Family belongingness attenuates entrapment and buffers its association with suicidal ideation in a sample of Dutch sexual minority emerging adults

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Acknowledgements

We thank the participants of this study for sharing their lived experiences, time, and efforts. We also thank Joz Motmans Ph.D., University of Ghent for sharing these data to make this publication possible. We also thank Derek de Beurs Ph.D. and Kat Clarijs M.Sc for their contributions to this project. This research was supported funding from the NSF Graduate Research Fellowship Program (Grant No. 1650042), the NSF Worldwide fellowship, the Netherlands Organization for Scientific Research, and the Department of Pedagogy and Educational Sciences at the University of Groningen, awarded to the first author, Luis A. Parra, Ph.D. Any opinions, findings, conclusions, and recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the NSF, or other funding agencies.

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Abstract

Sexual minority emerging adults are more likely to engage in suicidal ideation than their heterosexual counterparts. Experiences of homophobic violence are associated with suicidal ideation. Yet, the specific mechanisms linking homophobic violence to suicidal ideation remain unclear. Entrapment and social belongingness were tested to determine their relevance for understanding the link between homophobic violence and suicidal ideation. A sample of sexual minority Dutch emerging adults (N = 675; ages 18-29, M = 21.93 years, SD = 3.20) were recruited through online platforms and flyers. Homophobic violence was expected to be positively associated with suicidal ideation and entrapment. The association between homophobic violence and suicidal ideation was expected to be indirectly linked through entrapment. We explored whether various sources of social belongingness moderated the path between entrapment and suicidal ideation, and whether those sources of social belongingness moderated the indirect effect of homophobic violence on suicidal ideation through entrapment. Results showed that homophobic violence and entrapment were positively associated with suicidal ideation, and that family belongingness was negatively associated with suicidal ideation. Homophobic violence and suicidal ideation were not indirectly linked through entrapment. The interaction effect between entrapment and family belongingness was significant, suggesting that, on average, the effect of entrapment on suicidal ideation decreased when family belongingness was high. These results suggest that family belongingness may reduce the association between entrapment and suicidal ideation while adjusting for homophonic violence. Reducing entrapment and improving family belongingness may be useful targets for programs aimed at preventing suicidal ideation among sexual minority emerging adults.

Keywords: homophobic violence, entrapment, social belongingness, suicidal ideation

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Sexual minority youth and emerging adults (i.e., people who self-identify as lesbian, gay, bisexual, pansexual, queer, people who engage in non-heterosexual sexual behaviors, or who have non-heterosexual sexual attractions) in the European countries and in the United States are five times more likely to develop suicidal thoughts (Almeida et al., 2009; Baiocco et al., 2015) and three to five more times likely to attempt suicide (Kuyper, 2015; Russell & Fish, 2016) than their heterosexual counterparts. The minority stress framework (e.g., Meyer, 1995, 2003) suggests that sexual minority people experience homophobic violence (i.e., a form of minority stress) because of their stigmatized social status as non-heterosexual people. Although the Netherlands is considered a country with progressive attitudes and laws that protect the human rights of its sexual minority Dutch citizens, as demonstrated by being the first country in the world to legally support same-sex marriages in 2001 (Freedom to Marry, 2019), Dutch sexual minority people remain vulnerable to the adverse psychological effects of homophobic violence. In a Dutch national study, 40% of sexual minority youth and emerging adults (ages 16-25) reported one or more experiences of homophobic violence within a twelve-month interval (Kuyper, 2015). This is concerning because experiences of homophobic violence are associated with negative psychological processes and poor mental health outcomes, including suicidal ideation (Hatzenbuehler, 2009). Despite the high risk for suicidal ideation, the mechanisms linking sexual minority status and suicidal ideation are not well understood (Hatzenbuehler, 2009, Plöderl et al. 2013; Plöderl et al. 2014).

The integrated motivational-volitional model of suicidal behavior (IMV; O'Connor, 2011; O'Connor & Kirtley, 2018) suggests that suicidal ideation is associated with negative life

experiences (e.g., violence; AUTHOR CITATION) and detrimental psychological processes. These mental health challenges include entrapment (i.e., perceptions of no escape from psychosocial contexts that promote psychological pain) (Williams, 2001), and negative interpersonal processes (e.g., low perceived social belongingness, which encompass social support and social connectedness) (Joiner, 2005; van Orden et al., 2010). However, it is unknown if and how social belongingness as a 'rescue factor' (i.e., the role of social belongingness in attenuating risk for suicide; O'Connor, 2003; Williams, 2001) is interrelated with violence and entrapment, and of these constructs' relevance for understanding suicidal ideation in homophobic social contexts. Thus, the overarching scope of this study was to test the relevance of entrapment and social belongingness for understanding the association between homophobic violence and suicidal ideation in a sample of sexual minority Dutch emerging adults.

Understanding suicidal ideation from a minority stress perspective

The minority stress framework (Meyer, 1995, 2003) posits that sexual minority people experience and anticipate homophobic discrimination and violence and/or internalize negative societal attitudes about their non-heterosexual identities, attractions, or behaviors. Experiences of homophobic violence are associated with suicidal ideation and behavior (Almeida et al., 2009; Kuyper, 2015; Russell & Fish, 2016), and with psychological distress such as anxiety (Reitzel et al., 2017) and depressive symptoms (AUTHOR CITATION). Moreover, sexual minority youth and emerging adults may experience negative reactions from their family and others when disclosing their non-heterosexual orientations (i.e, coming out; D'Augelli et al., 2008; D'Augelli et al.,1998; Potoczniak et al. 2009). These negative reactions to disclosure are positively associated with suicidal ideation (Hill & Pettit, 2012).

The minority stress framework also suggests that social support (a key component of social belongingness) is associated with suicidal ideation and behaviors (Meyer, 1995, 2003; Russell & Fish, 2016). Empirical evidence suggests that lack of social support from family of origin and friends is associated with suicidal ideation in sexual minority youth and emerging adults (Liu & Mustanski, 2012; Ryan et al, 2009). Ryan and colleagues (2009) reported that sexual minority people who were unsupported by their families of origin because of their sexual orientation were 8.4 times more likely to attempt suicide when compared to sexual minority people who were supported by their families. This is of particular concern given that social support networks for some sexual minority people tend to contain fewer family members who provide major forms of support than of heterosexual people (AUTHOR CITATION). The minority stress framework, however, does not specify comprehensive psychological and interpersonal pathways by which experiences of homophobic violence are associated with specific forms of mental health. Our understanding of the etiology of various forms of adverse mental health outcomes, including suicidal ideation, is therefore limited (Hatzenbuehler, 2009, Meyer, 2010, Plöderl et al. 2013).

The integrated motivational-volitional model of suicidal behavior

The IMV model of suicidal behavior posits that negative life events, psychosocial processes such as entrapment, and social belongingness are key factors associated with suicidal ideation (O'Connor, 2011; O'Connor & Kirtley, 2018). Negative life events such as experiences of violence may impact mental health as these experiences are hypothesized to be associated with entrapment and suicidal ideation (AUTHOR CITATION). In suicide research, links between experiences of violence and suicidal ideation are documented in adult survivors of domestic violence (Wolford-Clevenger et al., 2016).

The IMV model places entrapment as a central process between negative life experiences and suicidal ideation. Entrapment is both external and internal. External entrapment can be defined as a state in which people may feel trapped by psychologically painful experiences caused by others (e.g., experiences of violence); and internal entrapment can be defined as a state in which people feel trapped in their mental pain or problems (Gilbert, 1989; Gilbert & Allan, 1998; Williams, 2001). Entrapment also captures people's feelings of no longer being able to cope with their psychological pain and to not see or seek rescue factors such as social belongingness. Suicidal ideation and behavior are hypothesized perceived 'solutions' for escaping entrapment (Williams, 2001). Empirical studies of people in clinical contexts report a positive association between entrapment and suicide behaviors. In the posttraumatic stress disorder literature, Panagioti and colleagues (2012) reported a moderate correlation (r = .42) between entrapment and suicidal behaviors in survivors of traumatic life events after adjusting for comorbid depression.

Key aspects of the IMV model may complement the minority stress framework by positing entrapment as a plausible psychological mechanism linking negative life events, such as experiences of homophobic violence, and suicidal ideation (O'Connor, 2011; O'Connor & Kirtley, 2018; Williams, 2001). To our knowledge, there is only one published study that focused on men who engage in same-sex sexual behavior (Li et al., 2016) which reported a positive association between entrapment and suicidal ideation. Yet, this body of work does not address whether experiences of homophobic violence are associated with suicidal ideation through entrapment, and whether social belongingness (from various sources) can influence the degree to which entrapment is associated with suicidal ideation.

The importance of interpersonal relationships for sexual minority people

Positive and meaningful interpersonal relationships promote healthy psychosocial adjustment; and the lack thereof seems to be detrimental for a person's mental health (Cohen, 2004; Uchino, 2004). IMV suggests that interpersonal sources of social belongingness may strengthen or weaken (i.e., moderate) the association between entrapment and suicidal ideation (O'Connor, 2011; O'Connor & Kirtley, 2018). In the minority stress literature, social belongingness may buffer against negative health outcomes in homophobic social contexts (Kwon, 2013). Having a sense of social belongingness with families of origin, friends, peers at school and at the workplace, sexual minority friends, and sexual minority communities is associated with healthy psychosocial adjustment (Huffman et al., 2008; Sheets & Mohr 2009, Shilo & Savaya 2011; Snapp et al., 2015; Watson et al., 2019).

Empirical evidence for positive associations among social belongingness to parents and family of origin with mental health in sexual minority people is abundant (Lazarevic et al., 2015; Needham & Austin, 2010; Shilo et al., 2015; Tabaac et al., 2015; Teasdale & Bradley-Engen, 2010; Williams et al., 2005). Social support from family of origin for sexual minority youth and emerging adults is associated with less suicidal ideation (Button, 2015 for review; Eisenberg & Resnick, 2006; Ryan et al, 2010). Although disclosure of sexual orientation (i.e., coming out) to parents and family may be a significant hurdle for sexual minority people, for those who are more fortunate to have loving and accepting families, positive parental and family responses may foster feelings of safety and confidence (Pollitt et al., 2017; Rothman et al., 2012). Studies suggest that support from parents may stimulate feelings of social belongingness in sexual minority youth, which may promote healthy psychosocial adjustment (Detrie & Lease, 2007). For some sexual minority adults in supportive social contexts, being out is associated with higher self-esteem and lower depressive symptoms (Legate et al., 2012).

Although family support has been demonstrated to have the greatest influence against mental health challenges and suicide among sexual minority youth and emerging adults (e.g., McConnell et al., 2015; Mustanski & Liu, 2013), support from friends has also been shown to have a positive impact on psychological adjustment for sexual minority emerging adults (Snapp et al., 2015). Having more support from friends associated with low depressive symptoms (Watson et al., 2019) and sexuality-based victimization (Mustanski & Liu, 2013). Research on sexual minority emerging adults has shown that sexual minority friends are more capable than family as providers of support for sexuality-related stressors, which can reduce the association between minority stress and emotional distress (Doty et al., 2010; Ueno, 2005). Moreover, support from classmates (Watson et al., 2019) and colleagues (Huffman et al., 2008; Melton et al., 2014) is associated with healthy psychosocial adjustment among sexual minority youth and adults.

Sexual minority communities function as sources of social support that may interrupt the negative impact of minority stress on health. Several studies have shown that feeling connected to a community of other sexual minority people can play a health-enhancing role (e.g., AUTHOR CITATION; McConnell et al., 2018; Ramirez-Valles et al., 2005). In particular, having a supportive sexual minority community has been linked to lower risk for suicidal ideation through heightened social belongingness among sexual minority emerging adults (Hill et al., 2017).

The current study

Collectively, the few pioneering studies (e.g., Baams et al., 2015; Fulginiti et al., 2020; Hill & Pettit, 2012; Li et al., 2016) that have integrated the minority stress framework with theoretical models of suicide suggest that various forms of minority stress, entrapment, and

social belongingness are critical factors that may be interrelated for understanding suicidal ideation in sexual minority emerging adults. These existing studies, however, do not offer empirical support for social belongingness as an independent mediating factor between minority stress and suicidal ideation and behaviors (e.g., Baams et al., 2015; Cramer et al., 2015; Fulginiti et al., 2020; Hill & Pettit, 2012). We expand on this current body work by considering that the propensity to engage in suicidal ideation when experiencing homophobic violence may be explained through feeling entrapped; and these associations may be enhanced (moderated) when social belongingness scarce (O'Connor & Nock, 2014). We further consider that sexual minority people may have access to their families of origin, friends, classmates/colleagues, sexual minority friends, and sexual minority communities from which they can seek and receive social support and connectedness to establish a sense of social belongingness. Conversely, these interpersonal sources that can foster a sense of social belongingness and healthy psychosocial adjustment may also augment the risk for suicidal ideation when and if these interpersonal sources of social belongingness are not available. Thus, the current study aimed to identify which sources of social belongingness, if any, could buffer against suicidal ideation in the context of homophobic violence and entrapment.

Hypotheses

Figure 1, panel A provides a conceptual diagram of the following hypotheses. Homophobic violence was expected to be positively associated with entrapment and greater risk for suicidal ideation. Entrapment in turn, was expected to be associated with greater risk for suicidal ideation. We also expected that the association between homophobic violence and suicidal ideation to be indirectly linked through entrapment. Across five moderated mediation models (one model for each source of social belongingness), we expected associations between

homophobic violence and entrapment with suicidal ideation to be buffered by more social belongingness or augmented by less social belongingness.

The predicted indirect association of homophobic violence on suicidal ideation through entrapment, and the exploratory tests of moderated mediation were expected to remain robust after adjusting for age, education, sexual orientation, outness about sexual orientation, and psychological distress. These five covariates were included in our models because younger (Fish et al., 2019) and both-sex attracted people (Haas et al., 2010; Plöderl & Tremblay, 2015; Ross et al., 2017) report more suicidal ideation than their older and same-sex attracted counterparts. In the general population, low education attainment is linked with higher risk for suicide (Li et al., 2011; Nock et al., 2008). Sexual minority people who conceal their sexual orientation report more psychological distress (Pachankis, 2007) when compared to sexual minority people who disclose their sexual orientation (Legate et al., 2012). Psychological distress has consistently been associated with homophobic violence (Woodford et al., 2014); and psychological distress is shown to be co-current with suicidal ideation (Baiocco et al., 2015; O'Connor & Nock, 2014 for review).

Method

Participants

A sample of Dutch sexual minority emerging adults (N = 675; ages 18-29, M = 21.9, SD = 3.20; 64.1% cisgender female) were recruited through online advertisements circulated across sexual diversity and social networking online platforms in the Netherlands. Recruitment efforts also relied on advertisements on suicide prevention forums. Participants reported same-sex attractions (75.3%), both-sex attractions (23.5%), and non-exclusively opposite sex attractions (i.e., mostly heterosexual people; 1.2%) (please see Measures for a description of sexual

attractions group composition). The majority of the sample had attained post-secondary higher education (76.6%), had come out to at least one parent (87.7%), and disclosed their same-sex attractions to others (97.5%). Participants with mostly heterosexual attractions (n = 8) were removed from subsequent analyses because of low representation and because research suggests these participants could not be categorized as both-sex attracted people (Savin-Williams et al., 2013; Savin-Williams & Vrangalova, 2013; Krueger et al., 2018; Thompson & Morgan, 2008). Thus, the final sample size used in all subsequent analyses was N = 667.

Procedure

Online data collection in the Netherlands took place between October 2016– February 2017. Ethics approval was obtained at the host university in the Netherlands. Participants gave informed consent online prior to completing the questionnaires. The online study was conducted in the Dutch language and all questionnaire items and response options were translated to English for publication.

Measures

***Homophobic violence*.** Lifetime homophobic violence was measured with a single item created by the research team, "*Have you ever been a victim of homophobic-related violence?"* [1] Response options ranged from 1 = *Never,* 2 = *Only once,* 3 = *About once a month,* 4 = *Multiple times per month,* 5 = *About once a week,* 6 = *Multiple times per week,* 7 = *Daily*. To more clearly

[1]In a subsequent question, participants were asked to "*Please specify type of violence (sexual/ physical/ verbal). Check all options that apply*" from a list of violence-related events (e.g., damage to personal possessions or property; verbal, physical, or sexual harassment, threats). Participants endorsed experiences of homophobic violence across various domains at the following frequencies: damage to personal possessions or property (2.7%) (n=18), verbal (49%) (n=327), physical (5.8%) (n=39), or sexual harassment (2.5%) (n=17), relational aggression (33.6%) (n=224); bullying (28.8%)(n=192), exclusion/rejection (25%) (n=167), ignored (15.4%) (n=103), and threats (12.1%) (n=81). These responses were used for descriptive purposes and were not used as predictors in subsequent analyses.

distinguish among response options 4-7, homophobic violence was dichotomized such that 0 = *Never* and 1= *Yes* (response options 2-7).[2]

Entrapment. The Entrapment Scale (Gilbert & Allan, 1998) is a 16-item measure that assesses the extent to which participants experience cognitions of feeling trapped in their lives and current situations or circumstances. The scale consists of two subscales: external entrapment and internal entrapment. Example items for external entrapment included, "*I am in a situation I feel trapped in*" (α = .92). Example items for internal entrapment included, "*I would like to get away from who I am and start again*" (α = .94). Response options ranged for each item from 0 = *Not at all like me* to 4 = *Extremely like me*. Similar to other studies (e.g., Taylor et al., 2010), the external and internal entrapment subscales were combined. For this study, both subscales were highly correlated r (667) = .79, $p < .001$ and higher averaged scores represented more entrapment. The Cronbach alpha from the English to Dutch translated measure used in this study was α = .95, which replicated the alpha coefficient reported in Taylor et al., (2010) (α = .95) that used the original English version.

Social Belongingness. Perceptions of social support and social connectedness across multiple interpersonal sources were assessed with two items developed by the research team. The first item asked participants *"To what extent do you feel supported by the groups of people detailed in the table below?"* Participants were asked to report their perceived social support from various sources: family of origin, straight friends, sexual minority friends, classmates/colleagues, and sexual minority communities. For each source of social support, participants responded from *1 = Very unsupportive* to *5 = Very supportive*, or *6 = Not applicable*. The second item asked participants *"To what extent do you feel connected with the*

[2]The main analyses yielded a similar pattern of results when using the 7-point Likert scale. Please see Supplementary Table 1.

groups of people detailed in the table below?" from the same social support source options. Responses options ranged from *1 = Very unconnected* to *5 = Very connected,* or *6 = Not applicable*. The two items for each source of social support and connectedness pertaining to each social source were respectively correlated (all *r*'s >.528, *p*'s < .001) and were combined. Response options 1-5 were averaged to create indices of social belongingness. Thus, higher averaged scores represented more perceived belongingness. The Cronbach alpha for each source of social belongingness was as follows: *family of origin* (α = .85), *straight friends* (α = .75), *classmates/colleagues* (α = .79), *sexual minority friends* (α = .69), and *sexual minority community* (α = .78). The handling of *Not applicable* responses is described below.

Suicidal ideation. Lifetime suicidal ideation was assessed with a single item, *"Have you ever thought seriously about ending your life?"* This single item has been previously used to assess lifetime suicide ideation in the adult population of a European country (Gisle & van Oyen, 2013). Response options ranged from 0 = *No, never,* 1 = *Yes, once,* and 2 = *Yes, multiple times*. Response options were dichotomized such that 0 = *No* and responses options 1 and 2 were coded as 1= *Yes*.

Covariates

Sexual attractions. Both-sex and same-sex attractions were assessed with a single item, *"To whom do you feel sexually attracted?"* Response options ranged from *1 = Only women, 2 = Mostly to women, rarely to men, 3 = More to women than to men, 4 = As much to men as to women, 5 = More to men than to women, 6 = Mostly to men, rarely to women,* and *7 = Only to men.* Sexual attractions was coded in two categories: female participants who endorsed 1 and 2 and male participants who endorsed 6 and 7 were grouped as same-sex attracted people (0 = *same-sex attracted*); and both female and male participants who endorsed 3-5 were grouped as

both-sex attracted people (1 = *both-sex attracted*), following a similar convention as done in previous research (e.g., Morandini et al., 2017; Rieger et al., 2016). Seven (*n* = 7) female participants endorsed 6 (*Mostly to men, rarely to women*); and one (*n* = 1) male participant endorsed 2 (*Mostly to women, rarely to men*). These eight (*n* = 8) participants were excluded from subsequent analyses because non-exclusively opposite sex attracted people fall within a heterosexual range (e.g., sexually attracted exclusively to opposite sex or sexually attracted to opposite sex mostly; Morandini et al., 2017) and may constitute their own sexual orientation group that differs from both-sex attracted people (Savin-Williams et al., 2013; Savin-Williams & Vrangalova, 2013; Krueger et al., 2018; Thompson & Morgan, 2008).

Outness. Participants were asked if they had disclosed their sexual orientation to others with a single item, "*Have you told at least one person that you are not straight?"* Responses were coded as 0 = *No* and *1 = Yes.*

Psychological distress. The 12-Item General Health Questionnaire (GHQ-12) (Goldberg & Williams, 1988) assessed participants' psychological distress symptoms. Response options inquired whether participants had "*Been feeling unhappy and depressed?"* or *"Lost much sleep over worry?"* Likert-type response options for each item ranged from 0 = *Not at all* to 3 = *Much more than usual.* Positive framed items were reverse coded. Higher summed scores suggested more psychological distress. The Cronbach alpha for this scale was $\alpha = .92$.

Analytical plan

The conceptual model guiding our analyses is depicted in Figure 1, panel A; and panel B depicts the statistical translation of this model. In detail, after examining bivariate associations among the predictor, outcome, and control variables, we tested whether homophobic violence and suicidal ideation were indirectly associated through entrapment (paths a_1 and b_1). We

calculated indirect effects by multiplying the effect of homophobic violence on entrapment by the effect of entrapment of suicidal ideation (a_1*b_1). The indirect association between homophobic violence on suicidal ideation through entrapment met mediation criteria if the Bias-Corrected accelerated Confidence Intervals (BCa CIs) of the tested indirect effect did not include zero. Then, we tested in five separate models whether each source of social belongingness moderated the link between entrapment and suicidal ideation through adding an interaction term between entrapment and each source of social belongingness. All continuous variables were mean centered prior to creating interaction terms. We evaluated the significance of the interaction effect (b_2) (Entrapment X Social belongingness) by testing the equality of average marginal effects, with the second differences (cross-derivatives) test (Ai & Norton, 2003; Berry et al., 2010; Mize, 2019; Rainey, 2016; Mustillo et al., 2018; Long and Mustillo, 2018) at ±1 standard deviation (*SD*) of the moderator (i.e., social belongingness). Interaction effects were considered statistically significant if the second differences test indicated that the CIs did not include zero.

Finally, we tested whether each source of social belongingness moderated the indirect effect of heterosexual violence on suicidal ideation via entrapment. This test shows whether the strength of the indirect effect is dependent on the moderator (sources of social belongingness). Conditional indirect effects of homophobic violence on suicidal ideation via entrapment as a function of each source of social belongingness (at various levels of the moderator, e.g., ±1*SD*) were calculated if the path between entrapment and suicidal ideation was moderated by social belongingness (b_3). This second stage moderated mediation model quantifies the association of an indirect effect as a function of a moderator with an index of moderated mediation (Hayes, 2015). The index of moderated mediation was calculated by multiplying the path between

homophobic violence and entrapment with the coefficient of the interaction product term of entrapment with social belongingness (a_1*b_3).

Each model was tested using diagonally weighted least squares (DWLS) estimation to yield more precise estimates of the predicted probit link path coefficients when the outcome variable is dichotomous. All models were fitted as path models in the lavaan package (Rosseel, 2012) in R Version 3.6.2 (R Core Team, 2019), adjusting for all associated covariates. We used this approach to accommodate the more complex moderated mediation models and obtained 95% BCa CIs for the model's estimates using bootstrapping (see notes in Table 3; MacKinnon, 2008; MacKinnon et al., 2004; Preacher & Hayes, 2008). We used bootstrapping because Shapiro–Wilk tests of normality indicated that the predictor and outcome variables were not normally distributed, all *p*s < .001; and because bootstrapping is robust against nonnormality of the sampling distribution of the indirect effect (MacKinnon, 2008; Montoya & Hayes, 2017). Lastly, we used the *secondDiff* function of the DAMisc package (Armstrong, 2020) in R to evaluate the significance of the non-linear interaction effect (second differences test) between entrapment and social belongingness on suicidal ideation in their respective models.

Missing data

Overall, we had complete data for all variables included in our main analyses with the exception outness, a control variable, which had one missing case.

Not Applicable responses

Participants had the option to select 'not applicable' (N/A) to items on the social belongingness scale items. In general, a few participants selected N/A for family of origin belongingness (.3%) (*n*=2), straight friend belongingness (.3%) (*n*=2), classmate/colleague belongingness (2.8%) (*n*=19), sexual minority friend belongingness (12%) (*n*=80), and sexual

minority community belongingness (10.8%) (*n*=72). Responses for belongingness with sexual minority friends and sexual minority community had sufficient N/A responses to detect statistically meaningful effects. We conducted χ^2 and *t*-tests to determine whether N/A responses were associated with all variables included in the subsequent models. N/A responses were associated with age, education, outness, homophobic violence, and belongingness with family of origin, classmates/colleagues, and sexual minority friends (please refer to Supplemental Results). It was likely that participants selected N/A because they had no (or no close ties) with family, straight friends, classmates/colleagues, sexual minority friends, or the sexual minority community, thus N/A responses were imputed with the lowest response option of the 5-item Likert scale (1= *Very unsupported/unconnected*). Furthermore, dummy variables were created to identify 0 = *N/A* and 1 = *Applicable* item responses. These dummy variables for identifying N/A responses were used as a covariate in all subsequent analyses as a conservative effort to yield more precise estimates in the moderated mediation models by accounting for all the associations related to N/A responses presented in the Supplemental Results.

Results

Descriptive analyses

Table 1 displays the means (*M*), standard deviations (*SD*), and zero-order correlations for all main measures in this study. A majority of participants endorsed experiencing homophobic violence (59.8%) (*n* = 399) and suicidal ideation (56.7%) (*n* = 378). Participants who endorsed experiences of homophobic violence were more likely to endorse suicidal ideation, χ^2 (1, *N*=667) = 17.01, $p < .001$, and to report more entrapment (*M* = 2.08, *SD* =.95) and social belongingness to sexual minority friends (*M* = 4.13, *SD* = 1.22) when compared to participants who did not endorse experiences of homophobic violence (*M*s = 1.90, 3.91; *SD*s = .94, 1.38), *t*'s(665) >|2.19|,

p's < .05. Entrapment was negatively associated with all sources of social support (Pearson *r*'s ranged from -.12 to -.35, all *p*'s < .05). Participants who endorsed suicidal ideation reported less belongingness to family of origin (*M* = 3.66, *SD* = 1.09), straight friends (*M* = 4.17, *SD* = .80), and classmates/colleagues (*M* = 3.28, *SD* = 1.00); and reported more psychological distress (*M* = 16.60, *SD* =7.60) when compared to participants who did not endorse suicidal ideation (*M*s = 4.12, 4.36, 3.65, 12.02; *SD*s =.94, .72, .78, 5.89), *t'*s (665) > |3.15|, *p'*s < .01. Participants' age, education, gender, sexual attractions, outness, and psychological distress were associated with the main predictor and outcome variables (please refer to Table 1 and Supplemental Results) and therefore were included as covariates in the subsequent analyses.

Associations between homophobic violence, entrapment, social belongingness, and suicidal ideation: moderated mediation

We used mediation analysis (Hayes, 2015) to test whether the association between homophobic violence and suicidal ideation was indirectly associated through entrapment, and moderated mediation to test whether the indirect effect of homophobic violence on suicidal ideation through entrapment was dependent on the strength of social belongingness across family of origin, straight friends, classmates/colleagues, sexual minority friends, and sexual minority community. These associations were tested while adjusting for participants' age, education, sexual attractions, outness, and psychological distress. The unstandardized probit and linear regression coefficients for total, direct, indirect effects, and the index of moderated mediation are reported in Table 3 for the five models pertaining to each source of social belongingness.

Model 1: Family belongingness. Overall, the model showed a good fit to the data (χ^2 = 9.168, *df* = 7 , *p* = .241; χ^2/df = 1.31; *CFI* = .998; *TLI* = .984; *RMSEA* = .022, 90% BCa CIs = [.000, .055], *SRMR* = .014), accounting for 56.2% and 33.7% of the variability in entrapment and

suicidal ideation, respectively. To facilitate interpretation, standardized probit and linear coefficients are provided in path diagram form for Model 1 in Figure 2. As expected, the total effect (*c*) between homophobic violence and suicidal ideation was significant (*b* = .352, *SE* = .090, 95% BCa CI = [.168, .522]), suggesting that endorsing homophonic violence was associated with greater risk for suicidal ideation. Homophobic violence was not associated with entrapment (a_1) (*b* = .036, *SE* = .027, 95% BCa CI = [-.017, .089]). Entrapment was positively associated with suicidal ideation (b_1) (*b* = 1.015, *SE* = .166, 95% BCa CI = [.690, 1.346]). The specific indirect effect (a_1*b_1) of homophobic violence on suicidal ideation through entrapment was non-significant (*b* = .037, *SE* = .028, 95% BCa CI = [-.015, .095]). These findings indicate that homophobic violence and suicidal ideation were not indirectly associated through entrapment.

The main effect of family belongingness on suicidal ideation was negative and significant (b_2) (*b* = -.113, *SE* = .049, 95% BCa CI = [-.211, -.021]). This main effect may suggest that family belongingness is a protective factor, such that increases in family belongingness decrease the risk for suicidal ideation. The coefficient of the interaction product term (Entrapment x Family belongingness) was statistically significant (b_3) (*b* = .211, *SE* = .081, 95% BCa CI = [-.055, .372]), and the second differences test indicated that the non-linear interaction effect was significant, .382 CI [.075, .749]. As illustrated in Figure 3, on average, the risk for suicidal ideation was lower when entrapment was low at high values of family belongingness. These findings further suggest that family belongingness may not only be a protective factor, but that family belongingness can buffer against suicidal ideation when sexual minority emerging adults are entrapped but feel supported by and connected to their families of origin, while adjusting for experiences of homophobic violence and covariates. The direct effect (*c'*) of homophobic

violence on suicidal ideation, while accounting for the indirect effect remained significant (*b* = .315, *SE* = .087, 95% BCa CI = [.136, .475]. Lastly, the index of moderated mediation (a_1*b_3) was non-significant (*b* = .008, *SE* = .007, 95% BCa CI = [-.002, .026]).

Models 2-5: Straight friends, classmates/colleagues**, sexual minority friends, and sexual minority community, respectively.** Similar to Model 1, Models 2-5 (please refer to Table 3 for full results) indicated that homophobic violence and entrapment were independently associated with greater risk for suicidal ideation. Homophobic violence was not associated with entrapment. The association between homophobic violence and suicidal ideation was not indirectly linked through entrapment. Social belongingness with straight friends, classmates/colleagues, sexual minority friends, and sexual minority community was not associated with suicidal ideation. These sources of social belongingness did not moderate the path between entrapment and suicidal ideation (both the coefficients of the interaction product term and the interaction effects tested with the second differences test were non-significant; all CIs included zero). The index of moderated mediation in these models was also non-significant.

Discussion

Theoretically guided by the IMV model of suicidal ideation and behavior (O'Connor, 2011) and the minority stress framework (Meyer, 1995; 2003) the current study showed that experiences of homophobic violence, entrapment, and family belongingness were associated with suicidal ideation in a sample of sexual minority Dutch emerging adults. As expected, homophobic violence was associated with a greater risk for suicidal ideation. These findings corroborate existing work indicating that experiences of homophobic violence are associated with suicidal ideation among groups of sexual minority youth and emerging adults (e.g., Almeida et al., 2009; Kuyper, 2015; Russell & Fish, 2016).

Our results suggested that entrapment was also associated with greater risk for suicidal ideation. These findings corroborate the only existing study, to our knowledge, that reports a positive association between entrapment and suicidal ideation in a group of sexual minority adults (Li et al., 2016). Entrapment has been implicated with suicidal ideation and behaviors in clinical contexts (O'Connor, 2003) and to date, it appears to be a more novel construct to the study of suicidal ideation among sexual minority people. The IMV model suggests that entrapment can mediate the link between negative life events, which could include experiences of homophobic violence, and suicidal ideation (O'Connor, 2011; O'Connor & Kirtley, 2018). Although the preliminary analyses in this study indicated that, on average, sexual minority emerging adults who endorsed experiencing homophobic violence reported more entrapment than those who did not endorse homophobic violence, that association was not robust in the main path analyses. Moreover, the hypothesized indirect effect of homophobic violence on suicidal ideation through entrapment was non-significant.

To date, there are few empirically identified psychological mechanisms linking homophobic discrimination and violence to suicidal ideation for sexual minority people (Hatzenbuehler, 2009; Plöderl et al. 2013; Plöderl et al. 2014) that are guided through integrating explanatory theories of suicide with the minority stress framework (e.g., Baams et al., 2015; Fulginiti et al., 2020; Hill & Pettit, 2012). Both Baams and colleagues (2015) and Hill and Pettit (2012) tested constructs from the interpersonal psychological theory of suicide (IPTS; Joiner, 2005) and reported that experiences of minority stress were associated with suicidal ideation through perceived burdensomeness (e.g., perceptions that one is a drain on others' resources or perceiving that others would be "better off without me") but not through thwarted belongingness (e.g., perceptions of not being supported by, and connected to others) (Joiner 2005; van Orden et

al., 2010). In a more recent study, Fulginiti and colleagues (2020) reported that thwarted belongingness was not an independent interpersonal mechanism linking minority stress and suicidal ideation among sexual minority youth. While IPTS suggests interpersonal processes and capability for suicide are linked to suicidal ideation (Joiner; 2005); and Hatzenbuehler's (2009) psychological mediation framework posits that interpersonal processes such as social belongingness mediate links between sexual minority-related violence and risk for suicide, the available empirical evidence, to our knowledge, has not supported social belongingness (including thwarted belongingness) as an independent mechanism linking minority stress to suicidal ideation.

In accordance with previous studies, suicidal ideation was associated with less belongingness to family of origin, straight friends, and classmates/colleagues in the preliminary analyses. Social belongingness is critical for the well-being of sexual minority people (Kwon, 2013). These findings are corroborated by previous work indicating that being supported by, and feeling connected to family of origin, straight friends, and classmates/colleagues, promote healthy psychosocial adjustment of sexual minority people (Huffman et al., 2008; McConnell et al., 2018; Melton et al., 2014; Oswald, 2002; Ryan et al., 2010; Sheets & Mohr 2009; Snapp et al., 2015; Watson et al., 2019). Moreover, the negative association between family belongingness and suicidal ideation remained robust in its respective path analysis. Those main effects suggested that the risk for suicidal ideation decreased when participants reported high family belongingness. This finding also corroborates existing studies suggesting that positive interpersonal relationships with family of origin are associated with less suicidal ideation (Button, 2015; Eisenberg & Resnick, 2006; Ryan et al., 2010).

We explored whether each source of social belongingness would moderate the path between entrapment and suicidal ideation. Family belongingness was the only source of social belongingness that moderated the path between entrapment and suicidal ideation. The significant interaction effect suggested that the influence of entrapment on risk for suicidal ideation was attenuated when family belongingness was high than when family belongingness was low. These findings provide new insights to our understanding that not only are entrapment and social belongingness associated with one another and independently associated with suicidal ideation (e.g., Li et al., 2016; Panagioti et al., 2012; Taylor et al., 2010), but that both constructs interact. Specifically, the detrimental effect of entrapment on risk for suicidal ideation may be lessened by supportive and inclusive families of origin. Lastly, the index of moderated mediation was non-significant. This is unsurprising given that the tested indirect effect of homophobic violence on suicidal ideation through entrapment was non-significant.

Limitations and future directions

We interpret all statistically significant associations reported in this study with caution because these data are cross-sectional and therefore, causality cannot be inferred. The current study did not include a measure of sexual identity beyond sexual attractions which did not allow us to assess for disparities in suicidal ideation (Haas et al., 2010; Kerr, 2013; Pompili et al, 2014; Salway et al., 2019; Swannell et al., 2016), including associations between outness and psychological distress (e.g., depressive symptoms; Feinstein et al., 2019), which are known to vary among gay, lesbian, and bisexual (LGB) emerging adults. Comprehensive measures of homophobic violence would have allowed for more precise assessments of frequency, valence, and severity of homophobic violence experienced by the participants. Moreover, the construct of entrapment is also closely related to defeat, and both are often included as a single latent factor in

research studies (Johnson et al., 2008; Li et al., 2016; Panagioti et al., 2012). IMV suggests that defeat precedes entrapment, thus, having had assessed for defeat would have allowed to test those associations more comprehensively. Additionally, our existing measure of social belongingness did not capture the complexity of informal support seeking behaviors and reciprocity which are known to contribute to a sense of belonging and lower risk for suicidal ideation (Lytle et al., 2018; Rickwood et al., 2007). Future work could test other models linking entrapment and social belongingness to suicidal ideation (e.g., the schematic appraisals model of suicide; Johnson et al., 2008). Lastly, the current study relied on nonprobability sampling methods commonly used with hard-to-reach populations such as groups of sexual minority people. In efforts to reduce sampling bias, we used a combination of sampling strategies (Bonevski et al., 2014; Ellard-Gray et al., 2015) by targeting both sexual minority relevant websites and online sources focused on suicide prevention and mental health. Despite these limitations, our measures of homophobic violence, entrapment, and family belongingness were robustly associated with suicidal ideation after adjusting for age, education, sexual orientation, outness, and psychological distress.

Aside from not being able to infer causality or direction of effects with cross-sectional study designs, pursuing prospective studies would help to advance research in this area substantially. Longitudinal designs may potentially reveal the temporal order of effects between experiences of homophobic violence, entrapment, and suicidal ideation over time. Prospective studies may also assess whether efforts of sexual minority people to seek positive family relationships, if at all possible, at earlier ages during which feeling supported by and connected with one's family of origin may be most essential for protecting against the entrapment, and or from developing suicidal thoughts. Empirical evidence suggests lasting effects of family

relationships on the mental health of sexual minority youth and emerging adults. Ryan and colleagues (2009) showed that sexual minority people who were rejected by their families of origin during adolescence because of their sexual minority status reported more suicide attempts when they were emerging adults when compared by sexual minority people with more accepting families of origin.

Despite the high risk for suicidal ideation and behaviors among sexual minority people, there is a lack of targeted suicide prevention strategies focusing on sexual minority people with proven effectiveness (Meyer et al., 2015). In order to prevent suicide, targeting specific risk factors such as homophobic violence, entrapment, and unsupportive family relationships that place sexual minority people at elevated risk for suicidal ideation and behaviors is necessary. On a preventive level, combating homophobic violence and entrapment as well as fostering social belongingness, particularly with families of origin, may be helpful for suicide prevention efforts. It is also likely that reducing sexual minority people's suicidal thoughts might improve their perceptions of social belongingness and may help reduce the extent to which they feel entrapped. The aforementioned associations, however, require rigorous empirical examination.

On a clinical level, clinicians should be aware of the increased risk of homophobic violence and suicidal ideation and behaviors in sexual minority people and monitor this in their patients. Furthermore, entrapment should be perceived as an important psychological construct closely associated to suicidal ideation (O'Connor & Kirtley, 2018). Exploring and assessing perceptions of entrapment, namely the way in which and the extent to which individuals feel trapped, is a crucial part of suicide risk detection and assessment, and an important element to be targeted in psychotherapeutic interventions (AUTHOR CITATION). In therapy, entrapment could be tackled by using cognitive-behavioral techniques such as shifting cognitions

surrounding particular experiences or events, reorganizing untenable goals and values individuals may have, and focusing on resilience and coping strategies as protective factors (Taylor et al., 2011). More research is needed, however, on specific psychotherapeutic approaches and on the potential effect existing psychotherapeutic interventions might have on entrapment. Interventions such as dialectical behavior therapy, cognitive-behavioral therapy, and problem-solving therapy have proven to be effective in reducing suicide risk (Winter et al., 2013). Mindfulness-based cognitive therapy (Chesin, et al., 2016) may also a direct effect on perceptions of entrapment. Furthermore, there should be a focus on LGBTQ parent/family-child relationships, coping with entrapment, and teaching healthy informal and formal help-seeking behaviors to minimize mental health challenges, including suicidal ideation and behaviors.

Conclusion

Sexual minority youth and emerging adults continue to be at higher risk of experiencing homophobic violence (Meyer, 2003) and developing suicidal thoughts (Almeida, et al., 2009; Baiocco et al., 2015) relative to their straight counterparts. These disparities are concerning, and theory-guided studies are necessary to understand associations among homophobic violence, entrapment, social belongingness, and suicidal ideation to improve suicide interventions. The findings reported in this study indicated that homophobic violence, entrapment, and family belongingness were associated with suicidal ideation in a group of sexual minority Dutch emerging adults. These findings also suggested that the effect of entrapment on risk for suicidal ideation was reduced when the sexual minority emerging adults in the study reported feeling highly supported by and connected to their families of origin. Thus, we make potentially meaningful contributions to research on suicidal ideation in sexual minority groups of people, and to suicide prevention programs by demonstrating that entrapment and family belongingness

are possible points of intervention for emerging adults who are systematically stigmatized and placed at elevated risk for suicide because of their non-heterosexual status.

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Table 1

Descriptive statistics, zero-order correlations among main predictor, outcome, and control variables

		M	*SD*	*Min*	*Max*	1	2	3	4	5	6	7	8
1.	Age	21.94	3.22	18.00	29.00	–	-.093*	-.039	.103**	-.031	-.029	-.026	-.057
2.	Psychological distress	14.61	7.27	0.00	36.00		–	737**	-.274**	-.240**	-.081*	-.267**	-.114**
3.	Entrapment	2.01	0.95	1.00	5.00			–	-.346**	-.276**	-.115**	-.331**	-.147**
4.	Family belongingness	3.86	1.05	1.00	5.00				–	.347**	.151**	.343**	.171**
5.	Straight friend belongingness	4.25	0.77	1.00	5.00					–	.222**	.427**	.110**
6.	Classmate/colleague belongingness	3.44	0.92	1.00	5.00						–	.128**	.384**
7.	Sexual minority friend belongingness	4.04	1.29	1.00	5.00							–	.172**
8.	Sexual minority community belongingness	3.08	1.27	1.00	5.00								–

*Notes: N = 667; *p < .05; **p < .01 (all tests were two tailed).*

Model 1. Homophobic Violence, Entrapment, Family belongingness, and Suicidal ideation

***a* paths**								
Outcome	Predictor	Label	β	*b*		*SE*	95% Bca LCI	95% Bca UCI
Entrapment								
	Homophobic violence	a_1	0.038	0.036		0.027	-0.017	0.089
	Age	a_2	0.026	0.004		0.004	-0.004	0.012
	Gender	a_3	0.019	0.019		0.028	-0.038	0.072
	Education	a_4	-0.051	-0.057		0.030	-0.118	0.001
	Sexual attractions	a_5	0.013	0.015		0.049	-0.080	0.112
	Outness	a_6	-0.114	-0.392		0.168	**-0.725**	**-0.067**
	Psychological distress	a_7	0.735	0.481		0.019	**0.442**	**0.517**
***b*, *c*, and *c'* Probit link paths**								
Outcome	Predictor	Label	Probit β	Probit *b*	*p*	*SE*	95% Bca LCI	95% Bca UCI
Suicidal ideation								
	Homophobic violence	*c'*	0.155	0.315		0.087	**0.136**	**0.475**
	Entrapment	b_1	0.482	1.015		0.166	**0.690**	**1.346**
	Family belongingness	b_2	-0.118	-0.113		0.049	**-0.211**	**-0.021**
	Entrapment X Family belongingness	b_3	0.121	0.211		0.081	**0.055**	**0.372**
	Age	b_4	-0.059	-0.018		0.014	-0.045	0.010
	Gender	b_5	-0.024	-0.050		0.099	-0.245	0.150
	Education	b_6	-0.098	-0.231		0.111	**-0.442**	**-0.009**
	Sexual attractions	b_7	0.033	0.078		0.113	-0.137	0.304
	Outness	b_8	0.004	0.028		0.510	-0.937	0.825
	Psychological distress	b_9	0.007	0.010		0.104	-0.202	0.212
Intercept/threshold			0.166	0.166	.753	0.528	-0.683	1.172
Indirect effect	$a_1 * b_1$		0.018	0.037		0.028	-0.015	0.095
Total effects	$c + (a_1 * b_1)$	*c*	0.173	0.352		0.090	0.168	0.522
Index of moderated mediation	$a_1 * b_3$		0.005	0.008		0.007	-0.002	0.026

$\chi 2(7) = 9.17$, $p = 0.241$; *CFI* =0.998, *TLI* = 0.984, *NIF* = 0.992, *RMSEA* = 0.022 [90% CI (0.00, 0.055)], *SRMR* = 0.014

Model 2. Homophobic Violence, Entrapment, Straight friend belongingness, and Suicidal ideation

***a* paths**								
Outcome	Predictor	Label	β	*b*		*SE*	95% Bca LCI	95% Bca UCI
Entrapment								
	Homophobic violence	a_1	0.038	0.036		0.027	-0.015	0.091
	Age	a_2	0.026	0.004		0.004	-0.004	0.012
	Gender	a_3	0.019	0.019		0.028	-0.035	0.073
	Education	a_4	-0.051	-0.057		0.030	-0.118	4.89E-04
	Sexual attractions	a_5	0.013	0.015		0.050	-0.081	0.119
	Outness	a_6	-0.114	-0.392		0.165	**-0.724**	**-0.076**
	Psychological distress	a_7	0.735	0.481		0.019	**0.442**	**0.519**
***b*, *c*, and *c'* Probit link paths**								
Outcome	Predictor	Label	Probit β	Probit *b*	*p*	*SE*	95% Bca LCI	95% Bca UCI
Suicidal ideation								
	Homophobic violence	c'	0.156	0.317		0.088	**0.140**	**0.484**
	Entrapment	b_1	0.490	1.031		0.158	**0.711**	**1.333**
	Straight friend belongingness	b_2	-0.017	-0.022		0.069	-0.165	0.104
	Entrapment X Straight friend belongingness	b_3	0.062	0.131		0.094	-0.063	0.315
	Age	b_4	-0.068	-0.021		0.014	-0.048	0.007
	Gender	b_5	-0.027	-0.056		0.100	-0.258	0.132
	Education	b_6	-0.106	-0.250		0.109	**-0.460**	**-0.035**
	Sexual attractions	b_7	0.031	0.074		0.116	-0.152	0.294
	Outness	b_8	0.005	0.037		0.524	-0.994	0.778
	Psychological distress	b_9	0.018	0.025		0.105	-0.189	0.225
Intercept/threshold			0.151	0.151	0.781	0.543	-0.635	1.228
Indirect effect	$a_1 * b_1$		0.018	0.038		0.028	-0.015	0.095
Total effects	$c + (a_1 * b_1)$	c	0.174	0.355		0.092	**0.169**	**0.523**
Index of moderated mediation	$a_1 * b_3$		0.002	0.005		0.005	-0.002	0.022

$\chi 2(7) = 9.17$, $p = 0.241$; *CFI* =0.998, *TLI* = 0.985, *NIF* = 0.992, *RMSEA* = 0.022 [90% CI (0.00, 0.055)], *SRMR* = 0.014

Model 3. Homophobic Violence, Entrapment, Classmate/colleague belongingness, and Suicidal ideation

***a* paths**

Outcome	Predictor	Label	β	*b*		*SE*	95% Bca LCI	95% Bca UCI
Entrapment								
	Homophobic violence	a_1	0.039	0.037		0.027	-0.016	0.090
	Age	a_2	0.021	0.003		0.004	-0.005	0.011
	Gender	a_3	0.023	0.023		0.028	-0.032	0.078
	Education	a_4	-0.037	-0.042		0.030	-0.102	0.016
	Sexual attractions	a_5	0.008	0.009		0.049	-0.089	0.104
	Outness	a_6	-0.111	-0.382		0.167	**-0.717**	**-0.064**
	Psychological distress	a_7	0.733	0.480		0.019	**0.443**	**0.516**
	Classmate/colleague belongingness N/A dummy	a_8	0.073	0.213		0.096	**0.036**	**0.410**

***b*, *c*, and *c'* Probit link paths**

Outcome	Predictor	Label	Probit β	Probit *b*	*p*	*SE*	95% Bca LCI	95% Bca UCI
Suicidal ideation								
	Homophobic violence	c'	0.157	0.320		0.089	**0.138**	**0.493**
	Entrapment	b_1	0.468	0.986		0.165	**0.666**	**1.309**
	Peer belongingness	b_2	-0.036	-0.039		0.076	-0.193	0.094
	Entrapment X Classmate/colleague belongingness	b_3	0.102	0.214		0.098	-0.001	0.385
	Age	b_4	-0.075	-0.023		0.014	-0.050	0.005
	Gender	b_5	-0.012	-0.026		0.100	-0.224	0.172
	Education	b_6	-0.077	-0.181		0.115	-0.412	0.043
	Sexual attractions	b_7	0.018	0.043		0.114	-0.173	0.271
	Outness	b_8	0.006	0.041		0.531	-0.903	0.836
	Psychological distress	b_9	0.031	0.043		0.107	-0.182	0.243
	Classmate/colleague belongingness N/A dummy	b_{10}	0.169	1.043		0.801	**0.084**	**2.600**
Intercept/threshold			0.079	0.079	0.886	0.551	-0.745	1.150
Indirect effect	$a_1 * b_1$		0.018	0.037		0.027	-0.015	0.093
Total effects	$c + (a_1 * b_1)$	c	0.175	0.357		0.093	**0.168**	**0.533**
Index of moderated mediation	$a_1 * b_3$		0.004	0.008		0.008	-0.003	0.027

$\chi 2(7) = 9.17$, $p = 0.241$; *CFI* =0.998, *TLI* = 0.985, *NIF* = 0.994, *RMSEA* = 0.022 [90% CI (0.00, 0.055)], *SRMR* = 0.012

Model 4. Homophobic Violence, Entrapment, Sexual minority friend belongingness, and Suicidal ideation

***a* paths**

Outcome	Predictor	Label	β	*b*	*SE*	95% Bca LCI	95% Bca UCI
Entrapment							
	Homophobic violence	a_1	0.039	0.038	0.027	-0.015	0.090
	Age	a_2	0.026	0.004	0.004	-0.004	0.012
	Gender	a_3	0.021	0.020	0.028	-0.033	0.077
	Education	a_4	-0.051	-0.057	0.030	-0.118	0.002
	Sexual attractions	a_5	0.015	0.017	0.050	-0.080	0.116
	Outness	a_6	-0.112	-0.385	0.167	**-0.723**	**-0.069**
	Psychological distress	a_7	0.733	0.480	0.019	**0.442**	**0.516**
	Sexual minority friend belongingness N/A dummy	a_8	0.023	0.034	0.041	-0.043	0.119

***b*, *c*, and *c′* Probit link paths**

Outcome	Predictor	Label	Probit β	Probit *b*	*p*	*SE*	95% Bca LCI	95% Bca UCI
Suicidal ideation								
	Homophobic violence	c'	0.152	0.311		0.089	**0.135**	**0.482**
	Entrapment	b_1	0.490	1.032		0.157	**0.722**	**1.342**
	Sexual minority friend belongingness	b_2	-0.017	-0.013		0.071	-0.154	0.125
	Entrapment X Sexual minority friend belongingness	b_3	0.067	0.095		0.058	-0.017	0.205
	Age	b_4	-0.071	-0.022		0.014	-0.050	0.004
	Gender	b_5	-0.026	-0.055		0.101	-0.248	0.143
	Education	b_6	-0.109	-0.258		0.111	**-0.472**	**-0.038**
	Sexual attractions	b_7	0.024	0.057		0.115	-0.164	0.285
	Outness	b_8	-0.002	-0.012		0.516	-0.999	0.747
	Psychological distress	b_9	0.020	0.027		0.105	-0.183	0.235
	Sexual minority friend belongingness N/A dummy	b_{10}	-0.054	-0.166		0.277	-0.702	0.387
Intercept/threshold			0.226	0.226	0.671	0.531	-0.569	1.250
Indirect effect	$a_1 * b_1$		0.019	0.039		0.028	-0.015	0.095
Total effects	$c + (a_1 * b_1)$	c	0.172	0.350		0.092	**0.168**	**0.530**
Index of moderated mediation	$a_1 * b_3$		0.003	0.004		0.004	-0.001	0.015

$\chi 2(7) = 9.17$, $p = 0.241$; *CFI* =0.998, *TLI* = 0.984, *NIF* = 0.993, *RMSEA* = 0.022 [90% CI (0.00, 0.055)], *SRMR* = 0.012

Model 5. Homophobic Violence, Entrapment, Sexual minority community belongingness, and Suicidal ideation

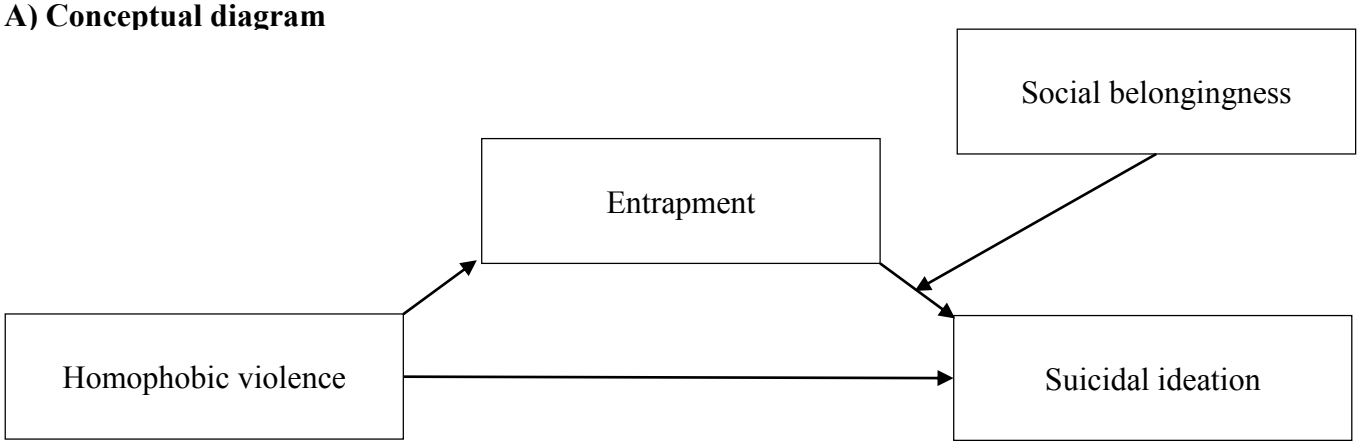
***a* paths**								
Outcome	Predictor	Label	β	*b*		*SE*	95% Bca LCI	95% Bca UCI
Entrapment								
	Homophobic violence	a_1	0.039	0.038		0.027	-0.018	0.089
	Age	a_2	0.027	0.004		0.004	-0.004	0.012
	Gender	a_3	0.02	0.020		0.028	-0.034	0.076
	Education	a_4	-0.049	-0.055		0.031	-0.117	0.003
	Sexual attractions	a_5	0.014	0.016		0.049	-0.075	0.113
	Outness	a_6	-0.114	-0.393		0.166	-0.732	-0.076
	Psychological distress	a_7	0.735	0.481		0.019	0.445	0.519
	Sexual minority community belongingness N/A dummy	a_8	0.016	0.025		0.038	-0.049	0.100
***b*, *c*, and *c'* Probit link paths**								
Outcome	Predictor	Label	Probit β	Probit *b*	*p*	*SE*	95% Bca LCI	95% Bca UCI
Suicidal ideation								
	Homophobic violence	c'	0.156	0.319		0.087	0.143	0.483
	Entrapment	b_1	0.481	1.012		0.160	0.698	1.325
	Sexual minority community belongingness	b_2	0.005	0.004		0.044	-0.081	0.090
	Entrapment X Sexual minority community belongingness	b_3	0.016	0.025		0.068	-0.103	0.160
	Age	b_4	-0.072	-0.022		0.014	-0.051	0.005
	Gender	b_5	-0.028	-0.059		0.102	-0.260	0.139
	Education	b_6	-0.112	-0.265		0.108	-0.473	-0.050
	Sexual attractions	b_7	0.029	0.068		0.115	-0.158	0.294
	Outness	b_8	0.006	0.045		0.536	-0.960	0.816
	Psychological distress	b_9	0.018	0.024		0.102	-0.170	0.226
	Sexual minority community belongingness N/A dummy	b_{10}	-0.019	-0.062		0.183	-0.410	0.313
Intercept/threshold			0.151	0.151	0.782	0.545	-0.649	1.192
Indirect effect	$a_1 * b_1$		0.019	0.039		0.028	-0.016	0.095
Total effects	$c + (a_1 * b_1)$	c	0.175	0.358		0.090	**0.175**	**0.531**
Index of moderated mediation	$a_1 * b_3$		0.001	0.001		0.003	-0.003	0.011
$\chi 2(7) = 9.17$, $p = 0.241$; *CFI* =0.998, *TLI* = 0.977, *NIF* = 0.990, *RMSEA* = 0.022 [90% CI (0.00, 0.055)], *SRMR* = 0.012								

Notes: All models are based on $N = 666$, one participant ($n = 1$) had missing data and removed via listwise deletion. β = standardized coefficients; *b* = unstandardized coefficients; *p* = intercept/threshold of suicidal ideation transformed into a probability score; *SE* applies to the unstandardized coefficients. *95% Bca LCI* and *UCI:* 95% bias corrected-accelerated lower and upper confidence intervals. CIs were calculated with 5,000 bootstrap samples. Significant BCa CIs are presented in bold font.

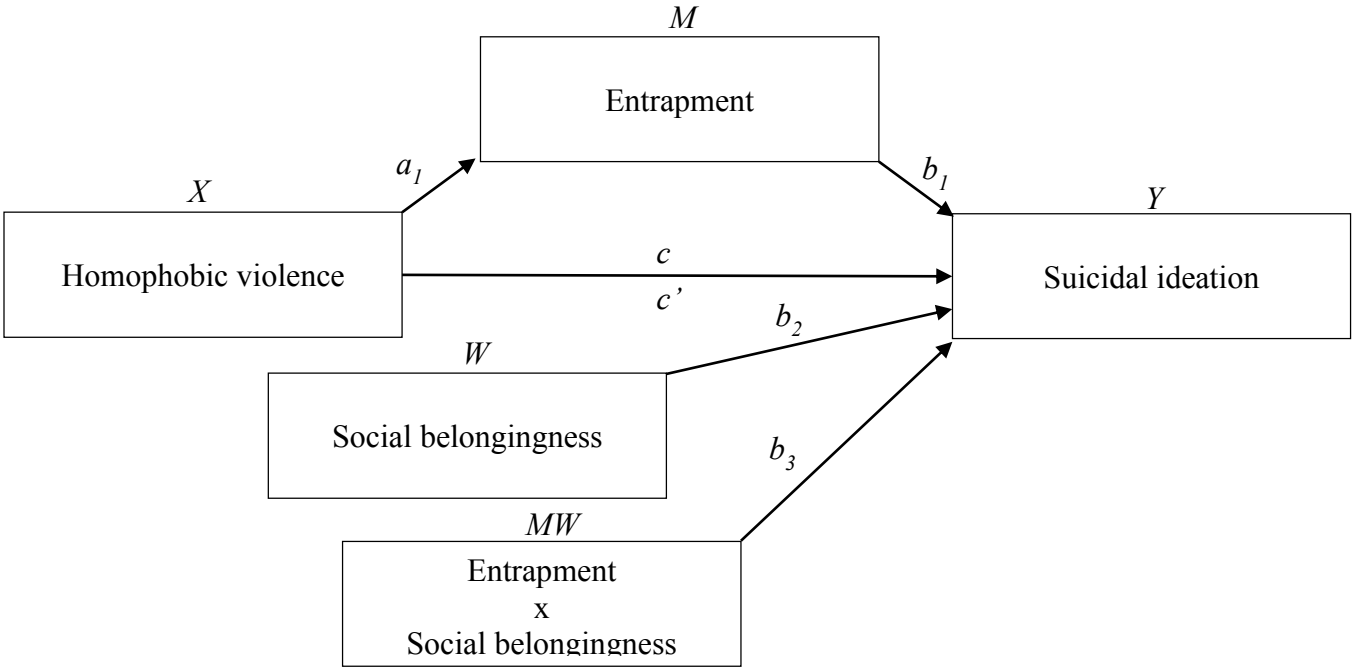
Figure 1

Conceptual and statistical diagrams of moderated mediation with main predictor and outcome variables

A) Conceptual diagram



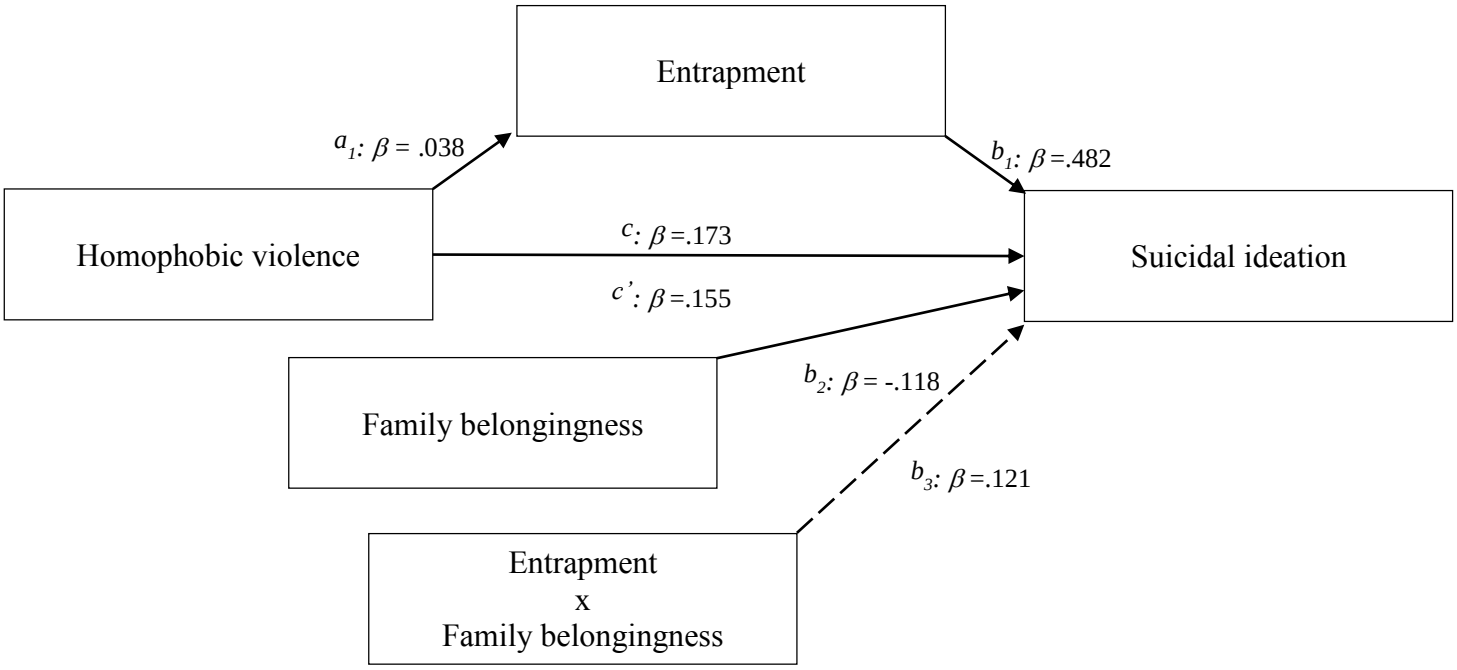
B) Statistical diagram



Notes: Figure 1, panel A represents the conceptual model for the moderated mediation analysis. Figure 1, panel B represents the statistical model testing direct (*c'*), indirect (a_1*b_1), and total (*c*) effects linking the association between homophobic violence and suicidal ideation indirectly through entrapment; and the index of moderated mediation (a_1*b_3) to determine if the indirect effect of homophobic violence and suicidal ideation through entrapment was contingent on social belongingness.

Figure 2

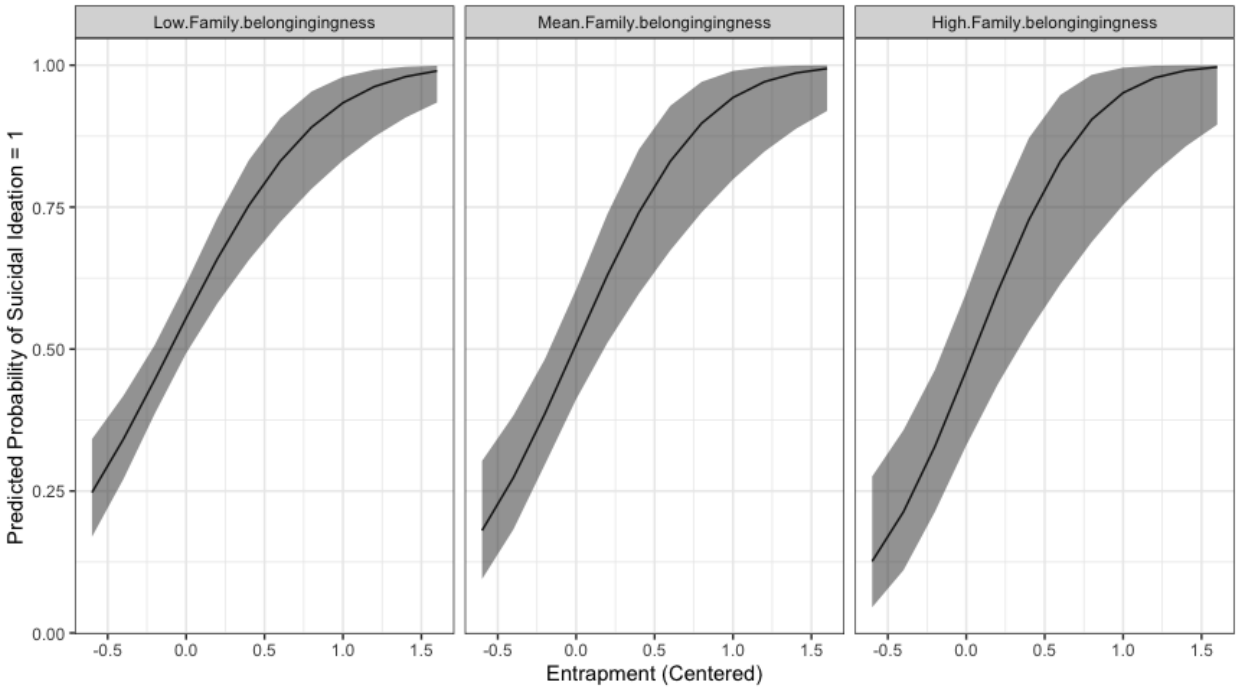
Moderated mediation analysis of the indirect of homophobic violence on suicidal ideation through entrapment as a function of family belongingness



Notes: Solid arrows represent statistically significant pathways. The betas (β) are standardized coefficients. Homophobic violence and suicidal ideation were indirectly associated through entrapment (a_1*b_1). Family belongingness was negatively associated with suicidal ideation (b_2). The interaction between entrapment and family belongingness was not associated with suicidal ideation (b_3). Family belongingness did not moderate the indirect effect of homophobic violence on suicidal ideation through entrapment (index of moderated mediation; a_1*b_3). For simplicity, covariates and covariances are not shown in diagram form and are presented in Table 3.

Figure 3

Non-linear interaction effect between entrapment and family belongingness on suicidal ideation



Notes. The change across the range of entrapment (mean centered) was larger when family belongingness was +1*SD* above its mean than when it was at the mean or -1*SD* below the mean, while adjusting for all covariates in the model.