



Impact of Perceived Responses to Suicide-Related Disclosure on Future Suicide Ideation and Attempts among Adolescents

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Abstract

How people respond when adolescents disclose their suicidal thoughts or behaviors may significantly shape their help-seeking and mental health outcomes. Drawing on the Intimacy Process Model and Interpersonal Theory of Suicide, the present study examined interpersonal needs as mediators of the relationship between adolescents' supportive and unsupportive experiences with suicide-related disclosure and future suicide ideation (SI) and attempts (SAs). Ethn racially diverse adolescents ($n=119$; 78% female), aged 12–19 years ($M=15.2$, $SD=1.9$), were recruited from hospitals and clinics following SI or SA and interviewed about how others responded to their disclosure of SI/SA. Interpersonal needs (perceived burdensomeness, thwarted belongingness) were measured at one-month follow-up, SI severity was measured at baseline and 3-month follow-up, and SA since baseline was assessed at 1-, 3-, and 12-month follow-up. Thirty-nine percent of adolescents ($n=47$) did not disclose their SI/SA, 43% ($n=51$) had a supportive disclosure experience, and 18% ($n=21$) had an unsupportive disclosure experience. Perceived supportiveness vs. unsupportiveness of responses was not associated with interpersonal needs nor with SI. Only thwarted belongingness predicted SI at 3 months, adjusting for baseline SI, among adolescents who disclosed their SI or SA. However, a perceived supportive (vs. unsupportive) response to disclosure significantly predicted lower odds of making a SA by 12 months. Treatments should address thwarted belongingness to reduce SI severity among adolescents presenting for clinical care following SI or SA. Increasing supportive experiences with suicide-related disclosure may reduce adolescents' risk of SAs.

Keywords Suicide ideation · Suicide attempt · Disclosure · Thwarted belongingness · Perceived burdensomeness

Introduction

Approximately 20% of high school students report suicide ideation (SI) each year in the United States. In 2023, about 13% of female and 6% of male high school students reported a suicide attempt (SA) (Verlenden et al., 2024). Despite the high prevalence of SI and SA, many adolescents do not disclose their suicidal thoughts (Hallford et al., 2023). Given their reliance on family for support and access to care (Davies et al., 2024), how adolescents' disclosures are received may influence their willingness to seek help and impact their mental health outcomes. Recent research found that over half of psychiatrically hospitalized adolescents had not disclosed their SI or SA to a parent prior to hospitalization (Bettis et al., 2023). Research examining ethnic/racial disparities in suicide-related disclosure suggests that racially minoritized adolescents are less likely to disclose their SI and are more likely to fear negative reactions

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to disclosing their SI, compared to non-Hispanic White adolescents (Shin et al., 2023). When adolescents do disclose, they most often turn to friends and family rather than professionals (Fox et al., 2022; Shin et al., 2023). While disclosures to parents may elicit both supportive and unsupportive reactions, little research has examined how these interpersonal experiences shape future suicide-related risk. In this study, we sought to fill this gap by assessing whether interpersonal needs, specifically perceived burdensomeness and thwarted belongingness, mediated the relationship between experiences of supportive and unsupportive reactions to suicide-related disclosures and future SI severity; and whether perceived supportive responses to adolescents' suicide-related disclosures impacted the likelihood of SAs over a one-year period in a sample of ethnoracially and socioeconomically diverse adolescents.

The Importance of Adolescence as a Developmental Period for Suicide Prevention

A key feature of adolescence, as a developmental period, is the renegotiation of family roles and increased autonomy, which depends on effective communication between adolescents and caregivers. Disclosure of emotional distress supports these developmental transitions by promoting emotion regulation and healthy family dynamics, while a lack of disclosure may contribute to dysfunctional patterns that increase suicide-related risk (Choe et al., 2023).

Rates of SI disclosure during adolescence vary widely (Fox et al., 2022; Shin et al., 2023), yet disclosure of SA is even less understood and less frequently reported (Brausch et al., 2025). Recent findings suggest that disclosure is influenced by adolescents' expectations of support and safety. For instance, a recent study found that adolescents who disclosed SI reported higher perceived parental support than those who did not (Brausch et al., 2025). Disclosures to peers were linked to reduced fear of suicide, and the identity of the recipient (parent vs. peer) did not significantly affect outcomes, suggesting that the act of disclosure and its aftermath may be more important than who is told (Brausch et al., 2025). Overall, adolescence is a vulnerable yet promising period in which supportive disclosure and responsive caregiving may serve as protective factors against escalating suicide risk.

Suicide-Related Disclosure and Risk

Fear of judgment, unwanted treatment, and hospitalization may deter adolescents – particularly youth of color and sexual and gender minoritized youth – from disclosing SI or SAs (Blanchard & Farber, 2020; Burke et al., 2021). Anticipated stigma, cultural mistrust, and concern about

burdening others further inhibit disclosure (Love & Morgan, 2021; Richards et al., 2019a, b). A study of adolescents, ages 13–17 years, who identified as sexual and/or gender minorities found that higher levels of discrimination were associated with lower honesty during past disclosures and reduced intentions to disclose in the future. These adolescents more frequently endorsed parent-related fears, including fear of disclosure and of worrying their parents, compared to cis-gender heterosexual youth (Burke et al., 2021). One study of an ethnoracially diverse adolescent sample found that many participants had negative experiences when their self-harm was initially discovered (i.e., they'd had no desire or intent to disclose), which fortified their wish to conceal their suicidal thoughts, behaviors, and non-suicidal self-injury (Klineberg et al., 2013). Many of these adolescents received responses of shock after disclosing, which signified – in the adolescents' opinion – that their disclosure recipients lacked emotional understanding or disproportionately focused on physical injuries and potential lethality. Negative or unsupportive reactions to suicide-related disclosures – such as stigma, or underreaction or overreaction from family or healthcare providers – can lead to reduced trust and discourage future disclosures of SI (Love & Morgan, 2021; Frey et al., 2016). Thus, understanding how anticipated reactions by others to suicide-related disclosure impact future suicide-related risk is particularly pressing for suicide prevention among minoritized youth.

Yet, disclosure can be beneficial. A cross-sectional, cross-cultural investigation of adolescents' communication of suicidal intent found that when suicide-related disclosure occurred, social reactions were mainly positive (e.g., feeling understood and accepted), and that adolescents who disclosed their previous SI in the past tended to endorse lower concurrent SI than did those who had chosen not to disclose (Eskin, 2003). Compared to those who continued to self-harm or had never engaged in self-harm, adolescents who had stopped self-harming tended to view disclosure more positively, particularly when it resulted in receiving help (Klineberg et al., 2013). Similarly, a longitudinal study found that adolescents who disclosed non-suicidal self-injury to parents reported improved coping, decreased severity of self-harm, and greater engagement with informal help-seeking (Hasking et al., 2015), suggesting that disclosure can play a protective role in recovery. Positive, helpful, supportive, and validating reactions to suicide related disclosure may have a significant impact on the adolescent discloser's outcomes, including reduced depressive symptoms, SI, thwarted belonging, and perceived burdensomeness, as well as increased family support and increased likelihood of disclosing SI in the future (Bettis et al., 2024). Qualitative studies of predominantly adult, non-Hispanic White, and female samples have identified features of supportive

suicide-related disclosures, including nonjudgmental listening, calm concern, and compassionate client-provider relationships (Love & Morgan, 2021; Richards et al., 2019a, b). In a cross-sectional study of mostly White and female adult SA survivors, disclosure was associated with greater family and peer support, which in turn were linked to lower perceived burdensomeness and thwarted belongingness (Frey & Fulginiti, 2017). Among college students, social support mediated the relationship between disclosing a SA – most often to friends or parents – and depressive symptoms, perceived burdensomeness, and thwarted belongingness (McClay et al., 2020). These findings highlight the protective role of supportive disclosure among adults and offer a foundation for studying similar mechanisms in youth. Given the limited research on children and adolescents, particularly those from minoritized backgrounds, it is critical to examine whether supportive disclosure experiences similarly reduce suicide-related risk in adolescent populations, who may face distinct developmental and contextual challenges.

Intimacy Process and Interpersonal Needs: Factors that may Impact Suicide-Related Disclosure Experiences

Reis and Shaver's (1988) Intimacy Process Model posits that when someone discloses distress, their perception of the listener's responsiveness – through understanding, validation, and care – can influence relational and emotional outcomes. While applied in other clinical contexts (e.g., cancer; Barnett et al., 2014), this model has not, to our knowledge, been applied to adolescent SI/SA disclosure. The parallels across clinical contexts (e.g., cancer and suicide-related risk) are clear: in both, individuals confront stigmatized, emotionally complex experiences while seeking reassurance that they are not alone or too difficult to support. Applying the intimacy process model to adolescent SI and SAs offers a novel lens for understanding how relational dynamics following disclosure may either mitigate or exacerbate suicide-related risk.

Similarly, the Interpersonal Theory of Suicide (Joiner, 2005; Van Orden et al., 2010) further emphasizes that unmet interpersonal needs – specifically perceived burdensomeness (PB) and thwarted belongingness (TB) – contribute to SI. The theory suggests that when PB and TB combine with an acquired capability for suicide (developed through gradual desensitization to the fear and pain associated with self-harm or death), they also contribute to SA. Much of the work to date on the relationship between TB, PB, and SI has been cross-sectional in design; and has relied on predominantly non-Hispanic White, college-aged samples; with very few studies available on adolescents or including

ethnoracially minoritized populations (Chu et al., 2017). One qualitative study of exclusively female-identifying Latina teenagers largely found PB, TB, and acquired capability for suicide present among those who had made a SA, but not always in the combinations suggested by the theory (e.g., some teens experienced PB but not TB) (Gulbas et al., 2019), and another qualitative study of Black and Latine adolescents found additional conceptualizations of the theory's constructs that reflected adolescents' unique sociocultural experiences (Vélez-Grau et al., 2023), highlighting the need for more inclusive research.

Both the Intimacy Process Model and the Interpersonal Theory of Suicide emphasize the role of relational experiences in alleviating or intensifying psychological suffering through connection, validation, or rejection. Together, these theories suggest that supportive reactions to suicide-related disclosure may reduce PB and TB, thereby decreasing SI, while unsupportive reactions may exacerbate these risk factors.

The Present Study

This study sought to understand the impact of perceived reactions to suicide-related disclosure on subsequent suicide-related outcomes, including SI severity and SA risk. We also tested whether these relationships were mediated by PB and TB. We hypothesized that: (1) perceiving a supportive (vs. unsupportive) reaction to suicide-related disclosure (T1) would be associated with lower SI severity at 3-month follow-up (T3); (2) perceived supportive responding (T1) would be associated with lower PB (T2) and TB (T2); (3) PB and TB would predict SI severity at 3-month follow-up; and that (4) PB and TB would thus mediate the relation between perceived response to disclosure and SI severity. Finally, we expected that (5) perceiving a supportive (vs. unsupportive) response to disclosure would be associated with a lower risk of SA at 12 months (T4), after adjusting for baseline (T1) SI severity. We also explored whether disclosure of SI (vs. not disclosing) would predict lower SI severity at a 3-month follow-up, and lower SA risk at a 12-month follow-up, regardless of perceived response to the disclosure.

Methods

Participants

This study is a secondary analysis of data from a larger study of 163 adolescents who presented with recent SI or a SA at emergency or outpatient services in the Northeastern United States. Most adolescents were interviewed

within two weeks of their SI or SA (see Miranda et al., 2023, 2025). Adolescents were included in the present study if they reported a history of SI or SA at baseline and if they provided follow-up data relevant to the planned analyses. Adolescents were included only if the data they provided on disclosure was judged to be sufficiently clear and interpretable by the coding team. For example, participants were excluded if it was unclear whether disclosure had occurred. For the mediation analysis, eight adolescents who described some social supports as supportive and others as unsupportive were excluded due to the need for a binary classification. Additionally, adolescents were required to have completed the twelve-month follow-up data for SA outcomes.

Adolescents ($N=119$; 78% assigned female at birth) in the present sample, ages 12–19 years ($M=15.2$, $SD=1.9$), were recruited from November 2017 to December 2022 and took part in two follow-up assessments over 12 months. Participants were recruited from three settings – a public hospital ($n=108$) or outpatient clinic ($n=5$) in New York City, a private hospital in New York City ($n=3$), or an inpatient hospital in Connecticut ($n=3$) – based on whether they presented with SI ($n=77$) or SA ($n=42$) in the previous two weeks (although 9 participants who were initially thought to have presented with SI or SA in the previous two weeks were actually interviewed 15–35 days from their presenting SI/SA). The sample was ethnographically diverse, with 17 (14%) adolescents identifying as Black (non-Hispanic), 96 (81%) identifying as Hispanic/Latine (24 identifying as Black), and 6 (5%) identifying as other ethnographic groups. Sixty-eight (57%) adolescents identified as a sexual minority (Bisexual, Gay, Lesbian, or Queer). Most adolescents had annual household incomes under \$25,000 ($n=54$; 45%), with the remainder having household incomes between \$25,000 and \$40,000 ($n=24$; 20%), \$40,000–\$70,000 ($n=13$; 11%), and more than \$70,000 ($n=14$; 12%). Information on income was missing from 14 participants.

Procedures

After obtaining appropriate informed consent, parental permission (in English or Spanish) (for adolescents under age 18), and adolescent assent, participants completed an initial assessment in which self-reported demographic information was collected, adolescents were interviewed about their recent SI or SA, and baseline SI severity was assessed (see Miranda et al., 2023, Sample 2, and Miranda et al., 2025, for additional details). This was followed by a second baseline session approximately 2–4 weeks later in which additional demographic information was collected and a measure of interpersonal needs was administered. Follow-up assessments were administered at 3 months and 12 months

post-baseline to assess SI severity and whether adolescents made a SA.

At baseline, participants completed the Adolescent Suicide Ideation Interview (ASII; Miranda et al., 2021) as well as self-report questionnaires as part of a larger study (Miranda et al., 2025). Other measures not relevant to the objectives of this study were also collected. Caregivers were also asked about the adolescent's SA history and any SA since baseline in an interview at the 3- and 12-month follow-up assessments. Adolescents and caregivers received monetary compensation for each assessment completed. Of note, there was a risk assessment protocol at each follow-up assessment in which research personnel screened items on suicide-related measures to assess risk, when needed. Participants who reported a recent SA (past month) or current or recent (past two weeks) SI were further assessed using a High-Risk Questionnaire (HRQ) developed for this study (Miranda et al., 2022).

The study procedures received full board approval from the Institutional Review Boards (IRBs) of the City University of New York, New York City Health+Hospitals/Lincoln, and the Visiting Nurse Service of New York. This study was not pre-registered.

Measures

Suicide-Related Disclosure

The Adolescent Suicide Ideation Interview (ASII; Miranda et al., 2021) was used to obtain information related to adolescents' most recent SI and/or SA. This semi-structured interview focused on the circumstances surrounding the adolescent's SI. As some adolescents were brought into the clinical setting (i.e., emergency department, outpatient or inpatient unit) without having told someone about their SI (e.g., SI was identified based on responses on self-report screeners or writing in a journal found by someone, etc.), the interview did not assume disclosure was required before their emergency department visit. The interview also inquired about whether adolescents disclosed their SI (“Did you tell anybody that you were having those thoughts [during the period of SI]?”; “Whom did you (tell/try to tell/want to tell)?”; and, “What did you say?”). When adolescents endorsed disclosure (e.g., to a caregiver/adult outside of the healthcare setting), they were asked to identify the disclosure recipient and how the person responded (i.e., “What did that person do after you told him/her/them?”).

Perceived responses to suicide-related disclosure were determined by coding respondents' open-ended descriptions from the ASII. Two independent coders reviewed transcriptions prior to dividing each participant's description

into “supportive” and “unsupportive” responses, which were the codes that naturally emerged (i.e., did not follow a pre-developed scheme). Two independent coders systematically extracted information from adolescents’ responses to the prompt, “What did that person do after you told him/her/them?” and reviewed other interview sections where this information may have been provided (i.e., description of circumstances leading to the SI). Notably, if the adolescent disclosed to a group and perceived differing reactions, then the data were coded as mixed (i.e., a combination of perceived supportive, unsupportive, and neutral responses) and were excluded from the analysis. A third coder resolved discrepancies, as needed.

The research team followed coding guidance related to the data extraction process outlined by Creswell and Creswell (2017). The researchers involved multiple team members at each step of the analysis, including transcription, extraction and coding, and consensus, which ensures that the analysis is more objective and thorough. Data were coded by the first author and another trained research assistant. Debriefing meetings were held throughout the analytic process to address any disagreements that may have arisen

Table 1 Sample perceived supportive and unsupportive responses to suicide-related disclosure

Supportive/Positive	Unsupportive/Negative
“They told me ... how I’m worth it, and they told me that I’m the best person and that they would cry for me if I did some stupid shit, yeah.”	“...And then that’s when she started telling me, ‘You’re being selfish’... I actually went, I went to the bridge, I was by the edge and everything, but then I was just like nah. I kept crying and crying. Her mom talked to me and she was, like, ‘You’re being selfish right now...’”
“My friend called me to check up on me. He wanted ... to check up on me and ... spend the day with me ... to make me feel better ... so I went outside to chill with all my friends ... there was a moment when they did come but they finally tried to make it leave, basically try to snap me out of it.”	“He didn’t really give me a reaction. He started like breaking down crying. He didn’t really have a reaction. [He was not sympathetic and didn’t provide comfort]. He just started crying and then he was like, he wanted to kill himself too.”
“After my mom knew ... I felt really good ... thoughts about ending my life has changed after like my mom talked to me. It’s like it get decreased.”	“My mom said nothing... She just didn’t care.”
“She just stood there and hugged me a long time. She told me I didn’t have to go to school if I didn’t want to.”	“I thought like her perspective of me changed and then like the suicidal thoughts got even worse after that point.”

Text in brackets [] indicates that the information was in response to an interviewer question

during coding. The interrater reliability for the two raters was found to be $\kappa=0.94$. See Table 1 for sample “supportive” and “unsupportive” responses to disclosure.

Interpersonal Needs

The Brief Interpersonal Needs Questionnaire (INQ-10) is a 10-item self-report questionnaire that measures perceived burdensomeness (5 items) and thwarted belongingness (5 items) (Bryan, 2011), consistent with the Interpersonal Theory of Suicide (Van Orden et al., 2010). Internal consistency in the present sample was 0.87, overall (0.93 for PB and 0.63 for TB). Total scores ranged from 0 to 30 ($M=8.89$, $SD=8.56$) for PB and from 0 to 30 ($M=14.00$, $SD=6.12$) for TB.

Suicide Ideation Severity

SI severity, as experienced in the previous month, was measured at baseline and 3-month follow-up using the Suicide Ideation Questionnaire-Junior (SIQ – JR; Reynolds, 1987), which contains 15 items measured on a 6-point Likert scale (note: the original scale is a 7-point scale, but due to an error – specifically, the response option “couple of times a month” was omitted – the current study used a 6-point scale, instead; thus, we were unable to calculate how many participants scored above the clinical cutoff for the measure). Internal consistency in the present sample was 0.94 at baseline and 0.92 at the 3-month follow-up, and total scores ranged from 0 to 75 ($M=32.32$, $SD=18.80$) at baseline and from 0 to 60 ($M=18.85$, $SD=14.26$) at follow-up. The 3-month follow-up timepoint was chosen, as it captured more proximal changes in adolescents’ suicidal thoughts following disclosure experiences and interpersonal dynamics.

Suicide Attempt at Follow-up (Adolescent and/or Caregiver Report)

At 3-month and 12-month follow-ups, adolescents and their parents/caregivers were asked if they had any SA(s) since enrolling in the study, as part of an interview developed by the research team. In addition, at the second baseline assessment, adolescents completed the Self-Injurious Thoughts and Behaviors Interview (SITBI; Nock et al., 2007), which inquired about their most recent SA. Adolescents who reported a SA since baseline, either on the SITBI or on the follow-up interview (“In the last [3 or 12] months, have you tried to kill yourself?”), or if their caregiver reported that the adolescent had made a SA at any follow-up point, were classified as having made a SA during the follow-up period. The 12-month period was chosen as it captured more distal and longitudinal outcomes, reflecting the extended trajectory of

risk beyond the immediate crisis that brought adolescents to clinical care, given that we expected that there would be a greater number of SAs by 12-month follow up than at 3-month follow up. The interrater reliability for agreement between parent report and youth report was found to be very poor ($\kappa = -0.11$).

Demographic Information

Participants reported basic demographic information, including age, sex assigned at birth, gender identity, race, ethnicity, and sexual orientation.

Data Analytic Plan

Hypotheses 1–4 were tested using the PROCESS macro for SPSS (Model 4) (Hayes, 2022). To test *Hypothesis 1*, linear regression analyses were conducted to examine supportive vs. unsupportive disclosure responses as a predictor of PB and TB, respectively. For *Hypotheses 2–4*, we conducted parallel mediation analyses. These analyses examined the indirect effects of perceived disclosure responses (supportive responding, coded as 1, compared to unsupportive responding, coded as 0) on T3 SI severity through PB and TB, adjusting for baseline SI and lifetime SA history (see below for further covariate selection). Bias-corrected 95% confidence intervals for regression coefficients were generated using 5,000 bootstrapped samples, given that bootstrapping does not make assumptions about normality of sampling distributions (Preacher & Hayes, 2008). *Hypothesis 5* was tested via logistic regression, adjusting for lifetime SA history and baseline SI. Additionally, to explore whether disclosure of SI (vs. non-disclosure) predicted lower SI severity at T3 and reduced SA risk at T4, a linear regression was conducted examining T3 SI severity as an outcome (adjusting for baseline SI), and a logistic regression analysis was conducted examining SA at T4 as an outcome, adjusting for lifetime SA history and baseline SI.

Analytic Assumptions Skewness and kurtosis of continuous study variables (i.e., TB, PB, SIQ-Jr baseline) fell within acceptable ranges (± 1), suggesting that the distributions were approximately normal. Shapiro-Wilk tests were non-significant for most variables (except for TB), indicating no significant deviation from normality. All other assumptions (i.e., independence of errors, equal error variances, and lack of multicollinearity) were also met.

Missing Data Missing data for baseline SI ($n=4$), PB ($n=13$), TB ($n=11$), and T3 SI severity ($n=23$) were estimated using multivariate imputation in JMP version 17.2.0

(JMP®, 1989–2023).¹ Four participants with missing data on sexual orientation were classified using the modal response (sexual minority). Only adolescents who disclosed their SI/SA ($n=72$) were included in the mediation analysis.²

Results

Descriptive Analyses of Suicide-Related Disclosure

Thirty-nine percent ($n=47$) of adolescents did not disclose their SI, 43% ($n=51$) had a supportive disclosure experience (i.e., the disclosure recipient responded positively and/or supportively to their disclosure), and 18% ($n=21$) had an unsupportive disclosure experience (i.e., the disclosure recipient responded negatively or unsupportively to their disclosure). An example of a perceived unsupportive experience was described as, "... she started telling me, 'you're being selfish,'" and an example of a perceived supportive experience was described as, "... how I'm worth it and they told me that I'm the best person and that they would cry for me if I did some stupid shit" (see Table 1).

Selection of Covariates

There were no significant differences or associations by age, gender, or ethnorracial group on any of the study outcome variables. However, adolescents who identified as a sexual minority had higher SI severity scores at baseline and 3-month follow-up assessments, $t(117)=2.62$, $p<.05$ and $t(116.0)=3.24$, $p<.01$. Therefore, sexual orientation was included as a covariate in the analysis examining SI severity as an outcome. Sexual orientation was not significantly associated with SA status and was thus not included as a covariate in models predicting SA.

¹ Sample size recommendations from Fritz and MacKinnon (2007) suggest that detecting medium-sized indirect effects in a parallel mediation model using bootstrapping typically requires approximately 71–74 participants to achieve 80% power at $\alpha=0.05$. Our sample of 72 was therefore adequately powered to detect medium indirect effects. Power analyses conducted using G*Power (version 3.1.6; Faul et al., 2009) suggested that a sample size of at least 85 was sufficient to detect a medium effect in a multiple regression analysis with 4 predictors, and a sample size of at least 113 would be required to detect a medium effect with 80% power in a logistic regression. Accordingly, our study provided adequate power for analyses predicting SI severity from non-disclosure and for predicting a suicide attempt (with our sample of 119). Given that this study involved secondary data analysis, our power analyses were post hoc.

² Note that mediation analyses were also conducted without imputing SIQ-JR at 3-month follow up, with a sample of 59 participants, and the direction of the findings was the same (available upon reasonable request).

Direct Effects of Perceived Supportive Response on Suicide Ideation Severity, Perceived Burdensomeness, and Thwarted Belongingness

Contrary to Hypothesis 1, perceived supportive responding was not significantly related to 3-month SI ($b=3.08$, $SE=2.91$, 95% CI: $[-2.72, 8.88]$, $p=.29$, $\beta=0.25$), when adjusting for baseline SI severity, SA history, and sexual orientation. There was a positive, yet non-significant, direct effect of perceived response on PB ($b=3.55$, $SE=2.23$, 95% CI: $[-0.91, 8.01]$, $p=.12$, $\beta=0.39$). Similarly, there was a positive, non-significant direct effect of perceived response on TB ($b=1.03$, $SE=1.38$, 95% CI: $[-1.72, 3.79]$, $p=.46$, $\beta=0.19$), contrary to Hypothesis 2. The parallel mediation analysis also tested whether PB and TB would predict SI severity at 3-month follow-up. Perceived burdensomeness was not significantly associated with 3-month SI severity ($b = -0.04$, $SE=0.17$, 95% CI: $[-0.38, 0.31]$, $p=.83$, $\beta = -0.03$). However, there was a statistically significant direct effect of thwarted belongingness on 3-month SI, $b=0.74$, $SE=0.28$, 95% CI: $[0.18, 1.30]$, $p=.01$, with a medium effect size ($\beta=0.32$). Thus, our findings partially supported Hypothesis 3. See [Supplementary Material](#), for details.

Indirect Effects

The indirect effects (Hypothesis 4) were not statistically significant (see [Supplementary Material](#)).

Predicting Suicide Ideation from Non-Disclosure

A linear regression was conducted to test whether not disclosing SI (vs. disclosing) would predict higher SI severity at 3-month follow-up. Non-disclosure did not significantly predict SI severity at 3 months, $b=1.21$, $SE=2.38$, 95% CI: $[-3.51, 5.93]$, $p=.61$, adjusting for sexual orientation, baseline SI, and SA history. The standardized regression coefficient suggested a small effect size ($\beta=0.05$).

Predicting Suicide Attempt from Perceived Supportive Response to Disclosure

Thirty-two adolescents (27%) made a SA by 12-month follow-up. Not disclosing SI or SA (vs. disclosing) did not predict a SA at 12-month follow-up ($O.R. = 1.06$, $p=.89$, 95% CI: $[0.46, 2.47]$). Adjusting for lifetime SA history and baseline SI, perceived supportive response to disclosure was associated with lower odds of making a SA during the follow-up period ($O.R. = 0.32$, $p<.05$, 95% CI: $[0.11, 0.99]$), compared to perceived unsupportive response, with a medium effect size (supporting Hypothesis 5). Moreover, non-disclosure was not associated with significantly

Table 2 Logistic regression predicting suicide attempt at follow-up ($N=119$)

Variable	O.R.	95% CI	<i>p</i>
Disclosure (Unsupportive response as reference group)			
Supportive	0.32	0.11, 0.99	<0.05
Did not Disclose	0.50	0.16, 1.50	0.22
Covariates			
SA History	1.67	0.58, 4.75	0.34
SI Severity (SIQ-Jr), Baseline	1.00	0.98, 1.03	0.87

SI=Suicide Ideation; SA=Suicide Attempt

* $p<.05$

differing odds of a SA, when compared to perceiving an unsupportive response to disclosure ($O.R. = 0.50$, $p=.22$, 95% CI: $[0.16, 1.50]$). See [Table 2](#), for details.

Discussion

The present study examined the relationship between adolescents' descriptions of others' responses to their suicide-related disclosure, the severity of their future SI, and their risk of SA, and examined TB and PB as potential mechanisms in the relationship between perceived disclosure responses and SI. Contrary to our hypotheses, perceived response to suicide-related disclosure was not related to PB and TB, and only TB – not PB – was related to SI severity at 3 months, adjusting for baseline SI. The non-significant association between perceived supportive responding and SI severity suggests that, in this sample, supportive disclosure alone may not be sufficient to reduce SI in the short term, or that effects may vary based on unmeasured contextual or relational factors. In addition, non-disclosure, itself (vs. disclosure), did not predict SI severity over time, nor SA. Thus, perceived supportive vs. unsupportive responses to suicide-related disclosure do not appear to impact PB or TB, nor SI severity, among adolescents with recent SI or SA. However, perceived supportive responses to disclosure were significantly associated with lower odds of a SA at 12-month follow-up. Specifically, the protective effect ($O.R. = 0.32$) indicates a reduction in risk, with a medium effect size, underscoring the potential clinical importance of how disclosures are received – even in the context of wide confidence intervals. These findings highlight the role of supportive responses when someone discloses suicidal thoughts to potentially reduce future SAs. Understanding the importance of supportive responses from an adolescent's support system can help inform interventions in emergency departments focused on fostering environments where supportive reactions are standard practice. This may be done through clinician encouragement and modeling of healthy responses to SI disclosure, which may thereby give support systems

the skills and tools to better respond when adolescents reach out for help. Such interventions could be crucial to improving suicide prevention strategies.

Although the present study did not find that perceived responses to disclosure significantly impacted PB or TB, the observed positive association between TB and future SI, as a medium-sized effect, supports emerging adolescent-focused research emphasizing the salience of TB in this population. For instance, while past studies across various demographics have consistently identified PB – not TB – as a more robust predictor of SI in both cross-sectional and longitudinal studies across various ages, racial and ethnic groups, sexual orientations, recruitment settings (i.e., outpatient clinics, college campuses, sexual and gender minority support groups, acute-care psychiatric hospitals), and occupations (Bryan et al., 2012; Chu et al., 2016; Hill et al., 2019b; Ma et al., 2016; Martin et al., 2021; O’Keefe et al., 2014; Van Orden et al., 2008; Woodward et al., 2014) our findings instead align with more recent adolescent-specific research. One study of Latina adolescent girls found that themes related to TB were present in 87% of the profiles of teenagers with suicidal thoughts and behaviors (Gulbas et al., 2019), suggesting that for Latina youth, experiences of disconnection may be more immediate or relevant drivers of distress than perceived burdensomeness. This study also called for future research to evaluate the applicability of the Interpersonal Theory of Suicide, particularly TB, while accounting for the unique experiences (e.g., loss of social ties due to immigration) of Latine adolescents (and other youth of color) that may impact TB and risk of suicidal behavior.

The importance and impact of TB on SI is suggested in other studies with adolescent samples. One ecological momentary assessment study of 48 adolescents who had been recently discharged from acute psychiatric care for suicide-related risk found that family-related TB, but not friend-related TB, significantly mediated the association between interpersonal negative life events and next-day suicidal thoughts (Glenn et al., 2022). Another study of bereaved adolescents found that grief reactions were indirectly related to SI via TB, but not PB (Hill et al., 2019a). Such research highlights the need to understand the origins of TB, and specifically whether the actions of family, friends, classmates, or other individuals most contribute to increased TB among adolescents with suicidal thoughts and behavior.

The intimacy process model (Reis & Shaver, 1988) emphasizes the importance of self-disclosure and partner responsiveness in building intimacy and influencing feelings and behaviors over time. However, the nuances of partner responsiveness may be lost in the coding of adolescents’ descriptions of the disclosure experience as supportive or

unsupportive. For example, an adolescent’s parent may believe they are supporting their adolescent by jumping into ‘problem-solving’ mode and calling emergency services once the adolescent discloses SI. Nevertheless, the adolescent may feel ignored after seeking validation and be uncomfortable with the involvement of institutionalized authority (e.g., police, hospital personnel). Ultimately, the adolescent’s mental health might be more strongly impacted by how they describe their perception of the disclosure experience rather than by the “objective responsiveness” of the person to whom they disclose. Our findings suggest that among adolescents with recent SI or SAs, perceived supportive responding does not impact thwarted belongingness or perceived burdensomeness. This interpretation is consistent with findings from another study of adolescents suggesting that the benefits of disclosure on emotional well-being depend on perceived responsiveness (Imami et al., 2019), highlighting the subjective nature of support. However, we did not include adolescents’ motivations for disclosure, which may affect suicide-related outcomes. Future studies might build on these models to incorporate adolescents’ expectations of disclosure, particularly when institutional systems are involved.

Nevertheless, it is noteworthy that descriptions of supportive responses – characterized by understanding, validation, and care – predicted lower risk of SA. This finding aligns with what would be expected based on the Intimacy Process Model, as perceiving a supportive response may meet the adolescent’s emotional needs, increase connectedness to the responder, and thus buffer against suicidal behavior over time. This possibility also warrants further study.

Strengths, Limitations, and Future Directions

This study had several notable strengths. To our knowledge, it is the first mixed-methods, longitudinal investigation of suicide-related disclosure among racially and ethnically diverse adolescents with SI or SAs. In addition, while most prior studies have relied on single-item, cross-sectional approaches (e.g., Burke et al., 2021; Fox et al., 2022), the current study used a multi-item assessment, which is a methodological improvement. In addition, the inclusion of both quantitative and qualitative data offers a richer understanding of disclosure experiences and outcomes.

Measurement and Design Limitations

Nonetheless, several methodological limitations warrant consideration. First, the study did not assess how prior suicide-related disclosures influenced current disclosure behavior, as neither perceived nor multi-informant data on earlier disclosure experiences were collected. Although

research on this topic is limited, studies among adult psychiatric samples suggest that previous disclosure to a trusted confidant may increase the likelihood of future disclosure, particularly when the recipient is supportive and responsive (Fulginiti et al., 2016, 2019; Fulginiti & Frey, 2020). These findings highlight the potential importance of cumulative disclosure histories.

Second, the study did not collect information on disclosure of other potentially stigmatized or concealed identities (e.g., mental health diagnoses, physical disabilities, sexual or gender minority status). Such factors could affect both adolescents' general willingness to disclose and the preparedness of disclosure recipients to respond effectively.

Third, the study did not differentiate between spontaneous and prompted disclosures, which may carry distinct relational and psychological implications. Our coding scheme was binary in nature, and a more nuanced approach – such as incorporating qualitative interviews alongside dimensional quantitative ratings – might have yielded a richer understanding of disclosure dynamics.

Furthermore, interpersonal needs – specifically PB and TB – were only assessed at the one-month follow-up, limiting our ability to examine whether baseline disclosure experiences predicted changes in these constructs over time. Future studies incorporating repeated assessments of interpersonal needs are needed to better characterize their role in longitudinal change processes. Additionally, future studies might also examine other interpersonal factors – such as patterns of familial communication (King et al., 2018) – that may impact the suicide-related disclosure experience. Understanding whether the family context is supportive and protective, rather than a risk factor, may impact suicide-related disclosure (Mueller et al., 2015). Positive communication patterns that promote open and supportive dialogue within families are important, because they may help adolescents feel comfortable discussing their struggles with SI, which could lead to more timely intervention. Speaking with their families about their SI could decrease adolescents' feelings of isolation and hopelessness, which may protect against future SI and SAs. Understanding how adolescents perceive the availability of support – and the emotional safety of disclosure – could illuminate modifiable targets for family-based suicide prevention interventions.

Informant Discrepancies

There was poor interrater reliability ($\kappa = -0.11$) between adolescent and caregiver reports of SAs during the follow-up period, which is consistent with prior findings that parent-child agreement on self-injurious thoughts and behaviors tends to be poor (Bell et al., 2022; Gratch et al., 2022). Adolescents may not have informed caregivers

about a SA, particularly if the attempt was private or did not result in medical attention, while caregivers may have underreported due to lack of knowledge, stigma, or differing interpretations of what constitutes a SA. These findings highlight the importance of including multiple informants when assessing suicidal behaviors and underscore the need for future studies to examine strategies for integrating conflicting reports and improving caregiver awareness of adolescent mental health struggles.

Contextual and System-Level Factors

Suicide-related disclosures are likely affected by other such disclosures in the same time period (e.g., to a psychiatrist, a social worker, registered nurses, school counselors, etc.), which may have primed adolescents in another unintentional way (i.e., to be more defensive). The impact of perceived reactions to a suicide-related disclosure could have also been mitigated by the stressful experience of immediately presenting to the emergency room. Caregiver responsiveness may also have been influenced by contextual stressors such as financial strain or difficulty navigating hospital systems, which were not systematically assessed in this study. Future multi-informant designs should incorporate contextual factors that may affect both adolescent disclosure and caregiver response.

Sample Composition and Generalizability

The sample included adolescents who presented with either SI or SAs, which may reflect different points along the suicide risk continuum. Although this broader inclusion allowed for examination of a range of suicide-related presentations, it may have obscured important differences in disclosure patterns and outcomes. Future research may benefit from stratifying analyses or recruiting more homogeneous samples to better account for variability in clinical profiles and risk trajectories.

This study may have limited generalizability beyond adolescents residing in the New York City metropolitan area who were actively seeking care. Prior engagement with services may buffer against the effects of unsupportive disclosure responses. Notably, only 21 participants reported an unsupportive disclosure experience, limiting statistical power and raising the possibility that some conceptually meaningful associations may have appeared nonsignificant due to the small subsample size. Future studies may seek to oversample this group to better understand the potential harm of unsupportive responses. Furthermore, 39% of the present sample did not disclose their SI at all. Understanding barriers to disclosure among these adolescents is critical for designing inclusive suicide prevention strategies.

Alternative Model

Another potential direction of future research would be to examine the disclosure process model as an alternative model of suicide-related disclosure (Chaudoir & Fisher, 2010). In the disclosure process model, there are three potential mediating processes that are proposed to affect long-term outcomes: (1) people feeling like their genuine selves, (2) social support, and (3) the degree to which disclosure potentially alters the way the confidant, and others, perceive the discloser (Chaudoir & Fisher, 2010; Love & Morgan, 2021). The disclosure process model was used to examine suicide-related disclosure to mental health providers in a study of adults (Fulginiti & Frey, 2019), but no work, of which we know, has examined this model among adolescents with SI.

Conclusion

Overall, this study found that adolescents' descriptions of perceived supportive (or unsupportive) responding after a suicide-related disclosure, may not affect the severity of their SI symptoms in the months following their presentation to an emergency department or clinic. Additionally, disclosure occurrence may not have a near-term impact on their SI symptoms. However, our findings suggested that TB predicted future severity of SI and that having a positive (vs. negative) experience with disclosure protected against a future SA up to a year later. Treatment providers may wish to consider signs of TB as possible indicators of suicide-related risk among adolescents with previous SI or SA. Future studies should examine other disclosure-related factors that may impact future SI trajectory, including additional components of the disclosing experience beyond the perceived response. As disclosure is essential to receiving care, creating interventions to help adolescents not only communicate their SI to others but also to ensure that they receive supportive responses may contribute substantially to suicide prevention.

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Author Contributions SRS conceptualized the research, conducted data analysis, and wrote the manuscript. CR coordinated data collection, assisted with data analysis, and edited the manuscript. AOP coordinated data collection and edited the manuscript. CLC and JSF assisted with conceptualization and edited the manuscript. MW edited the manuscript. RM designed and conceptualized the research, oversaw data collection and analysis, and edited the manuscript. All authors read and approved the manuscript.

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Data Availability Raw quantitative data from which this dataset was derived are available from the NIMH Data Archive. Qualitative data are available, upon request, from the corresponding author, and with a data use agreement, when relevant.

Declarations

Ethical Approval Study procedures were approved by the Institutional Review Boards of the City University of New York, New York City Health + Hospitals/Lincoln, and the Visiting Nurse Service of New York. All participants provided informed consent/assent prior to study participation.

Conflict of interest The authors have no relevant financial or non-financial interests to declare.

References

- Barnett, M. E., Shuk, E. M., Conway, F. P., & Ford, J. S. (2014). Cancer-related disclosure among adolescent and young adult cancer survivors: A qualitative study. *Journal of Adolescent and Young Adult Oncology*, 3, 123–129. <https://doi.org/10.1089/jayao.2013.0043>
- Bell, K. A., Gratch, I., Ebo, T., & Cha, C. B. (2022). Examining discrepant reports of adolescents' self-injurious thoughts and behaviors: A focus on racial and ethnic minority families. *Archives of Suicide Research*, 26, 1505–1519. <https://doi.org/10.1080/1381118.2021.1925607>
- Bettis, A. H., Cosby, E., Benningfield, M. M., Fox, K., & Burke, T. A. (2023). Characterizing adolescent disclosures of suicidal thoughts and behaviors to parents. *Journal of Adolescent Health*, 73, 591–594. <https://doi.org/10.1016/j.jadohealth.2023.04.033>
- Bettis, A. H., Burke, T. A., Scott, S. R., Bedock, C., Ambriano, C., Parrish, J., Marsh, D., & Fox, K. R. (2024). Disclosures of self-injurious thoughts and behaviors to parents in the context of adolescent therapy: A qualitative investigation. *Journal Of Clinical Psychology*, 80, 537–558. <https://doi.org/10.1002/jclp.23633>
- Blanchard, M., & Farber, B. A. (2020). It is never okay to talk about suicide: Patients' reasons for concealing suicidal ideation in psychotherapy. *Psychotherapy Research*, 30, 124–136.
- Brausch, A. M., Kalgren, T., & Howd, C. (2025). Characteristics of disclosure of suicidal and nonsuicidal behaviors in a clinical sample of adolescents. *Research on Child and Adolescent Psychopathology*, 53, 305–315. <https://doi.org/10.1007/s10802-024-01269-8>

- Bryan, C. J. (2011). The clinical utility of a brief measure of perceived burdensomeness and thwarted belongingness for the detection of suicidal military personnel. *Journal of Clinical Psychology, 67*, 981–992. <https://doi.org/10.1002/jclp.20726>
- Bryan, C. J., Clemans, T. A., & Hernandez, A. M. (2012). Perceived burdensomeness, fearlessness of death, and suicidality among deployed military personnel. *Personality and Individual Differences, 52*, 374–379. <https://doi.org/10.1016/j.paid.2011.10.045>
- Burke, T. A., Bettis, A. H., Barnicle, S. C., Wang, S. B., & Fox, K. R. (2021). Disclosure of self-injurious thoughts and behaviors across sexual and gender identities. *Pediatrics, 148*, Article e2021050255. <https://doi.org/10.1542/peds.2021-050255>
- Chaudoir, S. R., & Fisher, J. D. (2010). The disclosure processes model: Understanding disclosure decision-making and post-disclosure outcomes among people living with a concealable stigmatized identity. *Psychological Bulletin, 136*, 236–256. <https://doi.org/10.1037/a0018193>
- Choe, S. Y., Lengua, L. J., McFall, J. P., & Wyman, P. A. (2023). Adolescents' comfort in disclosing to caregivers predicts suicidal thoughts and behaviors directly and indirectly through difficulties in emotion regulation. *Journal of Youth and Adolescence, 52*, 1721–1737. <https://doi.org/10.1007/s10964-023-01785-8>
- Chu, C., Rogers, M. L., & Joiner, T. E. (2016). Cross-sectional and temporal association between non-suicidal self-injury and suicidal ideation in young adults: The explanatory roles of thwarted belongingness and perceived burdensomeness. *Psychiatry Research, 246*, 573–580. <https://doi.org/10.1016/j.psychres.2016.07.061>
- Chu, C., Buchman-Schmitt, J. M., Stanley, I. H., Hom, M. A., Tucker, R. P., Hagan, C. R., Rogers, M. L., Podlogar, M. C., Chiurliza, B., Ringer, F. B., Michaels, M. S., Patros, C. H. G., & Joiner, T. E. (2017). The interpersonal theory of suicide: A systematic review and meta-analysis of a decade of cross-national research. *Psychological Bulletin, 143*, 1313–1345. <https://doi.org/10.1037/bul0000123>
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Davies, P., Veresova, M., Bailey, E., Rice, S., & Robinson, J. (2024). Young people's disclosure of suicidal thoughts and behavior: A scoping review. *Journal of Affective Disorders Reports, Article 100764*. <https://doi.org/10.1016/j.jadr.2024.100764>
- Eskin, M. (2003). A cross-cultural investigation of the communication of suicidal intent in Swedish and Turkish adolescents. *Scandinavian Journal of Psychology, 44*, 1–6. <https://doi.org/10.1111/1467-9450.t01-1-00314>
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using GPower 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41*, 1149–1160. <https://doi.org/10.3758/BRM.41.4.1149>
- Fox, K. R., Bettis, A. H., Burke, T. A., Hart, E. A., & Wang, S. B. (2022). Exploring adolescent experiences with disclosing self-injurious thoughts and behaviors across settings. *Research on Child and Adolescent Psychopathology, 50*, 669–681. <https://doi.org/10.1007/s10802-021-00878-x>
- Frey, L. M., & Fulginiti, A. (2017). Talking about suicide may not be enough: Family reaction as a mediator between disclosure and interpersonal needs. *Journal of Mental Health, 26*, 366–372. <https://doi.org/10.1080/09638237.2017.1340592>
- Frey, L. M., Hans, J. D., & Cerel, J. (2016). Perceptions of suicide stigma. *Crisis, 37*, 95–103. <https://doi.org/10.1027/0227-5910/a000358>
- Fritz, M. S., & MacKinnon, D. P. (2007). Required sample size to detect the mediated effect. *Psychological Science, 18*, 233–239. <https://doi.org/10.1111/j.1467-9280.2007.01882.x>
- Fulginiti, A., & Frey, L. M. (2019). Exploring suicide-related disclosure motivation and the impact on mechanisms linked to suicide. *Death Studies, 43*, 562–569. <https://doi.org/10.1080/07481187.2018.1504349>
- Fulginiti, A., & Frey, L. M. (2020). Are the right people selected for first disclosures about suicidal thoughts? Exploring what we know about advance care planning in the context of safety planning. *Community Mental Health Journal, 56*, 174–185. <https://doi.org/10.1007/s10597-019-00457-x>
- Fulginiti, A., Pahwa, R., Frey, L. M., Rice, E., & Brekke, J. S. (2016). What factors influence the decision to share suicidal thoughts? A multilevel social network analysis of disclosure among individuals with serious mental illness. *Suicide and Life-Threatening Behavior, 46*, 398–412. <https://doi.org/10.1111/sltb.12224>
- Fulginiti, A., Pahwa, R., & Frey, L. M. (2019). Sharing suicidal thoughts in social networks: A multi-level perspective of disclosure among people with serious mental illness in India. *International Journal of Mental Health, 48*, 197–216. <https://doi.org/10.1080/00207411.2019.1664259>
- Glenn, C. R., Kleiman, E. M., Kandlur, R., Esposito, E. C., & Liu, R. T. (2022). Thwarted belongingness mediates interpersonal stress and suicidal thoughts: An intensive longitudinal study with high-risk adolescents. *Journal of Clinical Child and Adolescent Psychology, 51*, 295–311. <https://doi.org/10.1080/15374416.2021.1969654>
- Gratch, I., Fernandes, S. N., Bell, K. A., Pollak, O. H., Fox, K. R., Tezanos, K., Ebo, T., & Cha, C. B. (2022). Self-injurious thoughts and behaviors interview–revised (SITBI-R): Reliability, validity, and inter-informant agreement in an adolescent sample. *Journal of Clinical Child and Adolescent Psychology, 51*, 484–494. <https://doi.org/10.1080/15374416.2021.1901229>
- Gulbas, L. E., Hausmann-Stabile, C., Szyk, H. S., & Zayas, L. H. (2019). Evaluating the interpersonal–psychological theory of suicide among Latina adolescents using qualitative comparative analysis. *Qualitative Psychology, 6*, 297–311. <https://doi.org/10.1037/qap0000131>
- Hallford, D. J., Rusanov, D., Winestone, B., Kaplan, R., Fuller-Tyszkiewicz, M., & Melvin, G. (2023). Disclosure of suicidal ideation and behaviours: A systematic review and meta-analysis of prevalence. *Clinical Psychology Review, 101*, Article 102272. <https://doi.org/10.1016/j.cpr.2023.102272>
- Hasking, P., Rees, C. S., Martin, G., & Quigley, J. (2015). What happens when you tell someone you self-injure? The effects of disclosing NSSI to adults and peers. *BMC Public Health, 15*, Article 1039. <https://doi.org/10.1186/s12889-015-2383-0>
- Hayes, A. F. (2022). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach (3rd Edition)*. New York: Guilford Publications.
- Hill, R. M., Kaplow, J. B., Oosterhoff, B., & Layne, C. M. (2019a). Understanding grief reactions, thwarted belongingness, and suicide ideation in bereaved adolescents: Toward a unifying theory. *Journal Of Clinical Psychology, 75*, 780–793. <https://doi.org/10.1002/jclp.22731>
- Hill, R. M., Penner, F., Vanwoerden, S., Mellick, W., Kazimi, I., & Sharp, C. (2019b). Interpersonal trust and suicide ideation among adolescent psychiatric inpatients: An indirect effect via perceived burdensomeness. *Suicide and Life-Threatening Behavior, 49*, 240–252. <https://doi.org/10.1111/sltb.12433>
- Imami, L., Stanton, S. C. E., Zilioli, S., Tobin, E. T., Farrell, A. K., Luca, F., & Slatcher, R. B. (2019). Self-disclosure and perceived responsiveness among youth with asthma: Links to affect and anti-inflammatory gene expression. *Personality and Social Psychology Bulletin, 45*, 1155–1169. <https://doi.org/10.1177/01461617218808497>
- JMP®, Version 17.2.0. SAS Institute Inc. Cary, NC, 1989–2023.
- Joiner, T. E. (2005). *Why people die by suicide*. Cambridge, MA: Harvard University Press.

- King, C. A., Arango, A., & Foster, C. E. (2018). Emerging trends in adolescent suicide prevention research. *Current Opinion in Psychology*, 22, 89–94. <https://doi.org/10.1016/j.copsyc.2017.08.037>
- Klineberg, E., Kelly, M. J., Stansfeld, S. A., & Bhui, K. S. (2013). How do adolescents talk about self-harm: A qualitative study of disclosure in an ethnically diverse urban population in England. *BMC Public Health*, 13, Article 572. <https://doi.org/10.1186/1471-2458-13-572>
- Love, H. A., & Morgan, P. C. (2021). You can tell me anything: Disclosure of suicidal thoughts and behaviors in psychotherapy. *Psychotherapy*, 58, 533–543. <https://doi.org/10.1037/pst0000335>
- Ma, J., Batterham, P. J., Calear, A. L., & Han, J. (2016). A systematic review of the predictions of the interpersonal-psychological theory of suicidal behavior. *Clinical Psychology Review*, 46, 34–45. <https://doi.org/10.1016/j.cpr.2016.04.008>
- McClay, M. M., Brausch, A. M., & O'Connor, S. S. (2020). Social support mediates the association between disclosure of suicide attempt and depression, perceived burdensomeness, and thwarted belongingness. *Suicide and Life-Threatening Behavior*, 50, 884–898. <https://doi.org/10.1111/sltb.12622>
- Miranda, R., Shaffer, D., Ortin Peralta, A., De Jaegere, E., Gallagher, M., & Polanco-Roman, L. (2021). Adolescent Suicide Ideation Interview, Version A. <https://osf.io/8j7b5>
- Miranda, R., Ortin-Peralta, A., & Mañanán, J. (2022). High-Risk Questionnaire for Adolescent Suicide Ideation Study. <https://osf.io/qa98>
- Miranda, R., Ortin-Peralta, A., Macrynika, N., Nahum, C., Mañanán, J., Rombola, C., Runes, S., & Waseem, M. (2023). Content and process of adolescent suicide ideation: Implications for risk assessment. *Research on Child and Adolescent Psychopathology*, 51, 1657–1668. <https://doi.org/10.1007/s10802-023-01092-7>
- Miranda, R., Ortin-Peralta, A., Rombola, C., Mañanán, J., Espinal, J., & Waseem, M. (2025). Suicide ideation subtypes as predictors of future and earlier suicide attempt among adolescents. Manuscript accepted for publication. *Journal of Clinical Child and Adolescent Psychology*.
- Mueller, A. S., Abrutyn, S., & Stockton, C. (2015). Can social ties be harmful? Examining the spread of suicide in early adulthood. *Sociological Perspectives*, 58, 204–222. <https://doi.org/10.1177/0731121414556544>
- Nock, M. K., Holmberg, E. B., Photos, V. I., & Michel, B. D. (2007). Self-injurious thoughts and behaviors interview: Development, reliability, and validity in an adolescent sample. *Psychological Assessment*, 19, 309–317. <https://doi.org/10.1037/1040-3590.19.3.309>
- O'Keefe, V. M., Wingate, L. R., Tucker, R. P., Rhoades-Kerswill, S., Slish, M. L., & Davidson, C. L. (2014). Interpersonal suicide risk for American Indians: Investigating thwarted belongingness and perceived burdensomeness. *Cultural Diversity and Ethnic Minority Psychology*, 20, 61–67. <https://doi.org/10.1037/a0033540>
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40, 879–891. <https://doi.org/10.3758/brm.40.3.879>
- Reis, H. T., & Shaver, P. (1988). Intimacy as an interpersonal process. In S. Duck, D. F. Hay, S. E. Hobfoll, W. Ickes, & B. M. Montgomery (Eds.), *Handbook of Personal Relationships: Theory, Research and Interventions* (pp. 367–389). Oxford UK: John Wiley & Sons.
- Reynolds, W. M. (1987). *Suicidal ideation questionnaire (SIQ)*. Psychological Assessment Resources.
- Richards, J. E., Hohl, S. D., Whiteside, U., Ludman, E. J., Grossman, D. C., Simon, G. E., Shortreed, S. M., Lee, A. K., Parrish, R., Shea, M., Caldeiro, R. M., Penfold, R. B., & Williams, E. C. (2019a). If you listen, I will talk: The experience of being asked about suicidality during routine primary care. *Journal of General Internal Medicine*, 34, 2075–2082. <https://doi.org/10.1007/s11606-019-05136-x>
- Richards, J. E., Whiteside, U., Ludman, E. J., Pabiniak, C., Kirilin, B., Hidalgo, R., & Simon, G. (2019b). Understanding why patients may not report suicidal ideation at a health care visit prior to a suicide attempt: A qualitative study. *Psychiatric Services*, 70, 40–45. <https://doi.org/10.1176/appi.ps.201800342>
- Shin, K. E., Spears, A. P., Zhang, R., & Cha, C. (2023). Suicide-related disclosure patterns among culturally minoritized youth: Examining differences across race, ethnicity, gender identity, and sexual orientation. *Suicide and Life-Threatening Behavior*. <https://doi.org/10.1111/sltb.13026>
- Van Orden, K. A., Witte, T. K., James, L. M., Castro, Y., Gordon, K. H., Braithwaite, S. R., Hollar, D. L., & Joiner, T. E. (2008). Suicidal ideation in college students varies across semesters: The mediating role of belongingness. *Suicide And Life-Threatening Behavior*, 38, 427–435. <https://doi.org/10.1521/suli.2008.38.4.427>
- Van Orden, K. A., Witte, T. K., Cukrowicz, K. C., Braithwaite, S. R., Selby, E. A., & Joiner, T. E. (2010). The interpersonal theory of suicide. *Psychological Review*, 117, 575–600. <https://doi.org/10.1037/a0018697>
- Vélez-Grau, C., Magan, I. M., & Gwadz, M. (2023). The burden of not belonging: A qualitative study of the applicability of the interpersonal theory of suicide constructs of belongingness and burdensomeness to ethnocultural minoritized youth. *Behavior Therapy*, 54, 777–793. <https://doi.org/10.1016/j.beth.2023.02.004>
- Verlenden, J. V., Fodeman, A., Wilkins, N., Jones, S. E., Moore, S., Cornett, K., Sims, V., Saelee, R., & Brenner, N. D. (2024). Mental health and suicide risk among high school students and protective factors – Youth Risk Behavior Survey, United States, 2023. *MMWR. Recommendations and reports : Morbidity and Mortality Weekly Report. Supplement*, 73(Suppl-4), 79–86. <https://doi.org/10.15585/mmwr.su7304a9>
- Woodward, E. N., Wingate, L., Gray, T. W., & Pantalone, D. W. (2014). Evaluating thwarted belongingness and perceived burdensomeness as predictors of suicidal ideation in sexual minority adults. *Psychology of Sexual Orientation and Gender Diversity*, 1, 234–243. <https://doi.org/10.1037/sgd0000046>

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