

Sexual Orientation Concealment as an Indicator of Anxiety Risk among Sexual Minority Young Adults in South Korea

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This study examined associations between sexual orientation concealment and anxiety symptoms among South Korean sexual minority young adults. In total, 311 participants aged 19–39 years who identified as lesbian, gay, or bisexual were recruited from online LGBT communities and university online bulletin boards. Participants completed self-report measures assessing anxiety symptoms, sexual orientation disclosure and concealment, and experiences of microaggressions and social stigma, along with demographic information. Hierarchical regression analyses showed that sexual orientation concealment significantly predicted higher anxiety symptoms after controlling for disclosure, microaggressions, social stigma, and subjective economic status. Moderation analyses further indicated that the concealment–anxiety association was significant only among lesbian participants, and not among gay or bisexual participants. These findings suggest that behavioral concealment of sexual orientation may be associated with anxiety among South Korean sexual minorities, with exploratory analyses indicating that this association was most evident among lesbian participants. Given the preliminary nature of the moderation findings, this pattern requires replication. The results underscore the need for psychological interventions addressing concealment-related processes and minority stress in this population.

Keywords: anxiety, minority stress, sexual minorities, sexual orientation concealment, South Korea

Introduction

Sexual minorities—individuals with same-sex or bisexual attractions, identities, or behaviors, including those identifying as lesbian, gay, or bisexual (Meyer, 2003)—consistently exhibit elevated anxiety symptoms compared to heterosexual individuals (Cochran et al., 2003; Fergusson et al., 1999; Parodi et al., 2022; Plöderl & Trem-

blay, 2015; Rodriguez-Seijas et al., 2019), alongside broader mental health disparities including depression, suicidal ideation, and lower well-being (Peter et al., 2017; Wittgens et al., 2022; Pachankis & Clark, 2025; Lu et al., 2025). Pathological worry—a core feature of generalized anxiety disorder (American Psychiatric Association, 2013)—and orientation-related worries have been linked to heightened negative affect, depressive symptoms, and diminished quality of life (Weiss & Hope, 2011). This issue is particularly acute in South Korea, where 28.4% of sexual minorities reported suicide attempts and 35% reported self-harm (Na et al., 2014), and homosexual and bisexual individuals show higher depression and suicidal ideation than heterosexual individuals (Yi et al., 2017). Korean sexual minority women, in particular, report poorer mental health linked to minority stress (Kim & Choi-Kwon, 2021).

Early adulthood is a high-risk period for anxiety in the general population, as developmental and social transitions heighten vulnerability (Arnett, 2001; Kessler & Bromet, 2013; Remes et al.,

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The study procedures were carried out in accordance with the Declaration of Helsinki. The research was approved by the Institutional Review Board of Yonsei University. All participants were informed in detail about the study and all provided informed consent.



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2016). For sexual minority young adults, this normative risk is compounded by minority stress, such that they report higher anxiety than their heterosexual peers (Borgogna et al., 2019; Cohen et al., 2016; Pellicane & Ciesla, 2022; O'Shea et al., 2025). However, most research has been conducted in Western contexts (Doan et al., 2014; Jung, 2021). In South Korea, where cultural and religious barriers to LGBT acceptance persist and negative attitudes toward homosexuality remain prevalent (Chu et al., 2019; Jung, 2021; Korean Institute of Public Administration, 2021; Poushter & Kent, 2020), identifying anxiety risk processes—the cognitive, behavioral, and social processes that elevate vulnerability to anxiety—among sexual minority young adults is particularly critical.

The Role of Sexual Orientation Concealment behavior on Mental Health

Minority stress theory holds that stressors such as social stigma and microaggressions contribute to elevated anxiety among sexual minorities (Costa et al., 2023; Mays & Cochran, 2001; Park et al., 2021). Among these, sexual orientation concealment is a proximal minority stressor conceptualized as a psychological and behavioral process of hiding one's stigmatized identity (Meyer, 2003; Jackson & Mohr, 2016; Pachankis, 2007). Building on minority stress theory, Pachankis's (2007) cognitive–emotional–behavioral model specifies how concealment produces distress: avoiding identity-relevant threats increases vigilance and suppression of psychological discomfort, thereby contributing to anxiety and maladaptive social behaviors (Amstadter, 2008; Pachankis, 2007; Rosen & Schulkin, 1998). Although both concern the management of sexual orientation visibility, concealment and disclosure are increasingly distinguished: disclosure refers to explicit communication of one's orientation, often motivated by support-seeking, whereas concealment reflects active avoidance of situations revealing one's orientation (rather than mere non-disclosure), driven by sensitivity to potential threat (Larson & Chastain, 1990; Meidlinger & Hope, 2014; Pachankis, 2007). Individuals may disclose in some contexts while concealing in others. Concealment shows stronger associations with anxiety and depression than disclosure (Cho, 2022; Schrimshaw et al., 2013), and behavioral concealment is more strongly associated with psychological problems than lack of disclosure (Pachankis et al., 2020), possibly because concealment in-

volves ongoing anticipation of exposure, which heightens the vigilance characteristic of anxiety, unlike the more static nature of disclosure. Nevertheless, few studies have examined behavioral concealment in relation to anxiety symptoms while accounting for disclosure. In South Korea, where social acceptance remains limited, sexual minorities experience discrimination and pressure to conceal even after disclosing to acquaintances (Na et al., 2014; Park et al., 2021; Yi, 2015). Consistent with Pachankis's (2007) framework, South Korean sexual minorities may disclose to trusted others while concealing in higher-risk settings, making behavioral concealment a particularly important target for investigation.

Differences in the Relationship Between Sexual Orientation Concealment and Anxiety Symptoms Across Sexual Orientations

The psychological impact of concealing a stigmatized identity depends on societal attitudes toward that identity (Chaudoir & Fisher, 2010). In South Korea, gender role norms may shape how concealment is experienced across sexual orientation groups. Male homosexuality is often viewed as threatening traditional masculine ideals emphasizing emotional control (Connell, 1995; Mahalik & Cournoyer, 2000; Porter, 2016; Yoon & Gu, 2018), making gay men's identities particularly salient to these norms (Herek, 2000), while gendered expectations around relationships and family impose distinct pressures on lesbian women. Women are more likely to engage in self-disclosure and display same-sex physical affection (Derlega et al., 1989; Fehr, 1996; Felmlee et al., 2012; Fischer & Narus, 1981; Larsen & LeRoux, 1984; Monsour, 1992) and show greater sexual fluidity (Diamond, 2003a, 2003b, 2005). In the Korean context, Confucian values may heighten scrutiny of men's gender- and sexuality-related behavior (Jang, 1995; Kim et al., 2010; Lee, 2016). Family is also a salient source of minority stress for South Korean sexual minorities, given Confucian familial norms and marriage expectations (Jung, 2021; Yi, 2015). Additionally, bisexual individuals may face distinct minority stressors and less social support than homosexual individuals (Feinstein & Dyar, 2017; Feinstein et al., 2017; Herek, 2002; Hwang, 2020). These cultural and interpersonal factors suggest that concealment's psychological correlates may differ across sexual orientations in South Korea.

Present Study

The present study examined the association between behavioral sexual orientation concealment and anxiety symptoms among South Korean LGB young adults. Concealment-related concerns may be especially salient during young adulthood, a period marked by educational, occupational, and relational transitions (Arnett, 2001; Arnett et al., 2014; Kessler & Bromet, 2013; Kim et al., 2022; Remes et al., 2016), when Korean LGB adults in their 20s and 30s show particularly high depressive symptoms (Yi et al., 2017). Guided by Pachankis's (2007) cognitive–emotional–behavioral model, we focused on individuals currently engaged in everyday social or occupational contexts (students or employees), where concealment-relevant decisions arise more frequently.

The study had two aims. First, given that concealment may persist even after disclosure in South Korea, we examined the association between concealment and anxiety symptoms while accounting for minority-stress variables (microaggressions, social stigma, disclosure) and subjective economic status. Second, we tested whether the concealment–anxiety association differed by sexual orientation (gay, lesbian, bisexual) using interaction terms in hierarchical regression models. We hypothesized that higher concealment would be associated with greater anxiety symptoms, and that this association would vary across sexual orientation groups.

Methods

Participants

Participants were South Korean LGB young adults aged 19–39, an age range adopted to capture the extended transitions into adult roles in contemporary South Korea, where educational and occupational milestones often extend into the thirties, eligible participants were currently students or employed, because the study focused on concealment within everyday social contexts such as school and work, where sexual minorities routinely navigate decisions about identity visibility; individuals not currently in these settings (i.e., unemployed) were therefore excluded. A power analysis using G*Power 3.1.9.7 indicated that 119 participants were needed for hierarchical multiple regression analyses (medium effect size, Cohen's $f^2 = .15$; $\alpha = .05$; power = .95). Because the power

analysis was based on main effects, interaction tests were treated as exploratory. Anticipating attrition, the study planned to recruit up to 400 participants. Data were collected between July and September 2022 via online announcements on South Korean university bulletin boards and LGBT community spaces using the Qual-

Table 1. Sociodemographic Characteristics of Participants ($N = 311$)

Variables	Sample	
	<i>n</i>	%
Age		
19-29	144	46.4
30-39	167	53.7
Gender		
Female	185	59.5
Male	126	40.5
Transgender/Non-binary	0	0
Sexual orientation		
Gay	102	32.8
Lesbian	133	42.8
Bisexual	76	24.4
Bisexual Men	24	7.7
Bisexual Women	52	16.7
Highest educational level		
Middle school	2	.6
High school	96	30.9
College/university	155	49.8
Postgraduate degree	58	18.6
Marital status		
Single	308	99.0
Married/partnered	2	.6
Divorced/widowed	1	.3
Subjective economic status		
Upper	22	7.1
Upper-middle	63	20.3
Middle	111	35.7
Low-middle	82	26.4
Low	33	10.6
Living arrangement		
Alone	121	38.9
With friends	9	2.9
With a spouse/partner	49	15.8
With family	129	41.5
With relatives	3	1.0
Employment		
Employed	195	62.7
Self-employed	32	10.3
Part-time job	16	5.1
Undergraduate student	56	18.0
Graduate student	12	3.9

tics platform. Participants received a 3,000 won beverage coupon. The study was approved by the Institutional Review Board (IRB No. 7001988-202208-HR-1614-04). Of 440 individuals who initiated the survey, 311 met eligibility criteria and provided complete data. Exclusions comprised 18 who did not consent, 72 with incomplete surveys, 21 unemployed, 14 aged ≥ 40 , and 4 with other sexual orientations. The final sample included 185 (59.5%) females and 126 (40.5%) males; 102 (32.8%) identified as gay, 133 (42.8%) as lesbian, and 76 (24.4%) as bisexual (24 men and 52 women) (M age = 29.55, SD = 5.37). No participants identified as transgender or non-binary. Due to limited subgroup sizes, analyses did not stratify by gender within sexual orientation groups; thus, sexual-orientation effects may partially reflect gender composition differences. Table 1 presents sociodemographic characteristics.

Measures

Anxiety Symptoms

Anxiety symptoms were assessed using the Korean version of the Generalized Anxiety Disorder-7 (GAD-7; Spitzer et al., 2006; Seo & Park, 2015), a 7-item self-report measure rated on a 4-point Likert scale assessing anxiety symptom frequency over the past two weeks. Higher scores indicate greater anxiety severity. The original GAD-7 reported α = .92 (Spitzer et al., 2006), and the Korean version reported α = .93 (Seo & Park, 2015); in the present study, α = .92 and ω = .92.

Sexual Orientation Disclosure

Sexual orientation disclosure was measured using the 5-item Nebraska Outness Scale–Disclosure subscale (NOS-D; Meidlinger & Hope, 2014), translated into forward–backward translation by a clinical psychology professor and a graduate student in clinical psychology, with discrepancies resolved through discussion. Respondents indicate the percentage of people aware of their sexual orientation across five social groups (e.g., immediate family, friends, co-workers) on an 11-point scale (0–100%; e.g., “*What percent of the people in this group are aware of your sexual orientation?*”), with the mean across groups indicating greater disclosure. The original validation reported α = .82 (Meidlinger & Hope, 2014); in the present study, α = .66 and ω = .70. This modest internal consistency, below the conventional .70 benchmark, is acknowledged as a limitation.

Sexual Orientation Concealment

Sexual orientation concealment was assessed using the Korean version of the Sexual Orientation Concealment Scale (K-SOCS; Jackson & Mohr, 2016; Cho, 2022), rated on a 5-point Likert scale assessing concealment behavior over the past two weeks (e.g., “*I have avoided topics such as dating or relationships to hide my sexual orientation*”). The original 6-item scale (α = .73; Jackson & Mohr, 2016) was reduced to 5 items following Cho (2022), who removed item 4 due to low reliability. Higher scores indicate more frequent concealment; in the present study, α = .81 (ω = .82).

Social Stigma

Perceived social stigma was measured using the social stigma scale for sexual minorities (Harvey, 2001; Kang, 2011), consisting of 12 items rated on a 5-point Likert scale assessing perceived societal rejection. Higher scores indicate greater perceived stigma. The original scale reported α = .94 (Harvey, 2001), and the Korean adaptation reported α = .78 (Kang, 2011); in the present study, α = .84 (ω = .85).

Sexual Orientation Microaggression

Sexual orientation microaggressions were assessed using the Korean version of the Sexual Orientation Microaggression Scale (K-SOMS; Woodford et al., 2015; Park & Yoo, 2019), a 24-item measure rated on a 5-point Likert scale with three subscales (general, personal, environmental). Higher scores indicate more frequent microaggression experiences. The Korean validation reported subscale α s of .76–.86 (Park & Yoo, 2019); in the present study, α = .86, .85, and .79 (overall α = .92, ω = .92).

Data Analyses

Data were analyzed using SPSS 26.0 and R 4.2.2. Descriptive statistics and scale reliability (Cronbach’s α and McDonald’s ω) were computed; ω was reported as a complementary reliability index less dependent on item count (Cortina et al., 2020).

Group differences in anxiety symptoms across demographic variables and sexual orientation were examined using independent-samples t tests and one-way ANOVAs. When homogeneity of variance was violated (Levene’s test), Welch’s tests were used. Games–Howell tests were conducted for post hoc comparisons.

Bivariate correlations among continuous variables were then examined. Continuous predictors were mean-centered prior to creating interaction terms. Hierarchical multiple regression analyses were conducted to evaluate predictors of anxiety symptoms. Subjective economic status, social stigma, microaggressions, and sexual orientation disclosure were entered as control variables, and sexual orientation concealment was entered as the focal predictor. Moderation by sexual orientation was tested by adding the sexual orientation $\times$ concealment interaction term to the regression model. Because the *a priori* power analysis was based on main-effect estimates, interaction tests were interpreted as exploratory. Sexual orientation was operationalized as three categories: gay men, lesbian women and bisexual participants. Because bisexual men and women were combined due to sample size constraints, and categories were partly defined by gender, sexual-orientation effects may partially reflect gender differences. Because gender and sexual orientation were nearly collinear in this sample (gay men were all male, lesbian women all female), gender could not be entered as a separate covariate without precluding estimation of sexual-orientation effects. Simple slope tests used the MeMo-BootR package (Buchanan, 2018) in R.

Results

Preliminary Analysis

Preliminary analyses examined whether anxiety symptoms differed across demographic variables and sexual orientation. A Welch's ANOVA indicated significant group differences by subjective economic status, $F(4, 90.212) = 3.339, p = .013$. Post-hoc analyses showed that the "low" economic status group ($M = 8.73, SD = 7.04$) reported higher anxiety than the "upper-middle" ($M = 3.94, SD = 4.51$) and "upper" ($M = 4.00, SD = 4.66$) groups. There were no sig-

nificant differences across sexual orientation groups. Bivariate correlations (Table 2) showed that anxiety symptoms were significantly positively correlated with sexual orientation concealment ($r = .144, p = .01$), microaggressions ($r = .296, p < .001$), and social stigma ($r = .313, p < .001$), but not with disclosure ($r = .076$). Concealment was significantly negatively correlated with disclosure ($r = -.48, p < .001$).

Predictors of Anxiety Symptoms

Hierarchical multiple regression analysis showed that the full model (Model 5) accounted for 18.0% of the variance in anxiety symptoms, $F(9, 301) = 7.35, p < .001$. In Model 1, subjective economic status significantly predicted anxiety symptoms ($B = -.0996, \beta = -.206, p = .001$). In Model 2, microaggressions ($B = 1.235, \beta = .203, p = .001$) and social stigma ($B = 1.326, \beta = .186, p = .002$) significantly predicted anxiety after controlling for subjective economic status.

In Model 3, disclosure was not a significant predictor ($B = .020, \beta = .067, p = .203$). In Model 4, concealment significantly predicted anxiety symptoms ($B = .712, \beta = .138, p = .027$), and accounted for a significant increment in variance ($\Delta R^2 = .013, p = .030$), and disclosure became significant ($B = .040, \beta = .135, p < .05$). Variance inflation factors for all predictors in the full model ranged from 1.04 to 2.93 (tolerances from .34 to .96), all well below the conventional cutoff of 5, indicating no problematic multicollinearity. Detailed results are presented in Table 3.

The Moderating Effect of Sexual Orientation on the Relationship Between Sexual Orientation Concealment and Anxiety Symptoms

Sexual orientation was dummy coded with gay as the reference group, and interaction terms were created using mean-centered

Table 2. Descriptive Statistics and Correlations for Study Variables ($N = 311$)

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Anxiety ^a	5.12	5.21	—				
2. Sexual orientation concealment	2.33	1.01	.144**	—			
3. Sexual orientation disclosure	19.34	17.61	.076	-.480***	—		
4. Microaggression	1.52	.85	.296***	.196***	.067	—	
5. Social stigma	2.69	.73	.313***	.170**	-.002	.455**	—

^aGAD-7 (Generalized Anxiety Disorder-7).

* $p < .05$, ** $p < .01$, *** $p < .001$.

Table 3. Multiple Hierarchical Linear Regression Examining Association of Anxiety Symptoms and Potential Predictors (N = 311)

Variables	Anxiety									
	Model1 ($R^2 = .042$)		Model2 ($R^2 = .149$)		Model3 ($R^2 = .154$)		Model4 ($R^2 = .167$)		Model5 ($R^2 = .180$)	
	B	β	B	β	B	β	B	β	B	β
Subjective economic status	-.996	-.206**	-.732	-.151**	-.741	-.153**	-.737	-.153**	-.694	-.144**
Microaggression			1.235	.203**	1.201	.197**	1.040	.171**	.942	.154*
Social stigma			1.326	.186**	1.342	.188**	1.263	.177**	1.290	.181**
Sexual orientation disclosure					.020	.067	.040	.135*	.043	.147*
Sexual orientation concealment							.712	.138*	.185	.036
Lesbian									.396	.038
Bisexual									-.104	-.009
Lesbian $\times$ Sexual orientation concealment									1.383	.149*
Bisexual $\times$ sexual orientation concealment									.734	.068
ΔR^2	.042***		.107***		.005		.013*		.013	

Gay men served as the reference group for sexual orientation.
* $p < .05$, ** $p < .01$, *** $p < .001$.

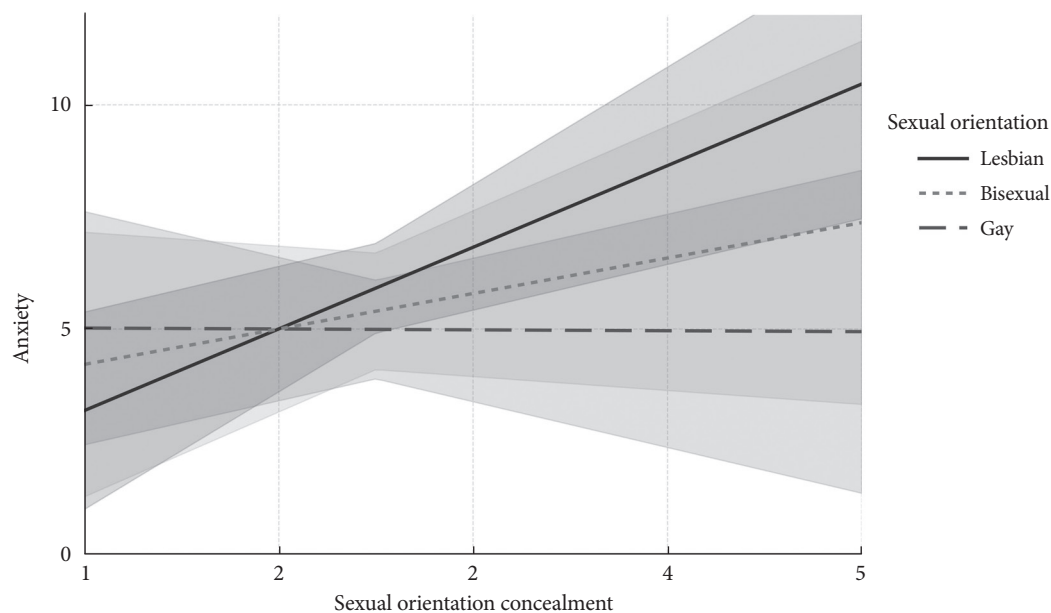


Figure 1. Simple slopes of anxiety (GAD-7) on sexual orientation concealment by group. Solid line = lesbian; dotted line = bisexual; dashed line = gay. Shaded bands represent 95% confidence intervals.

concealment scores. In Model 5, after controlling for subjective economic status, social stigma, microaggressions, and disclosure, the lesbian (vs. gay) $\times$ concealment interaction significantly predicted anxiety symptoms ($B = 1.383, \beta = .149, p = .044$), whereas the main effect of concealment was no longer significant ($B = .185, \beta = .036, p = .684$; Table 3). Simple slope analyses indicated that concealment did not significantly predict anxiety symptoms among gay ($B = -.02, p = .969$) or bisexual participants ($B = .79, p = .246$), but significantly predicted higher anxiety among lesbian partici-

pants ($B = 1.82, p = .004$). Figure 1 depicts the adjusted association between concealment and anxiety symptoms by sexual orientation.

Discussion

The present study examined the association between sexual orientation concealment and anxiety symptoms among South Korean sexual minority young adults. Hierarchical regression models

showed that higher concealment was associated with higher anxiety symptoms when controlling for disclosure, microaggressions, social stigma, and subjective economic status, although this main effect was attenuated after adding sexual-orientation interaction terms. The interaction between sexual orientation and concealment indicated heterogeneity across groups, with a significant interaction for lesbian (vs. gay) participants. Because interaction tests were exploratory and sexual-orientation categories were partly defined using gender, these subgroup differences should be interpreted as preliminary.

Minority Stressors and Anxiety

Consistent with minority stress theory, microaggressions and social stigma were also robust predictors of anxiety, with bivariate associations as strong as or stronger than that of concealment. This underscores that concealment operates alongside, rather than in place of, these established stressors. Importantly, however, concealment accounted for additional variance in anxiety beyond them, suggesting it captures a distinct proximal process not reducible to experiences of stigma or discrimination.

Predictive Power of Sexual Orientation Concealment and Disclosure on Anxiety Symptoms

Sexual orientation concealment significantly predicted anxiety symptoms even after controlling for minority-stress variables. This finding supports Pachankis's (2007) conceptualization of concealment as an independent psychological process with cognitive–emotional–behavioral components and aligns with Schrimshaw et al. (2013), who found this relationship remained significant after controlling for disclosure and internalized homophobia. Engaging in concealment behaviors may involve ongoing self-monitoring and hypervigilance that could contribute to elevated anxiety, though these processes were not directly assessed. Notably, actively avoiding situations that reveal one's orientation may itself heighten psychological stress, independent of broader experiences of stigma and discrimination.

Sexual orientation disclosure did not significantly predict anxiety symptoms when entered before concealment, consistent with prior work suggesting concealment, as a continuous process, may be more closely linked to mental health than disclosure status

alone (Pachankis, 2007; Pachankis et al., 2020). Both disclosure and non-disclosure can function as context-dependent strategies rather than uniformly “risky” or “protective” behaviors (Beals et al., 2009; Major & Gramzow, 1999). Disclosure became significant once concealment was added — a pattern that, given low variance inflation factors (< 5), reflects statistical suppression rather than multicollinearity. Concealment nonetheless explained significant incremental variance in anxiety ($\Delta R^2 = .013$, $p = .030$), indicating that the two capture related but distinct dimensions. Although both concern the management of sexual-orientation visibility, they may differ in motivational basis: disclosure may reflect support-seeking, whereas concealment may reflect heightened threat sensitivity. Given different temporal frames of the measures and the cross-sectional design, this result should be interpreted cautiously and revisited in longitudinal studies.

Differences in the Relationship Between Sexual Orientation Concealment and Anxiety Symptoms According to Sexual Orientation

Sexual orientation moderated the concealment–anxiety association: the concealment–anxiety simple slope was significant among lesbian participants but not among gay or bisexual participants. This contrast should be interpreted cautiously, as differing significance across groups does not itself establish a reliable between-group difference. This group-differentiated pattern echoes broader evidence that the psychological correlates of identity management vary across sexual orientation and gender groups (Pachankis et al., 2015; Feinstein et al., 2017, 2019).

Turning to the groups for which no effect emerged. The present study did not find a significant association between concealment and anxiety among gay and bisexual participants. This null finding should be viewed cautiously because moderation analyses were exploratory, the study was not powered a priori for interaction effects, sexual orientation categories were partly defined using gender, and bisexual men and women were combined due to sample size constraints. Subgroup differences may partially reflect gender composition rather than sexual orientation per se. Concealment may be linked to anxiety through different mechanisms across groups, or its impact may depend on unmeasured contextual factors such as family climate, workplace culture, or peer

norms. Where gender role norms are strongly enforced, gay men may experience heightened scrutiny and bisexual individuals may face additional disapproval and less social support (Feinstein & Dyar, 2017; Feinstein et al., 2017; Herek, 2002). Under such conditions, both concealment and disclosure may carry psychosocial costs, such that neither strategy reliably reduces distress; concealment may then become less consistently tied to anxiety in these groups.

One possible interpretation, which cannot be distinguished from a gender effect given the present design, is that the discrepancy reflects gender-linked differences in emotion regulation. Women tend to use emotion regulation strategies more actively and are more likely to engage in rumination, a maladaptive strategy that internalizes distress (Nolen-Hoeksema, 2012). Because concealment involves intense self-focus and repeated reflection on one's stigmatized identity (Pachankis, 2007), it may be more tightly coupled with ruminative coping among some lesbian women, amplifying anxiety (see Timmins et al., 2020, for evidence that minority stress–rumination–distress links vary by gender and sexual orientation). Beyond emotion regulation, this lesbian-specific pattern may also reflect the compounded position of being both a woman and a sexual minority in South Korea, where gender-role expectations and family pressures around marriage may intensify the costs of a concealed identity, particularly given that 41.5% of participants lived with family. Because these mechanisms were not directly assessed, both interpretations remain provisional and require confirmation in adequately powered, longitudinal research.

Practical Implications

This study demonstrates that sexual orientation concealment is associated with higher anxiety among South Korean sexual minority young adults even after accounting for other minority stressors. Given that cognitive-behavioral interventions targeting fear of sexual orientation exposure have demonstrated efficacy (Hobaica et al., 2018), these findings highlight the importance of identifying when and where concealment occurs, assessed separately from disclosure status, as a target for assessment and case formulation. The concealment–anxiety association may vary

across sexual orientation groups, suggesting clinicians should avoid assuming uniform effects and, if replicated, attend particularly to concealment among lesbian clients. In South Korea—where heteronormative norms, family expectations, and social reputation concerns heighten identity management stakes—concealment may function as a context-sensitive coping strategy that can be protective in unsafe settings even as it carries psychological costs. Clinical assessment may benefit from clarifying the specific contexts in which concealment occurs, perceived risks, and functions served, rather than treating concealment as inherently maladaptive.

Limitations and Future Directions

The present study has several limitations. First, participants were recruited primarily through online sexual minority communities and limited to students and employed young adults; findings may not generalize to those less connected to online communities, unemployed, or more socially isolated. Second, although the sample size was adequate for main effects, it was not powered for interaction effects. Moderation findings should be considered exploratory and require replication with larger samples. Bisexual men and women could not be analyzed separately, and sexual orientation categories were partly defined using gender; thus, observed differences should be interpreted as patterns in this sample rather than definitive evidence. Future research would benefit from larger, balanced subgroup samples allowing stratified analyses by gender and sexual orientation. Third, the study did not include transgender, pansexual, questioning, or other sexual and gender minority groups, who experience distinct minority stressors and elevated distress (Lefevor et al., 2019; Testa et al., 2017; Valentine & Shipherd, 2018; Birkett et al., 2009; Borgogna et al., 2019; Chang et al., 2022; Rentería et al., 2022). Future studies should examine whether concealment is differentially related to mental health across diverse identities. Fourth, the cross-sectional design precludes causal inference. Concealment may contribute to heightened anxiety, but higher anxiety may also increase concealment. Longitudinal designs are needed to clarify temporal ordering. This study focused on anxiety symptoms and did not assess or control for depressive symptoms; it thus remains unclear whether

the findings are anxiety-specific or reflect general internalizing distress. Future work should evaluate these outcomes concurrently. Relatedly, future cross-cultural research comparing concealment–anxiety associations across settings differing in structural stigma and sociocultural norms would clarify how culturally contingent these patterns are. Finally, all variables were assessed via self-report, which may be vulnerable to recall and reporting biases. Future research should incorporate multimethod assessment strategies (e.g., behavioral, experimental, or informant-based measures) to more fully capture concealment processes and their links to mental health (Seager van Dyk et al., 2022).

Author contributions statement

YJC, graduate student at Yonsei University, conceptualized and designed the research, collected, analyzed and interpreted the data, and wrote the draft of the manuscript. SHP, professors at Yonsei University, served as the principal investigators of the research grant and supervised the research process. All authors provided critical feedback, participated in the revision of the manuscript and approved the final submission. All authors had full access to all data in the study and take full responsibility for the integrity of the data and the accuracy of the data analysis.

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