INTRODUCTION

Sexual and gender diverse youth (SGDY; e.g., lesbian, gay, pansexual, transgender youth) experience disproportionate levels of mental health problems relative to cisgender heterosexual youth (National Academies of Sciences, Engineering, and Medicine (NASEM), 2020), and health disparities among SGDY are growing over time despite substantial social progress (Russell & Fish, 2019; Watson et al., 2018). Compared to cisgender heterosexual youth, SGDY report more frequent depressive, anxiety, and somatic symptoms (Choukas-Bradley & Thoma, 2022; NASEM, 2020). These disparities in negative health experiences can partially be explained by minority stress—the unique stressors SGGY face due to their sexual and gender identities (Brooks, 1981; Meyer, 2003). For instance, during adolescence, SGGY commonly navigate when and to whom they disclose their identities and whether they can safely do so at all (Caba et al., 2022). Unique stressors, such as bullying based on sexual and gender identities, come at a time when SGGY are meeting important developmental milestones (e.g., puberty); at this same time, SGGY are typically financially and legally dependent upon their caregivers (Russell & Fish, 2019). Some SGGY also experience threats to have their identities outed by their peers (e.g., 57% of sexual minority boys; Gordián-Arroyo et al., 2022), and the possibility for parents/caregivers to discover (intentionally or accidentally) their identity before they are ready to disclose (Chrisler, 2017). However, research has not considered how experiences with unintentional disclosure (being “outed”) to parents might be related to SGGY’s mental health. This represents a critical gap of knowledge on how the manner of disclosure may be related to the well-being of SGGY. Findings highlight the importance of instilling greater agency in disclosure experiences among SGGY.

Minority stress and disclosure stress

Minority stress theory (MST) has been used to explain the mechanisms that drive health disparities among SGGY (Brooks, 1981; Meyer, 2003). According to MST, in addition to general life stressors, SGGY experience unique and chronic stressors related to their sexual orientation and/or gender identity. Minority stressors are stigma-based...
and can include violence, discrimination, rejection, and expectations of these stigma-based stressors. Related to the current study, identity concealment/disclosure is especially salient in the discussion of SGDY and mental health (Pachankis et al., 2020). On one hand, research has found that individuals who disclose their sexual and gender identities in adolescence later report lower depression and higher life satisfaction in adulthood (Russell et al., 2014); on the other, in some contexts, sexual and gender identity disclosure might expose SGDY to higher amounts of harassment from their peers and family (D’Augelli et al., 1998; Watson et al., 2015). Notably, the benefits of disclosure are contextual and depend on the environment, age, and the people youth disclose to, which could explain some of the mixed findings regarding identity disclosure on SGDY development (Caba et al., 2022). With these mixed findings, scholars have argued that the chronic minority stress (i.e., disclosure stress) tied to identity concealment and/or disclosure is a critical factor to consider in the investigation of SGDY’s mental health (Mallory et al., 2021). The current study focuses on stress tied to a lack of agency in identity disclosure to parents (i.e., the stress of being outed), regardless of whether SGDY were accidentally or intentionally outed to their parents.

Sexual and gender identity disclosure

Disclosing a sexual or gender identity, or “coming out,” is identifying and communicating a non-heterosexual or non-cisgender identity (Bolderston, 2021) and can have various intra- and inter-personal implications, motivations, and forms. Self-disclosure for SGDY in adolescence can be particularly challenging and complex as patterns of outness can differ across various contexts (Caba et al., 2022). For instance, some sexual minority youth have reported mixed levels of outness—where select people across different contexts know of their identity—and some may be out to no one or out to almost everyone in a given context (Caba et al., 2022; Watson et al., 2015). SGDY with mixed and low levels of outness have reported some of the highest amounts of depressive symptoms and anticipated rejection (Caba et al., 2022; D’Augelli et al., 2010); in comparison, SGDY with higher outness in certain contexts have reported high amounts of parental rejection yet also higher amounts of self-esteem, life-satisfaction, and lower depressive symptoms (Caba et al., 2022; D’Augelli et al., 2010; Kosciw et al., 2022; Russell et al., 2014). In addition, SGDY’s motivations to disclose their identity vary and serve as adaptive behaviors to manage anticipated experiences across different contexts and to increase their social support (Beas et al., 2009). For example, SGDY may engage in strategies to actively conceal or manage information about their identities in social contexts they perceive as threatening (Schmitz & Tyler, 2018), and they may actively disclose in environments they perceive as supportive (Beas et al., 2009). The manner SGDY self-disclose also differs and can be active (e.g., intentionally and deliberately disclosing), passive (e.g., dropping hints), and passive non-disclosure (e.g., not necessarily strategically concealing but also not open; Perlson et al., 2021).

Extant research has examined the health-related consequences associated with a degree of outness in a given context rather than the manner of identity disclosure. From a methodological standpoint, scholars have pointed out that virtually no empirical research has examined the intra- and inter-personal implications of being outed (e.g., unintentional identity disclosure) during adolescence (Zhao, 2022). Nevertheless, a recent study has shown that 57% of sexual minority adolescent boys received direct threats of being outed by their peers (Gordián-Arroyo et al., 2022), and 44% of SGDY have not reported talking to an adult at school about their harassment out of fear their identities would be outed to their parents (Kosciw et al., 2022). In addition, adult cross-sectional samples, while limited in sample size, of South Korean gay men found that being outed was associated with higher suicidal ideation (Cho & Sohn, 2016). The above findings suggest that there is a high prevalence of threats and fears of being outed during adolescence, which conflicts with the strategic nature of disclosure; thus, understanding experiences of being outed in salient contexts, such as the family, across a diverse sample of SGDY is critical.

In addition, it is essential to note the unique experiences and patterns between youth who disclose a sexual identity and youth who disclose a gender identity, which may have different consequences for being outed. For example, identity disclosure among gender diverse youth often includes social transitioning (e.g., using pronouns to affirm gender identity; Davy & Cordoba, 2020); in comparison, cisgender minority youth may not go through as salient social transitions after their disclosure. Some samples have found that nonbinary individuals disclose their identities at later ages than transgender individuals (Scandurra et al., 2021) and that bisexual individuals disclose their identities later than individuals with emerging sexual identities (Bishop et al., 2020). A recent latent class analysis also found that transgender youth were more likely to receive negative reactions from family members in response to disclosing their identity compared to cisgender sexual minority youth (McCurdy et al., 2023). As such, being outed likely unfolds differently between SGDY.

Disclosure stress

Disclosure stress, a form of minority stress that results from disclosing a SGD identity to family, friends, or peers (e.g., Grossman et al., 2021), could be useful to understand how being outed may compromise SGDY’s mental health. The level of disclosure stress one experiences depends on numerous factors, such as perceived rejection and stigma. In an effort to avoid the stress and potential consequences that result from parental rejection—for example, being kicked out and facing homelessness (Kreiss & Patterson, 1997)—some SGDY may choose never to come out and instead conceal their identity (Hoy-Ellis, 2021). These compounding stressors may amount to increased disclosure stress for youth.
Most research that has examined disclosure stress has not distinguished the relationships between stress associated with self-disclosure and stress associated with being outed on SGDY’s mental health. Among research that has not distinguished between these forms of stress, higher levels of disclosure stress have been associated with greater levels of depressive symptoms among SGDY (Grossman et al., 2021; Mallory et al., 2021; Pollitt et al., 2017). Some of the only research to explicitly examine the implications of forced disclosure stress (referred to as stress of being outed in the current study) on adolescent well-being is from the 1990s and found that gay and bisexual boys whose identities were discovered by others experienced a greater array of conduct and relationship problems compared to gay and bisexual boys who self-disclosed their identity (Rosario et al., 1996).

Depressive symptoms and parental support among SGDY

Research suggests that SGDY experience disproportionate levels of depressive symptoms compared to their heterosexual and cisgender counterparts (Marshal et al., 2011), and these disparities in depressive symptoms have remained relatively unchanged over time (Watson et al., 2018). Depressive symptoms have also been found to vary among SGD populations based on social positions, such as gender identity and sexual orientation (Hoy-Ellis, 2021); however, there are mixed findings across race (for a review, see Toomey et al., 2017). Further research is needed to understand the role multiple intersecting identities (e.g., Black and Latine SGDY) have on depressive symptoms, as well as the mechanisms that influence these disparities.

One factor that is related to depressive symptoms among SGDY is LGBTQ family support. A robust body of research has shown that higher levels of family support among SGDY are associated with better mental health outcomes during adolescence and emerging adulthood (Katz-Wise et al., 2016). Greater family support has also been linked to lower general disclosure stress among transgender youth (Grossman et al., 2021). When SGDY receive little or no LGBTQ parental support, they often report experiencing greater difficulties coping with stress and increased stress from the lack of support, both of which may lead to greater depressive symptoms (Brooks, 1981; Meyer, 2003). For the purposes of this study, LGBTQ family support is defined as the presence of positive affirming behaviors and a lack of rejecting behaviors from parents after learning about their child’s SGD identity (whether self-disclosed or disclosed by someone else).

Increasingly, more youth have started to disclose their identity during adolescence (Bishop et al., 2020) when they are still reliant on their parents and caregivers for various sources of support (Katz-Wise et al., 2016). However, parents and caregivers are often among the last groups to whom SGDY disclose their identity out of fear of rejection and loss of life stability (Bishop et al., 2020; Savin-Williams, 1998). At the same time, studies document that parent/caregiver reactions to their child’s SGD identity are most strongly related—above and beyond friends’ and teachers’ reactions—to mental health (Watson et al., 2019). Many SGDY fear being outed to their family and desire to disclose their identity on their terms (Reisner et al., 2020; Van Bergen et al., 2021). For outing SGDY, parents/caregivers may learn about their child’s identity from other people or they may suspect their child’s identity, which can lead to attempts to confirm it (Chrisler, 2017). Given that SGDY who conceal their identities from their parents/caregivers have reported greater fears of rejection and that parents vary considerably in how affirming their reactions are to their child’s disclosure (Abreu et al., 2019; Katz-Wise et al., 2016), parental responses are critical to consider for outing youth. Parents and caregivers who learn of their child’s SGD identity from a source other than their child may process the information using their own potentially limited knowledge of SGD identities, which may elicit negative reactions (Katz-Wise et al., 2016). Indeed, when their identity is outed and questioned by their parents, SGDY are commonly met with less family support and more rejection (Van Bergen et al., 2021).

Research has also shown important nuances across sexual and gender identities in LGBTQ family support. For instance, compared to their cisgender peers, transgender and nonbinary youth often receive less LGBTQ family support and report higher amounts of physical, verbal, and mental abuse following the disclosure of their identity to their parents and caregivers (Grossman et al., 2021; for a review, see Wittlin et al., 2023). Although some studies have been inconsistent in finding differences in family support between lesbian, gay, and bisexual youth (Ryan et al., 2010), recent findings report that youth are increasingly identifying with more expansive labels (e.g., pansexual, queer, ace), which are significant predictors of family rejection (Gamarel et al., 2020; Simon et al., 2022; Watson et al., 2020). Parents and caregivers may be more unfamiliar with newer and more emerging sexual and gender identity labels (Robbins et al., 2016), which may be more conducive to higher prejudice, bias (MacInnis & Hodson, 2012), and greater instances of identity invalidation from parents (Bosse et al., 2022).

Outed stress, LGBTQ family support, and depressive symptoms

Few studies have assessed the relationship between disclosure stress, LGBTQ family support, and depressive symptoms together (Grossman et al., 2021; Pollitt et al., 2017). In addition, apart from Rosario et al. (1996) development of the disclosure stress measure, subsequent studies that have examined disclosure stress have yet to differentiate outing stress as a unique stressor (Grossman et al., 2021; Mallory et al., 2021; Pollitt et al., 2017). Studies that have examined the links between disclosure stress and family support have used general measures of parental support as moderators.
(Pollitt et al., 2017)—that is, not specific to LGBTQ-specific support. Although these studies have advanced knowledge on the nature and outcomes of disclosure stress, indirect associations between the stress from being outed to parents, LGBTQ family support, and SGDY’s mental health outcomes are understudied. In this study, LGBTQ family support was measured in a way that participants reported on their perceptions of LGBTQ family support after SGDY learned their identities had been outed to their parents. That is, the perceptions of LGBTQ parent support are focused on support specific to identifying as an LGBTQ person, which is temporally preceded by a caregiver discovering or someone outing a youth’s LGBTQ identity to a parent. As such, SGDY who report higher stress from being outed to their parents may subsequently perceive greater rejection or less affirmative support from their parents, which, in turn, may contribute to elevated depressive symptoms.

The relation between the stress of being outed to parents and LGBTQ family support is likely to vary across sexual and gender identities. For instance, SGDY who identify as transgender, nonbinary, bisexual, pansexual, queer, or asexual may exhibit greater stress after learning their identities have been outed to their parents, which may manifest through greater perceptions of parental rejection or invalidation of their identities (e.g., Simon et al., 2022; McCurdy et al., 2023; for a review, see Wittlin et al., 2023). Consequently, the indirect association of outed stress to parents and depressive symptoms through LGBTQ family support may be stronger for SGDY who identify with non-cisgender and emerging sexual identities (e.g., pansexual or queer).

Current study

To understand the minority stressors of SGDY who have had a lack of agency in their identity disclosure experiences to parents, the current study investigated the relationships between the manner of identity disclosure, LGBTQ family support, and depressive symptoms. The first aim of the study used a larger sample ($N=9272$) to examine between-group and within-group differences in depressive symptoms and LGBTQ family support between SGDY whose identities were outed to their parents and SGDY who were not outed to their parents. Given the lack of research examining these relationships, no a priori within-group hypotheses were formed. The second aim of the study used a smaller subsample of SGDY who were outed to their parents ($n=2795$) and examined non-moderated and moderated indirect associations between the stress of being outed to parents and depressive symptoms through LGBTQ family support. It was hypothesized that:

1. SGDY who were outed to their parents would report higher levels of depressive symptoms and lower LGBTQ family support than youth who were not outed.
2. Higher stress from being outed to parents would be associated with higher levels of depressive symptoms and lower amounts of LGBTQ family support.
3. The stress of being outed would be indirectly associated with depressive symptoms through LGBTQ family support.
4. The indirect association between the stress of being outed to parents and depressive symptoms through LGBTQ family support would be moderated by gender and sexual identity. Specifically, it was expected that the indirect association would be strongest for transgender and nonbinary youth compared to cisgender youth and strongest for pansexual, asexual, bisexual, and queer youth compared to gay and lesbian youth.

METHOD

Data were drawn from the LGBTQ National Teen Survey. These data were collected in partnership with the Human Rights Campaign (HRC) on Qualtrics between April and December 2017. Eligible youth were between ages 13–17, identified as LGBTQ+, were English-speaking, and lived within the United States at the time of survey completion. Participants were recruited online through various social media platforms (e.g., Snapchat, Facebook, Instagram, and Reddit) using targeted ads for youth identifying as LGBTQ+. Youth were also recruited through Snapchat with the support/assistance of social media ambassadors. Youth filled out questions on demographics, sexuality, gender, school and family experiences, and health behaviors. All study protocols, including a waiver of parental consent, were approved by the University of Connecticut Institutional Review Board.

In total, a sample of 17,112 SGDY was available for analysis. For the current study, only youth who responded to the stress of being outed to parents measure were included (regardless of whether they selected a stress option or “not applicable”; $N=11,483$). In addition, only youth who reported that their identity had been outed to their parents and responded to a stress option were included in the tests of indirect associations ($n=3437$). From this sample of 11,483 SGDY, missing data across primary variables of interest ranged from 5%–12%; however, most participants with missing data only responded to the demographic variables (and no health-relevant items), so multiple imputation was not utilized. Thus, a final analytic sample of 9272 SGMY was selected, with 2795 SGMY (i.e., who indicated their identity was outed) included in the tests of indirect associations.

Participants

Participants were between the ages of 13 and 17 ($M=15.63$, $SD=1.24$). The majority of participants identified as cisgender (64.7%), followed by nonbinary (25.5%) and transgender (9.7%). Participants identified as gay/lesbian (37.2%), bisexual (33.4%), pansexual (13.8%), asexual (5.2%), or something else (5.9%). The majority of participants identified as White...
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(66.8%), followed by Multiracial (14.1%), Latine (9.8%), Black (4.2%), Asian (4%), Native American (4%), Middle Eastern/Arab (3%), and something else (3%). Most participants reported that their parents’ highest education was a college degree (36.2%), followed by a postgraduate degree (30.9%), some college (14.1%), high school (12.5%), technical school (3.3%), and less than high school (3.0%). In addition, most participants reported not being outed to their parents (69.8%). Of the youth who were not outed to their parents, 36.2% reported that their parents and family members were unaware of their non-heterosexual identity, and 46.7% of gender diverse youth reported that their parents and family members were unaware of their non-cisgender identity. More detailed participant information stratified by SGDY who were and were not outed to their parents can be viewed in Table 1.

<table>
<thead>
<tr>
<th>TABLE 1</th>
<th>Demographic characteristics of the analytic sample stratified by disclosure group.</th>
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<tbody>
<tr>
<td></td>
<td>Full sample</td>
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<td>Gender identity</td>
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<td>Asexual</td>
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<td>Something else</td>
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<td>17</td>
<td>2927</td>
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<tr>
<td>Depressive symptoms</td>
<td>M = 1.33</td>
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<tr>
<td>LGBTQ family support</td>
<td>M = 2.39</td>
</tr>
<tr>
<td>Stress of being outed</td>
<td>M = 3.33</td>
</tr>
</tbody>
</table>

Note: Some values may not add up to 100 because some were reported on check-all-that-applies items.
Abbreviation: Native Amer., Native American.
*p < .001.
Demographics

Participants reported their age, highest parental education, race/ethnicity, gender identity, and sexual orientation. Due to small cell sizes among SGDY who were outed, youth who identified as Native American (n full sample = 35; n outed youth = 18), an identity not listed (n full sample = 26; n outed youth = 11), and Middle Eastern/Arab (n full sample = 29; n outed youth = 8) were combined into one group. For gender identity, youth were asked to check all the options that applied to them with the following categories: male, female, transgender boy, transgender girl, nonbinary, genderqueer, or another identity not listed. An additional write-in option was available for youth selecting another identity not listed. For the current study, gender was collapsed into three categories: cisgender, transgender, and nonbinary. For sexual orientation, youth were asked to select one option with the following question, “How do you describe your sexual identity?” Response options were “gay/lesbian,” “bisexual,” “straight, that is, not gay,” or “something else.” A follow-up question was provided to youth selecting “something else” and provided them with the following additional options: “pansexual,” “asexual,” “queer,” “questioning,” and “another sexual orientation.” For the current study, responses were collapsed into the following categories: gay/lesbian, bisexual, queer, pansexual, asexual, and something else. Due to small cell sizes among outed youth, heterosexual (n full sample = 155; n outed youth = 64), questioning (n full sample = 197; n outed youth = 37), and youth who identified as something else (n full sample = 199; n outed youth = 66) were included in the category “something else.”

Measures

Depressive symptoms

Depressive symptoms were assessed using 10 items from the Kutcher Adolescent Depression Scale (Brooks et al., 2003). The original scale contained 11 items; however, due to the waiver of parental consent in this study, the suicidal ideation question was not included. Participants were asked to indicate how often they had experienced various depressive symptoms in the past week (e.g., “feelings of worthlessness, hopelessness, letting people down, not being a good person”) on a scale from 0 (hardly ever) to 3 (all of the time). Internal consistency was excellent (α = .90). The mean of all 10 items was calculated, with higher scores indicating more depressive symptoms.

LGBTQ family support

LGBTQ family support was assessed using an eight-item scale (Miller et al., 2020). Participants were asked to report how often they felt their family members engaged in various behaviors that were accepting and rejecting specific to their LGBTQ identity (e.g., supported them because they were members of the LGBTQ community). Four items were used to assess positive supportive behaviors (e.g., “Say they were proud of you for being an LGBTQ person?”), and four items were used to assess rejecting family behaviors (e.g., “Say negative comments about you being an LGBTQ person?”). All items were scored from 1 (never) to 4 (often). Before calculating mean scores, all items that assessed rejecting family behaviors were reverse scored such that higher mean scores indicated more LGBTQ family support. Internal consistency was good (α = .85).

Stress of being outed to parents

The stress of being outed scale was adapted from the gay-related stress scale (Rosario et al., 1996) to be more inclusive of other identities by using the term LGBTQ. The current study assessed how youth rated their stress from being “outed” to their parents. Participants first read a brief description: “For each event listed below, we would like you to rate how stressful the situation was for you.” One of the 10 items on the scale assessed stress from being outed to parents. Specifically, participants were asked: “How stressful was it when your parents found out you were LGBTQ without you telling them?” Responses were scored from 0 (no stress) to 4 (extremely stressful). If participants were not outed to their parents, they selected “not applicable” for this item and were scored as “not-outed” for mean comparisons and as missing in all indirect association analyses. Higher scores indicated higher stress from being outed to parents.

Plan of analysis

First, descriptive statistics were run for the full sample and disclosure groups, including frequencies, means, standard deviations, and chi-squares. Two disclosure groups were created that included SGDY who were not outed to their parents and SGDY who were outed to their parents. Stress from being outed to parents was dichotomized, where youth who reported any level of stress were coded as 1 (regardless of stress level; outed to their parents), and youth who selected “not applicable” were scored as 0 (not outed to their parents). Next, independent sample t-tests were run to compare the means of SGDY who were and were not outed. For SGDY who were outed, a series of one-way analyses of variance (ANOVA) with Bonferroni corrections were used to assess mean differences based on demographic covariates (race/ethnicity, highest parental education) on levels of stress from being outed, depressive symptoms, and LGBTQ family support. These ANOVAs were not performed for SGDY who were not outed. Lastly, a series of two-way multivariate analyses of variance (MANOVA) were conducted with the dichotomized disclosure group variable to examine interactions between sexual orientation, gender identity, and
disclosure group on depressive symptoms and LGBTQ family support. As depressive symptoms and LGBTQ family support were correlated, MANOVAs were used to limit type I errors. Separate omnibus tests and Tukey post-hoc tests were conducted for each independent variable when multivariate reports were significant.

For the primary analysis, indirect associations between the stress of being outed to parents and depressive symptoms through LGBTQ family support were estimated. These analyses were restricted to SGDY who reported they were outed to their parents \( (n=2795) \), with the stress from being outed treated as a linear variable. First, the PROCESS macro \( \text{Hayes, 2018} \) in SPSS version 28 was used to assess whether there was a significant indirect association between the stress from being outed to parents and depressive symptoms through LGBTQ family support in the aggregate sample. Next, to determine whether gender and sexual identity moderated the indirect association, two separate moderated indirect associations were estimated. In regards to gender identity and sexual orientation, cisnormativity continues to be prevalent in society, and limited research has focused on the experiences of sexual minority youth with emerging identities (e.g., pansexual); thus, cisgender youth were used as the reference group for gender identity, and gay/lesbian youth were used as the reference group for sexual orientation to document group differences. To visualize interactions and facilitate figure creation, the \( R \) packages \( \text{ggeffects} \) \( \text{(Lüdecke, 2018)} \) and \( \text{ggplot2} \) \( \text{(Wickham, 2016)} \) were used.

All models were conducted in a single model with a bootstrap technique to determine the significance of the indirect associations. The index of moderated indirect associations was investigated in the form of a 95% bias-corrected confidence interval to determine significance. This method is considered better than traditional methods, such as the Sobel test \( \text{(Sobel, 1982)} \), in that it ameliorates power problems caused by non-normal sampling distributions of an indirect association \( \text{(MacKinnon et al., 2004; Preacher et al., 2010)} \). To examine how the strength of the indirect association changed at different levels of the moderator, a test of conditional indirect associations outlined by Hayes \( \text{(2018)} \) was conducted. Specifically, if the 95% bias-corrected confidence interval for the index of moderated indirect association did not contain a zero, then any conditional indirect association at different levels of the moderator could be interpreted as being significantly different. All models controlled for age, race/ethnicity (White SGDY as the reference group), and highest parental education.

**RESULTS**

**Descriptives**

 Frequencies, means, and standard deviations for the aggregate sample and by disclosure group are presented in Table 1. As indicated by independent sample \( t \)-tests, youth who reported being outed to their parents reported higher depressive symptoms and lower LGBTQ family support than youth who reported not being outed.

**Outed SGDY**

Most participants regarded being outed as a highly stressful experience. Specifically, 69% of youth who were outed to their parents reported it as being extremely stressful, and only 7.9% reported having no stress. One-way ANOVAs were used to further contextualize demographic differences across SGDY who were outed. Among outed youth, no differences emerged across race and highest parental education in stress levels of being outed to parents; however, significant differences were found across sexual orientation, \( F(5, 2793)=2.87, p<.05 \), and gender identity, \( F(2, 2796)=13.76, p<.001 \). Tukey post-hoc tests indicated that asexual youth reported higher levels of stress from being outed than bisexual youth and that transgender and nonbinary youth reported higher levels of stress from being outed than cisgender youth. No significant differences were found across race in depressive symptoms or LGBTQ family support. Differences across highest parental education in LGBTQ family support were significant for outed youth, \( F(5, 2793)=9.34, p<.001 \). Post hoc tests revealed that among youth who were outed to their parents, youth whose parents had postgraduate degrees reported the highest amounts of LGBTQ family support out of any other group. In addition, there were significant mean differences across highest parental education in depressive symptoms, \( F(5, 2793)=14.16, p<.001 \). Post hoc tests indicated that youth whose parents had postgraduate degrees reported lower amounts of depressive symptoms than all other groups except for youth whose parents had technical school experience.

**Differences between disclosure group, sexual orientation, and gender identity**

**Sexual orientation**

A series of two-way MANOVAs were estimated to examine how differences in depressive symptoms and LGBTQ family support would vary as a function of sexual orientation, gender identity, and disclosure group. The multivariate interactions between the disclosure group and sexual orientation were not significant. However, there were significant multivariate differences in disclosure group, Wilks’ \( \lambda = .99, F(2, 9259)=47.19, p<.001 \), and sexual orientation, Wilks’ \( \lambda = .97, F(10, 18,518)=31.48, p<.001 \). Although small in effect size, follow-up univariate tests indicated significant differences across disclosure groups in depressive symptoms, \( F(1, 9260)=64.61, p<.001, \eta^2 = .01 \), and LGBTQ family support, \( F(1, 9260)=55.04, p<.001, \eta^2 = .01 \), and sexual orientation in depressive symptoms, \( F(5, 9260)=53.44, p<.001, \eta^2 = .03 \), and LGBTQ family support, \( F(5, 9260)=19.03, p<.001, \eta^2 = .01 \). In the full
sample, according to post hoc tests, gay and lesbian youth reported the lowest levels of depressive symptoms out of all groups and higher amounts of LGBTQ family support than bisexual, pansexual, and asexual youth. For means and standard deviations, see Table 2.

Gender identity

There was a significant multivariate interaction between gender and disclosure group, Wilks’ $\lambda = .99, F(4, 18,530) = 4.17, p < .01$. In addition, there were significant multivariate differences in disclosure group, Wilks’ $\lambda = .99, F(2, 9265) = 58.42, p < .001$, and gender identity, Wilks’ $\lambda = .94, F(4, 18,530) = 146.48, p < .001$. Follow-up univariate tests indicated that the interactions between gender and disclosure group on depressive symptoms, $F(2, 9266) = 6.67, p < .01$, $\eta^2 = .001$, and LGBTQ family support, $F(2, 9266) = 3.58, p < .05$, $\eta^2 = .001$, were significant. A test of simple effects (Bonferroni corrected) indicated that transgender youth who were outed to their parents reported the highest levels of depressive symptoms compared to all other groups. Outed nonbinary youth reported greater levels of depressive symptoms than cisgender youth. In addition, transgender and nonbinary youth who were outed to their parents reported lower amounts of LGBTQ family support compared to cisgender youth. The univariate tests also revealed significant differences across gender on depressive symptoms, $F(2, 9266) = 297.50, p < .001$, $\eta^2 = .06$, and LGBTQ family support, $F(2, 9266) = 18.96, p < .001$, $\eta^2 = .004$, and significant differences across disclosure group on depressive symptoms, $F(1, 9266) = 76.24, p < .001$, $\eta^2 = .01$, and LGBTQ family support, $F(1, 9266) = 72.39, p < .001$, $\eta^2 = .01$. For means and standard deviations, see Table 2.

Indirect associations

Next, the indirect association was estimated for the full sample of SGDY who were outed using regression. Support was
found for the second and third hypotheses (see Figure 1). The results revealed a significant indirect association between the stress of being outed to parents and depressive symptoms through LGBTQ family support, \( b = .06, SE = .01, p < .001, 95\% CI [0.05, 0.07] \). LGBTQ family support partially accounted for the relationship between the stress of being outed and depressive symptoms. Greater stress from being outed to parents was associated with lower LGBTQ family support, which was, in turn, associated with greater depressive symptoms. A summary of path estimates is presented in Table 3.

Gender identity as a moderator

The indirect association moderated by gender identity was then estimated for SGDY who were outed. Gender identity was found to moderate the indirect association between the stress of being outed to parents and depressive symptoms through LGBTQ family support. As seen in Table 4, the index of moderated indirect associations was significant for transgender \( (\omega = .03, 95\% CI = [0.01, 0.05]) \) and nonbinary youth \( (\omega = .02, 95\% CI = [0.004, 0.03]) \), which indicated that gender positively moderated the indirect association. In other words, the strength of the indirect association between the stress of being outed to parents and depressive symptoms through LGBTQ family support was stronger for transgender and nonbinary youth than it was for cisgender youth (the reference group). Pairwise contrasts of conditional indirect associations between the stress from being outed to parents and depressive symptoms through LGBTQ family support revealed that this relationship was strongest for transgender youth \( (b = .08) \) and nonbinary youth \( (b = .07) \), and weakest for cisgender youth \( (b = .05) \). Overall, these results supported the hypothesis that the indirect association between the stress of being outed to parents and depressive symptoms through LGBTQ family support would vary across gender identity and was strongest for transgender and nonbinary...
The interaction of gender identity on path ‘a’ was significant for both transgender youth, $b = −.10$, $t(2782) = −2.62$, $p < .01$, and nonbinary youth, $b = −.06$, $t(2782) = −2.35$, $p < .05$. A test of simple slopes was conducted to interpret the interactions (see Figure 2). The relationship between the stress of being outed to parents and LGBTQ family support was strongest for transgender youth, $b = −.30$, $p < .001$, followed by nonbinary youth, $b = −.26$, $p < .001$, and weakest for cisgender youth, $b = −.20$, $p < .001$.

**Sexual orientation as a moderator**

Last, the indirect association moderated by sexual orientation was estimated for SGDY who were outed. The hypothesis that sexual orientation would moderate the indirect association between the stress of being outed to parents and depressive symptoms through LGBTQ family support was not supported. The relationship between the stress of being outed to parents and LGBTQ family support did not vary across sexual orientations. The index of moderated indirect associations was not significant for bisexual ($\omega = .001$, 95% CI $[−0.01, 0.01]$), queer ($\omega = .02$, 95% CI $[−0.01, 0.04]$), pansexual ($\omega = .01$, 95% CI $[−0.01, 0.02]$), asexual ($\omega = .02$, 95% CI $[−0.02, 0.05]$), and youth identifying as something else ($\omega = .01$, 95% CI $[−0.02, 0.03]$). Despite these findings, the indirect association between the stress of being outed to parents and depressive symptoms through LGBTQ family support remained significant across all groups (see Table 4). A summary of path estimates is presented in Table 6.
TABLE 5  Table summary of path estimates of the indirect association moderated by gender identity.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Path A (LGBTQ FS)</th>
<th>Path B/C (depressive symptoms)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
<td>SE</td>
</tr>
<tr>
<td>Constant</td>
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<td>.18</td>
</tr>
<tr>
<td>HCE</td>
<td>.05***</td>
<td>.01</td>
</tr>
<tr>
<td>Black</td>
<td>−.20**</td>
<td>.06</td>
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<td>Asian</td>
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<td>.08</td>
</tr>
<tr>
<td>Latine/x</td>
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<td>.04</td>
</tr>
<tr>
<td>Multiracial</td>
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<td>.04</td>
</tr>
<tr>
<td>Native Amer./Middle Eastern/Something else</td>
<td>−.20</td>
<td>.12</td>
</tr>
<tr>
<td>Age</td>
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<td>.01</td>
</tr>
<tr>
<td>Outed stress</td>
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<td>.01</td>
</tr>
<tr>
<td>Transgender</td>
<td>−12**</td>
<td>.04</td>
</tr>
<tr>
<td>Nonbinary</td>
<td>−.09**</td>
<td>.03</td>
</tr>
<tr>
<td>Transgender X Outed stress</td>
<td>−10**</td>
<td>.04</td>
</tr>
<tr>
<td>Nonbinary X Outed stress</td>
<td>−.06*</td>
<td>.03</td>
</tr>
<tr>
<td>LGBTQ FS</td>
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<tr>
<td>R²</td>
<td>.16***</td>
<td></td>
</tr>
<tr>
<td>Fmodel</td>
<td>42.63</td>
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</tr>
</tbody>
</table>

Note: All values represent unstandardized beta coefficients. For race/ethnicity, the reference group was White SGDY. For transgender and nonbinary youth, the reference group was cisgender youth.

Abbreviations: HCE, Highest caregiver education; LGBTQ FS, LGBTQ family support; Native Amer., Native American; Outed Stress, Stress of being outed to parents.

* p < .05. ** p < .01. *** p < .001.

FIGURE 2  Graph depicting the moderation of gender identity. The interaction of gender identity on the relation between the stress of being outed to parents and LGBTQ family support is shown.
DISCUSSION

A growing body of work has established that disclosure stress among SGDY is associated with various adverse health outcomes (Baams et al., 2015; Mallory et al., 2021; Pollitt et al., 2017). However, little work has specifically examined how stress, when tied to a lack of agency in identity disclosure (i.e., being outed), is related to negative health experiences. In addition, studies have yet to adequately examine the potential role of LGBTQ family support in disrupting these experiences. Thus, among a national sample of SGDY, the relationships between the stress of being outed to parents, LGBTQ family support, and depressive symptoms were investigated. The current study extended previous research in two ways: First, it examined a unique minority stressor that has yet to be explored among adolescents; that is, SGDY’s stress when their identity is outed to their parents. Second, it examined the potential roles that sexual and gender identity and LGBTQ family support have to explain the relationship between the stress from being outed to parents and depressive symptoms. Study findings highlight the need for researchers to understand further how being outed is associated with SGDY’s mental health outcomes, particularly for transgender youth.

It was first hypothesized that SGDY who were outed to their parents would report higher levels of depressive symptoms and lower LGBTQ family support than youth whose identities had not been outed to their parents. This hypothesis was supported as SGDY (regardless of gender and sex identity) whose identities were outed to their parents reported higher levels of depressive symptoms and lower LGBTQ family support than youth whose identities were not outed. Previous research has shown that some SGDY who are not open to their parents about their identities during adolescence report a greater fear of parental rejection (D’Augelli et al., 2010) and may manage this anticipated rejection through concealment behaviors (Hatzenbuehler, 2009; Jackson & Mohr, 2016). As a result, SGDY may avoid certain activities and behaviors that raise their parents’ suspicions about their identity in non-affirming family environments (Jackson & Mohr, 2016). In comparison, SGDY who engage in less concealment behaviors and self-disclose to their parents may anticipate less rejection in part by being in more affirming environments. Thus, a possible explanation...
could be that SGDY in the sample who were outed may have been in less affirming family environments and actively hid their identity from their parents to diminish the potential ramifications of identity disclosure (D’Augelli et al., 1998). Being outed may have been an uncontrollable stressor that left SGDY unprepared to deal with their parents’ reactions, which could be a potential driving factor of the disparities in depressive symptoms and LGBTQ family support observed between the two groups; however, further research is needed to better understand these underlying factors.

The process of being outed for SGDY also occurred alongside normative adolescent stressors (Russell & Fish, 2019), which may further explain the differences in depressive symptoms between SGDY who were and were not outed to their parents. SGDY who self-disclose their identities to their parents may have some degree of agency and planning in their decisions, whereas SGDY whose identities are outed or discovered may not have had sufficient planning to do so. Hence, although we can only speculate, SGDY who are outed may not have had ample sources of support in place to cope or bounce back from the resulting stress of their parents discovering their identities. SGDY who are outed also encounter this unique stressor at the same time they are experiencing normative adolescent stressors and additional stressors unique to their SGD identities (e.g., bias-based harassment; Russell & Fish, 2019), which may hinder their ability to adaptively cope with a stressor they were unexpectedly tasked to navigate in their families.

In addition, transgender and nonbinary youth who reported that their identities had been outed to their parents reported the highest levels of depressive symptoms (transgender youth reporting the highest) and lowest amounts of LGBTQ family support. This finding extends previous research, showing that although transgender and nonbinary youth are at a higher vulnerability to receive less family support and developing more chronic amounts of depressive symptoms (Grossman et al., 2021; for a review, see Wittlin et al., 2023), a lack of agency in their disclosure experiences could further widen these disparities between groups. Interestingly, mean differences across disclosure groups on depressive symptoms and LGBTQ family support did not significantly vary across sexual identities. As such, these findings suggest that SGDY, in particular, transgender youth, who are outed to their parents may report poorer mental health outcomes and family relationships compared to SGDY who are not outed to their parents.

As hypothesized, the indirect association (i.e., model a) between the stress of being outed to parents and depressive symptoms through LGBTQ family support was significant. In line with the minority stress framework (Brooks, 1981; Meyer, 2003), the results showed that SGDY with higher stress from having their identities outed to their parents reported lower LGBTQ family support. This lack of LGBTQ family support, in turn, was related to higher depressive symptoms among SGDY who were outed to their parents. These findings extend previous research while providing further support for the notion that the stress tied to disclosure is critical to understanding the development of SGDY (Mallory et al., 2021; Rosario et al., 1996). SGDY with higher stress from being outed to their parents may have been in less affirming family environments. It could be that learning their identities had been outed induced greater stress and was then followed by more frequent perceptions of rejection from their parents. Importantly, SGDY in the sample who received greater LGBTQ family support showed weaker associations between their stress of being outed and depressive symptoms, which extends previous work that underscores the importance of supportive family behaviors during disclosure experiences (Grossman et al., 2021; Katz-Wise et al., 2016). While this study only examined depressive symptoms, it seems likely that LGBTQ parental support has the potential to mitigate multiple minority stressors (e.g., being outed to parents).

Further aligned with the hypotheses, gender identity moderated the indirect association (i.e., model b) between the stress of being outed to parents and depressive symptoms through LGBTQ family support. Specifically, the indirect association was stronger for transgender and nonbinary youth compared to cisgender youth. The findings also showed that the relationship between the stress of being outed and LGBTQ family support was strongest for transgender and nonbinary youth. Notably, at lower stress levels, all three groups reported comparable LGBTQ family support. These results align with past findings, showing that LGBTQ family support may be a more robust predictor and attenuating factor for the well-being of transgender and nonbinary youth compared to cisgender youth (Abreu et al., 2019, 2022; Olson et al., 2016). To our knowledge, only one other study has linked disclosure stress to general parental support among transgender youth (Grossman et al., 2021), and none have explored how this differs across gender identity. These findings extend the literature, showing that high levels of stress from being outed to parents may be more strongly associated with depressive symptoms among transgender and nonbinary youth, in part due to the lower amount of LGBTQ family support they receive when outed to their parents.

Contrary to the hypotheses, sexual orientation did not moderate the indirect association (i.e., model c) and the relationship between the stress of being outed to parents and LGBTQ family support. This suggests that, regardless of sexual identity, the indirect association between the stress of being outed to parents and depressive symptoms through LGBTQ family support was similar in magnitude. Despite a lack of research on how being outed to parents unfolds across adolescence, there are several possible explanations for why these relationships were more influential across gender identity than sexual orientation. One possible explanation could be that, while being outed to parents is a relatively common fear among SGDY (Reisner et al., 2020; Van Bergen et al., 2021), it may be easier for cisgender sexual minority youth to deny and/or avoid the conversations with their parents after being outed compared to their transgender and nonbinary peers. By challenging gender normative structures, the identities of...
transgender and nonbinary youth may elicit more negative and critical reactions after being outed, thus placing them at a higher risk for parental rejection and adverse mental health outcomes. Indeed, past research has shown that parents commonly fear and are critical of their child’s gender nonconformity, particularly for youth assigned male at birth (Kane, 2006).

However, given that the degree of outness across contexts in this study was not accounted for, it is probable that transgender youth who were outed in the sample may have been more restrictive and hidden in how expressive they were in their gender identity to their parents (Steensma et al., 2013). Thus, a more likely explanation would be the unique experiences in parental responses to identity disclosure between cisgender and transgender youth. Specifically, while cisgender sexual minority youth and transgender youth may have overlapping experiences in how their parents respond to their identities, transgender youth experience unique pressures alongside these shared experiences, such as parents restricting bodily autonomy (Bosse et al., 2022; Johnson et al., 2020). These additive experiences may induce more stress for transgender and nonbinary youth being outed, contributing to a greater vulnerability for depressive symptoms.

Limitations

This study is not without limitations—first, this study was unable to assess whether youth in the sample were outed in regards to a specific sexual and/or gender identity, nor was it able to assess who outed them. Furthermore, this study was unable to capture the process of being outed for SGDY. It could be that parents discovered their child’s identity accidentally (e.g., Chrisler, 2017) or through another person. The mechanism of being outed may be important for understanding the severity of negative mental health outcomes (e.g., whether a parent or caregiver is told). Future research should build upon these measures by asking SGDY which identities were unwillingly disclosed and how the disclosure occurred. Second, this study was unable to observe differences in stress across all subgroups as sample sizes were small across certain groups, particularly among transgender girls. Future research should take a more nuanced approach to examine the extent to which these relationships differ across gender identity.

These data are also cross-sectional, so this study is unable to infer causation or a temporal relationship between the variables of interest. For instance, while the measure of LGBTQ family support assessed how supportive SGDY viewed their parents after learning about their identity, the youth who were outed in the sample likely already had a sense of how accepting or rejecting their parents were of their identities (Grafsky, 2018). Thus, it could be that SGDY’s anticipated rejection from their parents contributed to their stress of being outed. In addition, ample evidence suggests that current depressive symptoms may alter the recollection of past events (for a review, see Gotlib & Joormann, 2010). It could be that SGDY who reported more severe depressive symptoms recalled their experience of being outed as more stress-inducing than SGDY who reported fewer depressive symptoms. These results warrant further longitudinal research to enrich our understanding of how being outed to parents is associated with the well-being of SGDY across time. Lastly, the sample was derived using non-probability sampling methods and was limited in racial/ethnic diversity. In the current sample, 66.8% of SGDY identified as White non-Hispanic, which does not reflect national statistics in 2017 for this age group (i.e., 51.69% White non-Hispanic in 2016 aged 5–17; U.S. Census Bureau, 2021). From an intersectional perspective, SGDY of color experience unique manifestations of stress that are synergistically influenced by their non-cisgender/heterosexual and racial/ethnic identities (Crenshaw, 1991), which were not captured by this study. Future research should examine these relationships using probability samples to allow for greater generalizability and consider the unique experiences of SGDY of color through research from an intersectional lens.

Implications

Although this study has several limitations, it provided novel findings that underscore the importance of SGDY having agency over when they disclose their identities. In the current sample, around 30% of SGDY responded to a stress level of being outed to their parents. Being outed or discovered by parents may then be a common occurrence for SGDY that warrants further advancement in measurement work, as echoed by others (Zhao, 2022), to capture the experience of this unique disclosure experience. Future measurement work should include comprehensive measures, alongside those that evaluate outness, that assess (1) how frequently SGDY experience being outed to others, (2) which contexts it occurs in (e.g., family, school), and (3) how the actual outing occurred (e.g., being discovered or a peer intentionally outing SGDY to others). These findings also suggest that SGDY who are outed to their parents may report higher levels of depressive symptoms and lower LGBTQ family support, especially among transgender youth. In recent years, highly publicized anti-LGBTQ bills have been introduced in staggering numbers that have mandated school personnel who become aware of a student’s non-cisgender/heterosexual identity to inform parents or caregivers. Policymakers should be informed of the harms these bills have on the well-being of SGDY and strongly argue for SGDY’s right to self-disclose their identities on their terms. Lastly, most SGDY in the current sample reported that being outed was a very stressful experience (69%), which was associated with depressive symptoms partly through lower LGBTQ family support. Clinicians who work with SGDY should include comprehensive assessments of disclosure experiences alongside evaluations of familial experiences.
CONCLUSIONS

This study explored how a lack of agency in identity disclosure is related to the mental health of SGDY, with attention to the family context. Among a national sample of SGDY, it was found that participants who were outed to their parents reported greater depressive symptoms and lower LGBTQ family support compared to youth who were not out. For SGDY who were outed to their parents, supportive parental behaviors that affirm their identity were found to be a promising factor to potentially mitigate depressive symptoms from the stress of being outed. These LGBTQ-specific supportive behaviors were most important for transgender and nonbinary youth. Furthermore, while past scholarship has relied on general measures of family support to examine the relationships between disclosure stress and depressive symptoms (Pollitt et al., 2017), this study used LGBTQ-specific indicators of parental support. Using this LGBTQ-specific measure, it was found that SGDY who have high stress from being outed to their parents are likely to be situated in family environments that are more critical of their LGBTQ identity. Given the prolonged marginalization of SGDY across various contexts (e.g., legislation directly targeting SGDY), the results show that a lack of agency in disclosing a sexual and/or gender identity to parents can greatly undermine the well-being of SGDY.

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CONFLICT OF INTEREST STATEMENT

All authors disclose no potential conflicts, real, and perceived.

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