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Exploring the Relationships Between Hope, Minority Stress, and Suicidal Behavior Across Diverse LGBTQ Populations

Jeff Moe^a , Narketta Sparkman-Key^{b,*} , Alexandra Gantt-Howrey^c ,
Bianca Augustine^a, and Madeline Clark^d 

^aCounseling and Human Services, Old Dominion University, Norfolk, VA, USA; ^bProfessor and Associate Vice Provost, James Madison University; ^cAssistant Professor, New Mexico State University; ^dIntervention and Wellness, University of Toledo, Toledo, OH, USA



ABSTRACT

The role of hope in suicide prevention with diverse communities was assessed using a minority stress paradigm. Participants ($N = 352$) were recruited from a university student population and surveyed on their race and ethnicity, sexual-affective identity, gender identity, minority stress associated with multiple identities, social support, depression, hope, and suicidal behavior. Hierarchical multiple regression results indicate that hope significantly predicted suicidal behavior when adjusting statistically for the influence of all other variables. Clinical implications include that protective factors and multiple minority stress can be screened for when assessing suicide risk. Other implications, limitations, and future directions are also discussed.

KEYWORDS

BIPOC; hope; LGBTQ;
minority stress; suicide

Suicide is the 10th leading cause of death in the United States, with statistical increases observed over the past 10 years in suicide mortality across all racial and ethnic groups (Bridge et al., 2018). Suicidal and self-harming behavior has complex contributing factors, including the experience of discrimination based on belonging to one or more historically marginalized communities (Sadika et al., 2020). People who identify as lesbian, gay, bisexual, transgender, queer, questioning, and as members of other sexual-affective or gender diverse groups (LGBTQ) are more at-risk for suicidal behavior (Bostwick et al., 2014; Mereish et al., 2019). Research shows that rates of suicide are higher for LGBTQ youth who are also Black, Indigenous, and/or People of Color (BIPOC; Ferlatte et al., 2018), with transgender and non-binary youth of color consistently evidencing the highest rates of suicide and self-harming behavior (Johns et al., 2019). Despite social trends toward greater acceptance of LGBTQ identities in the

CONTACT Jeff Moe  jmoe@odu.edu  Department of Counseling & Human Services, Old Dominion University, 2100 Education Building, 4301 Hampton Blvd., Norfolk, VA 23529, USA.

*Present address: James Madison University, Harrisonburg, VA, United States.

United States over the past 10 years, rates of suicidal behavior for LGBTQ youth have remained consistent (Green et al., 2019). In addition, it is imperative to develop nuanced understanding of within-group differences among LGBTQ youth and not to view members of these related, but distinct, populations as a monolithic whole (Cyrus, 2017; Ferlatte et al., 2018). Research that accounts for differences in the experience of suicidal behavior based on gender, race and ethnicity, and sexual-affective identities is needed. Minority stress theory (Brooks, 1981; Meyer, 2003) has been applied to research on LGBTQ youth suicide, though comprehensive assessment of different sources of minority stress associated with multiple marginalized identities is often lacking in the extant literature base. The present study sought to address gaps in the literature by assessing minority stress associated with multiple minority identities and by integrating a strengths-based perspective into suicide prevention research with the minority stress paradigm. Given the problematic history of mental health professionals pathologizing both LGBTQ and BIPOC identities and lived experiences, it is vital to explore how strengths influence health disparities in LGBTQ, BIPOC, and multiple minority communities. To link research on suicidal behavior in multiply marginalized communities with a strengths-based paradigm, we assessed levels of hope as an additional contributing factor along with demographic traits, social support, depression, and both external and internal minority stress. For the purposes of this manuscript, the acronym LGBTQ will be used to signify individuals who identify using the associated identities, but also other sexual-affective and gender identity minority groups when issues such as minority stress apply across these related but distinct populations. In keeping with current best practice, the acronym BIPOC will be used to signify individuals who identify as such. Specific racial and ethnic identities or LGBTQ identities will be referenced when a topic is delimited to a specific group such as transgender women of color.

Minority stress, mental health, and suicidal behavior

LGBTQ youth are four times more likely to seriously consider suicide, plan for suicide and attempt suicide versus their peers (Johns et al., 2019). Approximately half of LGBTQ youth ages 13–24 seriously contemplates suicide each year, with at least one LGBTQ youth attempting suicide every 45 s (Green et al., 2019). Although adults who identify as BIPOC evidence lower rates of suicide than their White peers, suicide rates for BIPOC youth are much higher and are comparable to their White peers (Bridge et al., 2018; Heron, 2019). Suicide attempts among Black high school students rose 73% between 1991 and 2017, with adolescent and young adult

Black males showing the largest increases (Heron, 2019). Given the prevalence of suicidality, mental health professionals are likely to work with clients or students experiencing suicidal ideation (Lardier et al., 2017), however more research is needed to understand the role of protective factors in suicide prevention especially in terms of application to LGBTQ, BIPOC, and intersecting communities (Bostwick et al., 2014; Bruns & Letcher, 2018).

Minority stress theory (Brooks, 1981; Meyer, 2003) has been applied to scholarship on suicidal behavior in LGBTQ groups, BIPOC populations and suicide rates of individuals inhabiting both LGBTQ and BIPOC statuses (Sutter & Perrin, 2016). Minority stress theory posits that individuals from marginalized social groups are exposed to distinctive forms of external and internal stress that directly or indirectly impact health outcomes (Calabrese et al., 2015). Experiencing overt and covert discrimination, inequity resulting from discriminatory practices, and the internalization of oppressive and prejudicial values relative to one's status as a member of one or more marginalized groups are all forms of minority stress (Brooks, 1981; Meyer, 2003). External or internal minority stress are associated with a host of negative psycho-social outcomes such as depression and suicidal ideation (Mereish et al., 2019). Emerging scholarship also demonstrates that for individuals identifying as both LGBTQ+ and BIPOC, external and internal minority stress associated with multiple minority identities has additional deleterious effect on mental health (Sadika et al., 2020). Due to the compounding effects of oppressive systems, including white supremacy, racism, heterocentrism, cisnormativity, and cisheterosexism, LGBTQ identifying BIPOC individuals are disproportionately impacted by minority stress at the personal, relational, and collective levels (Mosley et al., 2021). For instance, BIPOC individuals identifying as LGBTQ are more likely to experienced racialized forms of heteronormativity, including unequal access to resources such as employment opportunities and health care insurance (Singh et al., 2021). Moreover, due to their intersecting identities BIPOC LGBTQ individuals experience discrimination and/or rejection from both cishetero BIPOC communities and from white LGBTQ communities (Cyrus, 2017). This ostracization fosters barriers to BIPOC LGBTQ individuals' social capital, such as connection to community, sense of belonging, and access to community resources (Singh et al., 2021).

Research that examines the effects of minority stress on health outcomes often fails to assess for multiple forms of minority stress (e.g., external and internal) and also often fails to assess for minority stress associated with more than one minority identity (Cyrus, 2017). Calabrese et al. (2015) found that Black sexual minority cisgender women experienced worse external minority stress, depression and anxiety compared to White sexual

minority cisgender women and Black sexual minority cisgender men. Similarly, Sutter and Perrin (2016) found in a sample of LGBTQ individuals that experiencing racism and heterosexism were inversely related to life satisfaction, and directly related to recent suicidal ideation. In studies by both Sutter and Perrin (2016) study and Calabrese et al. (2015), internalized minority stress was not assessed. Minority stress and mental health disparity researchers also often overlook assessing protective factors, which remains problematic given the history of over-pathologizing both LGBTQ+ people (Anestis et al., 2014) and BIPOC people (Cyrus, 2017).

Protective factors and suicidal behavior

Given the increase in suicide mortality among people of color and the persistent high rate of mortality for LGBTQ people, the link between multiple minority stress, protective factors, and suicidal behavior needs further exploration in diverse samples. The construct of hope from positive psychology is a protective factor that deserves greater attention in research on suicidal behavior in minority populations (Snyder, 2002). Snyder's (2002) hope framework is based on goal and future-oriented thinking, and has been linked to lower rates of depression, anxiety, with academic success, and with other protective factors such as self-efficacy and optimism. Anestis et al. (2014) found that hope reduced overall suicidal desire and recommended that hope be assessed as part of suicide risk screenings. Moe et al. (2008) found that hope was positively related to development of an affirming gay identity and inversely related to internalized stigma related to sexual-affective identity; discrimination and depression were not assessed in this study.

Social support, or the degree to which an individual feels supported by family members, friends, and/or significant others, has more scholarship demonstrating its effects in promoting health and wellness for LGBTQ people (Lardier et al., 2017), BIPOC individuals (Sadika et al., 2020), and BIPOC LGBTQ people (Mosley et al., 2021). Comparing the relative influence of both hope and social support in suicide prevention integrates a much-needed asset-based perspective in mental health disparity research based on a minority stress lens. To date, there is no study that assesses both external and internal minority stress stemming from multiple minority identities and how these factors impact suicide behavior along with the effect of hope. Assessing the relationships between multiple minority identities, minority stress associated with multiple statuses, social support, hope, depression, and suicidal behavior in a sample that includes both majority-identity (e.g., White or Heterosexual) and minority identity (e.g., LGBTQ or BIPOC) participants would add nuance to the knowledge base on health

disparity research. The goal of the present study was to address the research question: Does hope predict suicidal behavior, accounting for the effects of minority status, minority stress, depression, and social support? We hypothesized that hope would significantly predict suicidal behavior at $a \leq .01$.

Methods

Participants and procedure

The study was approved for data collection by the authors' home institution. Participants ($n = 352$) were recruited from the students of the four largest majors ($n = 2172$) of a mid-size university in a metropolitan area. Of these, 464 began the survey; after screening for incomplete responses and univariate outliers, the final sample of 352 was identified. For race or ethnicity, 56% ($n = 198$) of participants identified as White, 30% ($n = 107$) as Black or African American, 10% ($n = 35$) as Latinx heritage, and 14% ($n = 49$) as some other cultural heritage group (e.g., Samoan, multiple heritage, Native American, etc.). For gender identity, 85.9% ($n = 302$) identified as cisgender women, 10.4% ($n = 37$) as cisgender men, and 3.7% ($n = 13$) as transgender or gender non-binary. For sexual-affective identity, 74% ($n = 259$) identified as heterosexual, 17.6% ($n = 62$) as bisexual, 4.5% ($n = 16$) as lesbian, and 3.9% ($n = 14$) as gay. The age of participants was $M = 25.1$ years ($SD = 8.6$), ranging 18 to 61. A link to the survey was e-mailed once monthly for three months through a central advising office, starting in October 2019 and ending in January of 2020. Consenting participants were directed to the start of the survey. After data collection ended, the raffle was held and \$20.00 e-gift cards were sent to the winners.

Measures

Everyday Discrimination Scale

A modified version of the Everyday Discrimination Scale (EDS) was used (Harnois et al., 2019) in the present study to assess real and perceived discrimination occurring in daily life, targeted toward respondents' race or ethnicity (Harnois et al., 2019) as well as gender and sexual-affective identities (Calabrese et al., 2015). An example of items assessing participants' experience of racial or ethnic is: "How often in your day-to-day life, you were treated with less courtesy than other people because of your race/ethnicity?" (Harnois et al., 2019, p. 302). This item was modified by replacing race/ethnicity with gender, and in another item with sexual-affective identity, resulting in 27 total items. Each item is rated using five Likert-type anchors ranging from *never* to *almost always*. Calabrese et al. (2015)

found that modifying the EDS to assess racial or ethnic, gender, and sexual-affective identity discrimination demonstrated psychometric validity including stable inter-item consistency estimates for the EDS total and its sub-scales. The Cronbach a for participants' responses to all items in the current study was .90; the a for the nine items assessing racial or ethnic discrimination was .93, for the gender items $a = .86$, and for the sexual-affective identity items $a = .91$.

Internalized Stigma Scale

The Internalized Stigma Scale (ISS; Socías et al., 2014) assesses participants' internalized stigma related to their gender identity, race or ethnicity, and sexual-affective identities. The ISS was chosen as it assesses more than one dimension of internalized stigma with acceptable psychometric properties for exploratory research (Socías et al., 2014). Participants responded to a prompt: "Have you ever felt any of the following emotions because of your gender identity?" (Socías et al., 2014, para. 12) by rating how frequently they feel the following: ashamed, guilty, low-esteem, or feel you deserve to be punished (yes/no). The scale also contains prompts for rating sexual-affective identity and race or ethnicity. The internal consistency estimate for the total scale in the present study was $a = .85$; for the gender identity items $a = .86$, the sexual-affective identity items $a = .87$, and the race or ethnicity items $a = .79$.

Patient Health Questionnaire-9

The Patient Health Questionnaire-9 (PHQ9) is a nine-item measure of symptoms associated with clinical depression (Kroenke & Spitzer, 2002). Participants are asked to respond to the following: "Over the past two weeks, how often have you been bothered by any of the following problems?" (Kroenke & Spitzer, 2002, p. 514). An example of a problem is "Loss of interest or pleasure in doing things" (Kroenke & Spitzer, 2002, p. 514). Problems are rated based on a four-point anchor, ranging from *never* to *nearly every day*. Ratings are summed to produce a total score, and a reliability estimate for the PHQ-9 at .79 was reported in the validation study (Kroenke & Spitzer, 2002). The Cronbach's a for the present study is = .91.

Trait Hope Scale

The Trait Hope Scale (THS) assesses hope as two dimensions: agency and pathways thinking (Snyder, 2002). Agency is defined as energy directed at achieving goals, including overcoming obstacles to those goals (Snyder, 2002). Pathways involves the planning associated with goal attainment,

including identifying alternative plans as needed (Snyder, 2002). The 12-item scale includes four items to assess agency, four items for pathways, and four filler items which are not totaled when scoring responses. Items are scored according to a Likert-type scale ranging from 1 = *definitely false* to 4 = *definitely true*. An example of the agency items is: “My past experiences have prepared me well for my future” (Snyder, 2002, p. 274); pathways items include “I can think of many ways to get the things in life that are most important to me.” (Snyder, 2002, p. 274). Filler items include “I feel tired most of the time.” (Snyder, 2002, p. 274). Reliability estimates for the THS include values ranging from .74 to .84 in the original validation work (Snyder, 2002). Anestis et al. (2014) found the THS demonstrated good validity and reliability metrics in a sample of undergraduate students comprised of 41% students of color, similar to our research sample. For the present study, the Cronbach’s a for the total scale was $a = .84$; for the agency items $a = .78$, and for the pathways items $a = .75$.

Multidimensional Scale of Perceived Social Support

The Multidimensional Scale of Perceived Social Support (MSPSS) is a 12-item measure that assesses the perception of social support received from family, friends, and from a significant other (Dahlem et al., 1991). Respondents rate items using a seven-point Likert-type scale, ranging from *very strongly disagree* to *very strongly agree*. Family sub-scale include “I can talk about my problems with my family” (Dahlem et al., 1991, p. 757); significant other items include “There is a special person in my life who cares about my feelings”, and friends items include “My friends really try to help me” (Dahlem et al., 1991, p. 757). Dahlem et al. (1991) reported Cronbach a estimates for the total scale and sub-scales ranging from .90 to .94. For our study, the internal consistency for the total scale was $a = .93$, for the significant other items $a = .96$, the family items $a = .95$, and the friends items $a = .95$.

Suicidal Behavior Questionnaire-Revised

The Suicidal Behavior Questionnaire-Revised (SBQ-R) is a four-item measure (Gutierrez et al., 2001). Research shows strong correlations between the SBQ-R and other measures of suicidal behavior, both in clinical populations and with individuals not currently receiving psycho-social treatment (Gutierrez et al., 2001). Items include “Have you ever thought about or attempted to kill yourself?” (Gutierrez et al., 2001, p. 478), which is rated yes/no. Examples of scaled items include item 3: “How often have you thought about killing yourself in the past year?”, which is rated using a seven-point scale ranging from *never* to *almost every day* (Gutierrez et al.,

2001, p. 478). Items can be totaled for linear analysis with internal consistency estimates reported at $a = .83$ by the developer (Gutierrez et al., 2001). The Cronbach a for the SBQ-R total score in the present study is $a = .72$.

Data analysis and power

To address the research questions, hierarchical multiple linear regression was used where hope served as the independent variable of interest, suicidal behavior served as the criterion or dependent variables, and demographic traits, depression, social support, and minority stress variables were adjusted for statistically by entering them into earlier steps of the regression model. Descriptive statistics were also calculated to describe the sample, and correlations were computed to assess the linearity and multi-collinearity assumptions for the regression. An a priori power analysis utilizing the G*Power calculator (Faul et al., 2009) identified that a minimum of 82 participants would be needed assuming a moderate effect size, an alpha level of .01, one tested predictor, and 15 total predictors. Post-hoc power analysis using the actual effect size found a power of $b = .8$ with 352 participants.

Results

Descriptives and correlations

Means, standard deviations, and correlations between continuous variables are reported in Table 1. Correlations between continuous variables (suicidal behavior, social support, depression, minority stress, and hope) demonstrated relationships that are consistent with the literature base (see Table 1). Point-biserial correlations were calculated for the associations

Table 1. Means, Standard Deviations, and Intercorrelations for Everyday Discrimination, Stigma, Social Support, Depression, Hope, and Suicidal Behavior (N = 352)

	M	SD	1	2	3	4	5	6	7	8	9	10
1. SBQ-R	1.9	2.4	-	-.41**	.50**	.21**	.23**	.37**	-.01	.19**	.30**	-.27**
2. Hope	16.9	3.7		-	-.46**	-.25**	-.33**	-.23**	.03	-.10*	-.08	.39**
3. PHQ-9	10.1	8.4			-	.27**	.34**	.31**	.12*	.32**	.33**	-.35**
4. Stigma Race	1.9	2.8				-	.40**	.28**	.16**	.26**	.20**	-.18**
5. Stigma Gender	2.0	3.0					-	.40**	-.06	.34**	.24**	-.19**
6. Stigma SA	1.3	2.6						-	-.05	.25**	.55**	-.16**
7. ED Race	5.8	6.3							-	.25**	.06	-.16**
8. ED Gender	5.8	4.9								-	.41**	-.20**
9. ED SA	1.6	3.4									-	-.14*
10. Social Support	52.2	15.5										-

Note: SBQ-R: Suicide Behavior Questionnaire-Revised total score; Hope: Trait Hope Scale total score; PHQ-9: Patient Health Questionnaire-9 total score; Stigma Race: Internalized Stigma Ethnicity/Race subscale; Stigma Gender: Internalized Stigma Gender Identity subscale; Stigma SA: Internalized Stigma Sexual-Affective Identity subscale; ED Race: Everyday Discrimination Ethnicity/Race subscale; ED Gender: Everyday Discrimination Gender Identity subscale; ED SA: Everyday Discrimination Sexual-Affective Identity subscale; Social Support: total score on the Multidimensional Scale of Perceived Social Support.

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

between participants' group identities and continuous variables; significant correlations are summarized here. The following groups were coded for analysis: (1) white cisgender heterosexual females ($n = 124$), (2) white cisgender heterosexual males ($n = 13$), (3) white cisgender LGBTQ people ($n = 45$), (4) BIPOC cisgender LGBTQ people ($n = 34$), (5) BIPOC cisgender heterosexual females ($n = 111$), (6) BIPOC cisgender heterosexual males ($n = 12$), and (7) transgender and non-binary identified people ($n = 13$). The distinct group for transgender and non-binary participants helps to avoid conflating these participants with LGBTQ participants and to cisgender participants. Due to the low overall number of transgender and non-binary participants, White and BIPOC participants were analyzed together for this group. Identifying as transgender or non-binary was correlated with more suicidal behavior ($r_{pb} = .17, p = .002$) and depression ($r_{pb} = .12, p = .02$), less social support ($r_{pb} = -.27, p = .001$), and less hope ($r_{pb} = -.12, p = .027$). Identifying as transgender or non-binary was also correlated with more discrimination related to both gender identity ($r_{pb} = .12, p = .026$) and sexual-affective identity ($r_{pb} = .30, p \leq .001$), and more internalized stigma related to both gender identity ($r_{pb} = .23, p \leq .001$) and sexual-affective identity ($r_{pb} = .31, p \leq .001$).

Identifying as white, cisgender, and LGBTQ was correlated with suicidal behavior ($r_{pb} = .15, p = .013$) and with internalized stigma related to gender identity ($r_{pb} = .15, p = .005$) and sexual-affective identity ($r_{pb} = .26, p \leq .001$), depression ($r_{pb} = .13, p = .016$) and discrimination related to sexual-affective identity ($r_{pb} = .32, p \leq .001$). Identifying as BIPOC, female, and cisgender was correlated with race and ethnicity discrimination ($r_{pb} = .32, p \leq .001$). Identifying as white, cisgender, and LGBTQ was correlated with more internalized stigma ($r_{pb} = .26, p \leq .001$) and discrimination ($r_{pb} = .32, p \leq .001$) related to sexual-affective identity and also more suicidal behavior ($r_{pb} = .13, p = .013$) and depression ($r_{pb} = .13, p = .016$). Identifying as BIPOC, LGBTQ, and cisgender was correlated with discrimination based on race and ethnicity ($r_{pb} = .16, p = .002$). Identifying as BIPOC, cisgender, and male was correlated with more discrimination based on race and ethnicity ($r_{pb} = .21, p \leq .001$) and less social support ($r_{pb} = -.14, p = .007$).

Hierarchical multiple regression

To assess the unique contribution of hope in the prediction of suicidal behavior, a hierarchical multiple regression analysis was conducted where hope was input as the predictor of interest since it has received less attention in the literature in comparison to social support. Data assumptions were assessed for linearity, normality, multicollinearity, and

homoscedasticity; data conformed to expected parameters for analysis. Groups were dummy-coded using a null-value constant coding procedure for six groups: (1) BIPOC heterosexual cisgender females, (2) BIPOC heterosexual cisgender males, (3) white cisgender LGBTQ participants, (4) BIPOC cisgender LGBTQ participants, (5) white cisgender heterosexual males, and (6) transgender and non-binary people. The largest group, white cisgender heterosexual women, served as the referent group. This coding procedure facilitated analysis for how identifying with multiple identities was related to the minority stress, depression, suicidal behavior, and hope. The authors built the regression model following guidelines recommended by Tabachnik and Fidell (2019), where static or demographic variables are input into earlier steps, variables with more established relationships in the literature base are input into middle steps, and newer variables are input into later steps. The paradigm of minority stress theory also guided the input of variables in the regression. Building hierarchical multiple regression models in this manner facilitates analysis of the unique contributions of newer theoretical constructs while accounting statistically for the influence of variables with a longer history of scholarship (Tabachnik & Fidell, 2019).

Following from these principles, the dummy-coded groups were entered into Step 1. Scores for race, gender, and sexual-affective identity discrimination and stigma, the minority stress variables, were entered into Step 2. Depression scores were entered into Step 3. Social support scores were entered into Step 4, and hope scores were entered into Step 5. Results show that hope scores contributed significantly to the prediction of suicidal behavior, $R^2 = .35$, $F(18, 333) = 10.0$, $p \leq .001$. The variance in suicidal behavior associated with the specific influence of hope was $R^2D = .03$ or 3.0%, indicating a small effect size. Depression remained a significant contributor to suicidal behavior, as did internalized stigma related to sexual identity. For the significant predictors, hope had the second largest beta weight at $b = -.21$, $t(333) = -4.0$, $p \leq .001$. Depression had the highest beta weight $b = .31$, $t(333) = 5.7$, $p \leq .001$, followed by internalized sexual-affective identity stigma $b = .19$, $t(333) = 3.1$, $p = .002$. See Table 2 for a complete summary of the hierarchical multiple regression analysis.

Discussion

The results of our study indicate that hope provided a unique, albeit small, contribution to the prediction of suicidal behavior, adjusting statistically for the influence of group identity, minority stress, depression, and social support. Brooks (1981) and Meyer (2003) both assert that identification with a minority identity is insufficient to explain health disparities, and that

Table 2. Hierarchical Multiple Regression Predicting Suicidal Behavior by Age, Gender Identity, Sexual-affective Identity, Race and Ethnicity, Social Support, Everyday Discrimination, Internalized Stigma, Depression, and Hope (N = 352).

Predictors	R ² D	B	SE	b	99% CI
Step 1	.065*				
PoCCHF		.041	.299	.008	[−.55, .63]
PoCCHM		1.53	.668	.012	[.22, 2.9]
WLGBQ		.043	.368	.006	[−.68, 7.7]
PoCLGBQ		−.080	.411	−.010	[−.89, .73]
TGNB		.404	.637	.032	[−.85, 1.7]
WCHM		−.106	.583	−.008	[−1.2, 1.0]
Step 2	.123**				
ED Gender		.013	.028	.027	[−.042, .068]
ED SA		.048	.042	.069	[−.035, .131]
ED Race		−.027	.022	−.070	[−.069, .016]
Stigma Gender		−.046	.044	−.058	[−.132, .040]
Stigma SA		.171	.054	.185*	[.066, .277]
Stigma Race		.022	.044	.026	[−.064, .109]
Step 3					
Depression	.129**	.089	.016	.311**	[.058, .120]
Step 4					
Social Support	.006	−.007	.008	−.027	[−.020, .011]
Step 5					
Hope	.030**	−.136	.034	−.214**	[−.20, −.07]

Note: PoCCHF: BIPOC, cisgender, heterosexual, female; PoCCHM: BIPOC, cisgender, heterosexual, male; WLGBQ: white, cisgender, LGBQ male or female; PoCLGBQ: BIPOC, cisgender, LGBQ male or female; TGNB: Transgender and/or Non-Binary; WCHM: White, cisgender, heterosexual, male; ED Gender: score on the gender identity sub-scale of the Everyday Discrimination Scale; ED SA: score on the sexual-affective identity sub-scale of the Everyday Discrimination Scale; ED Race: score on the ethnicity/race sub-scale of the Everyday Discrimination Scale; Stigma Gender: score on the gender identity sub-scale of the Internalized Stigma Scale; Stigma SA: score on the sexual-affective identity sub-scale of the Internalized Stigma Scale; Race: score on the ethnicity/race identity sub-scale of the Internalized Stigma Scale; MM ED: The multiple of the Everyday Discrimination sub-scales; MM Stigma: The multiple of the Internalized Stigma sub-scales; Depression: total score on the Patient Health Questionnaire-9; Stigma: total score on the Multidimension Scale of Perceived Social Support; Hope: total score on the Trait Hope Scale.

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

assessing levels of stress, discrimination, and stigma associated with lived experiences as members of marginalized groups must be factored into conceptualization the health and well-being of minority identified people. Furthermore, intersectionality theory has demonstrated the compounded negative health outcomes for BIPOC LGBTQ individuals and the need to assess minority stress variables associated with multiple minority identities (Singh et al., 2021). Meyer (2003) and Calabrese et al. (2015) assert that minority stress is necessary but insufficient for conceptualizing health disparities with minority groups, and that mediating factors such as hope and social support should also be assessed for. In that vein, our study confirms and extends the work of Anestis et al. (2014), Moe et al. (2008), Lardier et al. (2017), and Mereish et al. (2019) by assessing how hope adds to the prediction of suicidal behavior. Snyder's (2002) hope construct is associated with many positive physical and mental health outcomes, and hope is identified as a common therapeutic factor (Anestis et al., 2014; Moe et al., 2008). Hope theory focuses on goal-oriented behavior and future-oriented thinking (Snyder, 2002), and it's possible that being able to imagine a

positive future for oneself helps moderate the relationship between minority stress and negative outcomes such as depression and suicidal behavior. The small effect size may represent the need to explore other resiliency factors and to also assess hopelessness as a negative counterpart to hopefulness (Mereish et al., 2019). There may also be nuanced experiences or definitions of hope not accounted for by Snyder's (2002) hope theory. Mosley et al. (2021) describe the benefits of protective factors for individuals with intersecting minoritized identities, specifically those with minoritized racial and sexual/affective identities.

In addition to hope, sexual-affective identity stigma also influenced suicidal behavior, while controlling statistically for the influence of depression. As expected, depression remained a significant factor in predicting suicidal behavior. It is important to note that, in keeping with minority stress theory, experiencing discrimination and/or internalized stigma was in general correlated with depression, suicidal behavior, less hope, and less social support (see Table 1). Sutter and Perrin (2016) state that internalized stigma related to sexual-affective identity may serve to isolate BIPOC individuals from their families and friends, and Cyrus (2017) suggests that this may be more acute for BIPOC people with collectivistic cultural attitudes. This suggests that events or experiences that contribute to minority stress, occurring at specific times and in specific locations, and directed at different salient aspects of personal identity, all inform mental health outcomes and may fluctuate across individuals' life spans and personal social ecologies (Brooks, 1981; Meyer, 2003). Replicating the findings in the present study within specific timeframes, such as immediately after experiencing rejection from family, friends, or significant others, is needed to further clarify the relationship between protective factors and suicidal behavior in multiple minority communities.

Cyrus (2017) suggests that for multiple minority individuals assessing discrimination and stigma based on any aspect of personal identity takes greater discernment, and it is possible that the measures used in this study were not sensitive to the specific intersectional experience of discrimination and stigma experienced by BIPOC, LGBTQ, and BIPOC LGBTQ people. Levels of positive identity development, which were not directly assessed here, may themselves be confounds in the relationship between gender identity, sexual-affective identity culture, minority stress, and suicidal behavior. This speaks to the continued need to advocate for access to culturally responsive mental healthcare, and to raise awareness of depression, mental health and suicide prevention across populations that is cognizant of intersections between culture, gender, and sexual-affective identities. Prevention efforts that incorporate awareness of cultural dynamics and the intersectional needs arising from

multiple minority statuses are recommended (Cyrus 2017). Practitioners should specifically address the shared and the distinct self-acceptance and social support needs of BIPOC LGBTQ clients (Mosley et al., 2021). Tailoring interventions to address future-oriented planning, and negative self-talk related to multiple aspects of personal diversity may help mitigate the influence of intersectional minority stress on mental health and suicidal behavior for individuals from multiply marginalized communities.

Implications for practice and training

Our findings support calls in the literature to integrate careful assessment of minority stress variables associated with multiple identities into counseling and therapy practice (Mereish et al., 2019). Providers should assess how clients' friends and families perceive clients' problems, specific stressors and supports for clients, and how clients perceive and experience their own identities and the contexts where identity is expressed (Sutter & Perrin, 2016). The salience of multiple sources of social identity, such as culture, gender, and sexual identities, as well as sources of conflict or resonance occurring at the intersections of identity, should also be targets for assessment (Brooks, 1981; Meyer, 2003). Content on minority stress, how it impacts mental health, and ways to assess how it informs the presenting issues of clients and students should be infused throughout training curriculum for educational and healthcare professionals. This includes awareness of intersectionality and the dynamics of multiple minority stress (Cyrus, 2017). Coursework on assessment, diagnosis, helping relationships, and sociocultural diversity and inclusion are all appropriate for helping trainees understand how minority stress informs case conceptualization and related interventions. Trainees should also receive didactic and experiential instruction on how to advocate for clients from diverse backgrounds, and to challenge systemic and institutional sources of minority stress.

By synthesizing these findings with the literature base on hope, practitioners may integrate screening for hope along with depression and minority stress when assessing suicide risk. Implementing interventions which promote future-oriented thinking and augment motivation to engage in future planning, may reduce suicide risk and positively impact clients' or students' overall wellness (Anestis et al., 2014). Similarly, the relationship between social support systems and clients' or students' degree of self-acceptance should be assessed, as research demonstrates that these factors foster positive mental health outcomes for BIPOC LGBTQ individuals (Mosley et al., 2021). Other research-supported interventions to promote hope include the creation of images, checklists, personal reminders or cues, and narrative techniques that foster a sense of agency (Bruns & Letcher, 2018).

The common thread across different hope-based interventions is a focus on the development of goals that clients are excited about, especially relational or group-oriented goals which foster and encourage community (Bruns & Letcher, 2018). Hope as a common therapeutic factor, and the role of goal setting in promoting hope and how multiple minority stress informs the experience and expression of hope are all important topics to address in training and supervision.

Limitations

Our findings should be interpreted with several caveats. Variable relationships were not assessed for causality and causal associations should not be inferred. Participants were recruited without randomization, making it difficult to generalize findings to other populations. Motivations to participate such as interest in minority stress or LGBTQ issues may be a confounding factor. Though the percentage of BIPOC, LGBTQ, and multiple minority-identified participants was larger than for the general population of the United States, the majority of respondents identified as White or Heterosexual. Replicating the findings in larger samples of people identifying as LGBTQ, BIPOC, or both is needed to understand within-group differences in these historically marginalized groups. The ways that internalized stigma and everyday discrimination were operationalized for this study may not adequately measure minority stress arising from multiple minority statuses. Cultural, gender, and sexual identity were assessed through self-report, and acculturation or identity development were not assessed and therefore may also be confounding variables.

Future directions and conclusion

Our results require replication and longitudinal research that demonstrates the stability of the relationship between hope compared to other protective factors in the prediction of suicidal behavior over time. Qualitative research that contextualizes the lived experience of hope as it relates to mental health, suicidal behavior, and development with BIPOC LGBTQ people could help refine our understanding of these constructs. More research is needed to assess the stability and generalizability of the relationship between hope, minority stress, social support, and mental health outcomes. Given the persistent high rate of disparity in mental health issues experienced by LGBTQ, BIPOC, and multiply identified groups, it is important to research how factors such as multiple minority stress, resilience, and hope influence behavior. The construct of hope has potential to help researchers and mental health providers address health disparities in

populations of people who identify as LGBTQ, BIPOC, or as members of multiple marginalized communities.

ORCID

Jeff Moe  <http://orcid.org/0000-0002-5586-3415>

Alexandra Gantt-Howrey  <http://orcid.org/0000-0002-0889-2109>

Madeline Clark  <http://orcid.org/0000-0001-5130-5160>

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