The Impact of Concealment, Impostor Phenomenon, and Internalized Homonegativity on the Mental Health of Sexual Minority Adults

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Abstract

Previous research has demonstrated that concealment of a minority sexual orientation is correlated with mental health challenges. Theory suggests that impostor phenomenon may mediate this link. This is the first study to examine impostor phenomenon empirically among sexual minority adults. Five hundred and ninety-nine sexual minority adults (M_{age} = 27.62) were recruited through social media advertisements and snowball sampling. Participants completed an online survey assessing concealment, impostor phenomenon, depressive symptoms, anxiety symptoms, and internalized homonegativity. Consistent with previous research, concealment predicted both depression and anxiety. Impostor phenomenon meditated the association between concealment and depression and concealment and anxiety. However, internalized homonegativity did not moderate the association between concealment and mental health challenges or the association between concealment and impostor phenomenon. This study fills an important gap in the literature by introducing the construct of impostor phenomenon to the field of sexual minority mental health. When working with sexual minority clients, therapists should ask about their clients' concealment behaviors and experiences with impostor phenomenon.

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Identity management refers to the process of making decisions about how to present one's concealable, stigmatized social identity to others (Chaudoir & Fisher, 2010; Mollet, 2023). Engagement in this process can either be conscious or unconscious (Talbot et al., 2020). How individuals choose to manage their stigmatized identities shapes the relationships they have with others and themselves (Chaudoir & Fisher, 2010). Sexual minority individuals (i.e., individuals with a sexual orientation that is not heterosexual) regularly engage in identity management by making decisions about how, when, and to whom they disclose their sexual orientation (King et al., 2013). Colloquially, this process is referred to as "coming out" (Talbot et al., 2020). The act of coming out is not a single event but an ongoing process (Talbot et al., 2020).

Due to internalized shame and the potential for heterosexist discrimination and harassment, disclosure can be psychologically, socially, and physically risky for sexual minority people (Legate et al., 2012; Riggle et al., 2017). Thus, some sexual minority individuals may choose to engage in the strategy of concealment (Huang & Chan, 2022; Pachankis et al., 2020). *Concealment* refers to the ongoing process of purposefully hiding one's identity from others (Jackson & Mohr, 2016). Concealment behaviors may include avoiding conversations or situations in which one's identity may be discovered, attempting to "pass" as straight, or intentionally suppressing details about oneself that would reveal one's identity (e.g., partner gender; Brennan et al. 2021). The degree to which sexual minority individuals conceal can vary from context to context (Beals et al., 2009). Concealment is thought to be a key aspect of many sexual minority people's lives (Pachankis, 2007).

Concealment and Mental Health Challenges

Sexual minority individuals are at substantially increased risk for a variety of mental health challenges, such as depression and anxiety, compared to heterosexual individuals (Brennan et al., 2021; Walch et al., 2016). The link between sexual minority identity and mental health is likely multifaceted; however, there is theoretical reason to believe that concealment of one's sexual minority identity may be a cause of these mental health challenges. Concealment may lead to negative cognitive (e.g., preoccupation, vigilance, suspiciousness), affective (e.g., depression, anxiety, shame), self-evaluative (e.g., diminished self-efficacy, identity ambivalence, negative view of self), and behavioral (e.g., impaired close relationship functioning) consequences for the sexual minority person (Pachankis, 2007). Furthermore, concealment may negatively impact one's ability to establish trust and connection with others (Huang & Chang, 2022).

Previous research has demonstrated that concealment of sexual orientation is correlated with mental health challenges (Jackson & Mohr, 2016; Lehavot & Simoni, 2011). For instance, Brennan et al. (2021) found that anxiety, depression, and stress were correlated with higher levels of concealment among gender and sexual minorities. In one of the few longitudinal studies on the topic, Huang and Chan (2022) found that concealment of one's sexual minority identity was associated with lower levels of subjective well-being one year later. On the other hand, another longitudinal study conducted by Pachankis et al. (2018) did not find a significant relationship between concealment and symptoms of anxiety and depression one year later (though the associations approached significance; *p*s <.10). Given these mixed findings, more research on the topic of concealment and mental health challenges among sexual minority adults is needed. The current study examines concealment as a predictor of symptoms of anxiety and depression.

Hypothesis 1: Concealment will predict (a) higher levels of anxiety symptoms and (b) higher levels of depressive symptoms.

Impostor Phenomenon

Impostor phenomenon—known colloquially as impostor syndrome—refers to a range of feelings and dispositions about one's own competence and abilities (Clance & Imes, 1978). According to Nadal et al. (2021), impostor phenomenon involves the following characteristics: diminishing one's own intelligence and past accomplishments in spite of previous success; feelings of inadequacy, inauthenticity, and doubt; a general sense of that one does not belong despite others' perceptions that one is high-achieving; feeling that one is not smart enough; and an inability to embrace or take pride in one's own accomplishments, even when receiving praise and recognition from others. It is theorized that impostor phenomenon may arise when one internalizes negative stereotypes about one's minoritized social identity (e.g., a woman internalizing societal messages about women's poor mathematical abilities). However, impostor phenomenon is not thought to develop due to sociodemographic characteristics alone. Rather, impostor phenomenon develops because a person with a minoritized social identity receives and internalizes negative messages about their abilities from an early age (Nadal et al., 2021).

The term *impostor phenomenon* was first coined by Clance and Imes (1978), who examined high-achieving women in professional settings and found that many of them were experiencing feelings of impostorism. Traditionally, impostor phenomenon has been conceptualized as a potential contributing factor to mental health challenges. Indeed, the women in Clance and Imes' (1978) study were in counseling for mental health challenges such as depression, anxiety, and self-confidence issues. Subsequent research has demonstrated the presence of impostor phenomenon among other minority groups, such as African American

(Bernard et al., 2017) and Latino (Mendoza, 2023) undergraduate students. Interestingly, Bernard et al. (2017) found that individuals who belonged to more than one marginalized identity group (i.e., Black women) experienced higher rates of impostorism than individuals who held a single marginalized identity (i.e., Black men). Additional research has demonstrated links between impostor phenomenon and mental health challenges; for instance, two studies found that impostor phenomenon was associated with lower levels of well-being (Cusack et al., 2013; McGregor et al., 2008).

Scholars have suggested that impostor phenomenon may be an integral part of the experiences of sexual minority individuals (Nadal et al., 2021). Sexual minority individuals may experience impostor phenomenon because they internalize negative societal messages about non-heterosexual identities, experience frequent microaggressions, or do not see sexual minority people represented in positions of power. Additionally, regularly concealing one's sexual orientation may lead to feelings of fraudulence and a sense that one does not belong (Riggle et al., 2017; Lattanner & Hatzenbuehler, 2023). However, empirical research has yet to examine impostor phenomenon among sexual minority individuals.

Conceptually, impostor phenomenon is linked to the psychological construct of authenticity. Prior research has found an association between feelings of authenticity and well-being in sexual minority individuals (Sutton, 2020; Brownfield & Brown, 2022; Riggle et al., 2017). For instance, Sutton (2020) conducted a meta-analysis of 75 studies which found a strong positive correlation between authenticity and general well-being. Additionally, Brownfield and Brown (2022) found that authenticity mediated the relationship between concealment and well-being in bisexual adults.

Many previous studies on this topic have focused on authenticity (or inauthenticity) related to one's sexual minority identity specifically. On the other hand, impostor phenomenon is a more general construct that captures feelings of fraudulence and negative perceptions of one's abilities in domains unrelated to one's sexual minority identity. I theorize that feelings of impostorism will generalize beyond one's sexual orientation into unrelated achievement domains such as career and academics. Moreover, as with the related construct of authenticity, impostor phenomenon may help explain the link between concealment and mental health challenges that has been found in previous research.

Hypothesis 2: Impostor phenomenon will mediate the link between concealment and mental health challenges.

Internalized Homonegativity

Internalized homonegativity—also known as internalized homophobia or internalized heterosexism—can be defined as negative evaluations of and distress directed towards one's own minority sexual orientation (Liu et al., 2022; Shidlo, 1994). Internalized homonegativity may arise when sexual minority individuals internalize others' negative biases and prejudices about sexual minority people. This internalization may lead to feelings of guilt and shame (Liu et al. 2022). Meyer (2003) asserts that while internalized homonegativity may be felt most acutely early in the coming out process, sexual minority individuals will likely carry the internalization of anti-gay stigma throughout their lives due to early socialization. The link between internalized homonegativity and mental health challenges has been well established in previous research (e.g., Walch et al., 2016; Velez et al. 2013). For example, a meta-analysis conducted by Newcomb & Mustanski (2010) found a small-to-moderate correlation between internalized

homonegativity and mental health challenges, including anxiety and depression, in sexual minority individuals.

Sexual minority individuals may conceal their sexual orientation for a variety of reasons. For instance, some may conceal due to concerns about discrimination and lack of physical and emotional safety (Brennan et al., 2021). Others may conceal because they have internalized negative stigma about their sexuality and feel ashamed or embarrassed about their identity (Lyons et al., 2017). Indeed, Velez et al. (2013) discovered that internalized homonegativity predicted concealment among sexual minority adults in the workplace. Theoretically, sexual minority individuals who are concealing due to internalized stigma—that is, sexual minority individuals with higher levels of internalized homonegativity—are likely to be more negatively impacted by concealment than those concealing for other reasons. Rather than attributing their concealment to a discriminatory social context, sexual minority individuals with high levels of internalized homonegativity may interpret their own concealing behavior as a signal that that their sexual orientation is shameful (Walch et al., 2016). This feedback loop may lead to greater concealment-related mental health challenges among sexual minority individuals with high levels of internalized homonegativity. Similarly, a higher level of internalized homonegativity may lead to heightened feelings of impostorism within sexual minority individuals who conceal. Individuals who conceal due to negative feelings about their sexual orientation, as opposed to those who conceal due to a discriminatory social context, may be more likely to experience feelings of inauthenticity regarding their sexual orientation. This inauthenticity may generalize beyond sexual orientation and impact the individual's ongoing evaluation of self.

Hypothesis 3: Internalized homonegativity will moderate the link between a) concealment and mental health challenges, and b) concealment and impostor phenomenon.

Current Study

The purpose of the current study was to examine impostor phenomenon as a potential mediator of the relationship between concealment of a minority sexual orientation and mental health challenges. Previous literature has demonstrated a link between concealment and mental health challenges (Brennan et al., 2021; Jackson & Mohr, 2016; Lehavot & Simoni, 2011; Huang & Chan, 2022). However, to my knowledge, no previous research has examined whether impostor phenomenon plays a role in the association between concealment and mental health. Based on pre-existing research on other minority populations and theory related to sexual minority psychology, there is reason to believe that impostor phenomenon may play a significant role in the lives of sexual minority individuals. Thus, this study fills an important gap in the literature by introducing the construct of impostor phenomenon to the field of sexual minority mental health. The current study also adds to the literature by examining internalized homonegativity as a moderator of the links between concealment and impostor phenomenon and mental health challenges. Participants in this study were sexual minority adults, who completed an online cross-sectional survey measuring concealment, impostor phenomenon, mental health challenges, and internalized homonegativity. The specific mental health challenges that were examined were depression and anxiety. Fostering a deeper understanding of the mental health issues that sexual minority individuals face will help advance treatment and prevention options for this population.

Methods

Participants

A priori power analyses were conducted using G*Power 3.1 (Faul et al., 2009). Analyses with power set at 0.80 and alpha set at .05 indicated that 148 participants would be needed to

detect medium effects (i.e., $f^2 = 0.15$). The study was open to adults 18 years or older who live in the United States and identify as non-heterosexual (including, but not limited to, the follow identities: gay, lesbian, bisexual, pansexual, and queer). Participants were recruited through advertisements on Facebook, Instagram, and e-mail listservs for sexual minority adults. Additionally, snowball sampling was used. Participants were encouraged to share information about the study with other people in their social network who meet study eligibility criteria.

In total, 864 unique survey responses were collected. Two hundred and nineteen responses were not included in the final analyses because the respondent failed four or more attention checks (almost entirely because the respondent did not complete the entire survey). Responses from individuals who described their sexuality exclusively as asexual or demisexual were also removed since variables such as internalized homonegativity would not apply to these individuals' experiences (n =46). Thus, the final sample size was 599.

The average age of the sample was 27.62 years old (SD = 9.57; range = 18-70). Participants identified with the following non-mutually exclusive racial/ethnic categories: 511 White (85.30%), 65 Hispanic or Latino (10.85%), 47 Asian American or Asian (7.85%), 29 Black or African American (4.84%), 22 Native American or Alaska Native (3.67%), 11 Middle Eastern or North African (1.84%), 2 Native Hawaiian or Other Pacific Islander (0.33%), and 11 another racial/ethnic category (1.84%). The sample included 113 men (18.86%), 226 women (37.73%), 240 non-binary or genderqueer individuals (40.07%), and 20 participants who identified as another gender identity (3.34%). Two hundred and eighty-two participants (47.08%) identified as trans while 317 did not identify as trans (52.92%). The highest level of education varied throughout the sample, with 9 participants reporting less than a high school education (1.50%), 63 a high school diploma (10.52%), 187 some college but no degree (31.22%), 37 a 2-

year degree (6.18%), 195 a 4-year degree (32.55%), 93 a master's degree (15.53%), 5 a professional degree (0.83%), and 10 a doctoral degree (1.67%).

Procedure

To join the study, interested individuals clicked on a link embedded within study advertisements that directed them to the Qualtrics survey platform. After reading an informed consent form, individuals indicated whether they consent to participate in the study. Individuals who consent to participate completed study measures in random order. There were eight attention check items interspersed throughout the surveys to screen out inattentive or inappropriate responders (e.g., "please select mostly agree"). If a participant incorrectly answered three or more of the eight attention checks, their data was excluded from analyses. At the end of the survey, participants were invited to provide their email address to be entered into a raffle to thank them for their participation. After the study's completion, five participants were randomly selected to receive a $50 gift card.

Measures

Concealment. Concealment was measured with the five-item Sexual Orientation Concealment Scale (SOCS; Jackson & Mohr, 2016). Participants rated how frequently they engaged in concealing behavior related to their sexual orientation in the last two weeks on a scale from 1 (*not at all*) to 5 (*all the time*). Sample items include "In the last 2 weeks, I have avoided the subjects of sex, love, attraction, or relationships to conceal my sexual orientation" and "In the last 2 weeks, I have remained silent while witnessing antigay remarks, jokes, or activities because I did not want to be labeled as LGB [lesbian, gay, or bisexual] by those involved." The SOCS has demonstrated acceptable reliability among sexual minority college students (Cronbach's $\alpha = 0.77$) and scores on the SOCS were associated with previously established

stigma management scales (Jackson & Mohr, 2016). In the current sample, Cronbach's α for the SOCS was 0.80.

Depressive Symptoms. Depressive symptoms were assessed with the nine-item Patient Health Questionnaire (PHQ-9; Kroenke et. al., 2001). Participants reported the frequency of depressive symptoms experienced in the last two weeks on a 4-point scale (0 = *not at all*, 1 = *several days*, 2 = *most of the days*, 3 = *nearly every day*). For example, participants rated the frequency with which they have been "feeling bad about yourself – or that you are a failure or have let yourself or your family down." The PHQ-9 has demonstrated strong reliability in lesbians and gay men (Cronbach's α = 0.92 and α = 0.91, respectively; Bariola, 2017). The PHQ-9 has demonstrated construct and criterion validity (Kroenke, 2001). Scores on the PHQ-9 illustrated construct validity by demonstrating a positive correlation with functional status, symptom-related difficulties, and disability days. Criterion validity was established by separate independent reinterviews by mental health professionals. In the current sample, Cronbach's α for the PHQ9 was 0.88.

Anxiety Symptoms. The current study used the Generalized Anxiety Disorder (GAD-7) scale to measure anxiety symptoms (Spitzer et. al., 2006). Across seven items, participants reported their anxiety symptoms (e.g., "trouble relaxing" and "not being able to stop or control worrying") over the last two weeks on a scale from 0 (*not at all*) to 3 (*nearly every day*). The GAD-7 has demonstrated excellent consistency among lesbians and gay men (Cronbach's α = 0.93 and α = 0.94; Bariola, 2017). In a sample of adult primary care patients, scores were positively associated with functional impairment (Spitzer et. al., 2006). In the current sample, Cronbach's α for the GAD7 was 0.90.

Impostor Phenomenon. The Clance Impostor Phenomenon Scale (CIPS) was used to measure impostorism (Clance, 1985). The CIPS includes 20 items, which direct participants to rate their experiences (e.g., "I sometimes think I obtained my present position or gained my present success because I happened to be in the right place at the right time or knew the right people.") on a scale from 1 (*not at all true*) to 5 (*very true*). The CIPS has demonstrated high internal reliability (Cronbach's $\alpha = 0.84$) and scores on the CIPS are associated with scores on established measures of constructs related to impostorism, such as the Perceived Fraudulence Scale (Chrisman et. al., 1995). In the current sample, Cronbach's α for the CIPS was 0.92.

Internalized Homonegativity. Internalized homonegativity was measured with the three-item internalized homonegativity subscale of the Lesbian, Gay, Bisexual Identity Scale (LGBIS; Mohr & Kendra, 2011). Participants were asked to indicate their current experience (e.g., "I believe it is unfair that I am attracted to people of the same sex.") on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Scores on the internalized homonegativity subscale of the LGBIS were strongly correlated with closely related existing measures. For instance, there was a positive correlation with ego dystonic homosexuality and a negative correlation with feelings of connection to other sexual minority people. The LGBIS internalized homonegativity subscale was found to be reliable among sexual minority college students (Cronbach's $\alpha = 0.86$; Mohr & Kendra, 2011). In the current sample, Cronbach's α for the internalized homonegativity subscale of the LGBIS was 0.87.

Demographic Questionnaire. Participants were asked to complete a demographic questionnaire. The questions asked about participants' age, race/ethnicity, education level, gender, sexual orientation, and state of residence.

Data Analytic Plan

The data were analyzed using SPSS Statistics 28 (IBM Corp., 2021). Descriptive statistics and Pearson's correlations were first calculated for all key study variables. Mediation and moderation analyses were completed using the SPSS PROCESS macro (Hayes, 2018).

Hypothesis 1

The first hypothesis was tested using two separate regression analyses. Concealment was entered as a predictor of depressive symptoms and anxiety, respectively.

Hypothesis 2

The second hypothesis was tested using two separate simple mediation analyses. In the first model, concealment predicted impostor phenomenon, which in turn predicted depressive symptoms. In the second model, concealment predicted impostor phenomenon, which in turn predicted anxiety symptoms.

Hypothesis 3

The third hypothesis was tested using two separate moderated mediation analyses. In the first model, internalized homonegativity moderated the paths between (a) concealment and depressive symptoms and (b) concealment and imposter phenomenon. In the second model, internalized homonegativity moderated the paths between (a) concealment and anxiety and (b) concealment and imposter phenomenon.

Results

Table 1 presents descriptive statistics and intercorrelations for key study variables. All correlations were in the expected directions. Simple linear regression was used to examine whether concealment predicted depressive symptoms. The overall regression model was statistically significant, $R^2 = .04$, $F(1, 588) = 25.57$, $p < .01$. Concealment significantly predicted depression scores, $\beta = 0.20$, $t(588) = 5.06$, $p < .01$. A second simple linear regression was used to

examine whether concealment predicted anxiety symptoms. The overall regression model was statistically significant, $R^2 = .06$, $F(1, 586) = 37.67$, $p < .01$. Concealment significantly predicted anxiety scores, $\beta = .25$, $t(586) = 6.14$, $p < .01$.

My first mediation model tested the effect of concealment on depression through the mediator of impostor phenomenon. The results revealed a significant effect of concealment on impostor phenomenon, $B = 0.26$, $SE = 0.04$, $p = .001$. Results also revealed a significant effect of impostor phenomenon on depression, $B = 0.43$, $SE = 0.04$, $p = .01$. The estimated indirect effect of concealment on depression through impostor phenomenon was significant, $B = 0.11$, $SE = .02$, 95% CI [0.08, 0.15]. The direct effect of concealment on depression, controlling for impostor phenomenon, was also significant, $B = 0.08$, $SE = 0.04$, $p = .02$. Overall, the model explained 23.24% of the variance in depression.

My second mediation model tested the effect of concealment on anxiety through the mediator of impostor phenomenon. The results revealed a significant effect of concealment on impostor phenomenon, $B = 0.26$, $SE = 0.04$, $p = .001$. Results also revealed a significant effect of impostor phenomenon on anxiety, $B = 0.51$, $SE = 0.04$, $p = .01$. The estimated indirect effect of concealment on anxiety through impostor phenomenon was significant, $B = 0.14$, SE =0.02, 95% CI [0.10, 0.18]. The direct effect of concealment on anxiety, controlling for impostor phenomenon, was also significant, $B = 0.13$, $SE = 0.04$, $p = .001$. Overall, the model explained 27.19% of the variance in anxiety.

I used a moderated mediation model to test whether internalized homonegativity moderated (a) the path between concealment and impostor phenomenon and (b) the path between concealment and depression. A moderation effect was inferred when the interaction term (i.e., the product of the predictor variable and the moderator variable) significantly predicted the

outcome variable. Results revealed that internalized homonegativity did not significantly moderate the pathway between concealment and impostor phenomenon (B = -0.03, SE = 0.03, p = .29.), or the pathway between concealment and depression (B = 0.02, SE = 0.03, p = 0.08.).

I used a second moderated mediation model to test whether internalized homonegativity moderated (a) the path between concealment and impostor phenomenon and (b) the path between concealment and anxiety. Results revealed that internalized homonegativity did not significantly moderate the pathway between concealment and impostor phenomenon (B = -0.04, SE = 0.03, p = .26.), or the pathway between concealment and anxiety (B = 0.002, SE =0.03, p = .06).

Because the sample included a substantially higher proportion of transgender and nonbinary (TNB) participants than expected, I performed exploratory analyses to examine differences in the mean level of key study variables based on gender identity. Results of an independent samples t-test revealed that there was no significant difference between TNB participants (M = 1.74, SD = 0.74) and cisgender participants (M = 1.75, SD = 0.75) in terms of concealment, $t(591) = 0.19$, p = .85. However, there was significant difference between TNB participants (M = 2.29, SD = 0.71) and cisgender participants (M = 2.13, SD = 0.67) in terms of depression scores, $t(592) = -2.81$, p = .01. There was significant difference between TNB participants (M = 2.50, SD = 0.78) and cisgender participants (M = 2.32, SD = 0.79) in terms of anxiety scores, $t(590) = -2.74$, p = .003. There was significant difference between TNB participants (M = 3.72, SD = 0.70) and cisgender participants (M = 3.58, SD = 0.76) in terms of impostor phenomenon, $t(585) = -2.26$, p = .01. There was significant difference between TNB participants (M = 1.59, SD = 0.88) and cisgender participants (M = 1.86, SD = 1.09) in terms of internalized homonegativity, $t(447.83) = 3.17$, p = .002.

Discussion

The intention of this study was to examine the role of impostor phenomenon in the mental health of adult sexual minority populations. Consistent with previous research, concealment predicted mental health challenges, specifically depression and anxiety. Impostor phenomenon meditated the association between concealment and depression, and concealment and anxiety. However, internalized homonegativity did not moderate the association between concealment and mental health challenges or the association between concealment and impostor phenomenon. This is the first empirical research study to examine impostor phenomenon in the context of concealment, mental health challenges, and internalized homonegativity among sexual minority individuals. Previously, impostor phenomenon has only been briefly theorized on in the literature.

A significant relation between concealment of sexual orientation and mental health challenges has been previously demonstrated (Jackson & Mohr, 2016; Lehavot & Simoni, 2011). The current study replicates these findings regarding depression and anxiety, strengthening confidence in this association. Concealing one's sexual orientation may cause internal conflict within an individual that leads to worry and shame. Additionally, LGBQ individual who conceals their sexual orientation might have difficulty trusting others if they are concealing to protect themselves from discrimination or stigma. Furthermore, sexual minority individuals may believe their own concealing behavior to be a signal that that their sexual orientation is something shameful (Walch et al., 2016).

Although Nadal (2021) had previously speculated about the presence of impostor phenomenon within sexual minority individuals, the current study is the first to examine impostor phenomenon empirically in the context of concealment and mental health challenges. My results demonstrate that impostor phenomenon significantly mediates this association

between concealment and both depression and anxiety. This finding helps explain the link between concealment and mental health challenges found in previous research. My initial theory was grounded in the commonality of inauthenticity between both concealment behaviors and impostor phenomenon. Concealing one's own sexual orientation may produce other feelings associated with impostor phenomenon, such as a sense of fraudulence and inadequacy. Sexual minority individuals may feel like they are a fraud or inadequate because their true experiences are incongruent to the expectations others have of them. This finding is consistent with previous research on other minority or marginalized groups such as African Americans (Bernard et. Al., 2017). The findings confirm the suspicion that concealing one's sexual orientation may have impacts on unrelated achievement domains such as career and academics. However, the findings only indicated a partial mediation, suggesting that other factors—such as identity centrality or shame—may also explain the link between concealment and mental health.

Based in theory, I speculated that sexual minority individuals who conceal their sexual orientation due to internalized homonegativity might be more negatively impacted by concealment than those concealing for other reasons. Similarly, I hypothesized that a higher level of internalized homonegativity may lead to heightened feelings of impostorism within sexual minority individuals who conceal. However, the current study found that internalized homonegativity did not moderate the links between concealment and mental health challenges or between concealment and impostor phenomenon. While the link between internalized homonegativity and mental health challenges has been previously established (Walch & Ngamake, 2016; Velez et al., 2013; Newcomb & Mustanski, 2010), the current study did not find that internalized homonegativity moderated the associations between concealment and mental health challenges. The impact of concealment and impostor phenomenon were consistent across

all levels, regardless of one's level of internalized homonegativity. These findings do not support my third hypothesis, demonstrating that internalized homonegativity does not contribute to variability in these processes. An individual who conceals their sexual orientation with lower internalized homonegativity may experience the same levels of mental health challenges or impostor phenomenon as an individual who conceals their sexual orientation with higher levels of internalized homonegativity. This finding contrasts with previous theorizing, which suggested that sexual minority people with higher levels of internalized homonegativity may be more negatively impacted by concealment and have higher rates of impostorism.

Limitations

The gender breakdown of my sample was not as expected. The largest demographic group (40.1%) identified as either non-binary or another gender (e.g., genderfluid, agender, two-spirit). Additionally, more individuals identified as transgender than as cisgender. These results may be due to a growing number of people who are exploring non-traditional gender categories (Meerwikj & Sevelius, 2017citation). Young LGBQ individuals especially may be more likely to examine the role of gender in their lives since gender and sexuality are so intimately tied (Herman et al., 2022). Snowball sampling may have led gender minority individuals to share the survey with other gender minority individuals. Specifically, I shared the study in openly queer spaces that have high numbers of trans and non-binary people. I do not consider the high percentage of TNB individuals to be a limitation; however, some of the results may have been impacted by the mixed transgender and cisgender population. Although the instructions for the concealment and internalized homonegativity scales directed participants to consider only their sexual orientation when responding, some participants may have considered both their sexual orientation and their gender identity simultaneously. For instance, transgender and non-binary

individuals reported higher levels of impostor phenomenon than cisgender individuals, while cisgender individuals reported higher levels of internalized homonegativity. I speculate that transgender and non-binary individuals who are sexual minorities may experience more impostor phenomenon due to their multiple marginalized identities. The moderation analysis may have found a significant moderation of internalized homonegativity in both the depression and anxiety models if the population was narrowed to cisgender individuals. Readers should exercise caution when applying the results of the current study to entirely cisgender or transgender LGBQ samples.

A further limitation is the demographic characteristics of this sample. Most participants were young, white, and college -educated. Results may have differed in a sample with more diversity in race, age, and education level. Previous research has found that individuals belonging to more than one marginalized identity group experienced higher rates of impostor phenomenon than individuals who belonged to only one single marginalized identity (Bernard et al. (2017). As such, it is likely that a sample of racial/ethnic minoriy individuals may have reported higher levels of impostorism. I also speculate that an older sample may have had higher levels of internalized homonegativity because of the elevated stigma of homosexuality in previous generations. Roughly half (50.58%) of participants reported having at least a four-year degree. I speculate that if the average level of education was lower, results may have produced higher rates of concealment. Due to higher risk of victimization, sexual minority individuals of lower socioeconomic status may find themselves in less affirming spaces (Bränström et al., 2023). Caution should be exercised when attempting to apply these findings to individuals of other demographic characteristics.

Due to the nature of the recruitment process, people who regularly conceal their sexualities may have been less likely to participate in this study. It is unlikely that the individuals who are engaging the most in concealing behaviors would be targeted through online advertisements or snowball sampling. Individuals who have not come out to anyone were unlikely to receive the survey from friends and family. Additionally, they may have feared that participation would expose their identity to others. Results may differ with a sample higher in concealment; I speculate that individuals who engage in more concealment may have demonstrated a stronger link between concealment and mental health. Similarly, these individuals may have reported worse rates of impostorism since they have fewer social outlets for authenticity. However, the difficulty in recruiting these high-concealment individuals is an expected limitation when studying sexual minority populations.

Furthermore, this study is limited by its correlational, cross-sectional design. The current study is neither longitudinal nor experimental. As such, we can only speculate about the directionality of the relationships among the variables. For instance, though we suggest that concealment leads to mental health challenges, we cannot be certain that mental health challenges do not cause higher levels of concealment. This study is also limited by its use of self-report data. Participants may have intentionally or unintentionally misrepresented their experiences while taking part in the study. For instance, if a participant was having an especially stressful week, they may have scored higher on the anxiety scale than they would have otherwise.

Implications & Future Directions

The current study has several implications for clinical practice. When working with sexual minority clients, therapists should ask about their clients' concealment behaviors and

experiences with impostor phenomenon. Assisting clients in reducing concealment behaviors and impostorism may help to reduce mental health challenges. An integral aspect of the counselor-client relationship is a sense of authenticity. I speculate that exploring clients' experiences with impostorism and heightening their sense of authenticity will strengthen this relationship along with other core relationships in the client's life. Additionally, counselors should consider that regardless of a client's level of internalized homonegativity, they may still be impacted negatively by concealing behaviors.

As the research on impostor phenomenon in sexual minority individuals is limited, further research is needed to further understand how impostorism impacts sexual minority people. Future research should adopt longitudinal and experimental designs to establish causal associations between concealment, impostor phenomenon, and mental health challenges. In addition, since impostor phenomenon is an umbrella term for several different processes (e.g. feeling inauthentic or fraudulent, being unable to take pride in one's own past achievements, feeling like one is not smart enough, etc.), qualitative research may provide deeper insight into which specific aspects of impostor phenomenon affect sexual minority individuals the most. For instance, sexual minority individuals may experience higher rates of feeling inauthentic and lower rates of being unable to take pride in their work. Additionally, recruiting more diverse samples should be prioritized in future research to gain more wholistic insights into the LGBQ population.

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Table 1

Descriptive Statistics and Zero-Order Correlations

Variables	*M*	*SD*	Range	1	2	3	4	5
1. Concealment	1.75	0.74	1.00 – 4.67	--				
2. Depression	2.23	0.70	1.00 – 4.00	.20*	--			
3. Anxiety	2.42	0.79	1.00 – 4.00	.25*	.73*	--		
4. Impostor Phenomenon	3.66	0.73	1.15 – 5.00	.27*	.47*	.50*	--	
5. Internalized Homonegativity	1.70	0.98	1.00 – 5.67	.53*	.13*	.11*	.20*	--

Note. Means, standard deviations, and ranges for all variables provided in original scales.
*$p < .05$.