Psychology of Sexual Orientation and Gender Diversity

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Minoritized sexual orientation is an established correlate for suicide ideation (SI) and nonsuicidal self-injury (NSSI); however, research on the prospective associations between sexual orientation and SI and NSSI is limited. The current study builds on existing literature by examining sexual orientation as a prospective distal risk factor for SI and NSSI risk among a diverse sample of young women after adjusting for histories of SI and/or NSSI and empirically supported correlates and risk factors. Participants were 135 young adult women (aged 18–24) who were predominately Black, with approximately half of the sample experiencing poverty. Participants completed an interview that assessed SI and NSSI at baseline and 6- and 12-month follow-ups. A single item was used to collect participants' self-identified sexual orientation at baseline. Minoritized sexual orientation was strongly associated with NSSI history and future SI and NSSI, adjusting for baseline correlates and predictors of interest. Psychological and physical victimization, race, and poverty were nonsignificant prospective predictors of SI and NSSI. Race and poverty did not moderate the associations between sexual orientation and follow-up SI and NSSI. These findings suggest young adult women who self-identify as lesbian, gay, bisexual, queer, or questioning (LGBQ) are more likely than those who identify as heterosexual to experience both SI and NSSI in the following year. Sexual orientation should be part of a culturally informed comprehensive risk assessment. A culturally informed intersectionality approach may be necessary to identify culturally specific risk and resiliency factors for SI and NSSI that can guide effective prevention and intervention strategies for LGBQ individuals.

Public Significance Statement

This study suggests that young adult women who self-identify as lesbian, gay, bisexual, queer, or questioning (LGBQ) are more likely than those who identify as heterosexual to experience both suicide ideation (SI) and nonsuicidal self-injury (NSSI) in the following year. Neither race nor poverty influenced the associations between minoritized sexual orientation and future risk for SI and NSSI. Sexual orientation should be part of a culturally informed comprehensive risk assessment. A culturally informed intersectionality approach may be necessary for future research to identify culturally specific risk and resiliency factors for SI and NSSI that can guide effective prevention and intervention strategies for LGBQ individuals.

Research suggests that young adults are at elevated risk for suicidal and nonsuicidal self-injurious thoughts and behaviors (SITB; e.g., Centers for Disease Control and Prevention [CDC], 2018; Gratz et al., 2002; Substance Abuse and Mental Health Services

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Administration [SAMHSA], 2019; Whitlock et al., 2006). In the United States, suicide has consistently been the second leading cause of death for emerging adults ages 15 to 24 (CDC, 2018). In 2018, a national survey revealed that approximately 3.7 million (1 in 9) young adults ages 18–25 reported serious thoughts of suicide in the past year (SAMHSA, 2019). Further, research suggests that compared to older cohorts, individuals in the iGen cohort (born 1995–2012) are more likely to report suicide ideation (SI; thoughts of killing oneself; Silverman et al., 2007), with greater increases in SI over time among young adults ages 18 to 25 (Twenge et al., 2019). Notably, these increases in SI were more pronounced among young women (Twenge et al., 2019). Taken together with research that indicates women report higher rates of SI, plans, and suicide attempts compared to men (e.g., Kann et al., 2018; Miranda-Mendizábal et al., 2019; SAMHSA, 2019; Wunderlich et al., 2008), young women may be particularly vulnerable to suicidal crises. In addition to elevated risk for suicidal SITB, young adult women report elevated rates of nonsuicidal self-injury (NSSI; i.e., intentional, self-inflicted destruction of bodily tissue without suicidal intent and for purposes not socially sanctioned; Klonsky & Muehlenkamp, 2007; see Bresin & Schoenleber, 2015 for review). To effectively reduce rates of SI and NSSI among young adult women, research is needed to better understand robust prospective risk factors for SI and NSSI that can guide prevention and intervention efforts.

Sexual orientation may be a promising distal risk factor for suicidal and nonsuicidal SITB among young adult women. First, women are more likely to self-identify as lesbian, gay, bisexual, queer, or questioning (LGBQ; e.g., Chandra et al., 2013; Mishel, 2019) when compared to men. In a sample of adults, rates of recent suicide attempts were highest among LGBQ individuals during young adulthood, with LGBQ women reporting the highest rates (Fish & Pasley, 2015). A substantial amount of cross-sectional research indicates young adults who identify as LGBQ are at elevated risk for SI and NSSI (e.g., Bränström et al., 2020; Haas et al., 2011; Jackman et al., 2019; King et al., 2008; Muehlenkamp et al., 2015; Nam et al., 2019; Salway et al., 2019; Swannell et al., 2016; Tsypes et al., 2016; Whitlock et al., 2011). Although these cross-sectional findings appear to be robust and suggest sexual orientation may be an important distal risk factor for SI and NSSI among young adult women, these results may not be corroborated by longitudinal studies. Cross-sectional findings are inherently limited in their ability to inform our understanding of risk factors that actually precede the development and maintenance of SITB. Further, prevention and intervention strategies based on cross-sectional findings may be premature and misguided such that interventions targeting correlates, as opposed to risk factors, would be unlikely to effectively reduce or prevent future risk for SI and NSSI. Therefore, prospective research is necessary to establish sexual orientation as a prospective distal risk factor for SI and NSSI.

Though prospective studies are few, the limited longitudinal research to date suggests that risk for SI and NSSI continues to be elevated among LGBQ individuals across adolescence and young adulthood (e.g., Becker et al., 2014; Spittlehouse et al., 2020). Research examining sexual orientation as a prospective distal risk factor of SI and NSSI is even more limited, with only a few studies in adult samples. In a sample of young adult college students, identifying as LGBQ was associated with elevated risk for future

NSSI (Wilcox et al., 2012). A longitudinal study of community adolescents found that identifying as LGBQ at age 15 was associated with greater odds of SI or self-injury at age 20, and this was mediated by self-esteem, depression, and previous SI or self-harm (Oginni et al., 2019). In another sample of adolescents, identifying as LGBQ was associated with elevated SI and odds of suicidal behaviors (e.g., suicide plan, suicide attempt) 6 months later after adjusting for depressive symptoms (Burton et al., 2013). This association was mediated by sexual-minority-related victimization but was no longer significant when adjusting for lifetime suicide risk. These studies suggest minoritized sexual orientation is a prospective distal risk factor for SI and NSSI that confers risk through both general (e.g., depression, self-esteem; Oginni et al., 2019) and population-specific (e.g., minority-related victimization; Burton et al., 2013) factors. However, most of these prospective studies have focused on adolescence and may not generalize to young adults.

Additionally, the scant prospective studies conducted with young adults have important limitations. Notably, some of these studies did not examine the prospective associations between sexual orientation and SI and NSSI separately. This is important considering research suggests that, although suicidal and nonsuicidal SITB are related and commonly co-occur (Andover & Gibb, 2010; Klonsky et al., 2013; Victor & Klonsky, 2014), they are distinct phenomena with different developmental trajectories, theorized functions and mechanisms, and risk factors (e.g., Glenn & Nock, 2014; Grandclerc et al., 2016; Muehlenkamp, 2005; Nock, 2014). Additionally, suicide-related outcomes in some of these studies did not differentiate between SI and suicidal behaviors, which is problematic considering these phenomena are also considered theoretically distinct (e.g., Joiner, 2005; Klonsky & May, 2015; O'Connor, 2011), with unique prospective predictors. Last, sexual orientation was rarely examined in the context of other empirical risk factors, including a history of SI and/or NSSI. Thus, it remains unclear whether minoritized sexual orientation is a robust prospective distal risk factor, rather than simply a co-occurring phenomenon, that is uniquely associated with future risk for both SI and NSSI among young adult women.

Establishing minoritized sexual orientation as a prospective distal risk factor would solidify the need to identify specific mechanisms by which sexual minority identification in young women may lead to risk for SI and NSSI over time, rather than risk being conferred specifically due to one's sexual orientation. General psychological theories of suicide (e.g., interpersonal psychological theory, Joiner, 2005; three-step theory, Klonsky & May, 2015) and NSSI (e.g., benefits and barriers model; Hooley & Franklin, 2018) would suggest more proximal mechanisms related to social experiences and psychological pain (e.g., belonging, burden, pain, deficits in emotion regulation) may explain the elevated rates of SI and NSSI among LGBQ individuals. Further, several culturally informed theories of SITB (e.g., cultural model of suicide, Chu et al., 2010; minority stress model, Brooks, 1981; Meyer, 2003), highlight sociocultural factors and experiences (e.g., social disadvantages, discrimination, victimization, acceptability of suicide, religiosity, acculturation), as well as population-specific mechanisms (e.g., stigma, identity disclosure, internalized homophobia) to more fully explain the development and expression of SI and NSSI among marginalized groups. For instance, Plöderl and colleagues (2014) found that risk factors from both general suicide

models (i.e., interpersonal psychological theory, Joiner, 2005; clinical model, Mann et al., 1999), and sexual-minority-specific models (i.e., minority stress model; Brooks, 1981; Meyer, 2003) were associated with elevated risk of SI and suicide attempts among LGBQ adults. These theories and recent findings provide promising avenues forward for identifying mechanisms and important moderators of the associations between sexual orientation and SITB (e.g., Chu et al., 2010; Muehlenkamp et al., 2015; Plöderl et al., 2014; Rasmussen et al., 2019; Testa et al., 2017).

In order to fully understand the prospective associations between sexual orientation and risk for SI and NSSI among young adult women, it may also be necessary to consider the interplay of multiple marginalized identities (e.g., on the basis of gender, race/ethnicity, sexual orientation, socioeconomic status [SES]). Recent work has emphasized the need for an intersectionality framework that emphasizes how multiple marginalized identities influence mental health and suicide risk (e.g., Agénor, 2020; Brown et al., 2022; Crenshaw, 1989; Ferlatte et al., 2018; Opara et al., 2020; Standley, 2020; Tucker, 2019). This framework is especially relevant for our diverse sample of young adult women who were predominately Black or African American, with approximately half of the sample experiencing poverty (indicated by receiving public assistance tied to low income). Overall, suicide risk appears to be lower in Black/African Americans relative to other race/ethnic groups, but between 2018 and 2019, rates of suicide increased for non-Hispanic Black individuals, particularly Black youth, whereas rates decreased for non-Hispanic White individuals (CDC, 2018). When considering gender, risk for suicide ideation, plans, and attempts is still higher for Black women compared to Black men, but alarming increases have been observed in suicide rates among young adult males since 2013 (CDC, 2018; Ramchand et al., 2021). These racial and gender differences may be due to culturally based resiliency factors (e.g., religiosity, hope; Davidson et al., 2010; Spates & Slatton, 2017), as well as differences in exposure to minority stressors (e.g., racial discrimination, lack of resources) that have also been linked to increased risk for SITB and related outcomes (e.g., depression; Arshanapally et al., 2017; Cochran et al., 2007).

There also appears to be important nuances when considering sexual orientation as a predictor of SITB among people of color. For example, some research has found elevated rates of suicide attempts, but not SI, among non-White sexual and gender minority adolescents (Baiden et al., 2020), whereas other research has found elevated rates of SI (Sutter & Perrin, 2016) and suicide attempts (Layland et al., 2020) due to sexual-orientation-based discrimination among people of color. Further, SES and poverty have also been shown to interact with other identity statuses, impacting suicide risk and related outcomes (e.g., depression; Holm et al., 2021; Opara et al., 2020). These complex associations highlight the need to examine risk for SI and NSSI in the context of multiple identity statuses (e.g., gender, sexual orientation, race, SES) to help clarify which individuals are most vulnerable and what factors potentiate or reduce risk for future SI and NSSI.

The first aim of the current study was to examine sexual orientation as a correlate and prospective distal risk factor for SI and NSSI in a sample of predominately Black, young adult women at clinically elevated risk of SITB. Notably, SI and NSSI were tested in separate models considering research suggesting they are distinct phenomena (e.g., Muehlenkamp, 2005; Nock, 2014). We first aimed to establish the robustness and relative magnitude of these associations after adjusting for other empirically supported correlates and general risk factors for SI and NSSI. Specifically, age, ethnicity, race, poverty, mood disorders, anxiety disorders, substance use disorders, borderline personality disorder (BPD), antisocial personality disorder (ASPD), psychological and physical victimization and aggression, childhood trauma, and impulsivity have been associated with SI and NSSI (e.g., Fox et al., 2015; Franklin et al., 2017). Therefore, these variables were considered as either potential covariates or other primary predictors of interest in the current study. Consistent with previous research, we hypothesized that minoritized sexual orientation would be uniquely associated with both a history of SI and NSSI after adjusting for other important baseline correlates that are not directly linked to sexual orientation identity. Second, we hypothesized that minoritized sexual orientation would be associated with elevated risk for future SI and NSSI over a 6- to 12-month period after adjusting for SI and/or NSSI history and other important baseline correlates.

Consistent with the minority stress model (Brooks, 1981; Meyer, 2003) and recent findings (see Chu et al., 2010, for review; Wilcox et al., 2012) that suggest victimization may account for the elevated risk for SI and NSSI among LGBQ individuals, the second aim of this study was to test whether general psychological and physical victimization were also important prospective risk factors for SI and NSSI. Specifically, we hypothesized that greater exposure to psychological and physical victimization during the follow-up period would be associated with elevated risk for future SI and NSSI and that the addition of these predictors would reduce the associations between sexual orientation and risk for future SI and NSSI. Last, to assess the impact of other marginalized identities and factors, we tested race and poverty as additional primary predictors of interest. Based on prior work, we hypothesized higher rates of SI and NSSI among those who identified as White and those who were experiencing poverty (indicated by receiving public assistance tied to low income). Further, we conducted exploratory moderation analyses to examine whether race and SES interact with sexual orientation to predict risk among young adult women.

These findings will directly inform our understanding of the role of minoritized sexual orientation as a prospective distal risk indicator for future SI and NSSI in a sample of predominately Black, young adult women. In addition, using a culturally informed intersectionality approach, this study will also shed light on whether general psychological and physical victimization may be potential mechanisms for SI and NSSI and whether other marginalized identities interact with sexual orientation to potentiate or mitigate SITB risk. Identifying unique prospective risk factors in specific cultural contexts is necessary in order to develop effective prevention and intervention strategies that can be implemented by policy holders, organizations, and practitioners in a variety of clinical settings by allowing further examination of potential mechanisms underlying the association between known risk factors and SITB outcomes.

Method

Procedures

The current study is a secondary data analysis of participants who were recruited as part of a 1-year longitudinal substudy on

women's personality, aggression, and SITB (see Scott et al., 2017, for details). Participants for the substudy were recruited from the Pittsburgh Girls Study, which is an ongoing longitudinal, community cohort study of 2,450 women who were recruited at ages 5 to 8 (see Keenan et al., 2010, for details). Based on self-report data from the larger longitudinal study, prospective participants who were over the age of 18 and reported aggressive behavior (physical, verbal, or relational) and/or SITB within the past year were identified for the substudy. Prospective participants were contacted for screening and deemed eligible if they endorsed SITB and/or perpetration of verbal, physical, or relational aggressive behavior in the past month. Seventy-six (45.6%) participants were deemed eligible based on a recent history of SITB and may have also had recent aggressive behavior, whereas 90 (54.2%) only had a history of recent aggressive behavior. All participants provided written and oral informed consent, and study procedures were conducted in accordance with the institutional review board. As part of the substudy, participants completed baseline, 6-month follow-up, and 12-month follow-up clinical interviews and self-report assessments. All clinical interviews were conducted by postbaccalaureate or graduate-level research assistants who were trained to fidelity by a doctoral-level clinical psychologist.

Participants

A total of 166 women were enrolled in the substudy. Due to incomplete data on SITB at 6- and 12-month follow-ups, 31 participants were excluded from these analyses, resulting in a final sample of 135 young adult women (ages 18–24, $M = 21.33$, $SD = 1.57$).[1] Ninety-four participants had complete 12-month follow-up data, and 41 participants had complete 6-month follow-up data. The average follow-up time period was 336 days (range = 168–640, $SD = 85.83$). The majority of participants identified as non-Hispanic ($n = 133$, 98.5%). Ninety-seven (71.9%) participants identified as Black, 35 (25.9%) as White, and three (2.2%) as multiracial. Thirty-eight (28.1%) participants identified as LGBQ. Of those who identified as LGBQ, the majority identified as bisexual ($n = 24$; 63.2%), followed by lesbian/gay ($n = 11$; 28.9%) and unsure/questioning ($n = 3$; 7.9%). Based on the Structured Clinical Interview for *DSM–IV* Axis I Disorders (First et al., 2002), 54 (39.3%) participants had a lifetime diagnosis of a mood disorder, 44 (32.6%) had a lifetime diagnosis of an anxiety disorder, and 59 (43.7%) had a lifetime diagnosis of a substance use disorder. See Table 1 for more detailed demographic and clinical diagnostic information for the full sample, LGBQ subsample, and heterosexual subsample.

Measures

Demographic Questionnaire

Demographic information was collected using a study-designed questionnaire at the baseline assessment. Information was gathered with respect to age, ethnicity, race, gender identity, sexual orientation ("Do you consider yourself to be: heterosexual/straight, gay/lesbian/homosexual, bisexual, not sure, decline to state"), education, employment status, and receipt of public assistance tied to low income (as an indicator of poverty).

Structured Clinical Interview for DSM–IV Axis I Disorders

The Structured Clinical Interview for *DSM–IV* Axis I Disorders (First et al., 2002) is a semistructured diagnostic interview for establishing current and lifetime diagnoses for mental disorders based on the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.; text rev.; *DSM–IV–TR*; American Psychological Association, 2000). Individual lifetime diagnoses were established and organized based on *DSM–IV–TR* categories for mood disorders, anxiety disorders, and substance use disorders for analyses as these disorders are associated with elevated risk for SITB (e.g., Fox et al., 2015; Franklin et al., 2017). Interrater reliability for all diagnoses that occurred in at least 5% of the sample has been demonstrated to be adequate (Scott et al., 2020). Participants completed this interview at baseline, 6-month follow-up, and 12-month follow-up; however, only the baseline assessment data were used for analyses.

Structured Clinical Interview for DSM–IV Personality Disorders

The Structured Clinical Interview for *DSM–IV* Personality Disorders (Pfohl et al., 1997) is a semistructured diagnostic interview for the *DSM–IV–TR* (American Psychological Association, 2000) personality disorders. Each diagnostic criterion was rated on a 0–3 scale (0 = *not present*, 1 = *subthreshold*, 2 = *present*, 3 = *strongly present*). BPD item scores, excluding the item assessing self-injurious behaviors (due to overlap with our outcomes of interest), and ASPD item scores were summed to create dimensional severity scores that ranged from 0 to 24. Interrater reliability for BPD and ASPD severity scores has been demonstrated to be adequate in this sample (Scott et al., 2017). Only BPD and ASPD severity scores were used in analyses given evidence that BPD and ASPD are associated with SITB (e.g., Fox et al., 2015; Franklin et al., 2017) and the elevated rates of BPD and ASPD symptoms in this sample (Scott et al., 2017). Participants completed this interview at baseline, 6-month follow-up, and 12-month follow-up; however, only the baseline assessment data were used for analyses.

Self-Injurious Thoughts and Behaviors Interview

The Self-Injurious Thoughts and Behaviors Interview (Nock et al., 2007) is a structured interview that assesses age of onset, presence, frequency, and characteristics of a range of suicidal (i.e., suicidal thoughts, plans, gestures, suicide attempts) and nonsuicidal (i.e., thoughts of NSSI, NSSI behaviors) SITBs. Only the presence of SI and NSSI behaviors at baseline and

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[1] There were significant differences between the full sample and the final sample in terms of lifetime history of SI, $\chi^2(1, N = 162) = 9.69$, $p = .002$; suicide plans, $\chi^2(1, N = 162) = 7.31$, $p = .007$; NSSI, $\chi^2(1, N = 162) = 9.02$, $p = .003$; mood disorder, $\chi^2(1, N = 166) = 8.28$, $p = .004$; and anxiety disorder, $\chi^2(1, N = 166) = 6.99$, $p = .008$, as well as age, $t(164) = 3.18$, $p = .002$, and childhood trauma, $t(142) = 2.09$, $p = .019$; however, there were no significant differences in terms of public assistance, race, history of suicide attempt, and history of substance use disorder. In general, individuals with more clinically significant symptoms and risk factors were less likely to complete follow-up assessments. This difference is most likely due to having a later start in the project with recruitment of individuals with SITB history (when new funding was obtained to do this), and individuals who were recruited later in the project were less likely to complete a follow-up assessment due to limited funds to follow all participants longitudinally.

Table 1

Demographic and Clinical Diagnostic Information for the Full-Sample, LGBQ Subsample, and Heterosexual Subsample

Variable	Full sample	Heterosexual	LGBQ	t/χ^2	p
Sample size: % (*n*)	100 (135)	71.9 (97)	28.1 (38)		
Age: *M* (*SD*)	21.33 (1.57)	21.23 (1.59)	21.61 (1.49)	−1.27	.205
Gender: % (*n*)					
Female	100 (67)	100 (42)	100 (25)		
Transgender (male to female)	—	—	—		
Decline to state	—	—	—		
Ethnicity: % (*n*)				.479	.489
Non-Hispanic	98.5 (133)	99.0 (96)	97.1 (37)		
Hispanic	1.5 (2)	1.0 (1)	2.6 (1)		
Race: % (*n*)				.004	.948
Black or African American	71.9 (97)	73.2 (71)	68.4 (26)		
White	25.9 (35)	25.8 (25)	26.3 (10)		
Multiracial	2.2 (3)	1.0 (1)	5.3 (2)		
Education: % (*n*)				3.71	.716
Less than high school or GED	9.6 (13)	11.3 (11)	5.3 (2)		
High school or GED	43.0 (58)	41.2 (40)	47.4 (18)		
Some college	40.0 (54)	38.1 (37)	44.7 (17)		
College degree or higher	7.4 (10)	9.3 (9)	2.6 (1)		
Employment: % (*n*)				3.65	.455
Not employed	36.3 (49)	32.0 (31)	47.4 (18)		
Part-time	37.8 (51)	40.2 (39)	31.6 (12)		
Full-time	25.9 (35)	27.8 (27)	21.1 (8)		
Receiving public assistance	48.9 (66)	47.4 (46)	52.6 (20)	.296	.586
Suicide risk: % (*n*)					
SI history	54.8 (74)	73.7 (28)	47.4 (46)	−2.90	.004
SI at follow-up	25.9 (35)	50.0 (19)	16.5 (16)	−4.22	<.001
NSSI history	27.4 (37)	50.0 (19)	18.6 (18)	−3.91	<.001
NSSI at follow-up	8.1 (11)	23.7 (9)	2.1 (2)	−3.03	.004
Suicide attempt history	20.0 (27)	23.7 (9)	18.6 (18)		
Multiple suicide attempt history	14.1 (19)	21.1 (8)	11.3 (11)		
DSM-IV mood disorder: % (*n*)	39.8 (53)	33.3 (32)	56.8 (21)	−2.51	.013
Major depressive disorder	36.1 (48)	31.3 (30)	48.6 (18)		
Dysthymia	4.5 (6)	4.2 (4)	5.4 (2)		
Bipolar disorder	1.5 (2)	1.0 (1)	5.4 (2)		
Mood disorder due to GMC	1.5 (2)	1.0 (1)	2.7 (1)		
Substance-induced mood disorder	1.5 (2)	1.0 (1)	2.7 (1)		
DSM-IV anxiety disorder: % (*n*)	33.0 (44)	28.1 (27)	45.9 (17)	−1.971	.051
Posttraumatic stress disorder	19.5 (26)	16.7 (16)	27.0 (10)		
Panic disorder	9.8 (13)	10.4 (10)	8.1 (3)		
Social anxiety disorder	9.0 (12)	8.3 (8)	10.8 (4)		
Specific phobia	6.0 (8)	3.1 (3)	13.5 (5)		
Obsessive-compulsive disorder	4.5 (6)	1.0 (1)	13.5 (5)		
Agoraphobia without panic	1.5 (2)	1.0 (1)	2.7 (1)		
Anxiety disorder due to GMC	1.5 (2)	1.0 (1)	2.7 (1)		
Substance-induced anxiety disorder	1.5 (2)	1.0 (1)	2.7 (1)		
DSM-IV substance-related disorder: % (*n*)	43.7 (59)	44.7 (43)	43.2 (16)	.160	.873
Cannabis	32.3 (43)	36.4 (35)	21.6 (8)		
Alcohol	25.6 (34)	23.9 (23)	29.7 (11)		
Hallucinogen	3.0 (4)	3.1 (3)	2.7 (1)		
Opioid	2.3 (3)	2.1 (2)	2.7 (1)		
Sedative	1.5 (2)	2.1 (2)	—		
Stimulants	0.8 (1)	1.0 (1)	—		
Cocaine	0.8 (1)	1.0 (1)	—		
Polysubstance	0.8 (1)	1.0 (1)	2.7 (1)		
Other substance	1.5 (2)	1.0 (1)	—		

Note. LGBQ = lesbian, gay, bisexual, queer, or questioning; SI = suicide ideation; NSSI = nonsuicidal self-injury; *DSM-IV* = *Diagnostic and Statistical Manual of Mental Disorders*, 4th ed.; GMC = General Medical Condition; Percentages may not sum to 100% due to missing and participants were able to meet criteria for multiple disorders. t/χ^2 and *p* values reflect statistical comparisons between heterosexual and LGBQ subsamples.

6- and 12-month follow-up were used in analyses considering the low base rate of suicide plans (*n* = 7; 5.2%) and suicide attempts (*n* = 6; 4.4%) during follow-up, as well as the significant overlap between thoughts of NSSI and NSSI (i.e., 79% of individuals who reported thoughts of NSSI also engaged in NSSI

behaviors at baseline). For follow-up data, participants were typically asked to report on the past 6 months (or since the last assessment if the time frame was extended or the 6-month follow-up assessment was missed). For the following analyses, baseline SI and NSSI reflect lifetime history, and follow-up SI

and NSSI reflect the presence of SI or NSSI at either the 6- or 12-month follow-up.

Revised Conflict Tactics Scale-Modified

The Revised Conflict Tactics Scale (Straus et al., 1996) is a 39-item self-report assessment of past-year frequency of aggressive behaviors and experiences of victimization with romantic partners that is designed to be asked of both the participant and the partner. It has demonstrated adequate validity and reliability (e.g., Straus, 2004; Straus et al., 1996; Vega & O'Leary, 2007). Only the Psychological Aggression (eight items) and Physical Assault (12 items) subscales were administered. Original items were modified for the current study to reflect both perpetration of aggressive behaviors *and* experiences of victimization with anyone, not solely romantic partners. Participants responded to a total of 40 items on a 7-point scale ranging from 1 (*0 times*) to 7 (*21 or more times*). As recommended, item midpoints (e.g., 6–10 times was scored as eight times) were summed to create four subscales: Psychological Aggression Perpetration (i.e., psychological perpetration; eight items; α = .77), Psychological Aggression Victimization (i.e., psychological victimization; eight items; α = .80), Physical Assault Perpetration (i.e., physical perpetration; 12 items; α = .91), and Physical Assault Victimization (i.e., physical victimization; 12 items; α = .82). Participants completed this scale at baseline, 6-month follow-up, and 12-month follow-up. Participants were asked to report past-year frequencies at baseline and past-6-month frequencies at each follow-up (or since last assessment). Six- and 12-month follow-up scores were summed to create physical victimization and psychological victimization follow-up scores reflecting the entire 12-month follow-up period.

Childhood Trauma Questionnaire-Short Form

The Childhood Trauma Questionnaire-Short Form (CTQ-SF; Bernstein et al., 2003) is a 28-item self-report assessment of abuse and neglect in childhood that has demonstrated adequate validity and reliability (e.g., Bernstein et al., 2003; Spinhoven et al., 2014). Participants completed the CTQ-SF only at baseline. Participants responded to items on a 5-point scale ranging from 1 (*never true*) to 5 (*very often true*) that are summed to create a total score and five subscales: Emotional Abuse, Sexual Abuse, Physical Abuse, Emotional Neglect, and Physical Neglect. Only the CTQ total score (25 items; α = .87) was used for analyses.

UPPS-P Impulsive Behavior Scale

The UPPS-P Impulsive Behavior Scale (UPPS-P; Whiteside & Lynam, 2001) is 59-item self-report assessment of impulsivity traits that has demonstrated adequate validity and reliability (e.g., Whiteside et al., 2005). Participants completed the UPPS-P only at baseline. Participants respond to items on a 4-point scale ranging from 1 (*agree strongly*) to 4 (*disagree strongly*) that are summed to create a total score and five subscales: Negative Urgency, (lack of) Premeditation, (lack of) Perseverance, Sensation Seeking, and Positive Urgency. Only the UPPS-P total score (59 items; α = .90) obtained at baseline was used in the analyses.

Data Analysis Plan

We conducted logistic regression analyses with Firth's bias reduction method (Firth, 1993) using the R package logistf (Heinze et al., 2020) in R (R Core Team, 2021). Firth's bias reduction method is a penalized maximum likelihood estimation method that has been shown to minimize small-sample bias and yields finite estimates of parameters under complete or quasi-complete separation (Firth, 1993; Heinze & Schemper, 2002). Given the relatively small sample size and low base rate behaviors of SI and NSSI in this sample, Firth's bias reduction method was deemed necessary; however, more complex models (e.g., mediation models) could not be estimated using this method. All continuous predictor variables were standardized prior to analysis, resulting in standardized parameter coefficients. Lifetime SI history, lifetime NSSI history, follow-up SI, and follow-up NSSI served as binary (0 = no, 1 = yes) criterion variables in separate models.

First, potential covariates were identified based on empirical evidence from the literature of concurrent or prospective associations with SI or NSSI (e.g., Fox et al., 2015; Franklin et al., 2017). Potential baseline covariates available in these data included age, ethnicity (0 = non-Hispanic, 1 = Hispanic), race (Black/African American/multiracial = 0, White/Caucasian = 1), public assistance (0 = no, 1 = yes), mood disorder (0 = no history, 1 = history), anxiety disorder (0 = no history, 1 = history), substance use disorder (0 = no history, 1 = history), BPD severity, ASPD severity, psychological victimization and perpetration, physical victimization and perpetration, childhood trauma severity, and impulsivity. Next, each of these variables was tested in preliminary single predictor models for each criterion variable to identify baseline covariates for the primary analyses. Only variables that were statistically significant in preliminary single predictor models were included as covariates in primary analyses (i.e., separate multiple predictor models for each criterion variable). Variables that were nonsignificant in preliminary single predictor models were not included in the primary analyses.

In the primary analyses, baseline covariates were tested in main-effects models. In the full models for lifetime SI and NSSI history, sexual orientation (0 = heterosexual, 1 = LGBQ) was entered as the primary predictor of interest. In the full models for follow-up SI and NSSI, sexual orientation, follow-up physical victimization, follow-up psychological victimization, race, and poverty were entered as the primary predictors of interest. In exploratory moderation models for follow-up SI and NSSI, the interactions between sexual orientation and race and between sexual orientation and poverty were entered. If an interaction was significant, simple slopes were examined (Aiken & West, 1991). Model fit statistics are provided, including Akaike information criterion (AIC), which allows for model comparisons.

Results

Data Screening and Preparation

Descriptive statistics and the data screening procedure were conducted in SPSS Version 28. Little's missing completely at random test indicated that data were missing completely at random, $\chi^2(45, N = 135) = 28.77$, $p = .971$, and the percentage of missing

values was small (7.34%). We identified and winsorized seven univariate outliers (i.e., scores greater than ±3.29 standard deviations from the mean) on various predictors (e.g., baseline and follow-up psychological victimization, baseline, and follow-up physical victimization; Tabachnick & Fidell, 2013).

Further, we investigated multicollinearity between predictor variables for each model by examining the variance inflation factor (ranging from .36 to 1.00) and the tolerance (range 1.00–2.76). These values indicated that multicollinearity between our predictor variables was not a concern (Tabachnick & Fidell, 2013). To test the linearity of the logit assumption, we conducted the Box-Tidwell test, as recommended by Tabachnick and Fidell (2013). For this test, we included the product between the continuous predictor variables and the natural log of the predictor (e.g., CTQ scores × ln[CTQ scores]) with the other main effects for each model. The linearity assumption was met, as evidenced by nonsignificant interaction terms ($ps = .119$–$.992$). Last, we examined standardized residuals for each model to identify participants with large standardized residuals (> 3.29) who were likely influencing model estimates. Final results for each model are presented after removing high residual cases.

Primary Analyses

Lifetime SI History

First, we tested the main effects of baseline selected covariates, $\chi^2(5, N = 131) = 33.02$, $p < .001$; Wald test = 23.60, $p < .001$; AIC = −23.02. As seen in Table 2, mood disorder history ($OR = 6.25$, $p < .001$) was associated with greater odds of having a lifetime history of SI. In the full model, $\chi^2(6, N = 131) = 35.36$, $p < .001$; Wald test = 24.54, $p < .001$; AIC = −23.36, sexual orientation was not a significant predictor of lifetime SI history ($OR = 2.14$, $p = .103$); however, mood disorder history ($OR = 5.77$, $p < .001$) remained a significant predictor of lifetime SI history.

Lifetime NSSI History

We first tested the main effects of selected baseline covariates, $\chi^2(6, N = 131) = 21.89$, $p = .001$; Wald test = 17.43, $p = .008$; AIC = −9.89. Black/African American/multicultural race or ethnicity identification ($OR = .38$, $p = .038$) was associated with lower odds of having a lifetime history of NSSI, whereas an anxiety disorder history ($OR = 2.60$, $p = .043$) was associated with greater odds of having a lifetime history of NSSI (see Table 3). In the full model, $\chi^2(7, N = 130) = 33.32$, $p < .001$; Wald test = 23.81, $p = .001$; AIC = −19.31, minoritized sexual orientation ($OR = 4.26$, $p = .002$) was associated with greater odds of having a lifetime history of NSSI such that individuals who identified as LGBQ had a 57% chance of having a history of NSSI compared to a 24% chance for individuals who identified as heterosexual. Additionally, Black/African American/multicultural racial/ethnic identification ($OR = .32$, $p = .019$) and anxiety disorder history ($OR = 2.73$, $p = .047$) remained significant predictors of lifetime NSSI history.

SI During Follow-Up

We tested the main effects of selected baseline covariates, including SI history, $\chi^2(8, N = 130) = 35.15$, $p < .001$; Wald test = 22.78, $p < .001$; AIC = −19.15. Anxiety disorder history

($OR = 2.87$, $p = .048$) and SI history ($OR = 7.83$, $p < .001$) were associated with greater odds of experiencing SI during follow-up. In the full model, $\chi^2(13, N = 130) = 44.30$, $p < .001$; Wald test = 25.19, $p = .021$; AIC = −18.30, minoritized sexual orientation ($OR = 4.41$, $p = .003$) was associated with greater odds of experiencing SI during follow-up, adjusting for other primary predictors of interest, lifetime SI, and other baseline covariates. Individuals who identified as LGBQ had a 15% chance of experiencing SI at follow-up, whereas individuals who identified as heterosexual only had a 4% chance of experiencing SI at follow-up. None of the other primary predictors of interest (e.g., follow-up psychological and physical victimization, race, poverty) were significantly associated with odds of SI during follow-up in the combined model. Additionally, anxiety disorder history ($OR = 3.83$, $p = .022$) and SI history ($OR = 9.35$, $p = .001$) remained significant predictors of SI during follow-up. In exploratory moderation models, the interaction between sexual orientation and race was not significant (logit = 1.22; $p = .295$; $OR = 3.39$), nor was the interaction between sexual orientation and poverty significant (logit = .91; $p = .341$; $OR = .37$).

NSSI During Follow-Up

We tested the main effects of selected baseline covariates, including NSSI history, $\chi^2(5, N = 127) = 20.75$, $p = .001$; Wald test = 20.75, $p = .057$; AIC = −10.11; however, there were no significant predictors of NSSI engagement at follow-up (see Table 3). In the full model, $\chi^2(10, N = 129) = 23.26$, $p = .010$; Wald test = 1214.12, $p = .168$; AIC = −3.26, minoritized sexual orientation ($OR = 32.69$, $p < .001$) was associated with greater odds of experiencing NSSI at follow-up, adjusting for other primary predictors of interest, lifetime NSSI, and other baseline covariates. Individuals who identified as LGBQ had a 50% chance of experiencing NSSI at follow-up, whereas individuals who identified as heterosexual only had a 3% chance of experiencing NSSI at follow-up. None of the other primary predictors of interest or baseline covariates were significantly associated with odds of NSSI at follow-up in the combined model. In exploratory moderation models, the interaction between sexual orientation and race was not significant (logit = .02; $p = .916$; $OR = 1.26$), nor was the interaction between sexual orientation and poverty (logit = −1.17; $p = .608$; $OR = .31$).

Discussion

The current study examined sexual orientation as a correlate and prospective distal risk factor for SI and NSSI in a sample of predominately Black, young adult women with a recent history SITB and/or aggression. To better inform risk identification, prevention, and intervention for SITB among this high-risk group, we examined experiences that may contribute to increased risk, as well as the potential moderating role of additional marginalized identity statuses (i.e., race, poverty). Our first hypothesis was partially supported such that young adult women who identified as LGBQ were more likely to have a lifetime history of NSSI but not SI, adjusting for baseline covariates. The lack of association between sexual orientation and lifetime SI history contradicts a considerable amount of cross-sectional literature (e.g., Haas et al., 2011; King et al., 2008). One possible explanation for this finding is that previous literature has rarely examined the effects of sexual

Table 2

Logistic Regression Results for Lifetime Suicide Ideation History and Nonsuicidal Self-Injury History

Variable	Logit	SE	95% CI LL	95% CI UL	χ^2	p	OR
			Lifetime SI history				
Intercept	−0.50	0.26	−1.01	−0.01	3.94	.047	0.61
Age	0.31	0.22	−0.11	0.74	2.06	.151	1.36
MoodDx	1.83	0.53	0.85	2.91	14.06	<.001	6.25
AnxDx	0.38	0.52	−0.63	1.38	0.55	.458	1.46
BPD severity	−0.16	0.25	−0.64	0.31	0.45	.501	0.85
CTQ total	0.40	0.24	−0.89	0.05	2.97	.085	0.67
Intercept	−0.65	0.28	−1.20	−0.12	5.83	.016	0.52
Age	0.28	0.22	−0.14	0.71	1.75	.185	1.33
MoodDx	1.75	0.54	0.76	2.84	12.51	<.001	5.77
AnxDx	0.32	0.53	−0.71	1.33	0.39	.534	1.38
BPD severity	−0.16	0.25	−0.64	0.32	0.43	.512	0.85
CTQ total	−0.37	0.24	−0.86	0.08	2.60	.107	0.69
Sexual orientation	0.76	0.48	−0.15	1.73	2.65	.103	2.14
			Lifetime NSSI history				
Intercept	−0.86	0.46	−1.78	−0.01	3.91	.048	0.42
Age	0.32	0.23	−0.11	0.77	2.09	.148	1.38
Race	−0.96	0.47	−1.89	−0.06	4.32	.038	0.38
MoodDx	0.56	0.51	−0.41	1.53	1.30	.255	1.75
AnxDx	0.96	0.49	0.03	1.89	4.11	.043	2.60
BPD severity	−0.21	0.25	−0.70	0.25	0.79	.375	0.81
CTQ total	0.30	0.24	−0.16	0.76	1.60	.206	1.34
Intercept	−1.18	0.49	−2.18	−0.27	6.59	.010	0.30
Age	0.33	0.24	−0.13	0.81	2.02	.155	1.32
Race	−1.15	0.51	−2.15	−0.19	5.49	.019	0.32
MoodDx	0.33	0.55	−0.75	1.38	0.37	.544	1.39
AnxDx	1.00	0.52	0.02	2.01	3.96	.047	2.73
BPD severity	−0.18	0.26	−0.69	0.30	0.54	.462	0.83
CTQ total	0.41	0.26	−0.10	0.91	2.53	.112	1.50
Sexual orientation	1.45	0.48	0.54	2.40	9.84	.002	4.26

Note. Race (coded as 0 = White/Caucasian, 1 = Black/African American/multiracial); MoodDx = mood disorder (coded as 0 = no history, 1 = history); AnxDx = anxiety disorder (coded as 0 = no history, 1 = history); BPD severity = borderline personality disorder severity score; CTQ total = Childhood Trauma Questionnaire total score; sexual orientation (coded as 0 = heterosexual, 1 = LGBQ). CI = confidence interval; LL = lower limit; UL = upper limit.

orientation in the context of other empirical correlates of lifetime SI (e.g., mood disorders, childhood trauma severity; Franklin et al., 2017). This would suggest that the association between sexual orientation and lifetime history of SI may be explained by other risk factors for SI that may also be correlated with sexual orientation. Although minoritized sexual orientation was not a statistically significant indicator in the multiple predictor model, it was independently associated with greater odds of a lifetime SI history in the preliminary single predictor model (*OR* = 3.19).

Consistent with our second hypothesis, minoritized sexual orientation was strongly and uniquely predictive of SI and NSSI at follow-up, suggesting that young adult women who self-identify as LGBQ were more likely to experience both SI (15% chance) and NSSI (50% chance) in the following year, even after adjusting for other baseline correlates and primary predictors of interest, including a lifetime history of SI and/or NSSI. In fact, only sexual orientation strongly predicted NSSI at follow-up. No other covariates or baseline predictors of interest, including a history of NSSI, which has been shown to be a robust risk factor for future NSSI

(Bresin & Schoenleber, 2015), emerged as unique predictors of NSSI. On the other hand, minoritized sexual orientation, history of SI, and history of an anxiety disorder each strongly predicted risk for SI at follow-up. This extends the existing literature by providing evidence that minoritized sexual orientation is not only a correlate of SI and NSSI but also a key prospective distal factor for both SI and NSSI among a community sample of predominately Black, young adult women.

The evidence for the prospective associations between minoritized sexual orientation and SI and NSSI established in this study solidifies the need for research that uses an intersectionality framework to identify culturally specific mechanisms for the development of SI and NSSI. Culturally informed theories of SITB (e.g., cultural model of suicide, Chu et al., 2010; minority stress model, Brooks, 1981; Meyer, 2003) and the majority of psychological research in this domain suggest that sexual orientation does not confer risk for SI and NSSI directly. Rather, risk develops through sociocultural factors and experiences (e.g., discrimination, victimization, acceptability of suicide) and population-specific mechanisms (e.g., stigma, identity

Table 3
Logistic Regression Results for Suicide Ideation and Nonsuicidal Self-Injury During Follow-Up

Variable	Logit	SE	95% CI LL	95% CI UL	χ²	p	OR
SI during follow-up							
Intercept	−3.01	0.58	−4.36	−2.00	53.42	<.001	0.05
Age	0.20	0.24	−0.27	0.66	0.70	.401	1.22
MoodDx	−0.42	0.59	−1.60	0.68	0.55	.460	0.66
AnxDx	1.05	0.55	0.01	2.15	3.92	.048	2.87
BPD severity	0.30	0.29	−0.27	0.89	1.08	.300	1.35
ASPD severity	0.38	0.31	−0.20	0.99	1.65	.200	1.47
CTQ total	−0.02	0.29	−0.59	0.53	0.01	.939	0.98
SI history	2.06	0.67	0.84	3.52	11.65	<.001	7.83
NSSI history	0.61	0.50	−0.35	1.57	1.55	.213	1.84
Intercept	−3.22	0.80	−4.97	−1.80	24.23	<.001	0.04
Age	0.31	0.26	−0.18	0.83	1.54	.214	1.37
MoodDx	−0.96	0.70	−2.41	0.34	2.06	.152	0.38
AnxDx	1.34	0.61	0.19	2.59	5.26	.022	3.83
BPD severity	0.48	0.35	−0.20	1.20	2.06	.165	1.62
ASPD severity	0.30	0.32	−0.32	0.94	0.87	.351	1.34
CTQ total	0.06	0.32	−0.58	0.68	0.03	.855	1.06
SI history	2.24	0.76	0.83	3.97	10.58	.001	9.35
NSSI history	0.20	0.58	−0.92	1.28	0.13	.716	1.22
Sexual orientation	1.48	0.54	0.48	2.56	8.53	.003	4.41
PhysVic	−0.01	0.03	−0.06	0.05	0.04	.848	0.99
PsychVic	−0.00	0.01	−0.02	0.01	0.30	.583	1.00
Race	0.22	0.62	−0.96	1.46	0.13	.721	1.24
Poverty	−0.22	0.51	−1.23	0.76	0.20	.658	0.80
NSSI during follow-up							
Intercept	−6.50	1.63	−11.86	−3.79	—	<.001	0.00
MoodDx	3.18	1.38	0.85	8.11	8.40	.003	24.00
ASPD severity	0.63	0.43	−0.08	1.68	1.74	.187	1.87
NSSI history	2.41	1.00	0.57	5.03	6.94	.008	11.16
PhysAgg	−1.55	0.97	−4.45	0.12	1.17	.085	0.21
PsychAgg	0.66	0.54	−0.64	1.86	2.97	.279	1.94
Intercept	−3.49	1.23	−7.44	−1.23	10.25	.001	0.03
MoodDx	0.22	0.79	−1.35	1.92	0.07	.785	1.25
ASPD severity	0.16	0.33	−0.49	0.81	0.24	.624	1.17
NSSI history	0.58	0.84	−1.17	2.42	0.43	.513	1.79
PhysAgg	0.60	0.43	−1.64	1.64	1.00	.318	1.82
PsychAgg	0.16	0.66	−2.18	1.49	0.05	.830	1.18
Sexual orientation	3.49	1.12	1.39	8.32	13.18	<.001	32.69
PhysVic	0.01	0.05	−0.12	0.14	0.06	.808	1.01
PsychVic	−0.02	0.02	−0.08	0.02	1.27	.260	0.98
Race	0.35	0.88	−1.36	2.33	0.16	.693	1.42
Poverty	−1.30	0.86	−3.23	0.37	2.30	.129	0.27

Note. MoodDx = mood disorder (coded as 0 = no history, 1 = history); AnxDx = anxiety disorder (coded as 0 = no history, 1 = history); BPD severity = borderline personality disorder severity score; ASPD severity = antisocial personality disorder severity score; CTQ total = Childhood Trauma Questionnaire total score; SI history = suicide ideation history (coded as 0 = no history, 1 = history); NSSI history = nonsuicidal self-injury history (coded as 0 = no history, 1 = history); PsychAgg = Conflict Tactics Scale Psychological Aggression Perpetration subscale score. PhysAgg = Conflict Tactics Scale Physical Assault Perpetration subscale; sexual orientation (coded as 0 = heterosexual, 1 = LGBQ); PhysVic = Conflict Tactics Scale Physical Assault Victimization subscale; PsychVic = Conflict Tactics Scale Psychological Aggression Victimization subscale score; race (Black/African American/multiracial = 0, White/Caucasian = 1); poverty = public assistance tied to low income (0 = no, 1 = yes). CI = confidence interval; LL = lower limit; UL = upper limit.

disclosure, internalized homophobia; e.g., McKay et al., 2019; Salentine et al., 2020). Despite previous evidence that victimization and discrimination are associated with SITB (e.g., Brooks, 1981; Burton et al., 2013; Chu et al., 2010, Meyer, 2003; Wilcox et al., 2012), general psychological and physical victimization experiences as assessed in the current study throughout follow-up did not predict future risk for SI and NSSI or significantly attenuate the association between sexual orientation and risk for SI and NSSI in our sample. These findings suggest that general psychological and physical victimization may not accurately capture identity-based risk factors, whereas a more nuanced assessment of sexual-orientation-based, racial/ethnicity-based, and gender-based discrimination (e.g., Holm

et al., 2021) tested in a longitudinal mediation model may be necessary to understand the role of victimization in the development of later SITB. Future longitudinal research is needed to replicate cross-sectional studies that have examined the role of population-specific and general risk factors among various sexual and gender orientation subgroups (e.g., Brown et al., 2017; Muehlenkamp et al., 2015; Testa et al., 2017).

Based on the intersectionality theory, which suggests that risk of SITB may not be understood by looking only at the effects of one identity but instead may be determined by the interplay of multiple identity statuses (e.g., Brown et al., 2022; Ferlatte et al., 2018; Opara et al., 2020; Standley, 2020; Tucker, 2019), we also examined the role of additional identity statuses and experiences. However, we did not find evidence that race or poverty moderated the associations between sexual orientation and risk for future SI and NSSI. It is important to note that our results reflect our unique sample of young adult women, who were predominately Black or African American, with approximately half of the sample experiencing poverty (indicated by receiving public assistance tied to low income). Additionally, participants were recruited based on a recent history of SITB and/or aggression and had high rates of various lifetime psychiatric disorders (see Table 1). Therefore, the current findings may not generalize across genders, race, socioeconomic status, or symptomatology and clinical severity. Although the specificity of our sample impacts the generalizability of our findings, this research provides crucial information about risk for SITB in a population that has been historically underrepresented in suicide and self-injury research (Erves et al., 2017).

More longitudinal research that examines nuances of risk in specific samples and carefully considers the interplay of multiple identities is necessary to understand the culturally specific factors that potentiate and mitigate SITB risk. For example, future research could examine these associations in the context of other gender and sexual identities. Although previous literature suggests that women exhibit higher risk for SI, NSSI, and fluidity in sexuality as compared to men (e.g., Bresin & Schoenleber, 2015; CDC, 2018; Chandra et al., 2013), literature also suggests that identifying as LGBQ is associated with elevated risk for suicidal and nonsuicidal SITB among young men as well (e.g., King et al., 2008; Miranda-Mendizábal et al., 2017). Further, SITB risk is known to be elevated among transgender individuals, as well as people who identify outside the gender binary (e.g., Dickey & Budge, 2020). The current study is a substudy of the Pittsburgh Girls Study, which originally enrolled parent-identified girls between the ages of 5–8. A more detailed question on gender identity was only assessed for a small portion of the study sample; therefore, we were not able to include gender identity in our analyses. Additionally, we were unable to examine potential differences between types of minoritized sexual orientation due to limited categories for identification and sample size of these subgroups. Of note, 63.2% of our LGBQ subsample identified as bisexual; thus, it is possible that our results are more consistent with research on bisexual individuals rather than LGBQ individuals more broadly. Emerging research on sexual orientation subgroups suggests there may be differences in risk for SI and/or NSSI depending on more nuanced sexual orientation categorizations. For example, bisexual individuals demonstrate higher risk for SITB compared to both lesbian/gay and heterosexual individuals (Liu & Mustanski, 2012;

Nam et al., 2019; Salway et al., 2019). Last, there is research that suggests women's sexual identities may be more fluid (Diamond, 2012) and that questioning or ambiguity related to sexual orientation is associated with elevated risk for SITB (e.g., Talley et al., 2016; Woodward et al., 2013).

Given these findings, the field can benefit from designing more sexual-orientation-specific research that assesses SI and/or NSSI among participants of all genders, as well as encouraging researchers on other topics to include nuanced assessment of sexual orientation and gender identity as a part of their standard demographic data collection (e.g., Cha et al., 2018). Future research on risk for SITB should consider potential interactions or distinctions between different gender identities and sexual orientations, as well as the impact of fluidity or fluctuations across time.

The current study provides crucial evidence for sexual orientation as a prospective distal risk factor for future SI and NSSI for young adult women, highlighting the critical need for targeted prevention, routine assessment, and early intervention efforts for this population. This research also emphasizes the need for culturally informed care and the importance of tailoring assessment, prevention, and intervention approaches for SITB to specifically address sexual orientation and minority-specific risk factors (e.g., Alessi, 2014; Cohen et al., 2020; Craig et al., 2013; Opara et al., 2020; Pachankis & Goldfried, 2004; Pachankis et al., 2020; Watson & Tatnell, 2019). For example, targeted prevention efforts could increase access and acceptability (e.g., reducing stigma, provider mistrust) of mental health care among marginalized groups who are less likely to receive care (e.g., Opara et al., 2020). Clinicians and providers should also routinely assess for risk for SI and NSSI when working with patients who identify as nonheterosexual given evidence of unique risk factors in this population. Assessing and targeting general (e.g., hopelessness, belonging, burden) and population-specific risk (e.g., discrimination, stigma, concealment) and resiliency factors (e.g., religiosity, ethnic identity) is necessary to reduce risk for suicidal and nonsuicidal SITB (e.g., Watson & Tatnell, 2019). There are excellent examples of culturally informed assessment approaches and tailored LGBQ-affirmative interventions (Alessi, 2014; Pachankis & Goldfried, 2004; Pachankis et al., 2020) that are capable of addressing SITB risk in the context of multiple marginalized identity statuses. Longitudinal research using a culturally informed intersectionality approach to understand the mechanisms in the association between minoritized sexual orientation and risk for future suicidal (e.g., SI, planning, suicide attempts) and nonsuicidal (i.e., NSSI thoughts, NSSI) SITB is necessary to develop culturally sensitive and effective prevention and intervention strategies.

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