the Thai Sexual Orientation Microaggressions Scale (T-SOMG) - interpersonal and environmental microaggression subscales - and the Thai Sexual Orientation Microaffirmations Scale (T-SOMF) - interpersonal and environmental microaffirmations subscales. Confirmatory factor analysis (CFA) was then conducted to verify the hypothesized second-order CFA measurement models. Acceptable standardized factor loadings corroborated these second-order models, confirming the accurate representation of the relationships between the corresponding subscales. Excellent model fit indices further underscored that the T-SOMG and T-SOMF models were correctly specified based on the Phase 2 EFA results. The CFA analyses validated the factor structures uncovered for each scale through prior EFA exploration.

Checks for convergent and discriminant validity substantiated the scales' uniqueness and their correlations with related and unrelated constructs. The convergent validity was confirmed by the positive associations between T-SOMG and the Heterosexist Harassment, Rejection, and Discrimination Scale (HHRDS), and T-SOMF and MOS Social Support Survey (MOS-SSS). The discriminant validity was verified by the nonsignificant associations between T-SOMG and T-SOMF with the Marlowe-Crowne Social Desirability Scale (MCSDS).

The reliability checks endorsed the adequacy of these scales. High internal consistency reliability for both scales, as indicated by McDonald's Omega (ω_T) and

Cronbach's alpha (α) values, confirmed the interrelatedness among the items in each subscale, supporting the accuracy of these constructs.

In summary, the Phase 3 results provided empirical evidence for the validity and reliability of the T-SOMG and T-SOMF scales. These instruments presented valuable assets for future research on microaggressions and microaffirmations among LGBQ+ individuals in Thailand, and potentially, other culturally similar regions. The scales furthered our understanding and quantification of these experiences, thereby enriching knowledge on the socio-psychological challenges confronted by sexual minority populations. Future research should endeavor to apply these scales in varied cultural contexts to investigate their applicability and reliability.

Conclusion

This three-phase study provided an encompassing exploration of microaggressions and microaffirmations among the LGBQ+ population in Thailand. The study, which initiated with a detailed examination of these experiences, sought to develop reliable, valid tools—the Thai Sexual Orientation Microaggressions Scale (T-SOMG) and the Thai Sexual Orientation Microaffirmations Scale (T-SOMF)—to quantify these phenomena.

Throughout each phase, rigorous methodologies were employed, including qualitative interviews, exploratory and confirmatory factor analysis, and checks for reliability and validity. The results from all phases presented compelling evidence for the construct validity and reliability of the T-SOMG and T-SOMF scales.

These scales not only enable measurement of microaggressions and microaffirmations among LGBQ+ individuals but also provide new insights into this community's unique socio-psychological experiences. For example, the most

commonly experienced microaggression was *“I have heard or seen the use of ‘Tud’ (the same meaning as ‘that is so gay’) negatively, e.g., cowardly, not manly, not cool.”* while the most prevalent microaffirmation was *“Someone treated me as like as treated others after they knew my sexual orientation.”* Listing the top scoring items illustrates the kinds of microaggressions and microaffirmations most widely encountered by Thai LGBTQ people on a regular basis. The validation of these scales significantly enriched the sparse literature on LGBTQ+ experiences in Thailand and paved the way for future research.

Limitations

Despite the substantial contributions of this study, several limitations should be noted:

- **Sample Representation:** While our study included a diverse spectrum of sexual minorities in Thailand, it may not have fully captured the experiences of rural, socioeconomic, or ethnic subgroups within this community. Additionally, our reliance on self-selected volunteers may have resulted in sampling bias.

Individuals struggling with internalized heterosexism, concealment pressures, or mental health challenges may have been less inclined to participate. Thus, our sample may have underrepresented more isolated individuals and overrepresented those with strong LGBTQ identities and community ties. We must be mindful of these biases when generalizing findings.

- **Response Format Imbalance:** The scales used in this study were not balanced in terms of "subtlety" or "commonness" in the response options. Specifically, for the subtlety dimension, options 1-2 are blatant and options 3-5 are subtle. Similarly, for the commonness dimension, options 1-2 are unique while options 3-5 are

common. This imbalance might have influenced participants' responses, potentially skewing the results. It was crucial for future studies to consider using balanced scales to ensure a more comprehensive representation of these dimensions.

- **Cross-sectional Design:** The cross-sectional design of the study precluded any causal inferences or examination of changes over time. Future research would benefit from a longitudinal design to understand the evolving nature of microaggressions and microaffirmations and their impact on mental health as well as the test-retest reliability and stability of the T-SOMG and T-SOMF measures.
- **Cultural Nuances:** Although the scales were developed with Thai cultural relevance in mind, they may not have captured all cultural nuances. Future studies could adopt a more ethnographic approach to delve deeper into these nuances.
- **Psychometric Properties:** While the initial psychometric properties of the scales were promising, further assessment of their reliability and validity in diverse contexts and populations is warranted in future research.

These limitations, while significant, underscore the importance of refining research methods in subsequent studies. Nonetheless, they also offer new avenues for future research to build upon and complement this study's groundbreaking findings.

Recommendations

The findings of this study suggested several key recommendations for future research. First, future studies should have extended these scales to various cultural, geographical, and demographic contexts. This would not only have validated the scales' applicability beyond the Thai LGBTQ+ community but would also have facilitated cross-cultural comparisons, thereby enriching our understanding of

microaggressions and microaffirmations among sexual minorities worldwide.

Second, future studies should have considered adopting a longitudinal design. This could have enabled tracking of changes over time in the experiences of microaggressions and microaffirmations, providing insights into the scales' temporal stability and the dynamic nature of these experiences.

Finally, further validation of these constructs was encouraged. Future research should have continued to validate the scales against other relevant constructs, exploring their relationships with mental health outcomes, stigma, discrimination, and resilience. This would have further established the scales' construct validity, demonstrating their potential utility in psychological research and practice and contributing to a more comprehensive understanding of the challenges faced by sexual minorities.

Chapter 4

Study Two - Core Study

Introduction

While Study One of this dissertation focused on developing instruments to assess sexual orientation microaggressions and microaffirmations, less research attention has examined the impacts of these experiences on mental health. Therefore, Study Two aims to address this gap by investigating the relationships between microaggressions, microaffirmations, and mental health outcomes among LGBTQ+ populations. Specifically, we empirically confirm the existence of an association between microaggression experiences and mental health concerns. Additionally, we explore the potential protective qualities of microaffirmations in buffering the negative effects of microaggressions.

Ethical Approval

The present study was reviewed and approved by the Institutional Review Board at Chulalongkorn University prior to any data collection or recruitment of participants. The research team adhered to ethical guidelines for human subjects research outlined in the Declaration of Helsinki. All participants provided informed consent prior to participation after receiving information about the study's purpose, risks, benefits, and their right to withdraw at any time. Identifying details were removed and data anonymized to protect participant confidentiality. Researchers stored study data securely in accordance with university data privacy protocols. The Institutional Review Board evaluated the proposed study methodology and determined the procedures posed minimal risk to participants. The study protocol, including detailed analysis plans, was preregistered at No. 028.1/64. The research

team conducted all analyses in adherence to the preregistered protocol, noting any deviations in the reported results.

Methods

Participants

A total of 309 participants were recruited through word of mouth and social media, predominantly Facebook and Twitter. Eligible participants were those who (a) self-identified as lesbian, gay, bisexual women, bisexual men, queer, attracted to more than one gender, attracted to the same sex, or not identified as heterosexual, (b) were aged 18 years or older, (c) resided in Thailand, and (d) were interested in a 30-minute online survey about sexual minority's positive and negative experiences. Two cases were removed for having more than 50% of data missing, leaving 307 cases for the final analyses with an average age of 28.1 ($SD = 8.2$).

The participant pool was primarily comprised of individuals identifying as female ($n = 170, 55.4\%$), which slightly exceeded those identifying as male ($n = 137, 44.6\%$). With regards to sexual orientation, the most significant portion of the participants identified as gay ($n = 104, 33.9\%$). In the domain of gender identity, participants predominantly identified as men ($n = 115, 37.5\%$), closely followed by those identifying as women ($n = 112, 36.5\%$). Educationally, the majority of the participants held a university degree ($n = 202, 65.8\%$). In terms of religion, the largest group identified as Buddhist ($n = 220, 71.7\%$). Employment status showed most participants engaged in full-time work ($n = 146, 47.6\%$), and relationship status revealed a predominance of single, non-dating individuals ($n = 136, 44.3\%$). A detailed tabulation of these demographic characteristics was presented in Table B 3 (Appendix B) for further clarification.

Materials

Demographic Variables. A demographic questionnaire was utilized to collect information on participants' age, sexual orientation, sex assigned at birth, gender identity, area of residence, educational level, religious affiliation, employment status, and relationship status.

Microaggressions. The Thai Sexual Orientation Microaggressions Scale (T-SOMG) developed in Study One consisted of 18 items and was divided into two subscales: Interpersonal Microaggression (INMG) and Environmental Microaggression (ENMG). The INMG subscale comprised nine items, such as *"I have experienced mockery of my behavior/mannerisms due to being LGBTQ+."* The ENMG subscale included nine items, such as *"I have encountered negative use of terms like 'Tud' (which is similar to 'that is so gay') that imply being cowardly, unmanly, or uncool."* Participants rated each item on a seven-point scale, ranging from 1 (never) to 7 (every day). Mean scores were calculated for each subscale, with higher scores indicating a greater frequency of microaggressions experienced in the past year. In the current sample, the INMG subscale demonstrated good reliability (McDonald's Omega, $\omega_T = 0.90$; Cronbach's alpha, $\alpha = 0.87$). Similarly, the ENMG subscale exhibited good reliability (McDonald's Omega, $\omega_T = 0.91$; Cronbach's alpha, $\alpha = 0.87$).

Microaffirmations. The final version of the Thai Sexual Orientation Microaffirmations Scale (T-SOMF), developed in Study One, consisted of 13 items. The T-SOMF measured the frequency of microaffirmation experiences and comprised two factors: Interpersonal Microaffirmation (INMF) and Environmental Microaffirmation (ENMF). The INMF factor included eight items, such as *"I have*

someone who allows me to explore my sexuality without judgment or pressure.” The ENMF factor consisted of five items, such as *“In society, there is encouragement to respect sexual orientations other than heterosexuality.”* Participants rated each item on a seven-point scale, ranging from 1 (never) to 7 (every day). Average scores were computed for each subscale, where elevated scores denoted a higher frequency of encountered microaffirmations within the preceding year. The scale demonstrated excellent reliability for both subscales (INMF: McDonald’s Omega, $\omega_T = 0.92$; Cronbach’s alpha, $\alpha = 0.89$; ENMF: McDonald’s Omega, $\omega_T = 0.89$; Cronbach’s alpha, $\alpha = 0.87$).

Internalized Heterosexism. The Internalized Homophobia Scale-Revised (IHP-R) by Herek et al. (2009b) was employed to assess participants’ level of internalized heterosexism. This five-item scale measured the extent to which individuals resented their sexual orientation, sought to avoid same-sex attractions and relationships, and experienced discomfort with their same-sex desires. An additional item was included to assess intrapersonal internalized microaggressions derived from interviews, asking participants how often they disregard their experiences of ambiguous situations by convincing themselves that they are overly sensitive and paranoid. Participants rated each item on a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). An average score was calculated, with higher scores indicating higher levels of internalized heterosexism. Previous studies reported internal consistency values of 0.82 (Herek et al., 1998; Herek et al., 2009b) and 0.79 (Bissonette & Szymanski, 2019) for the IHP-R. Construct validity using a sexual minority sample was also supported (Herek, 2000; Szymanski et al., 2008). In the current study, the modified IHP-R exhibited acceptable reliability, with a McDonald’s

Omega (ω_T) of 0.80 and Cronbach's alpha (α) of 0.73.

Sexual Orientation Concealment. The level of desire for concealment of participants' sexual orientation was assessed using six items from the Sexual Orientation Concealment Scale (SOCS) developed by Jackson and Mohr (2016). Participants rated each item on a five-point Likert scale, ranging from 1 (not at all) to 5 (all the time). Mean scores were calculated to assess intentional concealment of people's LGB identity, with higher scores indicating a greater tendency toward concealment. Sample items included *"I have concealed my sexual orientation by telling someone that I was straight or denying that I was LGB"* and *"I have concealed my sexual orientation by avoiding contact with other LGB individuals."* The SOCS had demonstrated adequate internal consistency in previous research, with a coefficient alpha of 0.78 (Jackson & Mohr, 2016). In the present study, the SOCS exhibited high reliability, as indicated by a McDonald's Omega (ω_T) of 0.91 and Cronbach's alpha (α) of 0.87.

Perceived Stress. Participants' perception of stress in various life situations during the past month was measured using the 4-item Perceived Stress Scale-4 (PSS-4) developed by Cohen et al. (1983). The PSS-4 was an abbreviated version of the original Perceived Stress Scale. Each item was rated on a 5-point scale, ranging from 0 (never) to 4 (very often). Total scores on the PSS-4 ranged from 0 to 16, with higher scores indicating greater perceived stress. Sample items included *"How often have you felt that you were unable to control the important things in your life?"* and *"How often have you felt confident about your ability to handle your personal problems?"* The PSS-4 had demonstrated acceptable internal consistency in previous studies, with coefficients of 0.77 (Warttig et al., 2013) and 0.74 (Vallejo et al., 2018). In the current

study, the PSS-4 exhibited satisfactory reliability, with a McDonald's Omega (ω_T) of 0.81 and Cronbach's alpha (α) of 0.74.

Anxiety. Participants' anxiety symptoms were assessed using the 7-item Generalized Anxiety Disorder Scale (GAD-7) developed by Spitzer et al. (2006). The scale measured the frequency of experiencing seven different anxiety symptoms over the previous two weeks. Each item was rated on a 4-point scale, ranging from 0 (not at all) to 3 (nearly every day). Total scores on the GAD-7 ranged from 0 to 21, with higher scores indicating higher levels of anxiety. Sample items included "*Feeling nervous, anxious, or on edge*" and "*Not being able to stop or control worrying.*" The GAD-7 had demonstrated high internal reliability with sexual minority individuals (Woodford et al., 2014) and good construct validity in the general population (Löwe et al., 2008). Previous studies reported internal consistency values of 0.90 (Woodford et al., 2014) and 0.92 (Timmins et al., 2020). In the present sample, the GAD-7 exhibited excellent reliability, with a McDonald's Omega (ω_T) of 0.94 and Cronbach's alpha (α) of 0.92.

Depression. Participants' depressive symptoms were assessed using the 9-item Patient Health Questionnaire (PHQ-9) developed by Kroenke et al. (2001). The scale measured the frequency of experiencing nine different depressive symptoms over the previous two weeks. Each item was rated on a 4-point scale, ranging from 0 (not at all) to 3 (nearly every day). Total scores on the PHQ-9 ranged from 0 to 27, with higher scores indicating higher levels of depression. Sample items included "*Little interest or pleasure in doing things*" and "*Feeling down, depressed, or hopeless.*" The PHQ-9 had demonstrated high internal reliability with sexual minority individuals (Woodford et al., 2014) and good construct validity in the general

population (Kocalevent et al., 2013). Previous studies reported internal consistency values of 0.88 (Salim et al., 2019) and 0.92 (Timmins et al., 2020). In the present sample, the PHQ-9 exhibited excellent reliability, with a McDonald's Omega (ω_T) of 0.93 and Cronbach's alpha (α) of 0.91.

Design and Procedure

After gaining approval from Chulalongkorn University's Institutional Review Board (No. 028.1/64), participants were recruited through convenience and snowball sampling methods, utilizing word-of-mouth, social media, and online platforms. The online survey included a consent form at its onset, highlighting the voluntary participation and confidentiality assurances. This consent form also presented the purpose of the survey and any potential risks or benefits. All materials and measures were provided in Thai (refer to Appendix C). The survey incorporated questions regarding demographic variables, microaggressions, microaffirmations, internalized heterosexism, sexual orientation concealment, and mental health issues.

Analytical Approach

Statistical analyses were conducted using R version 4.3.0 software (R Core Team, 2022). The "psych" package (Revelle, 2021) was used to calculate descriptive statistics, including means, standard deviations, Cronbach's alpha, McDonald's Omega, and bivariate correlations for all scale scores. We utilized the latent variable program "Lavaan" (Rosseel, 2012) to conduct a Confirmatory Factor Analysis (CFA), assessing the quality of the measurements. The CFA scrutinized the factor structure and appraised the convergent and discriminant validity of the constructs. To meet the sample-parameter ratio requirement in Structural Equation Modeling (SEM), we employed item parceling via the "SemTools" package (Jorgensen et al., 2018). The

model fit was assessed using various statistical metrics, including the chi-square test (χ^2), Comparative Fit Index (CFI), Non-Normed Fit Index/Tucker-Lewis Index (NNFI/TLI), Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Square Residual (SRMR), with expected CFI and NNFI/TLI values of 0.90 or higher and RMSEA and SRMR values of 0.08 or lower (Awang, 2012; Byrne, 2012; Kline, 2005).

To standardize scores across different scale ranges, the “scale” function in R was used. This method was common in statistical analyses to ensure variables are on the same scale and to reduce the impact of outliers. The data were standardized by converting to z-scores, which involved centering the data by subtracting the mean and then scaling it by dividing by the standard deviation. The scales used in this study, including the T-SOMG, T-SOMF, IHP, SOCS, PSS, GAD, and PHQ, had varying score ranges. Standardizing the scores allowed for a fair comparison of the variables and ensured that each variable had equal weight in the analysis.

For hypothesis testing, we used the PROCESS macro (version 4.3; Hayes, 2022) to create mediation and moderated mediation analyses for the dependent variable (mental health concerns). This study examined the mediation roles of internalized heterosexism and sexual orientation concealment, as well as the moderation and moderated mediation roles of microaffirmations, which could be broken down into four steps:

- 1. Mediation Examination:** The study utilized PROCESS Model 4 to analyze parallel multiple mediation, exploring the mediation roles of internalized heterosexism and sexual orientation concealment.
- 2. Moderated Mediation Analysis:** Employing PROCESS Model 8, the study

investigated the roles of microaffirmations in moderation and moderated mediation. Non-significant mediators from the previous step were excluded.

3. Exploration of Alternative Mediation Models: Additionally, alternative models were examined using PROCESS Model 6 to assess the mediation of serial mediators.

4. Exploration of Alternative Moderated Mediation Models: Further examination of alternative models was conducted employing PROCESS Model 85, aimed at assessing both mediation and moderated mediation effects of serial mediators.

Bias-corrected bootstrapping with 5,000 replications was employed to evaluate direct and indirect effects, and confidence intervals (CI) were constructed for each effect. A moderated mediation was considered significant if the 95% CI for the index of moderated mediation did not include zero. The study used a significance level of $\alpha = 0.05$, as recommended by Hayes (2022).

Results

Before the primary analyses, we conducted preliminary data cleaning procedures to evaluate univariate outliers, the pattern of missing data, and the normality of all variables. We used skewness (-3.0 to 3.0) and kurtosis (-7.0 to 7.0) indices, as suggested by Byrne (2010) and Hair, Black, et al. (2019), to determine data normality. The skewness index ranged from -1.13 to 1.9, and the kurtosis index ranged from -0.88 to 5.01. Both indices were within the normal distribution range, indicating that the data were normally distributed. Concerning missing data, we excluded two cases from our analysis as they had more than 50% missing data.

Descriptive Statistics

Means, standard deviations, zero-order correlations, ranges, alpha, and omega

reliabilities of all variables used in this study are presented in Table B 7 (Appendix B). We calculated the mean scores for the independent variable (MG) and mediators (IHP and SOCS) to interpret the participants' responses. Due to high correlations between the mental health measures (r s from .61 to .84), they were aggregated into an overall mental health concerns (MHC) composite score. This aligned with examining the predictors' effects on overall mental health. Confirmatory factor analysis and further rationale for creating MHC are detailed in the Results. We computed a correlation matrix using both standardized and unstandardized scores to evaluate the association between the variables.

We found statistically significant, positive, bivariate associations between microaggressions ($M = 4.90$, $SD = 1.07$) and internalized heterosexism ($M = 1.58$, $SD = 0.64$, $r = 0.21$, $p < .001$), sexual orientation concealment ($M = 2.30$, $SD = 1.04$, $r = 0.30$, $p < .001$), and mental health concerns ($M = 26.46$, $SD = 14.63$, $r = 0.33$, $p < .001$), as expected. Specifically, individuals who reported higher levels of microaggressions also reported higher levels of internalized heterosexism, sexual orientation concealment, and mental health concerns. Furthermore, we observed a positive bivariate correlation between internalized heterosexism and both sexual orientation concealment ($r = 0.56$, $p < .001$) and mental health concerns ($r = 0.34$, $p < .001$). Sexual orientation concealment was also positively associated with mental health concerns ($r = 0.51$, $p < .001$).

Conversely, microaffirmations ($M = 4.50$, $SD = 1.14$) were negatively associated with sexual orientation concealment ($r = -0.18$, $p = .002$), indicating that individuals who experienced more microaffirmations were less likely to conceal their sexual orientation. However, we did not find a significant bivariate relationship

between microaffirmations and either internalized heterosexism ($r = -0.04, p = .540$) or mental health concerns ($r = -0.10, p = 0.083$).

The results of the bivariate analysis indicated that there was no significant relationship between interpersonal microaggressions and both interpersonal ($r = -0.11, p = .052$) and environmental microaffirmations ($r = -0.06, p = .323$). However, environmental microaggressions were positively associated with both interpersonal ($r = 0.14, p = .015$) and environmental microaffirmations ($r = 0.18, p = .002$). Additional details on zero-order correlations, reliabilities, means, standard deviations, skewness, and kurtosis can be found in Table B 7, located in Appendix B.

Measurement Model for Mental Health Concerns

The three mental health measures of perceived stress, anxiety, and depression were aggregated into a composite mental health concerns score based on substantive methodological rationale. Empirically, these measures exhibited robust intercorrelations ($r_s = .61$ to $.84$), indicating they tapped into a shared underlying dimension. However, the less than perfect correlations suggested each measure also contained some unique variance.

To examine the general effects of the predictors on mental health issues per the study objectives, analyses were conducted using both the aggregated composite score and each measure separately. The aggregate score detected a large overall effect ($F^2 = 0.316$) at 99% power with a 1% Type II error rate. This aligned with investigating the overall mental health impact and maximized power by increasing effective sample size. Analyzing measures separately had slightly lower but still adequate power from 95-98% to detect their individual moderate-large effects. Critically, separate analyses would inflate Type I and familywise error rates due to

multiple testing.

Additionally, we examined the latent variable of mental health concerns (MHC) through a second-order Confirmatory Factor Analysis (CFA), using three indicators: the PSS, GAD, and PHQ. The individual items of each scale were first-order indicators, while the PSS, GAD, and PHQ acted as second-order indicators.

The data exhibited a good fit with the measurement model, as shown by statistically significant ($p < .001$) and large standardized factor loadings. Specifically, the second-order indicators (PSS = 0.720, GAD = 0.922, PHQ = 0.925) and first-order indicators (ranging from 0.759 to 0.990) demonstrated strong associations with the latent construct, indicating the scales were valid measures of the latent variable - MHC.

The model fit indices also indicated a good fit of the model to the data: the Chi-square test was not significant: $\chi^2(17, N = 307) = 21.871, p = 0.190$, indicating that the model was not significantly different from the observed data. The CFI (0.999) and TLI (0.998) exceeded the accepted threshold of 0.90, the RMSEA was 0.031 (90% CI = 0.000 to 0.064), well below the cutoff of 0.10, and the SRMR was 0.007. Hence, the sum scores of PSS, GAD, and PHQ were employed as a composite score for MHC in subsequent analyses, providing a holistic measure of mental health concerns.

These results provided empirical validation for combining the three measures into an aggregated mental health concerns score. In light of these findings, we utilized the sum scores of the PSS, GAD, and PHQ to create a composite score for MHC in the ensuing analyses. This amalgamation of mental health measures, encompassing elements of stress, generalized anxiety, and depressive symptoms into a single

composite score, served to minimize Type I and familywise error risks while optimizing parsimony, power, and the detection of the overall mental health effect.

Measurement Model

The adequacy of the measurement model was appraised for the independent variable, Microaggressions (MG), the mediators —IH and SOC — and the dependent variable, MHC. MHC was delineated by the first-order indicators (PSS, GAD, and PHQ), serving as a second-order construct. Refer to Figure A 6 in Appendix A for a visual depiction of the standardized factor loadings and path coefficients of the measurement models.

The model fit indices suggested an acceptable alignment of the measurement model with the data: $\chi^2(110, N = 307) = 199.623$; CFI = 0.989, NNFI/TLI = 0.986, RMSEA = 0.052 (90% CI: [0.040, 0.063]), and SRMR = 0.050. These findings proposed that the measurement model accurately represented the latent constructs.

All factor loadings within the measurement model were statistically significant ($p < .001$), indicating robust relationships between the latent constructs and their respective indicators. The second-order indicators (PSS, GAD, PHQ) and the first-order indicators (ranging from 0.700 to 0.999) demonstrated substantial and significant standardized factor loadings, which buttressed the validity of the measurement model.

We also evaluated the convergent and discriminant validity, along with the reliability of the measurement model. The Average Variance Extracted (AVE) for each construct surpassed the recommended threshold of 0.50 (Hair et al., 2022), suggesting satisfactory convergent validity and that each construct effectively captured substantial variance from its indicators. The square root of the AVE for each

construct was higher than the correlations between the constructs, demonstrating adequate discriminant validity. This signified that the constructs were discrete from one another, measuring distinct aspects of the underlying constructs.

Furthermore, we calculated the Composite Reliability (CR) values to assess the internal consistency reliability of the constructs. The Composite Reliability (CR) values for the first-order indicators surpassed the accepted threshold, indicating high reliability. Moreover, the CR values for the independent variable (MG) and mediators (IH, SOC) exceeded the recommended threshold of 0.70, indicating satisfactory internal consistency reliability (Hair, Risher, et al., 2019). For detailed AVE and CR scores, please refer to Table B 7 in Appendix B.

In conclusion, the measurement model demonstrated a satisfactory fit to the data, with significant factor loadings and satisfactory reliability estimates for all constructs. These findings supported the application of these measures in the subsequent analyses to explore the relationships among the variables under study.

Hypotheses Tests

Parallel Multiple Mediation Analysis

We conducted the PROCESS Model 4 analysis to examine the parallel multiple mediation effects of internalized heterosexism and sexual orientation concealment on the relationship between microaggressions and mental health outcomes. Refer to Table B 8 (Appendix B) and Figure 2 for detailed results and graphical illustration. The results based on 5000 bootstrapped samples indicated that microaggressions had a significant total effect ($c' = 0.332$, $SE = 0.054$, $p < .001$) and direct effect ($c = 0.195$, $SE = 0.050$, $p < .001$) on mental health concerns. This suggested that individuals who experienced higher levels of microaggressions were

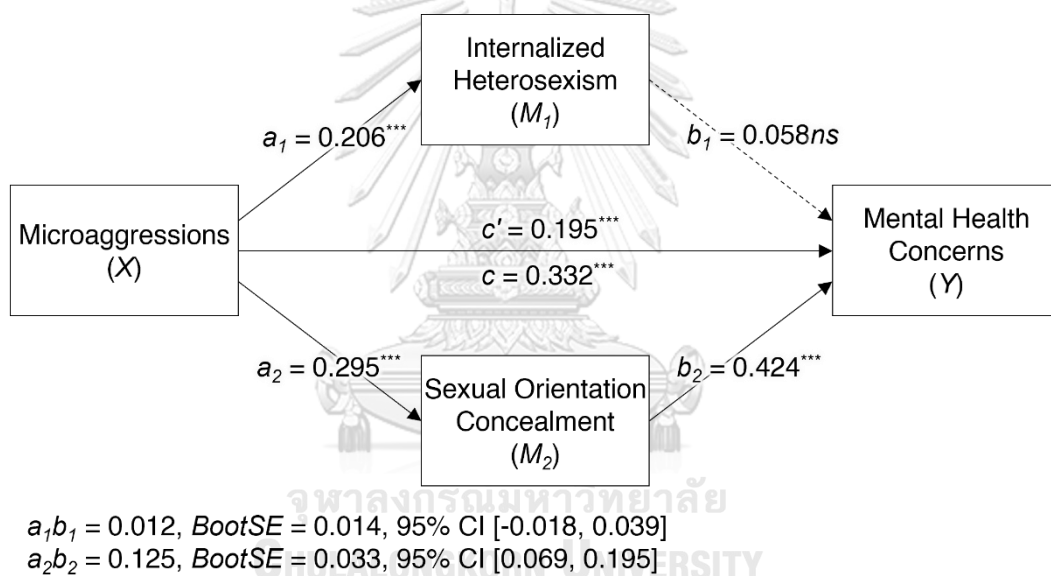
more likely to report elevated levels of mental health issues (H1 confirmed).

Microaggressions were significantly positively related to internalized heterosexism

($a_1 = 0.206$, $SE = 0.056$, $p < .001$) and sexual orientation concealment ($a_2 = 0.295$, $SE = 0.055$, $p < .001$), supporting H2.1 and H3.1.

Figure 2

Parallel Multiple Mediation Model Examining Internalized Heterosexism and Sexual Orientation Concealment as Mediating Mechanisms between Microaggressions and Mental Health Concerns



Note. $N = 307$. The notation $a_1 b_1$ refers to the indirect effect of X on Y via M_1 , $a_2 b_2$ refers to the indirect effect of X on Y via M_2 , c refers to the total effect, and c' refers to the direct effect. The analysis was conducted using PROCESS v4.3 (Model 4) with 5,000 bootstraps.

$ns > .05$, $*p \leq .05$, $**p \leq .01$, and $***p \leq .001$.

However, the analysis yielded results contrary to our expectations. It showed that internalized heterosexism neither mediated the relationship between

microaggressions and mental health concerns ($a_1b_1 = 0.012$, $\text{BootSE} = 0.014$, 95% CI [-0.018, 0.039]) nor exhibited a statistically significant association with mental health concerns ($b_1 = 0.058$, $SE = 0.058$, $p = .316$). This outcome contradicted prior research findings and led to the rejection of H2.2 and H4.2. On the contrary, sexual orientation concealment showed a significant positive association with mental health concerns ($b_2 = 0.424$, $SE = 0.060$, $p < .001$). The indirect effect of microaggressions on mental health concerns through sexual orientation concealment was also significant ($a_2b_2 = 0.125$, $\text{BootSE} = 0.033$, 95% CI [0.069, 0.195]), providing evidence for the partial mediating role of sexual orientation concealment in the relationship between microaggressions and mental health concerns, thus supporting H3.2. This suggested that individuals who experience higher levels of microaggressions were more likely to engage in sexual orientation concealment, which in turn contributed to elevated levels of mental health concerns.

Overall, the parallel multiple mediation model explained 4.3% of the variance in internalized heterosexism ($R^2 = 0.043$), 8.7% of the variance in sexual orientation concealment ($R^2 = 0.087$), and 30.2% of the variance in mental health concerns ($R^2 = 0.302$). The F -tests demonstrated that the models were statistically significant, with $F(1, 305) = 13.535$, $p < .001$ for internalized heterosexism, $F(1, 305) = 29.091$, $p < .001$ for sexual orientation concealment, and $F(3, 303) = 43.697$, $p < .001$ for mental health concerns, indicating the overall significance of the relationships.

Moderated Mediation Analysis

We further explored the relationships among microaggressions, mental health, and microaffirmations through a PROCESS Model 8 analysis. The “Internalized Heterosexism” variable was omitted from this model due to its non-significant

contribution in the previous PROCESS Model 4 analysis.

The current analysis aimed to investigate the potential moderating role of microaffirmations in the relationship between microaggressions and mental health concerns. This moderation was evaluated both directly (*c*-path: from the independent variable to the dependent variable) and indirectly through the mediating factor of sexual orientation concealment (*a*-path: from the independent variable to the mediator). Specifically, H4.1 and H4.3, which posited that the adverse impact of microaggressions on mental health outcomes would be diminished among individuals reporting higher instances of microaffirmations, were tested. The Index of Moderated Mediation (*IMM*) was employed to evaluate the moderated mediation hypotheses, accompanied by an examination of the conditional direct and indirect effects.

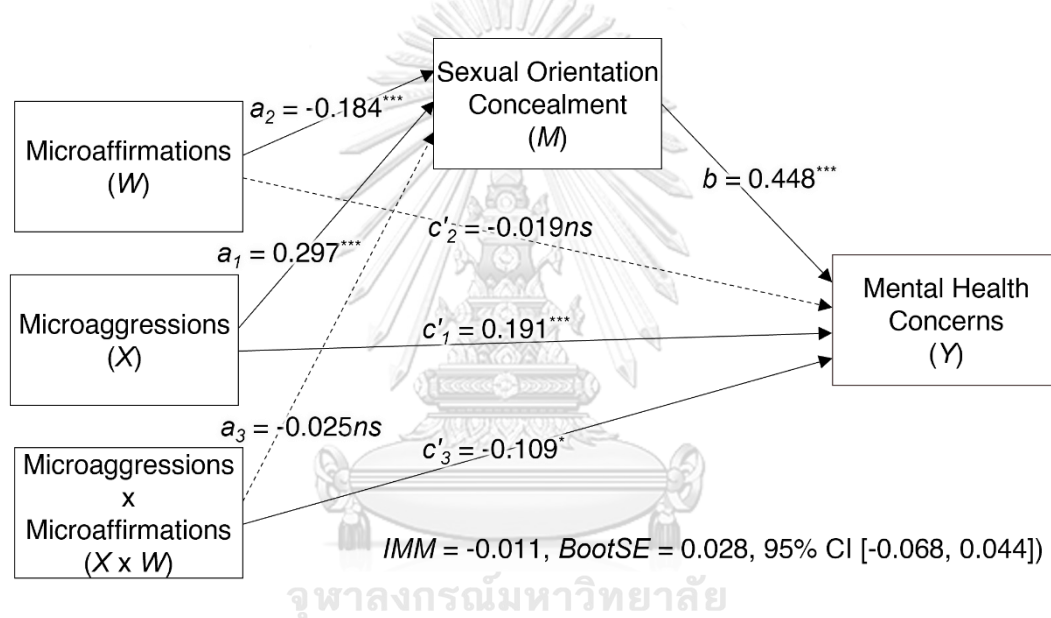
The outcomes of the regression analysis for the moderated mediation model are detailed in Table B 9 (Appendix B), and the corresponding graphical representation can be found in Figure 3. The results demonstrated a significant direct influence of microaggressions on both sexual orientation concealment ($a_1 = 0.297$, $SE = 0.054$, $p < .001$), and mental health concerns ($c'_1 = 0.191$, $SE = 0.050$, $p < .001$). Additionally, sexual orientation concealment had a significant positive effect on mental health concerns ($b = 0.448$, $SE = 0.051$, $p < .001$), corroborating the results from the parallel multiple mediation analysis.

As for the moderating role of microaffirmations, the findings highlighted a statistically significant direct effect of microaffirmations on sexual orientation concealment ($a_2 = -0.184$, $SE = 0.054$, $p < .001$), indicating increased levels of microaffirmations corresponded with decreased levels of sexual orientation concealment. This suggested that individuals reporting more microaffirmations were

less likely to hide or conceal their sexual orientation. However, the interaction effect between microaggressions and microaffirmations on sexual orientation concealment did not yield statistical significance ($a_3 = -0.025$, $SE = 0.053$, $p = .644$).

Figure 3

Moderated Mediation Model Examining the Direct and Indirect Effect of Microaffirmations on the Association between Microaggressions and Mental Health Concerns via Sexual Orientation Concealment



Note. $N = 307$. IMM = Index of Moderated mediation. The analysis was conducted using PROCESS v4.3 (Model 8) with 5,000 bootstraps.

$ns > .05$, $*p \leq .05$, $**p \leq .01$, and $***p \leq .001$.

Furthermore, the IMM for the association between microaffirmations and the indirect effect of microaggressions on mental health concerns had a bootstrap confidence interval (CI) encompassing zero ($IMM = -0.011$, $BootSE = 0.0281$, 95% CI $[-0.068, 0.044]$). This suggested that the presence of microaffirmations did not significantly moderate the relationship between microaggressions and mental health

concerns via sexual orientation concealment. In other words, the impact of microaggressions on mental health concerns through sexual orientation concealment does not depend on the level of microaffirmations. Consequently, H4.3, which postulated a moderating role of microaffirmations, was unsupported.

The influence of microaggressions on mental health, mediated by sexual orientation concealment, subtly varied depending on the intensity of microaffirmations. When microaffirmations were minimal (-1 *SD* from the mean), the indirect effect was marked at 0.144 (95% CI [0.076, 0.229]). At average microaffirmation levels, this effect slightly decreased to 0.133 (95% CI [0.075, 0.204]). With high microaffirmations ($+1$ *SD* above the mean), the effect further attenuated to 0.122 (95% CI [0.039, 0.221]). These findings suggested that irrespective of the microaffirmations level, microaggressions significantly affected mental health concerns by intensifying the propensity for sexual orientation concealment. Even though microaffirmations did not substantially modify the overall indirect effect of microaggressions on mental health concerns through sexual orientation concealment (as indicated by the nonsignificant index of moderated mediation), they may have provided a slight buffering effect at the individual level. This nuanced role of microaffirmations in the context of this relationship, although subtle, called for more in-depth investigation.

Despite the nonsignificant direct influence of microaffirmations on mental health concerns ($c'_2 = -0.019$, $SE = 0.049$, $p = .694$), there was a noteworthy finding: the significant interaction effect between microaggressions and microaffirmations on mental health concerns ($c'_3 = -0.109$, $SE = 0.047$, $p = .021$). The direct effect ($c'_1 + c'_3W$) of microaggressions on mental health concerns was significant when the level

of microaffirmations was 1 *SD* below the average (direct effect = 0.300, *SE* = 0.067, $p < .001$) or at the average level (direct effect = 0.191, *SE* = 0.050, $p < .001$). However, when the level of microaffirmations was 1 *SD* above the average (direct effect = 0.082, $c = 0.071$, $p = 0.248$), the direct effect was no longer significant, suggesting that a high level of microaffirmations could buffer the direct negative impact of microaggressions on mental health concerns. This finding suggested that, while microaffirmations did not moderate the indirect effect, they did have a significant direct impact on mental health outcomes, thereby substantiating H4.1.

Overall, the moderated mediation model accounted for 12.2% of the variance in sexual orientation concealment ($R^2 = 0.122$) and 31.2% of the variance in mental health concerns ($R^2 = 0.312$). Both models yielded statistically significant *F*-tests ($F[3, 303] = 14.027$, $p < .001$ for sexual orientation concealment; $F[4, 302] = 34.293$, $p < .001$ for mental health concerns), demonstrating the overall significance of the relationships.

In summary, microaggressions directly influenced both sexual orientation concealment and mental health concerns. Microaffirmations directly mitigated sexual orientation concealment but did not moderate the relationship between microaggressions and concealment. Furthermore, when considering the combined influence of microaffirmations, the indirect effect of microaggressions on mental health concerns through concealment was not statistically significant.

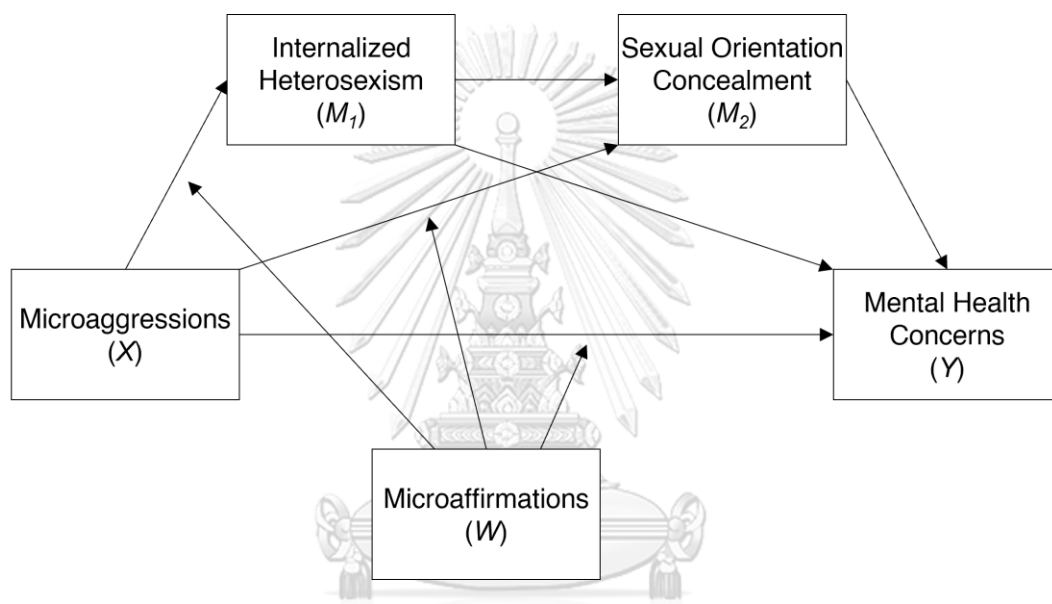
Alternative Models

To further explore potential competitive mediation between internalized heterosexism and concealment, two alternative models were evaluated: a serial multiple mediation analysis (utilizing PROCESS Model 6) and a moderated serial

multiple mediation analysis (employing PROCESS Model 85). In these models, internalized heterosexism was positioned as the first-stage mediator preceding concealment as the second-stage mediator in a proposed causal sequence. The alternative conceptual model was depicted in Figure 4.

Figure 4

The Alternative Conceptual Model



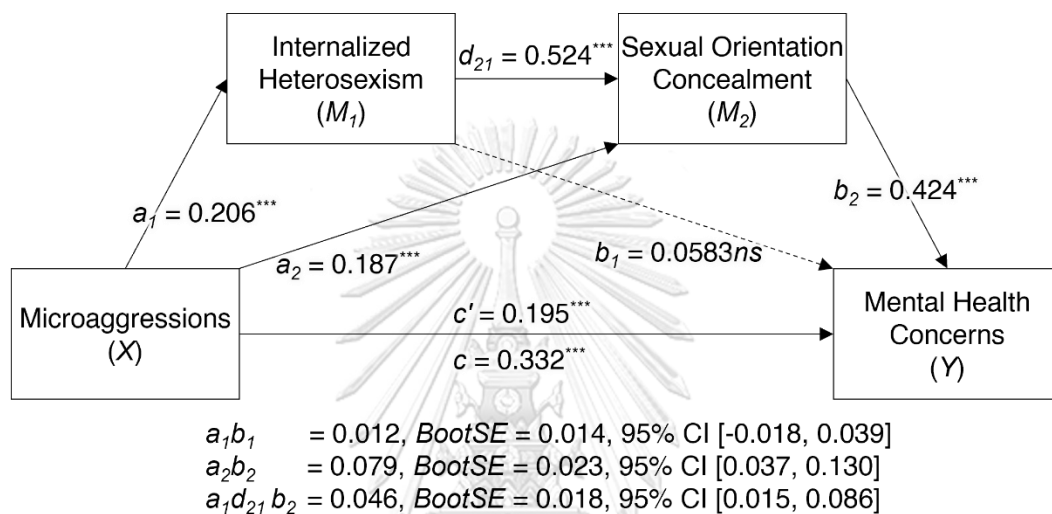
Serial Multiple Mediation Analysis

The purpose of the serial multiple mediation analysis was to examine the sequential mediating roles of internalized heterosexism (as a first-stage mediator) and sexual orientation concealment (as a second-stage mediator) in the relationship between microaggressions and mental health issues. This analytical approach enabled a detailed understanding of how microaggressions might potentially influence mental health. Table B 10 in Appendix B presented the detailed coefficients, standard errors, and p -values for the serial multiple mediation model, while Figure 5 illustrated the model and the standardized path coefficients. The following outcomes were derived

from the application of PROCESS Model 6.

Figure 5

Serial Multiple Mediation Model Examining Internalized Heterosexism and Sexual Orientation Concealment in Series as Mediating Mechanisms between Microaggressions and Mental Health Concerns



Note. $N = 307$. The notation $a_1 b_1$ refers to the indirect effect of X on Y through M_1 , $a_2 b_2$ refers to the indirect effect of X on Y through M_2 , $a_2 d_{21} b_2$ refers to the indirect effect of X on Y through M_1 and M_2 in series, c refers to the total effect, and c' refers to the direct effect. The analysis was conducted using PROCESS v4.3 (Model 6) with 5,000 bootstraps.

$ns > .05$, $*p \leq .05$, $**p \leq .01$, and $***p \leq .001$.

The model significantly accounted for the variance in internalized heterosexism ($R^2 = 0.043$, $F[1, 305] = 13.535$, $p < .001$), sexual orientation concealment ($R^2 = 0.350$, $F[2, 304] = 81.730$, $p < .001$), and mental health concerns ($R^2 = 0.302$, $F[3, 303] = 43.697$, $p < .001$). Our findings confirmed the statistically significant overall impact of microaggressions on mental health concerns ($c = 0.332$,

$SE = 0.054, p < .001$). This effect was evidenced directly on mental health concerns ($c' = 0.195, SE = 0.050, p < .001$) and indirectly via increased levels of sexual orientation concealment ($a_2b_2 = 0.079, BootSE = 0.023, 95\% CI [0.037, 0.130]$). These direct and indirect effects of microaggressions led to heightened mental health concerns. We also noted the direct effects of microaggressions on internalized heterosexism ($a_1 = 0.206, SE = 0.056, p < .001$) and on sexual orientation concealment ($a_2 = 0.187, SE = 0.047, p < .001$). Notably, the effect of sexual orientation concealment on mental health concerns was significant ($b_2 = 0.424, SE = 0.060, p < .001$).

Contrarily, the primary mediator, internalized heterosexism, did not yield a statistically significant indirect effect on mental health concerns ($a_1b_1 = 0.012, BootSE = 0.014, 95\% CI [-0.018, 0.039]$) nor a significant direct effect ($b_1 = 0.058, SE = 0.058, p = .316$). These results mirrored those obtained from the parallel multiple mediation analysis.

Interestingly, a significant indirect effect was found through the sequential pathway of internalized heterosexism and sexual orientation concealment ($a_1d_2b_2 = 0.046, BootSE = 0.018, 95\% CI [0.015, 0.086]$), with the influence of internalized heterosexism on sexual orientation concealment also found to be significant ($d_2 = 0.524, SE = 0.047, p < .001$). This implied a substantial part of the effect of microaggressions on mental health concerns can be attributed to the sequential mediation of these two factors.

In summary, our data indicated that microaggressions significantly influence mental health concerns, both directly and indirectly through sexual orientation concealment and sequentially via internalized heterosexism and sexual orientation

concealment. Nevertheless, our data did not substantiate the role of internalized heterosexism as a standalone mediator in the relationship between microaggressions and mental health concerns.

These findings underscored a complex process in which microaggressions significantly increase both internalized heterosexism and sexual orientation concealment. While internalized heterosexism significantly contributed to sexual orientation concealment, it did not have a direct impact on mental health concerns. In contrast, sexual orientation concealment directly affected mental health concerns, highlighting its critical role in the multiple mediation model and illuminating the intricate pathways through which microaggressions may have influenced mental health. These findings validated the proposed serial multiple mediation model in this study.

Moderated Serial Multiple Mediation Analysis

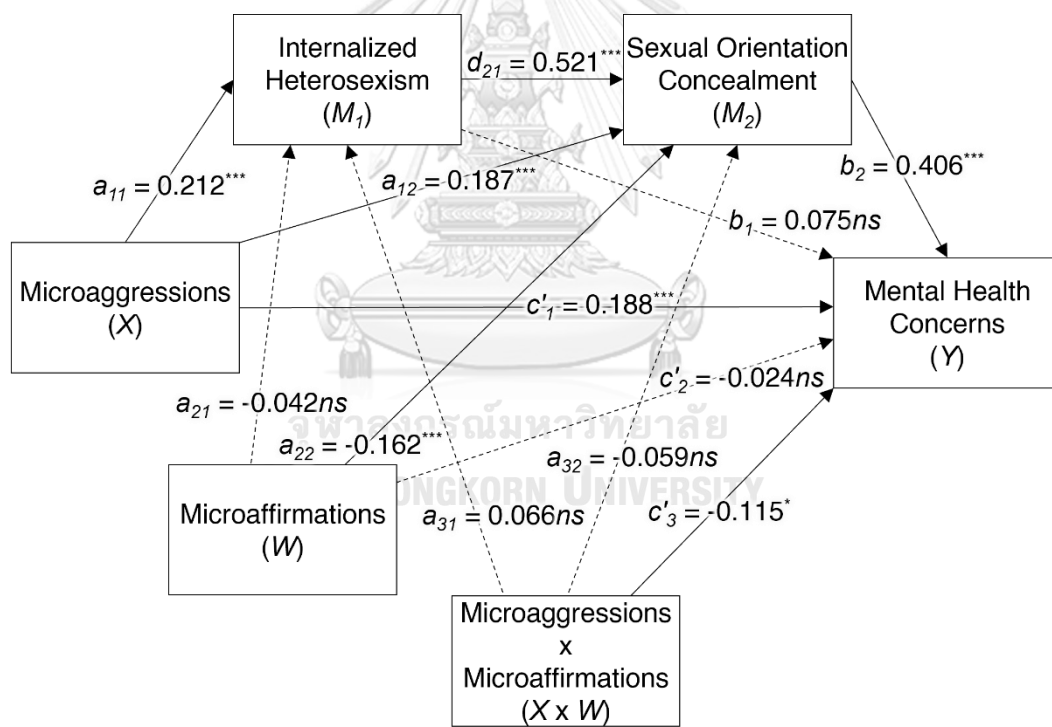
The moderated mediation analysis was conducted to examine the role of microaffirmations as a moderator in the relationship between microaggressions and mental health concerns, via the mediators of internalized heterosexism and sexual orientation concealment. In our extended analysis incorporating microaffirmations as a moderator in the serial multiple mediation model, some unique interactions were revealed. Appendix B's Table B 11 offered an in-depth view of the moderated mediation model, detailing coefficients, standard errors, and p-values. Figure 6, also provided, graphically represents this model, showcasing the standardized path coefficients for greater clarity.

Paralleling our previous findings from the moderated mediation analysis, microaffirmations did not significantly moderate the effects of microaggressions on

the mediators. Specifically, the influence of microaggressions on internalized heterosexism ($a_{31} = 0.066$, $SE = 0.055$, $p = 0.232$, $IMM = 0.005$, $BootSE = 0.010$, 95% CI [-0.009, 0.031]) and sexual orientation concealment ($a_{32} = -0.059$, $SE = 0.045$, $p = 0.188$, $IMM = -0.024$, $BootSE = 0.019$, 95% CI [-0.065, 0.012]) were not significantly moderated by microaffirmations.

Figure 6

Moderated Serial Multiple Mediation Model Examining Internalized Heterosexism and Sexual Orientation Concealment in Series as Mediating Mechanisms between Microaggressions and Mental Health Concerns



$$IMM_{X \rightarrow M_1 \rightarrow Y} = 0.005, \text{ BootSE} = 0.010, \text{ 95\% CI} [-0.009, 0.031]$$

$$IMM_{X \rightarrow M_2 \rightarrow Y} = -0.024, \text{ BootSE} = 0.019, \text{ 95\% CI} [-0.065, 0.012]$$

$$IMM_{X \rightarrow M_1 \rightarrow M_2 \rightarrow Y} = 0.014, \text{ BootSE} = 0.018, \text{ 95\% CI} [-0.016, 0.053]$$

Note. $N = 307$. IMM = Index of Moderated mediation. The analysis was conducted using PROCESS v4.3 (Model 85) with 5,000 bootstraps.

$ns > .05$, $*p \leq .05$, $**p \leq .01$, and $***p \leq .001$.

For the indirect pathway from microaggressions to mental health concerns via internalized heterosexism, the effect remained insignificant across all levels of microaffirmations. Specifically, the point estimates, along with their corresponding 95% confidence intervals, were reported as 0.011 [-0.013, 0.034] at -1 *SD* below the mean, 0.016 [-0.016, 0.047] at the mean, and 0.021 [-0.019, 0.076] at +1 *SD* above the mean.

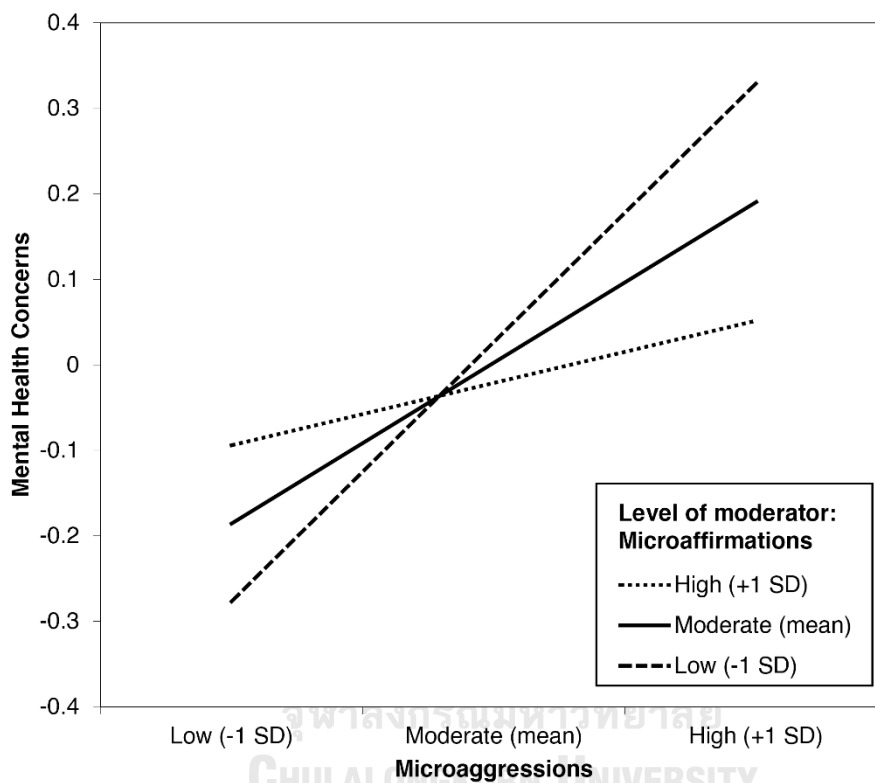
Conversely, the indirect effect of microaggressions on mental health concerns via sexual orientation concealment demonstrated a decreasing trend from 0.100 [0.048, 0.169] at -1 *SD* to 0.052 [-0.002, 0.115] at +1 *SD*. This suggested that, although the overall moderating role of microaffirmations did not reach statistical significance, the level of microaffirmations may nonetheless have exerted an influence on the magnitude of the indirect effect of microaggressions on mental health concerns through sexual orientation concealment. This was consistent with the earlier moderated mediation analysis, suggesting that the presence of microaffirmations did not significantly alter the influence of microaggressions on these mediators.

In line with the previous analysis, a significant moderation effect was observed on the direct pathway. The interaction between microaggressions and microaffirmations was significant for the direct effect on mental health concerns ($c'_3 = -0.115$, $SE = 0.047$, $p = .016$), indicating that microaffirmations could significantly buffer the direct impact of microaggressions on mental health concerns. The direct effect of microaggressions on mental health concerns was found to be significant when the level of microaffirmations was one *SD* below the mean (direct effect = 0.303, $SE = 0.067$, $p < .001$) and at the mean level (direct effect = 0.188, $SE = 0.050$, $p < .001$). However, when the level of microaffirmations was one *SD* above the mean,

the direct effect was not statistically significant (direct effect = 0.073, $SE = 0.071$, $p = .307$).

Figure 7

Interaction Plot Showing the Effect of Microaggressions (X) on Mental Health Concerns (Y) at Different Levels of Microaffirmations (W)

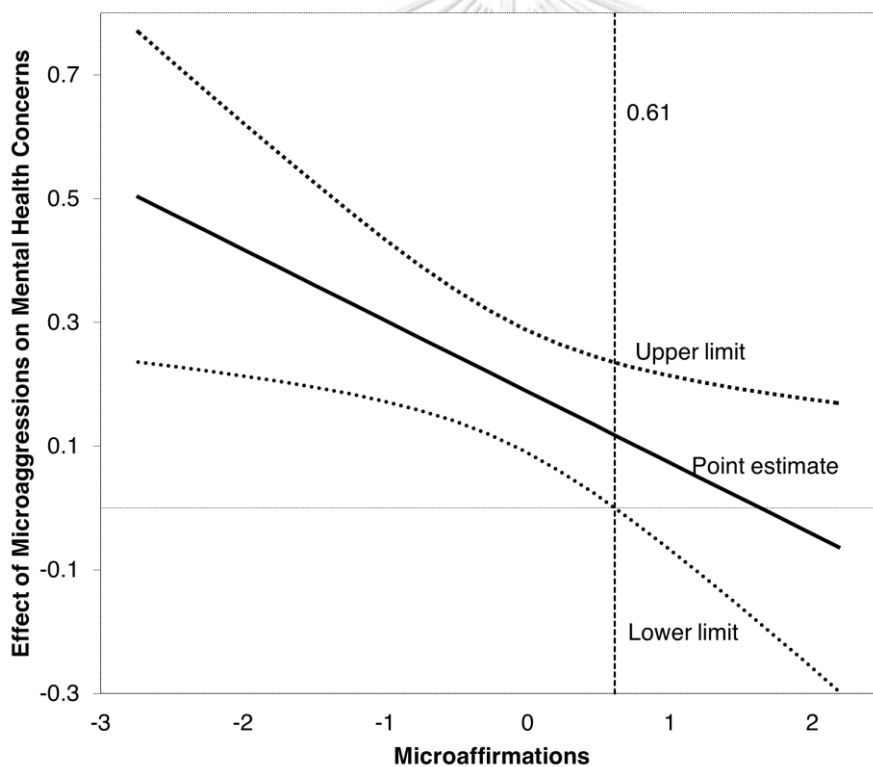


For a visual depiction of the conditional effects of microaffirmations at high, moderate, and low levels, please refer to the simple slopes in Figure 7. Meanwhile, Figure A 7 in Appendix A served as a visual distillation of these intricate relationships between microaggressions and mental health concerns, illustrating both the direct and indirect impacts via the conditioning variable. This comprehensive representation aided in understanding the complex interplay within the model.

These findings indicated a significant moderation effect on the direct pathway. Specifically, higher levels of microaffirmations served as a buffer, potentially reducing the immediate negative impact of microaggressions on mental health concerns.

Figure 8

Johnson-Neyman Plot Depicting the Region of Significance for the Interaction Between Microaggressions (X) and Microaffirmations (W) on Mental Health Concerns (Y)



To provide a more precise analysis of the interaction, a Johnson-Neyman technique was also utilized (Figure 8). This approach mathematically identified values along the continuum of microaffirmations where the effect of microaggressions transitioned between statistical significance and non-significance. The Johnson-

Neyman graph revealed that microaggressions had a statistically significant effect on mental health concerns only when microaffirmations were below 0.613. The range of observed values of microaffirmations was -2.74 to 2.19.

When microaffirmations exceeded 0.613, the effect of microaggressions on mental health concerns was no longer statistically significant. These findings suggested that microaggressions only increased mental health concerns when microaffirmations were relatively low or moderate, whereas microaggressions did not impact mental health when microaffirmations were sufficiently high. The Johnson-Neyman results helped qualify the conditions under which microaggressions influenced mental health, providing more nuanced insights into the protective role of microaffirmations.

Despite the non-significant moderation effects on the indirect paths, the overall model explained a substantial proportion of the variance in internalized heterosexism ($R^2 = 0.049$, $F[3, 303] = 5.156$, $p = 0.002$) sexual orientation concealment ($R^2 = 0.380$, $F[4, 302] = 46.333$, $p < .001$), and mental health concerns ($R^2 = 0.316$, $F[5, 301] = 27.824$, $p < .001$), demonstrating the robustness of the model.

In conclusion, the findings from the moderated serial mediation analysis were consistent with the results from the earlier moderated mediation analysis. The presence of microaffirmations did not significantly alter the influence of microaggressions on the mediators, but they did have a significant buffering effect on the direct impact of microaggressions on mental health concerns. This underscored the importance, as suggested by our findings, of integrating microaffirmations into interventions aimed at mitigating the negative effects of microaggressions on mental health.

Discussion

This section delved into the findings of our study, investigating the repercussions of microaggressions on mental health, with an emphasis on internalized heterosexism and sexual orientation concealment acting as mediators. Additionally, it explored the possibility of microaffirmations functioning as a moderator. Our results offered a detailed understanding of these intricate relationships, elucidating the complex mechanisms by which microaggressions may affect mental health. We discussed these results in the context of our initial research hypotheses and reviewed their alignment with the existing body of literature.

Microaggressions and Mental Health Concerns

Our study affirmed the direct and positive association between microaggressions and mental health issues, corroborating previous findings (Gibbs & Fusco, 2023; Richard, 2021; Salim et al., 2019; Seelman et al., 2017; Woodford et al., 2014). In line with our first hypothesis (H1), participants experiencing greater levels of microaggressions reported more mental health concerns. This emphasized the psychological cost of microaggressions, even in their subtle forms, and their contribution to a hostile environment that heightened mental health issues.

Although the effect size of this specific stressor on the Thai sexual minority sample was small, Meyer's (2003) minority stress theory posits that specific stressors related to accumulate on top of general life stressors. Thus, while limited quantitatively, identifying this additional identity-based stressor holds meaning by highlighting another nuanced layer of excess stress faced by the sample above general population stress levels. From a minority stress perspective, the present study's ability to reveal an overlooked factor that exacerbates challenges for Thai sexual minorities

outweighs the small statistical impact.

The Mediating Roles of Internalized Heterosexism and Sexual Orientation

Concealment

Our findings revealed a direct and positive correlation between microaggressions and both internalized heterosexism and sexual orientation concealment. Consistent with H2.1 and H3.1, these positive associations implied that repeated exposure to microaggressions may have led individuals to internalize negative societal attitudes and hide their sexual orientation. This phenomenon reflected coping mechanisms in response to persistent discrimination. This absorption of negative attitudes, often referred to as self-blame, could be a psychological response to recurring microaggressions (Szymanski et al., 2008). Similarly, concealment of one's sexual identity might have been employed as a defensive strategy to shield oneself from further discrimination, a behavior supported by the stress and coping theory (Lazarus & Folkman, 1984) Thus, our findings extended these theories by illustrating how microaggressions could indirectly contribute to the stress experienced by Thai sexual minorities.

Although our study established these relationships, the roles of internalized heterosexism and sexual orientation concealment differed in their influence on mental health outcomes. Despite our anticipations (H2.2) and in contrast to the Psychological Mediation Framework (Hatzenbuehler, 2009), internalized heterosexism did not mediate the relationship between microaggressions and mental health issues. We observed no statistically significant mediating effect, nor was there a significant association between internalized heterosexism and mental health concerns.

Conversely, sexual orientation concealment partially mediated the relationship

between microaggressions and mental health concerns (H3.2). Although concealment may have offered temporary respite from immediate microaggressions, it could have contributed to long-term stress and, as our findings indicated, elevated mental health concerns. This suggested that individuals dealing with high levels of microaggressions were more likely to resort to hiding their sexual orientation, a coping strategy leading to increased mental health issues.

This key insight emphasized the need to address concealment as a significant coping strategy, highlighting its potential psychological implications. It also reinforced Meyer's (2003) Minority Stress Model's theoretical foundation, stating that societal pressures pushing individuals to hide their sexual orientation could increase stress in various ways. For instance, the fear of being involuntarily outed could have created persistent anxiety about one's secrecy being discovered. Additionally, concealing one's identity and pretending to be someone else contradicted one's true self-concept, leading to psychological distress from inauthentic living. The cognitive load and demand required to actively maintain concealment through monitoring behavior and speech also represented a significant source of stress. In summary, societal pressures to hide one's sexual minority status could have exacerbated stress through heightened vigilance, inconsistency between public and private selves, and the mental burden of secrecy. This lent further support to the minority stress perspective.

While internalized heterosexism significantly mediated the relationship between microaggressions and mental health concerns when modeled independently, this effect was obscured with the addition of sexual orientation concealment as a parallel mediator. Specifically, in the simple mediation model with just

microaggressions, internalized heterosexism, and mental health, internalized heterosexism did demonstrate a significant mediating effect in line with H2.2. However, when sexual orientation concealment was added as a second parallel mediator, internalized heterosexism no longer mediated the microaggressions-mental health link, contrary to original hypotheses. This suggests the mediating influence of internalized heterosexism was overridden by the addition of concealment as a competing mediator in the model. In contrast, supporting H3.2, sexual orientation concealment did emerge as a consistent partial mediator, implying those subjected to higher levels of microaggressions may conceal their orientation more, in turn relating to poorer mental health outcomes.

In our primary parallel multiple mediation model, we found that internalized heterosexism did not independently mediate the relationship between microaggressions and mental health. However, our serial multiple mediation analysis revealed a more nuanced perspective, demonstrating an indirect effect of internalized heterosexism on mental health through subsequent sexual orientation concealment. This highlights the importance of examining the interrelationships between internalized heterosexism, concealment, microaggressions, and mental health using multifaceted statistical modeling approaches.

This analysis illuminated complex dynamics between microaggressions, internalized heterosexism, and sexual orientation concealment, uncovering how societal pressures contribute to mental health challenges among Thai sexual minorities. The two-step process suggested that experiencing a higher level of microaggressions could have led individuals to internalize negative societal attitudes about their sexual orientation. This internalization served as an emotional burden,

thereby motivating them to conceal their identity as a form of self-protection. Our findings highlighted internalized heterosexism played a significant role as an initial emotional-cognitive reaction in the mediation pathway. While not directly impacting mental health in the primary model, our serial analysis revealed its indirect effect, supporting its role in the minority stress process.

These findings emphasized the need for additional research, as they diverged from prior studies and contributed to a more nuanced understanding of minority stress theory. The discrepancies may be attributed to differences in our sample, underscoring the importance of cultural and societal contexts in shaping these relationships.

The Moderating Role of Microaffirmations

Our research delved into the potential moderating role of microaffirmations in the relationship between microaggressions and mental health concerns, taking into account sexual orientation concealment and internalized heterosexism as mediators. Our primary model deviated from the original hypothesis by excluding internalized heterosexism due to its lack of a substantial mediating effect. This adjustment highlighted the complex nature of these relationships and emphasized the need for ongoing research to further elucidate these dynamics.

Contrary to H4.3, microaffirmations did not significantly moderate the indirect effect of microaggressions on mental health through sexual orientation concealment. Notably, though microaffirmations considerably reduced sexual orientation concealment, they failed to significantly alter the pathway linking microaggressions and mental health. The implication is that while microaffirmations can mitigate the impulse to conceal one's sexual orientation, they are not sufficient to buffer the

adverse impact of microaggressions on mental health via this mechanism.

Our data intriguingly confirmed H4.1 that microaffirmations buffered the direct relationship between microaggressions and mental health concerns. Microaffirmations, despite not directly influencing mental health concerns or altering the complex dynamics of sexual orientation concealment, demonstrated potential to alleviate the direct harmful effects of microaggressions on mental health. Consequently, providing subtle affirmative support and inclusive gestures could have diminished the immediate impact of microaggressions, fostering improved mental health outcomes.

In our alternative moderated serial multiple mediation model, we proposed internalized heterosexism as the first-stage mediator and sexual orientation concealment as the second-stage mediator. Significantly, microaffirmations did not appear to moderate the indirect effects at either stage. As a form of positive reinforcement, microaffirmations had the potential to alleviate the impulse for individuals to conceal their sexual orientation.

Despite not significantly curtailing the overall indirect impact of microaggressions on mental health, consistent provision of microaffirmations appeared to mitigate the mediating effects of sexual orientation concealment. This observation, while not statistically significant, suggested that these dynamics warranted further investigation. This lack of support for our hypothesis suggested an unexpected dynamic where the indirect effects of microaggressions on mental health, whether solely through internalized heterosexism or sequentially involving both mediators, seemed to intensify in the presence of increased microaffirmations. However, this strengthening of indirect effects did not reach statistical significance,

suggesting a need for further in-depth research to better comprehend these dynamics.

Notably, the serial mediation model accounted for 30.2% of the variance in mental health concerns, while the moderated serial mediation model explained 31.2%. These large effect sizes represent both statistical significance and real-world practical importance. Elucidating pathways that explain nearly one-third of the variability in psychological outcomes sheds light on key intervention targets to address mental health disparities. The substantial variance indicates the harmfulness of microaggressions and restrictive coping, highlighting the need for programs that reduce stigma and build healthy coping skills. The results also reveal the promise of microaffirmations for resilience-promotion by buffering detrimental impacts.

Overall, the models have meaningful clinical utility for understanding nuanced minority stress experiences and psychological processes underlying health inequities. The findings can inform development of impactful, multifaceted interventions through a holistic lens accounting for environmental stressors, cognitive-emotional mechanisms, and buffers against stigma's effects. Tailored support addressing internalized negativity and identity concealment alongside inclusive community actions may effectively promote sexual minorities' wellbeing.

Conclusion

The study provided essential insights into the complex dynamics between microaggressions, microaffirmations, internalized heterosexism, sexual orientation concealment, and mental health concerns. The findings revealed that in the primary parallel mediation model, sexual orientation concealment served as a significant mediator in the relationship between microaggressions and mental health issues, while internalized heterosexism did not mediate this relationship. However, upon adjusting

the model to a sequential mediation framework, internalized heterosexism emerged as the predominant mediator, emphasizing its relevance within specific contexts and highlighting the intricate nature of the relationships among microaggressions, internalized heterosexism, sexual orientation concealment, and mental health concerns.

Our research also established that microaffirmations could directly moderate the relationship between microaggressions and mental health, despite not moderating the mediation path via sexual orientation concealment. This implied that the direct effects of microaffirmations offered a form of resilience against the mental health impact of microaggressions. Interestingly, the results also suggested a pattern where higher levels of microaffirmations might have attenuated the indirect impacts of microaggressions on mental health. However, this finding, though noteworthy, did not achieve statistical significance, inviting cautious interpretation and further exploration.

Limitations

While this research provided meaningful insights into the experiences of sexual minority individuals in Thailand, it is necessary to acknowledge several limitations that may have affected the interpretation and generalizability of our findings.

- **Self-report Measures:** The data collected was based on self-report measures, which inherently carry the risk of recall bias and social desirability bias (McDonald, 2008). These biases might have influenced participants' responses, potentially leading to underestimations or overestimations of their experiences.
- **Cross-sectional Design:** Our study utilized a cross-sectional design, limiting our

ability to draw definitive conclusions about causality. The relationships we observed provided evidence of associations but did not indicate clear causal pathways.

- **Limited Sample Diversity:** The sample predominantly comprised individuals who identified as part of the LGBTQ+ community. While this was the intended focus of our research, it limited the generalizability of our findings. The experiences of individuals with diverse gender identities and those who did not identify within the LGBTQ+ spectrum may have differed considerably (Allmark, 2004).
- **Cultural Context:** This research was conducted in the Thai context, where societal attitudes, cultural norms, and laws regarding sexual orientation may have differed significantly from other regions. This specificity might have limited the transferability of our findings to other cultural or societal contexts.
- **Non-inclusion of Other Potential Mediators and Moderators:** While this study considered internalized heterosexism and sexual orientation concealment as mediators and microaffirmations as a moderator, there might have been other relevant mediators (e.g., rejection sensitivity, emotion dysregulation, emotion-focused coping strategies), or moderators (e.g., social support, resilience) unaccounted for in our research. The non-inclusion of these factors may have limited the comprehensiveness of our findings.
- **Potential Differences in Microaggressions Experience:** Our study did not distinguish between different types or sources of microaggressions. Microaggressions may have differed based on various factors like the nature of the relationship between the involved parties or the context in which they occurred, which may have influenced the impact on mental health.

- **Uncaptured Complexities:** While we accounted for direct, mediating, and moderating relationships in our models, real-world experiences are often more complex and multi-dimensional, which our research design may not have fully captured.

Despite these limitations, our research contributed significantly to understanding the experiences and mental health impacts faced by sexual minority individuals in Thailand. However, these limitations should be taken into account in future research to build on and expand our findings.

Recommendations

Building on these findings, future research should have delved deeper into understanding the complex interplay between these factors. There was a need for studies employing longitudinal designs and larger, more representative samples to further validate these relationships. Exploring other potential moderators like resilience, personal coping strategies, social support, and ethnic identity as well as mediators such as rejection sensitivity, emotion dysregulation, emotion-focused coping strategies, social isolation, may have enriched our comprehension of the pathways through which microaggressions affected mental health.

The recommendations stemming from this research were multifaceted and suggested promising avenues for future exploration. First, given the potential buffering role of microaffirmations in mitigating the direct negative impact of microaggressions on mental health, there was a need to develop and test interventions that leveraged this promising strategy. By incorporating microaffirmations into interventions, we may have been better equipped to support the mental health of individuals experiencing microaggressions related to their sexual orientation, which

were quite commonplace among Thai LGBTQ adults in the study.

The intriguing findings about microaffirmations' role in buffering the indirect impacts of microaggressions on mental health offered a new direction for future studies. It would have been beneficial to investigate factors such as the timing, quality, and context of microaffirmations, along with their interactions with individuals' resilience, coping mechanisms, or psychological resources.

In practical terms, our findings underlined the importance of efforts aimed at reducing microaggressions and promoting microaffirmations in society, particularly in contexts involving individuals with diverse sexual orientations. Such efforts could have contributed to mitigating mental health concerns in these communities.

Lastly, these findings needed to be validated across different cultural, geographical, and demographic contexts. Broadening the scope of exploration would have helped ensure the universal applicability of the findings and enhance their relevance across diverse LGBTQ+ communities. Taken together, these recommendations paved the way for future research to continue advancing our understanding of the unique socio-psychological experiences within the LGBTQ+ community, ultimately contributing to improved mental health outcomes and interventions.

In conclusion, while our study uncovered the multifaceted dynamics between microaggressions, internalized heterosexism, sexual orientation concealment, microaffirmations, and mental health, it also underlined the importance of continued research to further elucidate these complex relationships. The potential of microaffirmations in counteracting the harmful effects of microaggressions offered a promising avenue for both future research and practical interventions.

Chapter 5

General Discussion

This concluding chapter integrated the key findings from the two studies in this dissertation research. It discussed the theoretical and practical implications, along with notable limitations and recommendations to guide future directions for research on this topic.

Summary of Key Findings

The foundational groundwork laid in Study One led to the creation and validation of the Thai Sexual Orientation Microaggressions Scale (T-SOMG) and Thai Sexual Orientation Microaffirmations Scale (T-SOMF). These instruments' reliability was confirmed through high internal consistency coefficients, ensuring that they consistently measured the constructs of microaggressions and microaffirmations among Thai LGBTQ+ individuals.

Regarding construct validity, Principal Axis Factoring identified the underlying dimensions of these scales. For T-SOMG, two factors, "Interpersonal Microaggression" and "Environmental Microaggression," were revealed, whereas T-SOMF analysis yielded "Interpersonal Microaffirmation" and "Environmental Microaffirmation." This process verified that the scales accurately measured the constructs they were intended to gauge, providing evidence of construct validity.

The convergent validity of T-SOMG was supported by significant positive correlations with related constructs, such as discrimination, while T-SOMF showed associations with social support. This suggested that these scales accurately aligned with and captured similar aspects of experiences to those in established theoretical frameworks of microaggressions and microaffirmations. Discriminant validity was

demonstrated by the absence of significant associations with unrelated constructs, affirming that the scales measured distinct constructs, such social desirability, and did not overlap with unrelated variables.

Building on these validated scales, Study Two examined the effects of microaggressions on mental health concerns, the mediating roles of internalized heterosexism and sexual orientation concealment, and the potential moderating effects of microaffirmations. Findings affirmed the detrimental impact of microaggressions on mental health concerns (H1), aligning with previous research.

The study also illuminated the distinct roles of internalized heterosexism and sexual orientation concealment. Both factors were positively associated with microaggressions (H2.1 & H3.1), yet their influence on mental health concerns diverged. While internalized heterosexism significantly mediated the microaggressions-mental health link when modeled independently, this effect was obscured by the addition of sexual orientation concealment as a parallel mediator. Specifically, internalized heterosexism demonstrated a mediating effect in isolation, but did not maintain this when concealment was introduced as a competing mediator. In contrast, supporting H3.2, sexual orientation concealment emerged as a consistent partial mediator, suggesting those facing more microaggressions concealed their orientation more, relating to poorer mental health.

However, the serial multiple mediation analysis revealed a more complex pathway whereby microaggressions were associated with greater internalized heterosexism, linking to increased concealment, in turn related to worse mental health. This highlighted internalized heterosexism's important indirect role as a precursor to concealment coping in response to microaggressions. The findings

emphasized the need for further disentangling the interrelationships between internalized heterosexism, concealment, microaggressions, and mental health using multifaceted statistical modeling.

Microaffirmations did not moderate the indirect effect of microaggressions on mental health concerns via sexual orientation concealment, as initially hypothesized (H4.3). However, they were found to moderate the direct relationship between microaggressions and mental health concerns (H4.1), implying that they could buffer the direct negative impact of microaggressions.

In an alternative moderated serial multiple mediation model, microaffirmations did not significantly moderate the indirect effects through either internalized heterosexism (H4.2) or sexual orientation concealment. This unexpected finding invited further examination to clarify these dynamics.

In synthesis, these studies advanced our understanding of how microaggressions impact mental health, the crucial role of sexual orientation concealment as a mediator, and the potential of microaffirmations in buffering the direct impact of microaggressions. They also highlighted the need for continued exploration into the role of internalized heterosexism. Together, these findings contributed essential insights into the mental health concerns of Thai LGBTQ+ individuals, underpinning the development of future supportive interventions.

Implications of Findings

Theoretical Contributions

This research made valuable contributions to minority stress and psychological mediation frameworks by testing these models among Thai sexual minorities. Findings supported the applicability of both theories in this cultural

context for understanding processes linking stigma-related stressors to mental health.

Results highlighted the complex dynamics between microaggressions, concealment tendencies, internalized self-stigma, and positive identity experiences. Although internalized heterosexism did not independently mediate microaggression effects, the sequential mediation pointed to its indirect role in shaping maladaptive behaviors that heightened distress. This advanced perspectives on the internalization of societal devaluation.

Notably, microaffirmations emerged as a moderator, despite such resilience factors being less examined within minority stress models. This underscored the importance of integrating positive identity experiences when conceptualizing stigma-related processes. Overall, integrating the two frameworks provided valuable and nuanced insight into socio-psychological dynamics potentially underlying mental health disparities among Thai sexual minorities.

Practical Implications

The development of the T-SOMG and T-SOMF had important practical utility for researchers and professionals in Thailand and similar cultural contexts. These localized measures allowed for effective detection of the subtle positive and negative experiences unique to Thai sexual minority groups. Knowledge of the relationships tested also had key applied value. Findings could inform culturally-tailored mental health interventions by illuminating problematic mediators like concealment and internalized self-stigma that could be targeted.

This research provides preliminary evidence that microaffirmations may help buffer the negative impacts of microaggressions on mental health among sexual minorities. Though experimental clinical research is still needed, these findings

suggest incorporating affirming statements and validating LGBTQ+ identities could be beneficial during counseling with sexual minority clients. On a societal level, results highlight the potential value of continued advocacy to promote microaffirmations and reduce microaggressions through public education, policies, and community building.

These initial findings have promising practical implications for addressing mental health disparities. They indicate training therapists in affirmative practices could provide affirming coping skills to help LGBTQ+ clients build resilience against minority stress. Additionally, broader public health campaigns fostering subtle acceptance interpersonally and in media could positively impact mental health. However, more research is needed to clarify optimal implementation before definitive practice recommendations. Still, this study provides an empirical foundation suggesting affirmative approaches warrant continued investigation as tools to potentially enhance wellbeing and equity among marginalized populations.

Limitations

While these studies offered valuable insights, some limitations should be acknowledged to guide future research. The reliance on convenience sampling risked underrepresenting certain subgroups, like those with high internalized heterosexism or impaired mental health. More targeted recruitment was needed to access hidden populations. Additionally, the cross-sectional designs could not establish causality. Longitudinal approaches would have elucidated causal pathways and enabled test-retest scale evaluations over time. Self-report measures also carried risks of response biases potentially influencing results. Incorporating implicit or behavioral measures could have complemented self-reports in future work.

Generalizability beyond the Thai cultural context required investigation to ensure applicability across diverse settings. Though these studies illuminated some mediating and moderating mechanisms, other relevant factors likely remained unexplored, limiting model comprehensiveness. A priority for future research was continued exploration of potential mediators (e.g., rejection sensitivity, emotion dysregulation, emotion-focused coping strategies), or moderators (e.g., social support, resilience). Furthermore, differentiating microaggression types and sources may have revealed nuances, as impacts likely depended on relationship dynamics, contexts, or other factors. Finally, the complex, multifaceted realities of marginalized groups were difficult to fully capture through these analytic approaches. Mixed methods and longitudinal designs would have promoted deeper understanding of dynamic processes.

In summary, these limitations offered meaningful avenues to extend this research through enhanced recruitment, study designs, consideration of cultural contexts, exploration of variables, and the application of analytical sophistication.

Future Directions

These studies illuminated several valuable directions for continued research. Validating the microaggression (T-SOMG) and microaffirmation (T-SOMF) scales across diverse backgrounds was critical for ensuring generalizability and enabling cross-cultural comparisons. Additionally, employing longitudinal approaches would have been beneficial for elucidating temporal dynamics, causal pathways, and scale test-retest reliability over time. Further construct validation against mental, behavioral, and attitudinal criteria was encouraged to support scale utility and deepen insights into multifaceted challenges confronting sexual minorities.

An essential recommendation was investigating microaffirmations as a promising buffer against microaggression mental health impacts. Developing and evaluating strength-based interventions leveraging microaffirmations represented a priority. Clarifying factors influencing microaffirmation effectiveness such as timing, context, and individual differences warranted examination. Study findings also underscored the potential benefits of reducing microaggressions and fostering microaffirmations through public education and policy initiatives. However, rigorous program evaluation was imperative to guide effective implementation.

Elucidating the complex mediating and moderating mechanisms through multivariate statistical modeling and mixed methods was needed to advance nuanced understanding. Continued research mapping pathways involving resilience, coping, social support, and other relevant factors was recommended. Ultimately, multifaceted research advancing knowledge of microaggressions and microaffirmations experiences related to sexual orientation could inform impactful practices and policies to promote LGBTQ+ health, well-being, and equity in the face of minority stress.

In summary, by extending measurement validation, employing longitudinal approaches, examining multidimensional pathways, developing strengths-based interventions, and driving policy changes, impactful programs could be created to support sexual minorities confronting minority stress.

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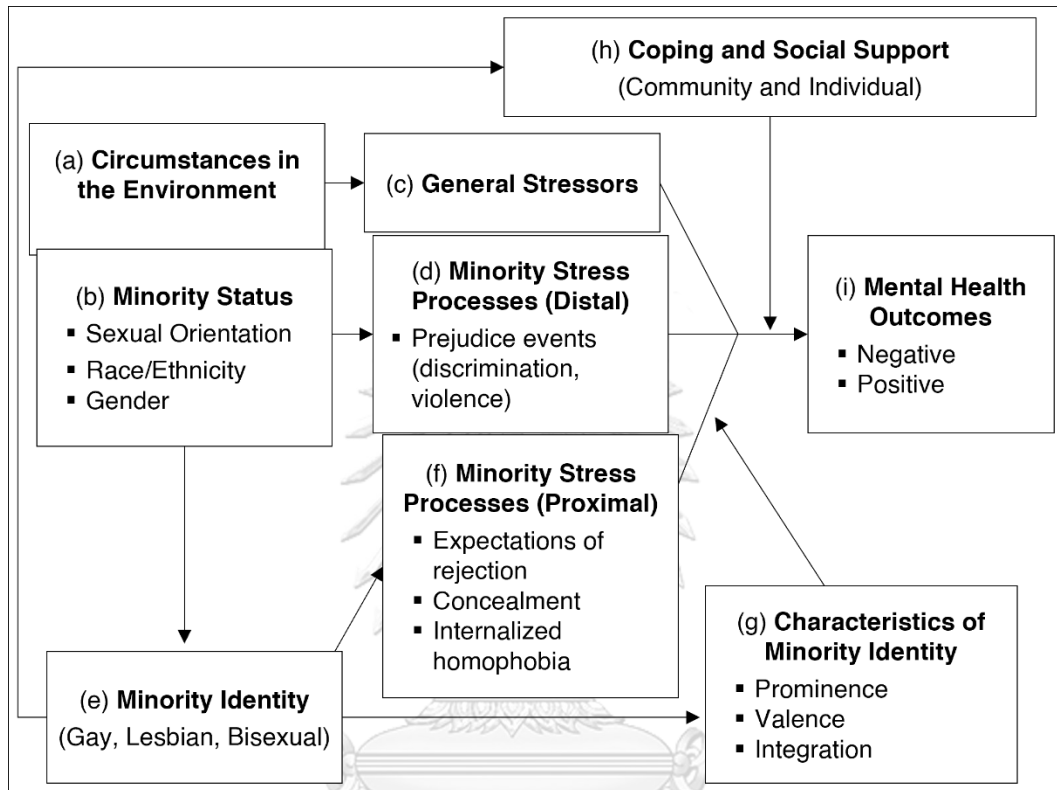
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Appendix A

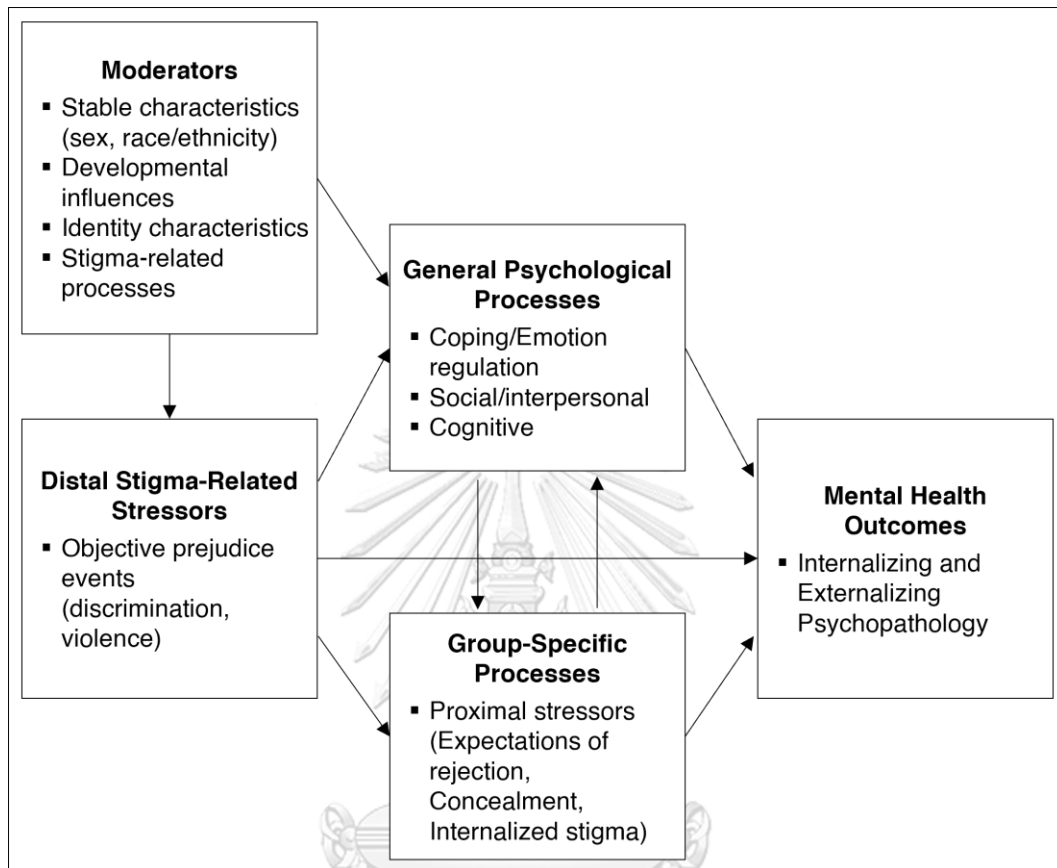
Figure A 1

Minority Stress Model



Note. Reprinted from “Prejudice, Social Stress, and Mental Health in Lesbian, Gay, and Bisexual Populations: Conceptual Issues and Research Evidence,” by I. H.

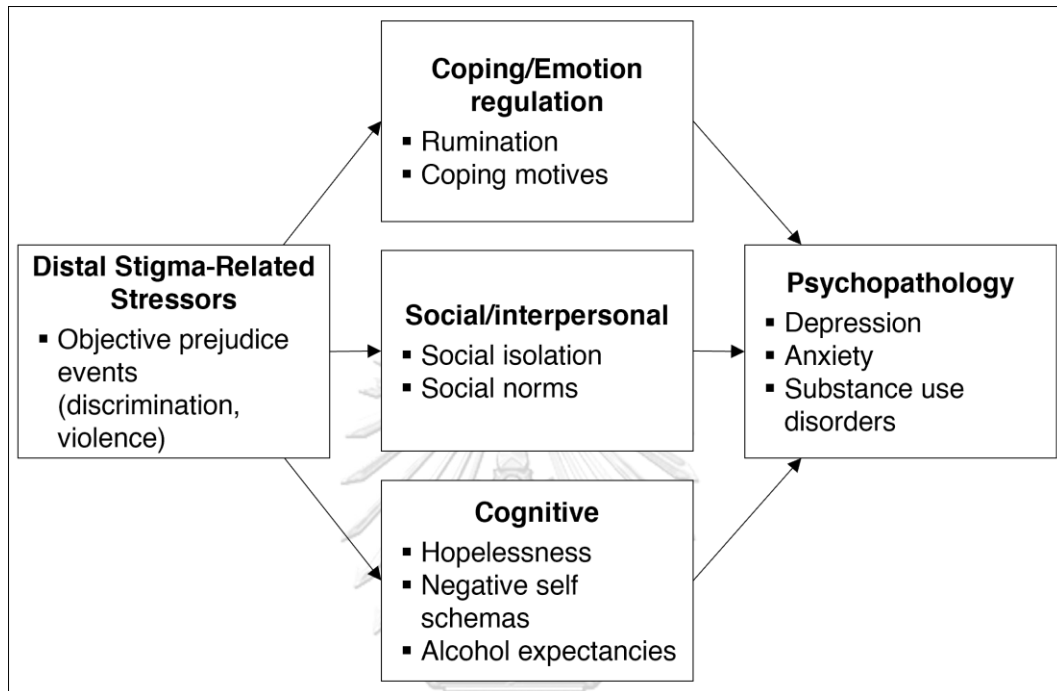
Meyer, 2003, *Psychological Bulletin*, 129, p. 679. Copyright 2003 by the American Psychological Association.

Figure A 2*Psychological Mediation Framework*

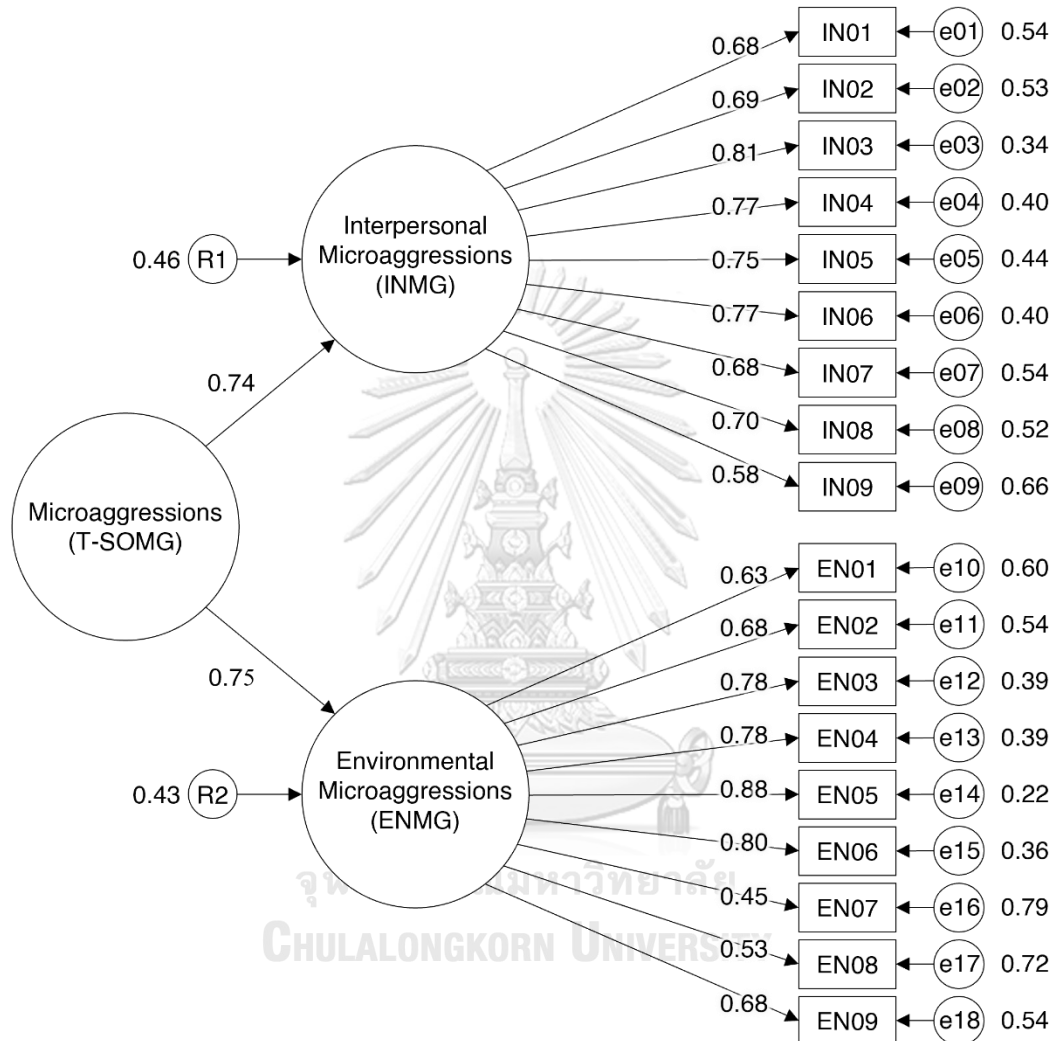
Note. Reprinted from “How does sexual minority stigma ‘get under the skin’? A psychological mediation framework,” by M. L. Hatzenbuehler, 2009, *Psychological Bulletin*, 135, p. 712. Copyright 2009 by the American Psychological Association.

Figure A 3

Integrative Mediation Framework of Group-Specific and General Psychological Processes



Note. Reprinted from “How does sexual minority stigma ‘get under the skin’? A psychological mediation framework,” by M. L. Hatzenbuehler, 2009, *Psychological Bulletin*, 135, p. 724. Copyright 2009 by the American Psychological Association.

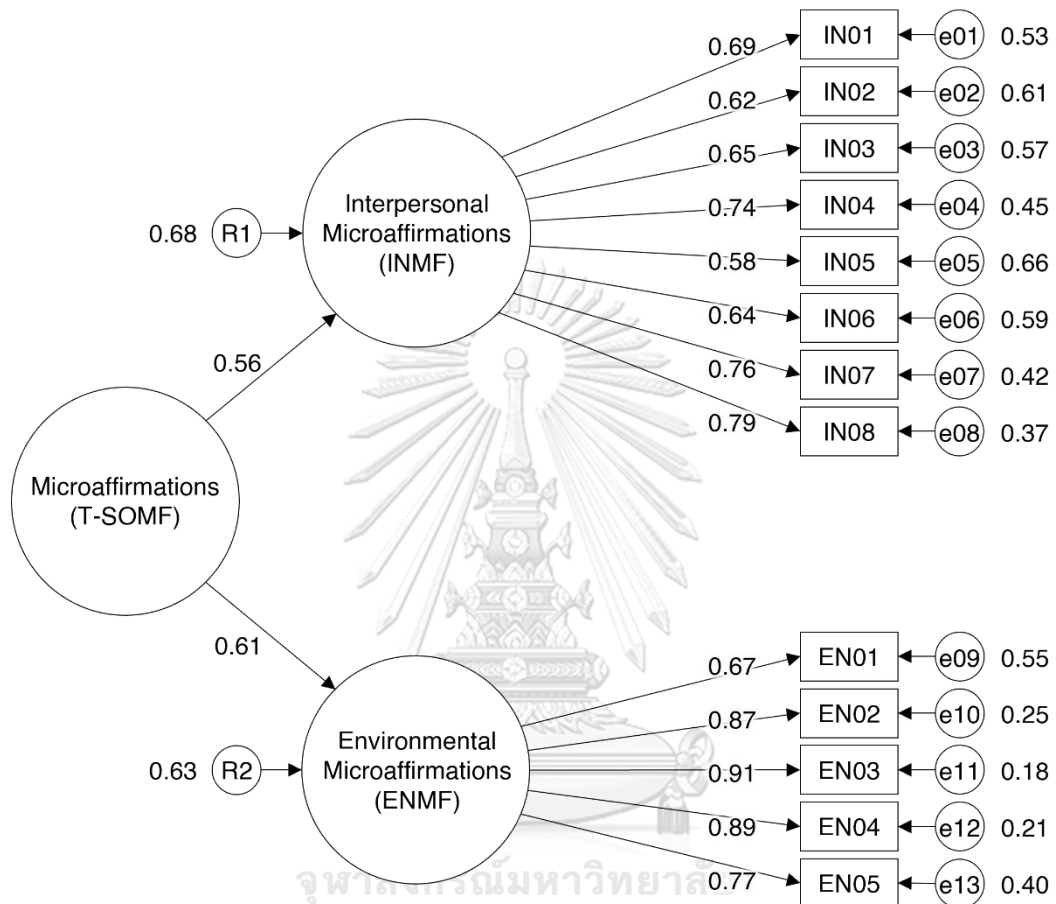
Figure A 4*Second-Order Confirmation Factor Analysis for Thai Sexual Orientation**Microaggressions Scale (T-SOMG)*

Note. $N = 200$.

Figure A 5

Second-Order Confirmation factor analysis for Thai Sexual Orientation

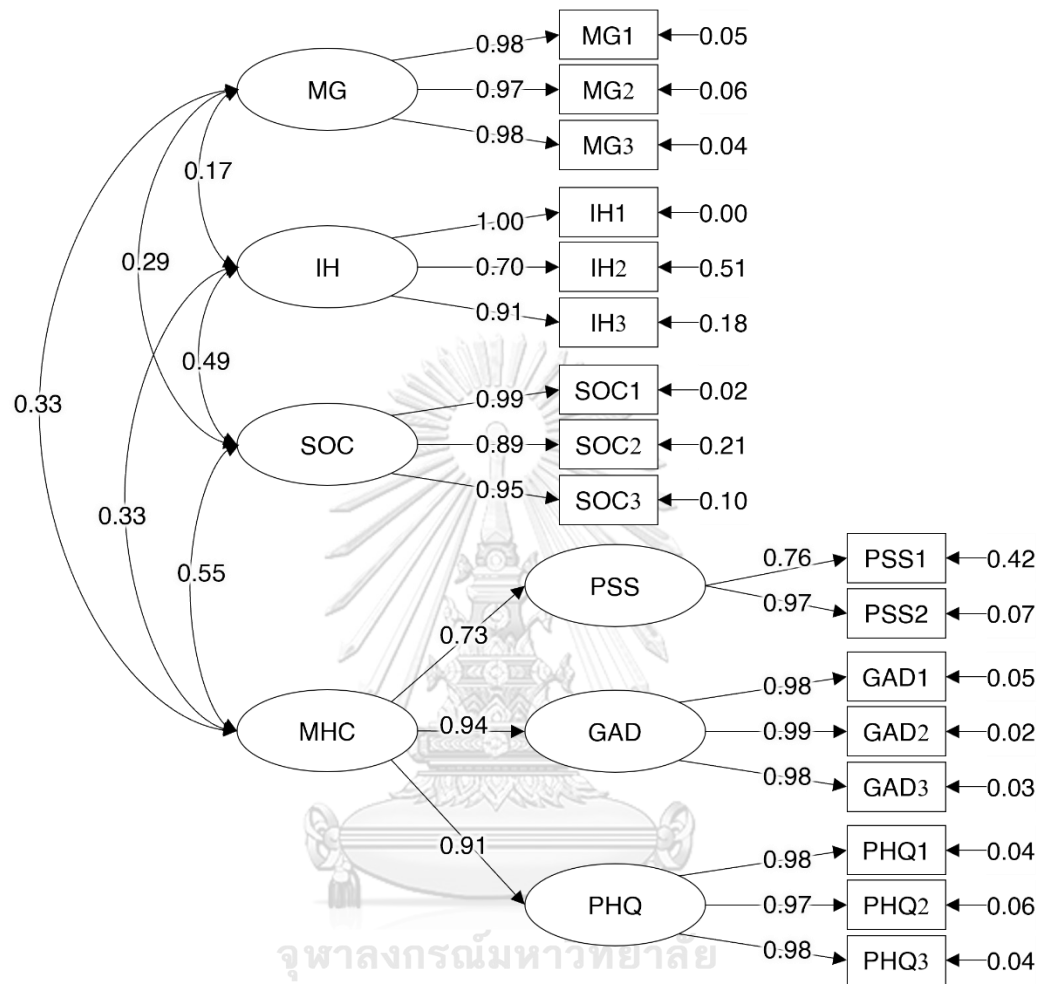
Microaffirmations Scale (T-SOMF)



Note. N = 200.

Figure A 6

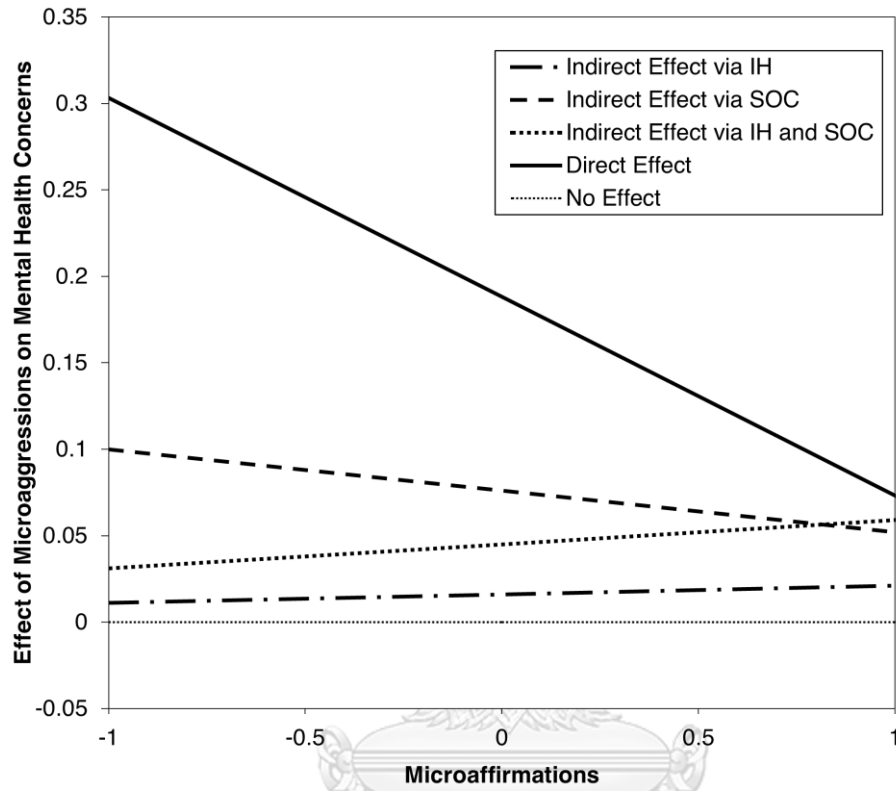
Measurement Model



Note. Statistics are Standardized Factor Loadings.

Figure A 7

A Visual Representation of the Conditional Indirect and Direct Effects of Microaggressions (X) on Mental Health Concerns (Y)



Appendix B

Table B 1
Summary Characteristics and Effect Size of Previous Studies of Microaggressions on Mental Health Concerns

Study	Sample	Country	LGBTQ+	D	Predictor	Outcome	Effect size
Bissonette and Szymanski (2019)	N = 568, M_{age} = 20.5, %F = 80.0, %White = 69.0	USA	LGBQ	C	LGBQMCS	Depression (PHQ-8)	.34*
Kaufman et al. (2017)	N = 190, M_{age} = 17.6, %F = 0, %White = NR N = 77, M_{age} = 17.6, %F = 100.0, %White = NR	NL	LGB	C	SOMI	Depression (DML)	.42** .32**
Kulick et al. (2017)	N = 111, M_{age} = 22.5, %F = 45.0, %White = 0 N = 349, M_{age} = 23.0, %F = 56.7, %White = 100.0	USA	LGBTQ+	C	LGBQMCS	Depression (PHQ-9)	.25** to .28** .24*** to .29***
Salim et al. (2019)	N = 89, M_{age} = 24, %F = 100.0, %White = 62.3	USA	LB	P	BMS-W	Depression (PHQ-9)	$b = 1.49^*$
Sarno et al. (2020)	N = 1,130, M_{age} = 21.3, %F = 0, %White = 25.1	USA	YMSM and YTW	P	SOMI	Depression (PROMIS)	.07* to .26***
Seelman et al. (2017)	N = 497, M_{age} = NR, %F = NR, %White = NR	USA	LGBTQ+	C	LGBQMCS and TMAs	Anxiety (GAD-7) Perceived Stress (PSS)	.20*** .22***
Swann et al. (2016)	N = 363, M_{age} = NR, %F = 0.0, %White = 13.2	USA	LGB	C	SOMI	Depression (BSI)	.29***

(continued)

Table B 1 (continued)

Summary Characteristics and Effect Size of Previous Studies of Microaggressions on Mental Health Concerns

Study	Sample	Ctry	LGBTQ+	D	Predictor	Outcome	Effect size
Timmins et al. (2020)	N = 4,248, M_{age} = NR, %F = 42.9, %White = 89.1	UK, USA, IE, CA, AU	LGB	C	MAS	Anxiety (GAD-7) Depression (PHQ-9)	.33*** .30***
Whicker (2016)	N = 179, M_{age} = 34.5, %F = 0.0, %White = 88.8	USA	LGB	C	HMS	Anxiety (DASS) Depression (DASS) Perceived Stress (DASS)	.45** .19*** .39***
Woodford et al. (2014)	N = 299, M_{age} = 24.0, %F = 57.2, %White = 77.6	USA	LGB	C	LGBQMCS	Anxiety (GAD-7) Perceived Stress (PSS)	.25*** to .30*** .31*** to .34***
Woodford, Chonody, et al. (2015)	N = 580, M_{age} = 23.0, %F = 54.0, %White = 86.0	USA	LGB	C	LGBQMCS	Depression (PHQ-9)	.25*** to .29***
Woodford, Pacey, et al. (2015)	N = 187, M_{age} = 34.0, %F = 44.0, %White = 71.0	USA	LGB	C	EMAS	Anxiety (GAD-7) Perceived Stress (PSS)	.24*** to .25*** .19** to .21**

Note. The effect size was Pearson bivariate correlation. Ctry = study's country of origin. NR = not reported. NL =

Netherlands. USA = United States. CA = Canada. AU = Australia. IE = Ireland. %F = percent of females at birth in the sample.

N = number of participants. D = Design. C = cross-sectional design. P = prospective design. LGBTQ+s = sexual orientation or

gender identity of participants in the sample. LGB = cisgender lesbian, gay, or bisexual individuals. LGBTQ = lesbian, gay,

bisexual, or queer individuals. LGBT = lesbian, gay, bisexual, or transgender individuals. LGBTQ+ = lesbian, gay, bisexual, transgender, or queer individuals. YMSM = young men who have sex with men. YTW = young transgender women. LB = lesbian and bisexual women individuals. HMS = Homonegative Microaggression Scale. LGBQMCS = LGBQ Microaggression on Campus Scale. SOMI = Sexual Orientation Microaggression Inventory. DML = Depressive Mood List. PROMIS = Patient-Reported Outcomes Measurement Information System (PROMIS) Depression—Short Form 8a. BSI = Brief Symptom Inventory. MAs = Sexual minority subscale of the gender and sexual minority microaggressions scale. TMAs = Trans microaggressions scale.

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



Table B 2

Summary of Studies on Indirect Effects in Line with Hatzenbuehler's (2009) Framework

Study	Sample	D	Independent	Intermediary	Dependent
Bissonette and Szymanski (2019)	$N = 568$, $M_{age} = 20.5$, %F = 80.0, %White = 69.0, LGBQ college students	C	Microaggressions, Internalized Heterosexism	Positive peer group relations	Depression
Deitz (2015)	$N = 233$, $M_{age} = 42.3$, %F = 48.5, %White = 85.0, SM	C	Microaggressions	Expectations of Rejection, Internalized heterosexism	Psychological well-being
Kaufman et al. (2017)	$N = 267$, $M_{age} = 17.6$, %F = 28.8, %White = NR, LGB	C	Microaggressions	Rumination	Depression
Sarno et al. (2020)	$N = 1,130$, $M_{age} = 21.3$, %F = 0, %White = 25.1, YMSM and YTW	P	Microaggressions, Victimization, Internalized Stigma	Rumination	Depression
Timmins et al. (2020)	$N = 4,248$, $M_{age} = NR$, %F = 42.9, %White = 89.1, LGB	C	Childhood gender nonconformity	<u>Lv1</u> : Microaggressions, Heterosexist discrimination <u>Lv2</u> : Expectations of Rejection, Internalized heterosexism <u>Lv3</u> : Rumination	Anxiety, Depression
Denton et al. (2014)	$N = 564$, $M_{age} = 35.3$, %F = 47.8, %White = 84.2, SM	C	Heterosexist discrimination	<u>Lv1</u> : Expectations of Rejection, Internalized heterosexism <u>Lv2</u> : Emotion-focused coping self-efficacy	Physical symptom severity (continued)

Table B 2 (continued)

Summary of Studies on Indirect Effects in Line with Hatzenbuehler's (2009) Framework

Study	Sample	D	Independent	Intermediary	Dependent
Feinstein et al. (2012)	$N = 467$, $M_{age} = 31.2$, %F = 46.6, %White = 76.0, LG	C	Childhood gender nonconformity	<u>Lv1</u> : Heterosexist discrimination <u>Lv2</u> : Internalized heterosexism, Rejection sensitivity	Anxiety, Depression
Puckett et al. (2016)	$N = 363$, $M_{age} = 18.9$, %F = 0.0, %White = NR, YMMSM	P	Victimization	Internalized heterosexism	Mental health problems
Szymanski and Ikizler (2013)	$N = 203$, $M_{age} = 31.0$, %F = 0, %White = 82.0, SMM	C	Heterosexist discrimination	Internalized heterosexism	Depression
Walch et al. (2016)	$N = 474$, $M_{age} = 31.4$, %F = NR, %White = 80.6, LGB	C	Heterosexist discrimination	<u>Lv1</u> Internalized heterosexism <u>Lv2</u> Anxiety, Depression, Stress	Self-rated health, Sick days, Physician visits, Medication use

Note. N = number of participants. %F = percent of females at birth in the sample. Ctry = study's country of origin. NR = not reported. D = Design. C = cross-sectional design. P = prospective design. LGB = cisgender lesbian, gay, or bisexual individuals. LG = lesbian and gay. YMMSM = young men who have sex with men. YTW = young transgender women. SM = sexual minority individuals SMM = sexual minority men. GB = gay and bisexual men individuals.

Table B 3*Demographic Characteristics of Participants in the Study*

	Study One Phase 1 (<i>n</i> = 20)		Study One Phase 2 (<i>n</i> = 164)		Study One Phase 3 (<i>n</i> = 200)		Study Two (<i>n</i> = 307)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Assigned sex at birth								
Male	10	50.0	73	44.5	38	19.0	137	44.6
Female	10	50.0	91	55.5	162	81.0	170	55.4
Sexual orientation								
Lesbian	5	25.0	62	37.8	73	36.5	68	22.1
Gay	6	30.0	62	37.8	32	16.0	104	33.9
Bisexual	9	45.0	30	18.3	59	29.5	76	24.8
Queer	–	–	5	3.0	14	7.0	20	6.5
Questioning	–	–	1	0.6	8	4.0	10	3.3
Asexual	–	–	4	2.4	10	5.0	9	2.9
Pansexual	–	–	–	–	4	2.0	20	6.5
Gender identity								
Men	9	45.0	63	38.4	31	15.5	115	37.5
Women	10	50.0	75	45.7	108	54.0	112	36.5
Non-binary	1	5.0	26	15.9	61	30.5	53	17.3
Gender fluid	–	–	–	–	–	–	19	6.2
Agender	–	–	–	–	–	–	8	2.6
Residence								
Bangkok	6	30.0	80	48.8	101	50.5	123	40.1
Central Thailand (excluding Bangkok)	4	20.0	26	15.9	21	10.5	53	17.3
Eastern Thailand	1	5.0	6	3.7	16	8.0	20	6.5
Northeast Thailand	2	10.0	23	14.0	25	12.5	26	8.5
Northern Thailand	3	15.0	15	9.1	20	10.0	32	10.4
Southern Thailand	3	15.0	13	7.9	14	7.0	30	9.8
Western Thailand	1	5.0	1	0.6	3	1.5	23	7.5

(continued)

Table B 3 (continued)*Demographic Characteristics of Participants in the Study*

	Study One Phase 1 (<i>n</i> = 20)		Study One Phase 2 (<i>n</i> = 164)		Study One Phase 3 (<i>n</i> = 200)		Study Two (<i>n</i> = 307)	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Educational level								
Elementary/some high school	4	20.0	–	–	6	3.0	11	3.6
Graduated high School/vocational certificate	4	20.0	11	6.7	30	15.0	51	16.6
College/diploma/high vocational certificate	4	20.0	8	4.9	4	2.0	4	1.3
University degree	7	35.0	105	64.0	136	68.0	202	65.8
Postgraduate degree/additional qualification	1	5.0	30	18.3	20	10.0	31	10.1
Doctorate/advanced degree	–	–	6	3.7	–	–	3	1.0
Professional degree	–	–	3	1.8	4	2.0	5	1.6
Other(s)	–	–	1	0.6	–	–	–	–
Religion								
Buddhist	12	60.0	125	76.2	119	59.5	220	71.7
Christian	2	10.0	5	3.0	4	2.0	7	2.3
Muslim	1	5.0	2	1.2	2	1.0	3	1.0
Other(s)	–	–	–	–	2	1.0	1	0.3
Non-believer	5	25.0	32	19.5	73	36.5	76	24.8
Employment status								
Unemployed and seeking employment	4	20.0	8	4.9	16	8.0	19	6.2
Regular (full-time)	9	45.0	86	52.4	85	42.5	146	47.6
Regular (part-time)	1	5.0	2	1.2	1	0.5	10	3.3
Freelance	1	5.0	16	9.8	18	9.0	20	6.5
Student	5	25.0	40	24.4	75	37.5	108	35.2
Retired	–	–	2	1.2	–	–	–	–

(continued)

Table B 3 (continued)*Demographic Characteristics of Participants in the Study*

	Study One Phase 1 (<i>n</i> = 20)		Study One Phase 2 (<i>n</i> = 164)		Study One Phase 3 (<i>n</i> = 200)		Study Two (<i>n</i> = 307)	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Other(s)	–	–	10	6.1	5	2.5	4	1.3
Relationship status								
Single/not dating	7	35.0	73	44.5	94	47.0	136	44.3
Dating	7	35.0	21	12.8	28	14.0	32	10.4
Partnered	4	20.0	56	34.1	73	36.5	125	40.7
Engaged (same sex)	–	–	–	–	–	–	2	0.7
Married (same sex)	–	–	2	1.2	3	1.5	2	0.7
Married (other sex)	2	10.0	10	6.1	1	0.5	10	3.3
Other(s)	–	–	2	1.2	1	0.5	–	–

Table B 4*Number of Items in Each Phase of Development for the T-SOMG and T-SOMF Scales*

Phase	Number of items	
	T-SOMG	T-SOMF
Phase 1 ($N = 20$)		
Initial item	94	25
Rating results	58	23
Phase 2 ($N = 164$)		
After removing neutral items	42	18
After removing low on frequency characteristics	26	18
EFA result	22	18
Phase 3 ($N = 200$)		
After removing low on frequency characteristics	21	18
CFA result	18	13
Result	18	13

Table B 5

Results of Second-Order Confirmatory Factor Analysis for the Thai Sexual Orientation Microaggressions Scale (T-SOMG)

item	<i>M</i>	<i>SD</i>	F1: INMG	F2: ENMG
INMG01	3.34	1.91	0.68	–
INMG02	3.60	2.22	0.69	–
INMG03	4.41	2.11	0.81	–
INMG04	4.52	2.15	0.77	–
INMG05	4.94	2.17	0.75	–
INMG06	4.09	2.33	0.77	–
INMG07	3.65	2.26	0.68	–
INMG08	4.27	2.32	0.70	–
INMG09	4.22	2.16	0.58	–
ENMG01	6.11	1.48	–	0.63
ENMG02	5.94	1.34	–	0.68
ENMG03	6.33	1.24	–	0.78
ENMG04	6.16	1.40	–	0.78
ENMG05	6.24	1.26	–	0.88
ENMG06	6.08	1.43	–	0.80
ENMG07	5.55	1.49	–	0.45
ENMG08	5.80	1.38	–	0.53
ENMG09	6.22	1.21	–	0.68
Cronbach's Alpha (α)			0.90	0.89
McDonald's Omega (ω_T)			0.92	0.92

Note. INMG = Interpersonal microaggressions. ENMG = Environmental microaggressions.

Table B 6

Results of Second-Order Confirmatory Factor Analysis for the Thai Sexual Orientation Microaffirmations Scale (T-SOMF)

item	<i>M</i>	<i>SD</i>	F1: INMF	F2: ENMF
INMF01	4.68	1.68	0.69	–
INMF02	4.44	1.95	0.62	–
INMF03	4.18	1.98	0.65	–
INMF04	4.86	1.67	0.74	–
INMF05	4.49	1.93	0.58	–
INMF06	3.95	2.17	0.64	–
INMF07	5.12	1.77	0.76	–
INMF08	5.08	1.87	0.79	–
ENMF01	4.04	1.49	–	0.67
ENMF02	4.17	1.64	–	0.87
ENMF03	4.17	1.61	–	0.91
ENMF04	4.34	1.61	–	0.89
ENMF05	4.58	1.68	–	0.77
Cronbach's Alpha (α)			0.88	0.91
McDonald's Omega (ω_T)			0.90	0.92

Note. INMF = Interpersonal microaffirmations. ENMF = Environmental microaffirmations.

Table B 7
Zero-Order Correlations Matrix, Descriptive Statistics, and Reliability Scores of Measured Variables

Variables	MG	INMG	ENMG	MF	INMF	ENMF	IHP	SOCS	MHC	PSS	GAD	PHQ
MG	(0.92)											
INMG	0.91***	(0.90)										
ENMG	0.81***	0.49***	(0.91)									
MF	0.02	-0.10	0.18**	(0.93)								
INMF	-0.01	-0.11	0.14*	0.87***	(0.92)							
ENMF	0.05	-0.06	0.18**	0.86***	0.50***	(0.89)						
IHP	0.21***	0.28***	0.03	-0.04	-0.02	-0.04	(0.80)					
SOCS	0.30***	0.36***	0.12*	-0.18**	-0.19***	-0.11*	0.56***	(0.91)				
MHC	0.33***	0.34***	0.21***	-0.10	-0.16**	-0.01	0.34***	0.51***	(0.96)			
PSS	0.27***	0.27***	0.19***	-0.13*	-0.19***	-0.03	0.27***	0.45***	0.77***	(0.81)		
GAD	0.30***	0.35***	0.16**	-0.07	-0.13*	0.01	0.37***	0.51***	0.94***	0.62***	(0.94)	
PHQ	0.32***	0.31***	0.22***	-0.08	-0.12*	-0.01	0.27***	0.43***	0.95***	0.61***	0.84***	(0.93)
<i>M</i>	4.90	4.04	5.76	4.50	4.57	4.43	1.58	2.30	26.46	7.38	7.92	11.16
<i>SD</i>	1.07	1.43	1.03	1.14	1.36	1.28	0.64	1.04	14.63	3.58	5.77	6.82
α	0.90	0.87	0.87	0.90	0.89	0.87	0.73	0.87	0.95	0.74	0.92	0.91
AVE	0.95	-	-	-	-	-	0.78	0.89	-	0.76	0.97	0.95
CR	0.84	-	-	-	-	-	0.90	0.95	-	0.87	0.89	0.87
Skewness	-0.31	0.03	-1.13	-0.18	-0.24	-0.13	1.90	0.60	0.45	0.25	0.48	0.48
Kurtosis	-0.37	-0.88	1.17	-0.36	-0.62	-0.34	5.01	-0.56	-0.67	-0.51	-0.80	-0.56
Range	1-7	1-7	1-7	1-7	1-7	1-7	1-5	1-5	0-64	0-16	0-21	0-27

Note. The diagonal displays the measures of internal consistency as Omega total (ω_T). M = Mean, SD = Standard Deviation, α = Cronbach's Alpha, AVE = Average Variance Extracted, CR = Composite Reliability. Pearson correlation matrix with variables from Study Two ($N = 307$). MG = Microaggressions. $INMG$ = Interpersonal Microaggressions. $ENMG$ = Environmental Microaggressions. MF = Microaffirmations. $INMF$ = Interpersonal Microaffirmations. $ENMF$ = Environmental Microaffirmation. IHP = Internalized Homophobia Scale-Revised. $SOCs$ = Sexual Orientation Concealment Scale. MHC = Mental Health Concerns. PSS = Perceived Stress Scale-4. PHQ = Patient Health Questionnaire-9. GAD = Generalized Anxiety Disorder Scale.

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

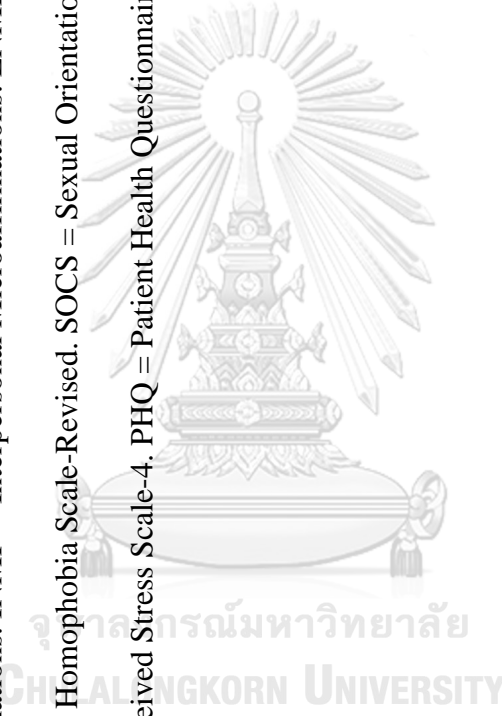


Table B 8
Regression Coefficients, Standard Errors, and Model Summary for the Parallel Multiple Mediator Model Examining the Relationship between Microaggressions and Mental Health Concerns, as illustrated in Figure 2

Antecedent	M_1 (IH)			M_2 (SOC)			Y (MHC)		
	Coeff.	SE	p	Coeff.	SE	p	Coeff.	SE	p
	a_1			a_2			c'		
X (MG)	0.206	0.056	<.001	0.295	0.055	<.001	0.195	0.050	<.001
M_1 (IH)	—	—	—	—	—	—	0.058	0.058	.316
M_2 (SOC)	—	—	—	—	—	—	0.424	0.060	<.001
Constant	0.000	0.056	1.000	0.000	0.055	1.000	0.000	0.048	1.000
	$R^2 = 0.043$			$R^2 = 0.087$			$R^2 = 0.302$		
	$F(1, 305) = 13.535, p < .001$			$F(1, 305) = 29.091, p < .001$			$F(3, 303) = 43.697, p < .001$		

Note. MG = Microaggressions. IH = Internalized Heterosexism. SOC = Sexual Orientation Concealment. MHC = Mental Health Concerns.

Table B 9

Model Coefficients and Conditional Direct and Indirect Effects of Microaggressions on Mental Health Concerns through Sexual Orientation Concealment at Different Levels of Microaffirmations: The Conditional Process Model in Figure 3

Antecedent	M(SOC)			Consequent		
	Coeff.	SE	p	Coeff.	SE	p
X (MG)	a_1 0.297	0.054	< .001	c'_1 0.191	0.050	< .001
M(SOC)	—	—	—	b 0.448	0.051	< .001
W (MF)	a_2 -0.184	0.054	< .001	c'_2 -0.019	0.049	.694
$X \times W$	a_3 -0.025	0.053	.644	c'_3 -0.109	0.047	.021
Constant	i_{M1} 0.001	0.054	.992	i_Y 0.002	0.048	.960
		$R^2 = 0.122$			$R^2 = 0.312$	
		$F(3, 303) = 14.027, p < .001$			$F(4, 302) = 34.293, p < .001$	
	Conditional Indirect Effect ($X \rightarrow M \rightarrow Y$)			Conditional Direct Effect		
W	$(a_1 + a_3W)b$	95 Bootstrap CI		$c'_1 + c'_3W$	SE	p
-1.0 (-1 SD)	0.144	0.076 to 0.229		0.300	0.067	< .001
0.0 (M)	0.133	0.075 to 0.204		0.191	0.050	< .001
1.0 (+1 SD)	0.122	0.039 to 0.221		0.082	0.071	0.248

Note. MG = Microaggressions. SOC = Sexual Orientation Concealment. MHC = Mental Health Concerns. MF = Microaffirmations.

Table B 10

Regression Coefficients, Standard Errors, and Model Summary for the Serial Multiple Mediator Model Examining the Relationship between Microaggressions and Mental Health Concerns, as illustrated in Figure 5

Antecedent	M_1 (IH)			Consequent			Y (MHC)			
	Coeff.	SE	p	Coeff.	SE	p	Coeff.	SE	p	
X (MG)	a_1	0.206	0.056	a_2	0.187	0.047	c'	0.195	0.050	<.001
M_1 (IH)	—	—	—	d_{21}	0.524	0.047	b_1	0.058	0.058	.316
M_2 (SOC)	—	—	—	—	—	—	b_2	0.424	0.060	<.001
Constant	i_{M_1}	0.000	0.056	i_{M_2}	0.000	0.046	i_Y	0.000	0.048	1.000
			$R^2 = 0.043$			$R^2 = 0.350$			$R^2 = 0.302$	
			$F(1, 305) = 13.535, p < .001$			$F(2, 304) = 81.730, p < .001$			$F(3, 303) = 43.697, p < .001$	

Note. MG = Microaggressions. IH = Internalized Heterosexism. SOC = Sexual Orientation Concealment. MHC = Mental Health Concerns.

Table B 11
Model Coefficients and Conditional Direct and Indirect Effects of Microaggressions on Mental Health Concerns through Internalized Heterosexisms and Sexual Orientation Concealment at Different Levels of Microaffirmations: The Conditional Process Model in Figure 6

Antecedent	M_1 (IH)			M_2 (SOC)			Y (MHC)					
	Coeff.	SE	p	Coeff.	SE	p	Coeff.	SE	p			
X (MG)	a_{11}	0.212	0.056	<.001	a_{12}	0.187	0.047	<.001	c'_1	0.188	0.050	<.001
M_1 (IH)	—	—	—	—	d_{21}	0.521	0.046	<.001	b_1	0.075	0.058	0.200
M_2 (SOC)	—	—	—	—	—	—	—	—	b_2	0.406	0.061	<.001
W (MF)	a_{21}	-0.042	0.056	0.452	a_{22}	-0.162	0.045	<.001	c'_2	-0.024	0.049	0.626
X \times W	a_{31}	0.066	0.055	0.232	a_{32}	-0.059	0.045	0.188	c'_3	-0.115	0.047	0.016
Constant	i_{M_1}	-0.002	0.056	0.979	i_{M_2}	0.001	0.045	0.977	i_Y	0.003	0.048	0.958
			$R^2 = 0.049$				$R^2 = 0.380$				$R^2 = 0.316$	
			$F(3, 303) = 5.156, p = 0.002$				$F(4, 302) = 46.333, p < .001$				$F(5, 301) = 27.824, p < .001$	

(continued)

Table B 11 (continued)

Model Coefficients and Conditional Direct and Indirect Effects of Microaggressions on Mental Health Concerns through Internalized Heterosexisms and Sexual Orientation Concealment at Different Levels of Microaffirmations: The Conditional

Process Model in Figure 6

<i>W</i>	Conditional Indirect Effect		Conditional Direct Effect		<i>p</i>
	$(a_{11}+a_{31})b_1$	$(a_{12}+a_{21})b_2$	$c'_1+c'_3W$	$c'_1+c'_3W$	
-1.0 (-1 SD)	0.011	0.100	0.303	0.067	< .001
0.0 (M)	0.016	0.076	0.188	0.050	< .001
1.0 (+1 SD)	0.021	0.052	0.073	0.071	0.307
Conditional Indirect Effect					
$X \rightarrow M_1 \rightarrow Y$					
<i>W</i>	$(a_{11}+a_{31})d_{21}b_2$	95 Bootstrap CI			
-1.0 (-1 SD)	0.031	0.000 to 0.072			
0.0 (M)	0.045	0.014 to 0.087			
1.0 (+1 SD)	0.059	0.009 to 0.130			
$X \rightarrow M_2 \rightarrow Y$					
<i>W</i>	$(a_{12}+a_{22})b_2$	95 Bootstrap CI			
-1.0 (-1 SD)	0.100	0.048 to 0.169			
0.0 (M)	0.076	0.035 to 0.128			
1.0 (+1 SD)	0.052	-0.002 to 0.115			
$X \rightarrow M_2 \rightarrow Y$					
<i>W</i>	$(a_{12}+a_{22})b_2$	95 Bootstrap CI			
-1.0 (-1 SD)	0.100	0.048 to 0.169			
0.0 (M)	0.076	0.035 to 0.128			
1.0 (+1 SD)	0.052	-0.002 to 0.115			

Note. MG = Microaggressions. IH = Internalized Heterosexism. SOC = Sexual Orientation Concealment. MHC = Mental Health Concerns. MF = Microaffirmations.

Appendix C

IRB Approval



The Research Ethics Review Committee for Research Involving Human Research
Participants, Group I, Chulalongkorn University
Jarnjuree 1 Building, 2nd Floor, Phayathai Rd., Patumwan district, Bangkok 10330, Thailand,
Tel: 0-2218-3202, 0-2218-3049 E-mail: eccu@chula.ac.th

AF 02-12

COA No. 088/2021

Certificate of Approval

Study Title No. 028.1/64 : SEXUAL ORIENTATION MICROAGGRESSIONS AND MENTAL HEALTH CONCERNS: A CONDITIONAL PROCESS MODELING OF PROTECTIVE EFFECTS OF MICROAFFIRMATIONS

Principal Investigator : RAPINPAT YODLORCHAI

Place of Proposed Study/Institution : Faculty of Psychology,
Chulalongkorn University

The Research Ethics Review Committee for Research Involving Human Research Participants, Group I, Chulalongkorn University, Thailand, has approved constituted in accordance with Belmont Report 1979, Declaration of Helsinki 2013, Council for International Organizations of Medical Sciences (CIOM) 2016, Standards of Research Ethics Committee (SREC) 2017, and National Policy and guidelines for Human Research 2015.

Signature: Prida Tasanapradit Signature: Raveenan Mingpakane
(Associate Prof. Prida Tasanapradit, M.D.) (Assistant Prof. Raveenan Mingpakane, Ph.D.)
Chairman Secretary

Date of Approval : 19 April 2021

Approval Expire date : 18 April 2022

The approval documents including;

- 1) Research proposal
- 2) Participant Information Sheet and Consent Form
- 3) Researcher
- 4) Questionnaire
- 5) Advertising leaflets



Protocol No. 028.1/64
Date of Approval 19 APR 2021
Approval Expire Date 18 APR 2022

The approved investigator must comply with the following conditions:

1. It's unethical to collect data of research participants before the project has been approved by the committee.
2. The research/project activities must end on the approval expired date. To renew the approval, it can be applied one month prior to the expired date with submission of progress report.
3. Strictly conduct the research/project activities as written in the proposal.
4. Using only the documents that bearing the RECCU's seal of approval: research tools, information sheet, consent form, invitation letter for research participation (if applicable).
5. Report to the RECCU for any serious adverse events within 5 working days.
6. Report to the RECCU for any amendment of the research project prior to conduct the research activities.
7. Report to the RECCU for termination of the research project within 2 weeks with reasons.
8. Final report (AF 01-15) and abstract is required for a one year (or less) research/project and report within 30 days after the completion of the research/project.
9. Research project with several phases; approval will be approved phase by phase, progress report and relevant documents for the next phase must be submitted for review.
10. The committee reserves the right to site visit to follow up how the research project being conducted.
11. For external research proposal the dean or head of department oversees how the research being conducted.



คณะกรรมการพิจารณาจริยธรรมการวิจัยในคน กลุ่มสถาบัน ชุดที่ 1 จุฬาลงกรณ์มหาวิทยาลัย
254 อาคารจามจุรี 1 ชั้น 2 ถนนพญาไท เขตปทุมวัน กรุงเทพฯ 10330
โทรศัพท์: 0-2218-3202, 0-2218-3049 E-mail: eccu@chula.ac.th

COA No. 088/2564

ใบรับรองโครงการวิจัย

โครงการวิจัยที่ 028.1/64 : การเหยียดเพศวิถีโดยอาจไม่ตั้งใจและปัญหาสุขภาพจิต : โมเดลการวัดแบบ
มีเงื่อนไขโดยมีการสนับสนุนเพศวิถีเป็นตัวแปรกำกับ

ผู้วิจัยหลัก : รพีพันธ์ภัทร์ ยอดหล่อชัย

หน่วยงาน : คณะจิตวิทยา จุฬาลงกรณ์มหาวิทยาลัย

คณะกรรมการพิจารณาจริยธรรมการวิจัยในคน กลุ่มสถาบัน ชุดที่ 1 จุฬาลงกรณ์มหาวิทยาลัย
ได้พิจารณา โดยใช้หลัก ของ Belmont Report 1979, Declaration of Helsinki 2013, Council for
International Organizations of Medical Sciences (CIOM) 2016, มาตรฐานคณะกรรมการจริยธรรมการวิจัย
ในคน (มจจค.) 2560, นโยบายแห่งชาติและแนวทางปฏิบัติการวิจัยในมนุษย์ 2558 อนุมัติให้ดำเนินการศึกษาวิจัย
เรื่องดังกล่าวได้

ลงนาม รพีพันธ์ภัทร์ ยอดหล่อชัย
(รองศาสตราจารย์ นายแพทย์ปริศนา ทักนประดิษฐ์)
ประธาน

ลงนาม วิวัฒน์ มิ่งกษณีย์
(ผู้ช่วยศาสตราจารย์ ดร.วิวัฒน์ มิ่งกษณีย์)
กรรมการและเลขานุการ

วันที่รับรอง : 19 เมษายน 2564

วันหมดอายุ : 18 เมษายน 2565

เอกสารที่คณะกรรมการรับรอง

- 1) โครงการวิจัย
- 2) เอกสารข้อมูลสำหรับผู้มีส่วนร่วมในการวิจัยและหนังสือแสดงความยินยอมของผู้มีส่วนร่วมในการวิจัย
- 3) ผู้วิจัย
- 4) แบบสอบถาม
- 5) ใบประกาศยืนยัน



เลขที่โครงการวิจัย: 028.1/64
วันที่รับรอง: 19 เม.ย. 2564
วันหมดอายุ: 18 เม.ย. 2565

เงื่อนไข

1. ข้าพเจ้ารับทราบว่าเป็นการมีจริยธรรม หากดำเนินการแก้ไขข้อบกพร่องการวิจัยก่อนได้รับการอนุมัติจากคณะกรรมการพิจารณาจริยธรรมการวิจัย
2. หากใบรับรองโครงการวิจัยหมดอายุ การดำเนินการวิจัยต้องยุติ เมื่อต้องการต่ออายุต้องขออนุมัติใหม่ล่วงหน้าไม่น้อยกว่า 1 เดือน พร้อมส่งรายงานความก้าวหน้าการวิจัย
3. ต้องดำเนินการวิจัยตามที่ระบุไว้ในโครงการวิจัยอย่างเคร่งครัด
4. ให้เอกสารข้อมูลสำหรับผู้มีส่วนร่วมในการวิจัย ใบยินยอมของผู้เข้าร่วมการวิจัย หรือผู้มีส่วนร่วมในการวิจัย และเอกสารเชิญเข้าร่วมวิจัย (ถ้ามี) เฉพาะที่ประทับตราคณะกรรมการเท่านั้น
5. หากมีข้อสงสัยกรณีไม่พึงประสงค์หรือแจ้งสถานการณ์ไปยังข้อมูลติดต่อผู้วิจัยจากคณะกรรมการ ต้องรายงานคณะกรรมการภายใน 5 วันทำการ
6. หากมีการเปลี่ยนแปลงการดำเนินการวิจัย ให้ส่งคณะกรรมการพิจารณาใบรับรองก่อนดำเนินการ
7. หากยุติโครงการวิจัยก่อนกำหนดต้องแจ้งคณะกรรมการ ภายใน 2 สัปดาห์พร้อมคำชี้แจง
8. โครงการวิจัยไม่เกิน 1 ปี ส่งมอบรายงานสิ้นสุดโครงการวิจัย (AF 01-15) และบทคัดย่อผลการวิจัยภายใน 30 วัน เมื่อโครงการวิจัยเสร็จสิ้น สำหรับโครงการวิจัยที่เป็นวิทยานิพนธ์ให้ส่งบทคัดย่อผลการวิจัย ภายใน 30 วัน เมื่อโครงการวิจัยเสร็จสิ้น
9. โครงการวิจัยที่มีหลายระยะ จะรับรองโครงการระยะ เมื่อดำเนินการวิจัยในโครงการเสร็จสิ้นแล้ว ให้ดำเนินการส่งรายงานความก้าวหน้า พร้อมโครงการวิจัยและเอกสารที่เกี่ยวข้องไประยะถัดไป
10. คณะกรรมการฯ สนับสนุนการตรวจประเมินเพื่อติดตามการดำเนินการวิจัย
11. สำหรับโครงการวิจัยจากภายนอก ผู้บริหารส่วนงาน รับผิดชอบการดำเนินการวิจัย

Consent Forms

1

ข้อมูลสำหรับผู้มีส่วนร่วมในการวิจัย (รายละเอียดงานวิจัย)

ชื่อโครงการวิจัย	การเหยียดเพศวิถีโดยอาจไม่ได้ตั้งใจและปัญหาสุขภาพจิต: โมเดลการวัดแบบมีเงื่อนไขโดยมีการสนับสนุนเพศวิถีเป็นตัวแปรกำกับ (Sexual Orientation Microaggressions and Mental Health Concerns: A Conditional Process Modeling of Protective Effects of Microaffirmations)
ชื่อผู้วิจัย	รพินท์ภัทร์ ยอสห่อชัย ฉนิศระติบปริญญาเอก สาขาจิตวิทยาพัฒนาการ คณะจิตวิทยา จุฬาลงกรณ์มหาวิทยาลัย
ติดต่อผู้วิจัย	โทรศัพท์ 0851140414 E-mail : R.RAPINPAT@GMAIL.COM

โปรดอ่านข้อมูลต่อไปนี้ก่อนตัดสินใจเข้าร่วมงานวิจัย เพื่อให้เข้าใจถึงข้อมูลเบื้องต้นและวัตถุประสงค์ของงานวิจัยโดยหากต้องการข้อมูลเพิ่มเติมหรือมีข้อสงสัยสามารถติดต่อผู้วิจัยได้ที่

งานวิจัยนี้จัดทำขึ้นโดยมีวัตถุประสงค์เพื่อศึกษาประสบการณ์การถูกเหยียดเพศวิถีรูปแบบที่ผู้กระทำนั้นอาจไม่ได้ตั้งใจและปัญหาด้านสุขภาพจิตในกลุ่มผู้ที่ไม่ได้มีเพศวิถีแบบชายรักหญิงหรือหญิงรักชาย (LGBQ+) เพื่อทำความเข้าใจในกระบวนการทางจิตและผลกระทบที่อาจเกิดขึ้น ผู้วิจัยหวังเป็นอย่างยิ่งว่าผลการศึกษานี้จะเป็นข้อมูลเบื้องต้นในการวิจัยเพื่อทำความเข้าใจเกี่ยวกับการเหยียดและสนับสนุนเพศวิถีที่เกิดขึ้นในสังคมไทย

คุณลักษณะของผู้ที่จะได้รับการคัดเลือกเพื่อเข้าร่วมในการวิจัย มีดังนี้

1. มีอัตลักษณ์ทางเพศเป็น LGBQ+ เช่น เกย์ กู้ด ทอม ดี เลสเบียน ไบเซ็กชวล แพนเซ็กชวล หรืออื่น ๆ ที่ไม่ใช่ตัวแม่เพศเท่านั้น (ชายรักหญิง/หญิงรักชาย) และ ไม่ใช่บุคคลข้ามเพศ หรือ ทรานส์ หรือ Transgender
2. มีอายุ 18 ปีขึ้นไป
3. เป็นคนไทยและอาศัยอยู่ในประเทศไทย
4. ยินดีทำแบบสอบถามออนไลน์เกี่ยวกับประสบการณ์การพบและสับสนของกลุ่มผู้ที่ไม่ได้มีเพศวิถีแบบชายรักหญิงหรือหญิงรักชาย ใช้เวลาประมาณ 30 นาที

หากคุณมีคุณสมบัติตามเกณฑ์และยินดีเข้าร่วมงานวิจัยโปรดเลือก 'เข้าใจข้อมูลข้างต้นและยินดีเข้าร่วมงานวิจัยนี้ด้วยความสมัครใจ' แล้วกด 'ถัดไป' เพื่อเริ่มการทำแบบสอบถาม และหากไม่ประสงค์จะเข้าร่วมงานวิจัยสามารถกดปิดหน้าต่างได้ทันที งานวิจัยนี้จะไม่เก็บชื่อหรือคำขอชดเชยในการทำแบบสอบถาม

เมื่อเริ่มทำแบบสอบถามคุณจะถูกสุ่มคำถามทั้งสิ้น 74 ข้อ ใช้เวลาประมาณ 30 นาที โดยขอให้คุณเลือกคำตอบที่ตรงกับความคิดเห็นหรือประสบการณ์ของคุณมากที่สุด คำตอบนั้นไม่มีถูกหรือผิด ประกอบไปด้วย ข้อมูลเชิงประชากร เช่น อายุ เพศ กำเนิด เพศวิถี ระดับการศึกษา (จำนวน 11 ข้อ) การถามถึงประสบการณ์เกี่ยวกับเพศวิถีที่คุณได้พบในชีวิตประจำวัน (จำนวน 31 ข้อ) ความเชื่อและพฤติกรรมเกี่ยวกับเพศวิถีของตนเอง (จำนวน 12 ข้อ) รวมทั้งประเมินถึงสภาวะทางสุขภาพจิต (จำนวน 21 ข้อ)

งานวิจัยนี้เป็นการเก็บข้อมูลรูปแบบออนไลน์โดยไม่มีกระบวนการระบุชื่อผู้ตอบหรือข้อมูลที่ระบุตัวตนได้ เพื่อความเป็นนิรนามของผู้ตอบ ข้อมูลคำตอบที่ได้รับจะถูกนำไปวิเคราะห์และสรุปผลในภาพรวม โดยไม่มีการรายงานข้อมูลที่สามารถระบุตัวตนผู้ตอบได้ ไฟล์ข้อมูลผู้ตอบจะถูกเก็บโดยผู้วิจัยบนระบบที่มีการใส่รหัสป้องกันที่มีเพื่อผู้วิจัยเท่านั้นที่สามารถเข้าถึงข้อมูลได้และจะมีการทำลายข้อมูลนี้ในปี พ.ศ. 2574 โดยอาจมีการนำข้อมูลที่ไม่มีการระบุตัวตนมาใช้อีกครั้งเมื่อมีงานวิจัยต่อยอดที่ได้ รับการพิจารณา

เลขที่โครงการวิจัย 098.1/64
 วันที่รับผล 19 มี.ค. 2564
 วันครบอายุ 18 มี.ค. 2565



2

จากคณะกรรมการจริยธรรมการวิจัยในคนภาค เลือกลงชื่อ "ยินยอมให้นำคำตอบไปใช้ในงานวิจัยในคนภาค" หากคุณยินดีให้มีการนำข้อมูลมาใช้

ประโยชน์ที่คุณจะได้รับจากการเข้าร่วมงานวิจัยนี้อาจจะไม่ได้เกิดขึ้นกับคุณโดยตรง แต่เป็นการช่วยให้คุณและคนในสังคมเข้าใจถึงการเหยียดและการสนับสนุนเพศวิถีมากขึ้น รวมถึงผลกระทบทั้งทางตรงและทางอ้อมของการเหยียดเพศวิถีต่อปัญหาด้านสุขภาพจิตของ LGBTQ+ และยังเป็นการสร้างการตระหนักรู้ให้สังคมว่าในปัจจุบันมีการเหยียดเพศวิถีมากขึ้นแค่ไหน และส่งผลอย่างไรต่อ LGBTQ+ ซึ่งอาจนำไปสู่กระบวนการการแก้ไขพฤติกรรมที่เป็นปัญหาเหล่านี้ในอนาคต

งานวิจัยนี้ไม่ได้เกี่ยวข้องกับ การคัดกรอง หรือ การรักษาใด ๆ ที่สิ้น ความเสี่ยงที่อาจเกิดขึ้นจากการเข้าร่วมงานวิจัยนี้มีน้อยมาก คาดว่าจะไม่เกิดอันตรายทั้งทางร่างกาย จิตใจ และสังคม ข้อคำถามส่วนหนึ่งจะเป็นการขอให้ผู้เข้าร่วมงานวิจัยนี้ถึงประสบการณ์ในอดีตที่ผ่านมาซึ่งอาจทำให้เกิดความรู้สึกอึดอัดใจได้บ้าง คุณมีสิทธิที่จะปฏิเสธหรือถอนตัวจากการวิจัยเมื่อใดก็ได้ โดยไม่จำเป็นต้องให้เหตุผล และจะไม่มีผลกระทบใด ๆ ต่อคุณ

หลังจากตอบแบบสอบถามแล้ว หากคุณรู้สึกไม่สบายใจ และต้องการคำแนะนำทางจิตวิทยา คุณสามารถติดต่อสายด่วนสุขภาพจิต 1323 โดยกรมสุขภาพจิต หรือติดต่อผู้วิจัยเพื่อให้คำแนะนำเบื้องต้นในการเข้ารับคำปรึกษากับนักจิตวิทยาในชั้นต่อไป

หากผู้วิจัยไม่ได้รับปฏิบัติต่อผู้เข้าร่วมงานวิจัยตามข้อมูลที่ได้รับ สามารถรายงานเหตุการณ์ที่เกิดขึ้นต่อคณะกรรมการจริยธรรมการวิจัยในคน กลุ่มสหสถาบันชุดที่ 1 จุฬาลงกรณ์มหาวิทยาลัย (RECCU) อาคารจามจุรี 1 ชั้น 2 เลขที่ 254 ถนนพญาไท เขตปทุมวัน กรุงเทพฯ 10330 ประเทศไทย โทรศัพท์/โทรสาร 02-218-3202 อีเมล reccu@chula.ac.th

เข้าใจข้อมูลข้างต้นและยินดีเข้าร่วมงานวิจัยนี้ด้วยความสมัครใจ

ยินยอมให้นำคำตอบไปใช้ในงานวิจัยในคนภาค



เลขที่โครงการวิจัย: 098-164
วันที่รับรอง: 19 เม.ย. 2564
วันหมดอายุ: 18 เม.ย. 2565

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