Asking Preadolescents About Suicide Is Not Associated With Increased Suicidal Thoughts

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Objective: Rising rates of suicidal thoughts and behaviors (STBs) in preadolescents make suicide-risk screening in this age group critical to reduce harm. Although screening appears generally safe for youth aged 12 years of age and older, effects in preadolescents remain unknown. This study tested iatrogenic effects of repeated suicide-risk screening in 2 groups of preadolescents (8-12 years of age): a lower-risk group with no prior STBs, and a higher-risk group who had experienced STBs.

Method: The Ask-Suicide Screening Questions (ASQ) screener, modified to query suicidal thoughts over the prior week, was administered to 194 preteens from the Pediatric Suicidality Study (PED-SI) over 12 months. PED-SI is a study of preschool-onset depression following children recruited at ages 3 to 6 years for depression and nondepressed peers. Lower-risk preadolescents (n = 68) completed monthly screens, whereas higher-risk pre-adolescents (n = 124) completed weekly screens, administered remotely via text or e-mail. We examined correlations between screen completion rates and positive screens, changes in positive screens over time, and whether previous screen completion predicted a positive future screen. Bayes factors assessed for meaningfulness of null effects.

Results: A total of 192 preadolescents (mean age = 10.13 years; 63% boys; 37% girls; 79.2% White, 8.9% Black, 9.9% Multiracial, 2.1% Asian; 7.3%, Hispanic) completed at least one screen. Findings from inferential statistics and supported by Bayes factors indicated no evidence that repeated screening increased suicidal thoughts in either group. In the lower-risk group, positive screens were rare (1.6%), with no significant increases over time. In the higher-risk group, 7% of screens were positive, but this frequent screening did not exacerbate suicidal thoughts.

Conclusion: Suicide-risk screening appears to be safe for preadolescents. Clinicians can proceed with screening preadolescents with increased confidence that the benefits outweigh the risks.

Plain language summary: This study examined the effects of repeated suicide-risk screens on rates of suicidal thoughts and behaviors in pre-adolescents. Using the Ask-Suicide Screening Questions screener, the study followed 194 preadolescents from the Pediatric Suicidality Study over 12 months, with lower-risk children screened monthly and higher-risk children screened weekly. Results showed no evidence that repeated screening increased suicidal thoughts among either group of preteens. These findings provide reassurance that suicide-risk screening appears safe for preteens, allowing clinicians to screen with increased confidence that the benefits outweigh the risks.

Key words: suicidal ideation; suicide; children; youth; screen

T he rising rates of suicidal thoughts and behaviors (STBs) in preadolescents have garnered significant attention from clinicians, researchers, and policy makers. Population-based data indicates that by ages 9 to 10 years, 14.5% of children in the United States have experienced STBs, including 13.2% who have experienced suicidal thoughts and 1.3% who have made a suicide attempt.[1] Death by suicide, albeit relatively rare in pre-adolescents (ie, those <12 years of age), has increased 8.2% annually from 2008 to 2022, and has ranked as the fifth leading cause of death in both US boys and girls across this time period.[2] The American Association of Pediatrics (AAP) has declared youth suicide a "national public health threat," recommending universal suicide-risk screening for youth aged 12 years or older during well-child visits, and targeted screening for preadolescents aged 8 to 11 years with specific risk factors such as behavioral complaints (eg, irritability, isolating from friends or family) or a history of STBs.[3] In addition, there have been increased calls for more systematic suicide-risk screening in preadolescents[4] amidst mounting evidence that profiles of preadolescents with STBs are highly variable and not reliably associated with elevated psychopathology symptoms[5] or documented mental health diagnoses.[6,7]

Despite the push for expanded screening, and the evidence that suicide-risk screening effectively identifies at-risk youth,[8,9] there are unique challenges and concerns about potential risks associated with suicide-risk screening in

preadolescents.[10] One primary concern is the possibility of iatrogenic effects—adverse outcomes (eg, introducing the idea of suicide or increasing focus on STBs) that result from the screening process itself. The limited available evidence suggests that suicide-risk screening does not increase STBs in youth aged 12 years or older[11] and may even lead to small reductions in suicidal thoughts[12] and behaviors.[13] However, these studies have primarily focused on high school students[11,14] and adolescents who have received in-patient psychiatric care,[15] leaving a gap in our understanding of the effects of suicide-risk screening on younger children and those without psychiatric chief complaints.

Because preadolescents may be more suggestible than older adolescents,[16] there is concern that they might internalize the idea of suicide simply because it was mentioned in a screening, even if they had not previously considered it.[17] There is also concern that preadolescents may become more anxious or distressed when asked about sensitive topics such as suicide, leading to unintended emotional or psychological consequences.[17] These concerns may be heightened for preadolescents not experiencing mental health problems who presumably rarely think about suicide.

However, it is critical to balance these concerns with the following: (1) the marked benefits of early detection of STBs, ranging from acute suicide prevention to identification of at-risk children for early intervention, when such interventions are potentially most effective[18]; and (2) the lack of clear suicide-risk markers in preadolescents[5] that might otherwise make targeted suicide-risk screening more effective. To achieve this balance, we must study and better understand the risks and benefits of suicide-risk screening in preadolescents. This endeavor is complicated by the fact that asking about STBs is likely to uncover existing STBs, and we lack a reference rate for STBs in this population. Thus, study designs that account for this issue are needed. For example, longitudinal studies could test whether preadolescents who complete more suicide-risk screens across time report more STBs—a finding that would be necessary but not sufficient to indicate iatrogenic effects, as many factors, including normative developmental trajectories, could also affect increased rates of STBs across time. In addition, using both inferential and Bayesian statistical techniques to evaluate the null hypothesis (eg, that preadolescents who complete more suicide-risk screens are *not* more likely to report STBs) can help clarify the true impact of these screenings.

Present Study

The present study systematically tested for iatrogenic effects of assessing suicidal thoughts repeatedly in a sample of preadolescents 8 to 12 years of age. We modified the widely used Ask Suicide-Screening Questions (ASQ),[19] a measure with favorable psychometric properties[20] that has been used to assess youth suicide risk in pediatric practices,[21-23] inpatient care,[23,24] and emergency departments,[23,25] to query suicidal thoughts over the prior week. We administered this measure monthly to preadolescents without any history of STBs (lower-risk) and weekly to preadolescents with a history of STBs (higher-risk) across a 12-month period. Specifically, we tested whether we could detect the following: (1) new onset of suicidal thoughts in the lower-risk sample, and (2) increased suicidal thoughts in the higher-risk sample, as a function of receiving or completing the suicide-risk screener.

METHOD

Study Design

Participants were 192 preadolescents who participated in the year-long e-survey component of the Pediatric Suicidality Study (PED-SI) when they were 8 to 12 years of age. In brief, PED-SI consists of children who were recruited as preschoolers (3-6 years of age) for a study that tested a psychotherapy intervention for preschool-onset major depressive disorder (PO-MDD). Children were recruited from the greater Saint Louis, Missouri, region, which includes both urban and suburban regions. At the preschool baseline assessment, children (1) met criteria for PO-MDD and were randomized into the study, (2) failed to meet criteria for PO-MDD and/or were not randomized, or (3) were recruited as a nondepressed (ie, healthy) comparison group. All children, regardless of randomization or depression status, were invited to participate in the PED-SI follow-up. Key posttreatment findings included lower rates of PO-MDD, depression severity, and comorbid psychopathologies, along with increased functional impairment in children who received the treatment relative to those on the waitlist. Details about the treatment study and outcomes are reported in Luby *et al.*,[26] Barch *et al.*,[27] and Luby *et al.*[28]

As part of the current study, PED-SI, participants first completed a research visit with a clinical psychiatric interview, the Kiddie Schedule for Affective Disorders and Schizophrenia for School Aged Children–Present and Lifetime Version (K-SADS-PL),[29] administered independently to preadolescents and caregivers. Of the preadolescents who had PO-MDD, 67.9% experienced STBs after the preschool period (according to self- or caregiver-report), and 22.6% of the nondepressed peers experienced STBs (further details in Hennefield *et al.*[30]) indicating substantial variability in STB risk within this sample. The research visit was followed by 12 months of e-surveys.

Data for the present analyses were collected between 2019 and 2023. Written informed consent and assent was

obtained from caregivers and preadolescents, respectively. Study procedures were approved by Washington University School of Medicine's Institutional Review Board.

Procedure

Preadolescents received e-surveys either weekly or monthly over the 12-month period based on their history of STBs and nonsuicidal self-injurious behaviors (NSSI). Specifically, those with no self- or caregiver-reported STBs or NSSI at any prior study session from preschool through the preadolescent PED-SI visit (n = 68; lower-risk group) received monthly e-surveys, whereas those with reported STBs or NSSI at any prior study session (n = 124; higher-risk group) received weekly e-surveys. These timeframes (monthly, weekly) were selected to balance the goal of detecting changes in suicidal thoughts over a 12-month period while minimizing participant burden, particularly given the anticipated differences in endorsement rates between the 2 groups.

Before beginning the e-surveys, a researcher guided preadolescents through a 30-minute tutorial. Importantly, caregivers and preadolescents were informed at multiple timepoints, including the tutorial, that team members would not monitor e-survey responses and would be unaware if suicidal thoughts were endorsed. Preadolescents were encouraged to tell a trusted adult immediately if experiencing suicidal thoughts. A message after each e-survey reiterated this point and provided mental health resource contact information. E-survey hyperlinks were texted or e-mailed to child or caregiver based on family preference, with no differences in screen endorsements based on recipient ($t = 0.17$, $p = .866$). E-surveys were administered through the Health Insurance Portability and Accountability Act (HIPAA)–compliant Research Electronic Data Capture (REDCap)[31] platform. Caregivers could help children complete e-surveys, which occurred in <7% of surveys. Preadolescents were given 2 days (weekly) or 6 days (monthly) to complete each survey. Participants received $10 for each completed survey. A more detailed procedural overview of the e-surveys is provided by Thompson *et al.*[32]

Measures

The ASQ,[19] a 4/5-item measure with high sensitivity and negative predictive value in determining suicide risk, was adapted to repeatedly assess preadolescents' experiences of suicidal thoughts over the prior week. Regardless of whether they received the e-survey monthly or weekly, all preadolescents reported on the past week. Each e-survey included 3 standard items: "In the past week... (1) have you wished you were dead?; (2) have you felt that you or your

family would be better off if you were dead?; (3) have you been having thoughts about killing yourself?" In addition, each e-survey included 1 acuity item: (4) Are you having thoughts of killing yourself right now? A response of "yes" to any item was considered a positive screen.

In contrast to this adaptation, the standard ASQ uses multiple timeframes to assess suicidal thoughts. For example, it evaluates passive ideation (items 1 and 2) over the past few weeks and active ideation (item 3) over the past week. The ASQ also includes an item about lifetime suicide attempts; however, this item was omitted from the current study, as lifetime suicide attempts were already assessed via the K-SADS before the start of the e-surveys. Given the relatively low rate of suicide attempts in this age group, we opted to focus on recent suicidal thoughts. Finally, although the standard acuity item (ie, thoughts of killing yourself right now) is typically administered only after there is an affirmative response to 1 of the prior items, in this study it was included for all participants so as to ensure consistency in screening.

Statistical Analysis

For both the lower- and higher-risk groups, we present descriptive information about positive and negative screens across the e-survey period. Only screens in which preadolescents responded to all 4 ASQ items were included in the present analyses, which included 99.7% of screens. To test for potential iatrogenic effects of receiving or completing the suicide-risk screen, we conducted the following analyses. First, we examined the Pearson correlation coefficient between e-survey completion rates and percentage of positive screens. Although a positive association could indicate that more frequent completion is associated with a greater likelihood of a positive screen, it could also reflect normative developmental trajectories. Therefore, any observed association must be interpreted in conjunction with additional information. Second, we used hierarchical generalized linear models (HGLMs) with binomial distribution and logit link function to test whether survey week, defined as number of weeks since the preadolescent follow-up (centered within subject), predicted the likelihood of a positive screen. A positive relationship would suggest that the more times a child was asked about suicidal thoughts across the study, the more likely they were to report suicidal thoughts. However, this could also reflect an expected increase in suicidal thoughts with age. Third, we used HGLMs to test whether completing a survey at 1 timepoint predicted the likelihood of preadolescents having a positive screen at the next timepoint (eg, the following week or month). This analysis more directly

tests for iatrogenic risk, as a significant association would suggest that youth were more likely to report suicidal thoughts at timepoint X if they were asked about suicidal thoughts at timepoint X-1 vs not having been asked at timepoint X-1. All models covaried for sex at birth and within-subject centered age. In addition, we repeated these analyses within the subset of lower-risk preadolescents (n = 45) without PO-MDD and no history of STBs or NSSI, as PO-MDD strongly predicts emergence of STBs after the preschool period.[30]

Bayes factors (BFs) were used to determine the meaningfulness of our null effects.[33] More specifically, BF is a ratio that uses model fit to determine the degree of support for a hypothesis based on the data. BFs ≤0.33 indicate strong support of the null hypothesis (ie, that suicide-risk screening does not increase suicidal thoughts); BFs between 0.33 and 1 are ambiguous; BFs between 1 and 3 constitute "anecdotal" evidence; and BFs ≥3 indicate strong support of the alternative hypothesis.[34] BFs were calculated using brms[35] and bayestest[36] R packages.

For data checks, we examined whether preadolescents with increased suicidal thoughts were less likely to complete surveys, and thus we might be missing critical data to inform iatrogenic risk. For the lower-risk group, a positive suicide-risk screen at 1 timepoint did not significantly predict the likelihood of completing (or not completing) the next e-survey ($B = -1.83$, SE = 1.12, $t = -1.63$, $p = .103$, odds ratio [OR] = 0.16, 95% CI = 0.02-1.45), BF = 0.25, with strong support of the null), suggesting

preadolescents with suicidal thoughts were not systematically failing to complete subsequent e-surveys. Interestingly, for the higher-risk group, a positive screen at 1 timepoint positively predicted the likelihood of completing the next e-survey ($B = 0.93$, SE = .27, $t = 3.48$, $p < .001$, OR = 2.54, 95% CI = 1.50-4.29, BF = 4.79, with strong support of the alternative relative to the null).

RESULTS

Of 210 PED-SI participants, 194 (92.4%) agreed to the e-survey component, with 192 preadolescents (mean age = 10.13 years, SD = 1.02, range = 7.06-12.27) completing at least 1 e-survey. Four participants in the lower-risk group and 2 participants in the higher-risk group completed only 1 screen. Sample characteristics by age and risk group are presented in Table 1. E-surveys were completed on average 2.02 days after receiving them for the lower-risk group (SD = 2.03) and 1.17 days for the higher-risk group (SD = 0.85). Table 2 presents the number of times that each modified ASQ item was endorsed.

Lower-Risk Group
Preadolescents in the lower-risk, "monthly" group (n = 68) completed 695 of 879 (79.1%) suicide-risk screens across 12 months. Of these screens, 98.4% were negative and 1.6% were positive (ie, endorsing any of the modified ASQ items). In total, 59 preadolescents (86.8%) had negative screens on all completed monthly e-surveys, and 9

TABLE 1 Demographic and Clinical Characteristics of Preadolescents in the Lower-Risk and Higher-Risk Groups

	Lower-risk group (n = 68)		Higher-risk group (n = 124)		All preadolescents (N = 192)	
	Mean	**SD**	**Mean**	**SD**	**Mean**	**SD**
Age, y	9.98	1.08	10.21	0.97	10.13	1.02
	%	**N**	**%**	**N**	**%**	**N**
Age, y, at first screen						
7[a]-9	51.5	35	36.3	45	41.7	80
10-12	48.5	33	63.7	79	58.3	112
1+ Screen at age 12+ y	20.6	14	21.8	27	21.4	41
Sex, female	48.5	33	30.7	38	37.0	71
Hispanic ethnicity	10.3	7	5.7	7	7.3	14
Race						
Asian	4.4	3	0.8	1	2.1	4
Black	5.9	4	10.5	13	8.9	17
More than 1 race	5.9	4	12.1	15	9.9	19
White	83.8	57	76.6	95	79.2	152
MDD/MDD-NOS	7.4	5	43.5	54	30.7	59

Note: MDD = major depressive disorder; MDD-NOS = major depressive disorder-not otherwise specified.
[a]One child was 7 years of age.

TABLE 2 Screen Item Endorsement by Risk Group

Modified ASQ item endorsed	Lower-risk group			Higher-risk group		
	Surveys completed	%	n	Surveys completed	%	n
ASQ item #1	695	0.72	5	4,710	4.93	232
ASQ item #2	695	0.14	1	4,710	4.29	202
ASQ item #3	695	0.29	2	4,710	3.72	175
Acuity item #4[a]	695	0.58	4	4,710	1.19	56

Note: ASQ = Ask-Suicide Screening Questions screener.
[a]This item is #5 in the original ASQ.

preadolescents (13.2%) had a positive screen on either 1 (n = 7) or 2 (n = 2) screens.

E-survey completion rates were not significantly associated with the percentage of positive suicide-risk screens ($r = 0.16$, $p = .192$). Survey week also did not predict the likelihood of preadolescents having a positive screen ($B = 0.04$, SE = 0.02, $t = 1.86$, $p = .067$, OR = 1.04, 95% CI = 1.00-1.09, BF = 0.49, with equivocal support of the null). Completing a survey 1 month did not predict the likelihood of having a positive screen the following month ($B = -0.92$, SE = 0.87, $t = -1.06$, $p = .288$, OR = 0.40, 95% CI = 0.07-2.19, BF = 0.25, with strong support of the null).

In the subset of lower-risk preadolescents without PO-MDD (n = 45), survey week also did not predict the likelihood of a positive suicide-risk screen ($B = 0.04$, SE = 0.03, $t = 1.30$, $p = .200$, OR = 1.05, 95% CI = 0.98-1.12, BF = 0.55, with equivocal support of the null). Completing a survey at 1 timepoint also did not predict the likelihood of having a positive screen at the next e-survey ($B = -1.51$, SE = 1.41, $t = -1.07$, $p = .285$, OR = 0.22, 95% CI = 0.01-3.54, BF = 0.34, with equivocal support of the null).

Higher-Risk Group

Preadolescents in the higher-risk, "weekly" group (n = 124) completed 4,710 of 6,309 (74.7%) suicide-risk screens across 12 months. Of these screens, 93.0% were negative and 7.0% were positive. In total, 63 preadolescents (50.8%) had negative screens on all completed weekly e-surveys, and 61 preadolescents (49.2%) had a positive screen on 1 (n = 17), 2 (n = 12), 3 to 8 (n = 24), or >11 (n = 8) screens.

E-survey completion rates were not significantly associated with percentage of positive suicide-risk screens ($r = -0.11$, $p = .242$). Survey week did not predict the likelihood of preadolescents having a positive screen ($B = -0.01$, SE = 0.01, $t = -1.41$, $p = .160$, OR = 0.99, 95% CI = 0.98-1.00, BF = 0.64, with equivocal support of the null). Completing a survey 1 week did not predict the likelihood of having a positive screen the following week ($B = -0.07$, SE = 0.23, $t = -0.31$, $p =$ .756, OR = 0.93, 95% CI = 0.59-1.47, BF = 0.33, with strong support of the null).

DISCUSSION

The rising rates of suicide among preadolescents[2,37] underscores the critical need for establishing safe, feasible, and acceptable methods for suicide-risk screening in this age group. This study found that repeated suicide-risk screening administered remotely via e-surveys was not associated with a greater likelihood of suicidal thoughts in either lower- or higher-risk preadolescents, supporting the relative safety of such screenings. For the lower-risk group, who had no history of STBs or NSSI and were screened monthly, positive suicide-risk screens were rare, occurring in only 1.6% of the screens. Completing more e-surveys across the 12-month study period was not associated with more positive suicide-risk screens, suggesting that neither increased exposure to suicide screening measures nor increased reflection on experiences with suicidal thoughts related to increased suicidal thoughts. There was no significant increase in positive screens across the study, countering the possibility of cumulative negative effects from monthly suicide-risk screens. Most compellingly, completing a suicide-risk screen 1 month did not predict a positive screen the next month, indicating lack of increased risk across this shorter interval.

For the higher-risk group, who had a history of STBs and/or NSSI and were screened weekly, 7% of the suicide-risk screens were positive, with approximately half of preadolescents reporting suicidal thoughts at least once during the year. Similar to the lower-risk group, completing more e-surveys was not associated with more positive screens. Positive screens did not increase over time, nor did completing a screen at 1 week predict a positive screen the following week. These findings suggest that frequent suicide-risk screening does not exacerbate suicidal thoughts in higher-risk preadolescents. Moreover, it is important to note that normative developmental trajectories of suicidal thoughts over time in preadolescents might contribute to screening positive in a longitudinal study like the present

one. This pattern works against the aims of the paper, which should provide readers with more confidence in the results.

Given that our conclusions are based on a lack of evidence (rather than support for a positive outcome), it was critical that we examined the meaningfulness of our null effects, which we did by reporting Bayes factors (BFs).[33] Across the models, BFs indicated either strong support of the null hypothesis (eg, models testing screen completion at 1 month/week predicting positive screens at the next month/week) or equivocal support (eg, models predicting increases in positive screens across the study).[34] Notably, none of the models approached the threshold for what would be considered even anecdotal evidence for iatrogenic effects (ie, a BF >1).[38] Combined with the nonsignificant findings from our inferential statistics, the relatively low BFs observed in each of our models provides additional confidence in our findings.[39] Thus, although we cannot make strong or causal claims about the absolutely safety of suicide-risk screening, the limited negative impact of suicide-risk screening observed via the dense screening processes in this study should help to alleviate concern shared by clinicians, caregivers, and scientists that asking preadolescents about suicidal thoughts will increase the rates of suicidal thoughts in clinical or research settings. The findings also align with previous research indicating that suicide-risk screening is relatively safe in older youth.[12,13,40]

We also found no evidence that preadolescents with suicidal thoughts were less likely to complete the suicide-risk screens, which helps to rule out the possibility that missing data from preadolescents struggling with suicidal thoughts systematically biased the data. Indeed, in the higher-risk group, a positive screen 1 week positively predicted the likelihood of completing the screen the following week. This unexpected finding suggests that, if anything, preadolescents experiencing ongoing suicidal thoughts remained *more* engaged with the e-surveys, possibly due to the shorter duration between e-surveys or finding the study more personally relevant.

There is increasing support for screening youth for STBs in primary care settings.[3,4,21] Because these screenings typically occur much less frequently (ie, annually) than in our study (ie, weekly, monthly), these findings are promising regarding the lack of potential iatrogenic impact on preadolescents. Given the American Association of Pediatrics (AAP) recommendations for universal annual suicide-risk screening for youth aged 12 years and older, and given the limited information on the safety of suicide-risk screening before high school, these findings begin to fill a critical gap. Our sample was well distributed across ages 8 to 12 years, with 21% of participants completing at least 1 survey at age 12 years or older, thereby providing data for

this key population. Furthermore, alongside identifying individuals at risk for suicide, suicide-risk screening has secondary benefits. These include identifying children experiencing ongoing and impairing, albeit not necessarily escalating, suicidal thoughts, and opening lines of communication among preadolescents, caregivers, and clinicians, which may be invaluable if STBs arise in the future. Importantly, future work is still needed to incorporate qualitative data to understand preadolescents' and caregivers' perspectives on suicide-risk screening and to identify strategies for addressing any concerns that they may have.

This study also provides preliminary support for the potential of asynchronous suicide-risk screening methods for monitoring preadolescent mental health. As outlined in the Methods, screens were delivered via text or e-mail to either the child or the caregiver, based on family preference. This approach yielded a high completion rate (>74% of all screens), suggesting that asynchronous suicide-risk screening is both feasible and acceptable to preadolescents and their families. The absence of real-time monitoring of responses increased feasibility and may have contributed to higher compliance rates, as preadolescents could report on their suicidal thoughts without the immediate concern of triggering intervention, thereby potentially reducing apprehension. However, the lack of real-time monitoring has limitations, including delayed identification and management of acute risks. Obtaining a more comprehensive understanding of the trade-offs among feasibility, compliance, and the timely detection of high-risk cases, such as when and where to send alerts, will be critical for implementing and optimizing asynchronous suicide-risk screening strategies across diverse populations and settings.

There are several limitations to consider when interpreting these study findings. First, although our findings suggest that participating in research with repeated suicide-risk assessments administered monthly or weekly was not associated with increased suicidal thoughts in lower- or higher-risk preadolescents, respectively, we caution against overgeneralizing these findings. Further research, for example, is needed to examine possible iatrogenic effects of more frequent assessments, such as daily diaries or ecological momentary assessment protocols. Second, although this study cannot assess the relative safety of weekly suicide-risk screening over extended periods (eg, 12 months) for lower-risk children, including those with no history of STBs or depression, the infrequency of positive screens—even among the higher-risk group—suggests that frequent screening of lower-risk children may not be necessary or recommended. Third, both the present study and those in the extant literature[13] were conducted with ethics committee approval and risk management protocols, possibly

biasing published findings toward studies deemed "safer." It is unknown which, if any, of these additional oversights may contribute to the safety profiles of screening protocols. Fourth, the predominately White composition of the sample limits generalizability to minoritized youth. This is particularly important, given increases in Black youth suicide and differing risk factors for suicide between racial groups,[7,41] which could extend to suicide-risk screening. Further research with diverse samples, including preadolescents from different racial and ethnic backgrounds as well as those in more rural settings, is essential to understand the broader implications of suicide-risk screening. Fifth, the modifications made to the ASQ (eg, querying only passive suicidal ideation over the past week, and omitting the item on suicide attempts) may have altered the psychometric properties of the measure. In addition, the screen did not assess suicide behaviors or attempts. Although suicidal thoughts generally precede suicide behaviors, some preadolescents may endorse suicide behaviors but not thoughts,[42,43] which would not have been captured in the present study.

As noted above, we want to be careful about claiming no risk for youth when engaging in suicide-risk screening or participating in STB studies. Preadolescents in the lower-risk group reported suicidal thoughts on 1.2% of monthly screens, with 13.2% reporting suicidal thoughts on at least 1 screen. Because of the design of the study, we do not know whether this endorsement rate is higher than it would have been without study participation. However, we would expect some preadolescents to develop suicidal thoughts over any 12-month period, and this rate broadly aligns with recent data indicating lifetime STB rates of 14.5% for children 9 to 10 years of age[1] and 23% for youth 11 to 14 years of age.[44] Moreover, of the lower-risk preadolescents with a positive screen, 78% reported suicidal thoughts only on 1 monthly e-survey, raising questions about potential transient normative experiences of suicidal thoughts. Experimental designs are needed to address this question and whether screening in fact causes changes in STB endorsement. These findings also highlight the importance of following up a positive screen with a brief suicide safety assessment[21,25,45] to better evaluate risk for suicide and to determine next steps.

There is justifiable concern about whether asking youth about suicidal thoughts might either facilitate the onset of suicidal thoughts or exacerbate existing suicidal thoughts. The findings from this study suggest that in preadolescence, completing repeated suicide-risk assessments (weekly, monthly) was not associated with detectable iatrogenic effects in youth with or without an STB history. These findings suggest that funders, investigators, parents, and youth can feel more confident about youth participating and contributing to this critically needed research. Findings also suggest that clinicians can proceed with screening in children in this age group with confidence that the benefits outweigh the risks.

CRediT authorship contribution statement

Laura Hennefield: Writing – review & editing, Writing – original draft, Methodology, Investigation, Conceptualization. **Katherine R. Luking:** Writing – original draft, Methodology, Formal analysis, Conceptualization. **Rebecca Tillman:** Writing – original draft, Formal analysis, Data curation. **Deanna M. Barch:** Writing – original draft, Supervision, Resources, Project administration, Methodology, Investigation, Funding acquisition. **Joan L. Luby:** Writing – original draft, Supervision, Resources, Project administration, Methodology, Investigation, Funding acquisition. **Renee J. Thompson:** Writing – original draft, Methodology, Investigation, Conceptualization.

REFERENCES

1. DeVille DC, Whalen D, Breslin FJ, et al. Prevalence and family-related factors associated with suicidal ideation, suicide attempts, and self-injury in children aged 9 to 10 years. JAMA Netw Open. 2020;3(2):e1920956. https://doi.org/10.1001/jamanetworkopen.2019.20956

2. Ruch DA, Horowitz LM, Hughes JL, et al. Suicide in US preteens aged 8 to 12 years, 2001 to 2022. JAMA Netw Open. 2024;7(7):e2424664. https://doi.org/10.1001/jamanetworkopen.2024.24664

3. Hamilton JG, Horowitz LM, Standley CJ, et al. Developing the blueprint for youth suicide prevention. J Public Health Manag Pract. 2023;29(5):E214-E222. https://doi.org/10.1097/PHH.0000000000001764

4. Hennefield L, Denton E, Chen PG, Sheftall AH, Ayer L. Preteen suicide risk clinical pathways for pediatricians: special recommendations. J Acad Consult Liaison Psychiatry. 2024;65(6):551-561. https://doi.org/10.1016/j.jaclp.2024.06.003

5. Ayer L, Ohana E, Ivanova MY, Frering HE, Achenbach TM, Althoff RR. Emotional and behavioral problem profiles of preteens with self-injurious thoughts and behaviors: a multicultural study. J Am Acad Child Adolesc Psychiatry. 2024;63(9):931-942. https://doi.org/10.1016/j.jaac.2023.11.012

6. Chaudhary S, Hoffmann JA, Pulcini CD, et al. Youth suicide and preceding mental health diagnosis. JAMA Netw Open. 2024;7(7):e2423996. https://doi.org/10.1001/jamanetworkopen.2024.23996

7. Mintz S, Dykstra H, Cornette M, et al. Characteristics and circumstances of suicide among children aged 6 to 9 years: 2006–2021. Pediatrics. 2024;154. https://doi.org/10.1542/peds.2024-067043l

8. Asarnow JR, Mehlum L. Practitioner review: treatment for suicidal and self-harming adolescents—advances in suicide prevention care. J Child Psychol Psychiatry. 2019;60(10):1046-1054. https://doi.org/10.1111/jcpp.13130

9. Milliman CC, Dwyer PA, Vessey JA. Pediatric suicide screening: a review of the evidence. J Pediatr Nurs. 2021;59:1-9. https://doi.org/10.1016/j.pedn.2020.12.011

10. Cwik M, Jay S, Ryan TC, et al. Lowering the age limit in suicide risk screening: clinical differences and screening form predictive ability. J Am Acad Child Adolesc Psychiatry. 2020;60(5):537-540. https://doi.org/10.1016/j.jaac.2020.11.025

11. Gould MS, Marrocco FA, Kleinman M, et al. Evaluating iatrogenic risk of youth suicide screening programs: a randomized controlled trial. JAMA. 2005;293(13):1635-1643. https://doi.org/10.1001/jama.293.13.1635

12. Dazzi T, Gribble R, Wessely S, Fear NT. Does asking about suicide and related behaviours induce suicidal ideation? What is the evidence? Psychol Med. 2014;44(16):3361-3363. https://doi.org/10.1017/s0033291714001299

13. Blades CA, Stritzke WGK, Page AC, Brown JD. The benefits and risks of asking research participants about suicide: a meta-analysis of the impact of exposure to suicide-related content. Clin Psychol Rev. 2018;64:1-12. https://doi.org/10.1016/j.cpr.2018.07.001

14. Robinson J, Yuen HP, Martin C, et al. Does screening high school students for psychological distress, deliberate self-harm, or suicidal ideation cause distress—and is it acceptable? An Australian-based study. Crisis. 2011;32(5):254-263. https://doi.org/10.1027/0227-5910/a000087

15. Mathias CW, Furr RM, Sheftall AH, Hill-Kapturczak N, Crum P, Dougherty DM. What's the harm in asking about suicidal ideation? Suicide LifeThreat Behav. 2012;42(3):341-351. https://doi.org/10.1111/j.1943-278x.2012.0095.x

16. Ackil JK, Zaragoza MS. Developmental differences in eyewitness suggestibility and memory for source. J Exp Child Psychol. 1995;60(1):57-83. https://doi.org/10.1006/jecp.1995.1031

17. Ayer L, Colpe L, Pearson J, Rooney M, Murphy E. Advancing research in child suicide: a call to action. J Am Acad Child Adolesc Psychiatry. 2020;59(9):1028-1035. https://doi.org/10.1016/j.jaac.2020.02.010

18. Colizzi M, Lasalvia A, Ruggeri M. Prevention and early intervention in youth mental health: is it time for a multidisciplinary and trans-diagnostic model for care? Int J Ment Health Syst. 2020;14(1):23. https://doi.org/10.1186/s13033-020-00356-9

19. Horowitz LM, Bridge JA, Teach SJ, et al. Ask Suicide-Screening Questions (ASQ): a brief instrument for the pediatric emergency department. Arch Pediatr Adolesc Med. 2012;166(12):1170-1176. https://doi.org/10.1001/archpediatrics.2012.1276

20. Lowry NJ, Goger P, Ruz MH, Ye F, Cha CB. Suicide risk screening tools for pediatric patients: a systematic review of test accuracy. Pediatrics. 2024;153(3). https://doi.org/10.1542/peds.2023-064172

21. Horowitz LM, Bridge JA, Tipton MV, et al. Implementing suicide risk screening in a pediatric primary care setting: from research to practice. Acad Pediatr. 2022;22(2):217-226. https://doi.org/10.1016/j.acap.2021.10.012

22. Kemper AR, Hostutler CA, Beck K, Fontanella CA, Bridge JA. Depression and suicide-risk screening results in pediatric primary care. Pediatrics. 2021;148(1):e2021049999. https://doi.org/10.1542/peds.2021-049999

23. Roaten K, Horowitz LM, Bridge JA, et al. Universal pediatric suicide risk screening in a health care system: 90,000 patient encounters. J Acad Consult Psychiatry. 2021;62(4):421-429. https://doi.org/10.1016/j.jaclp.2020.12.002

24. Horowitz LM, Mournet AM, Lanzillo E, et al. Screening pediatric medical patients for suicide risk: is depression screening enough? J Adolesc Health. 2021;68(6):1183-1188. https://doi.org/10.1016/j.jadohealth.2021.01.028

25. Brahmbhatt K, Kurtz BP, Afzal KI, et al. Suicide risk screening in pediatric hospitals: clinical pathways to address a global health crisis. Psychosomatics. 2018;60(1):1-9. https://doi.org/10.1016/j.psym.2018.09.003

26. Luby JL, Barch DM, Whalen D, Tillman R, Freedland KE. A randomized controlled trial of parent-child psychotherapy targeting emotion development for early childhood depression. Am J Psychiatry. 2018;175(11):1102-1110. https://doi.org/10.1176/appi.ajp.2018.18030321

27. Barch DM, Whalen D, Gilbert K, et al. Neural indicators of anhedonia: predictors and mechanisms of treatment change in a randomized clinical trial in early childhood depression. Biol Psychiatry. 2018;85(10):863-871. https://doi.org/10.1016/j.biopsych.2018.11.021

28. Luby JL, Gilbert K, Whalen D, Tillman R, Barch DM. The differential contribution of the components of parent child interaction therapy emotion development for treatment of preschool depression. J Am Acad Child Adolesc Psychiatry. 2020;59(7):868-879. https://doi.org/10.1016/j.jaac.2019.07.937

29. Kaufman J, Birmaher B, Axelson D, Perepletchikova F, Brent D, Ryan N. K-SADS-PL DSM-5. Accessed April 28, 2025. https://www.pediatricbipolar.pitt.edu/sites/default/files/assets/AH/AK/KSADS_DSM_5_SCREEN_Final.pdf

30. Hennefield L, Whalen DJ, Tillman R, Barch DM, Luby JL. Preschool-onset major depressive disorder as a strong predictor of suicidal ideation and behaviors into preadolescence. J Am Acad Child Adolesc Psychiatry. 2024;63(9):919-930. https://doi.org/10.1016/j.jaac.2023.11.008

31. Harris PA, Taylor R, Thielke R, Payne J, Gonzalez N, Conde JG. Research Electronic Data Capture (REDCap)—a metadata-driven methodology and workflow process for providing translational research informatics support. J Biomed Inform. 2009;42(2):377-381. https://doi.org/10.1016/j.jbi.2008.08.010

32. Thompson RJ, Whalen DJ, Gilbert K, et al. Preadolescent suicidal thoughts and behaviors: an intensive longitudinal study of risk factors. J Am Acad Child Adolesc Psychiatry. 2025;64(3):375-385. https://doi.org/10.1016/j.jaac.2024.03.018

33. Kass RE, Raftery AE. Bayes factors. J Am Stat Assoc. 1995;90(430):773-795.

34. Jeffreys H. Theory of Probability. Clarendon Press; 1961.

35. Bürkner PC. brms: An R package for Bayesian multilevel models using Stan. J Stat Softw. 2017;80(1):1-28; https://www.jstatsoft.org/index.php/jss/article/view/v080i01

36. Makowski D, Ben-Shachar M, Lüdecke D. bayestestR: Describing effects and their uncertainty, existence and significance within the Bayesian framework. J Open Source Softw. 2019;4(40):1541.

37. Bridge JA, Ruch DA, Sheftall AH, et al. Youth suicide during the first year of the COVID-19 pandemic. Pediatrics. 2023;151(3). https://doi.org/10.1542/peds.2022-058375

38. Schmalz X, Manresa JB, Zhang L. What is a Bayes factor? Psychol Methods. 2021;28(3):705-718. https://doi.org/10.1037/met0000421

39. Harms C, Lakens D. Making "null effects" informative: statistical techniques and inferential frameworks. J Clin Transl Res. 2018;3:382-393.

40. Curtin SC, Heron M. Death rates due to suicide and homicide among persons aged 10–24: United States, 2000-2017, 352. NCHS Data Brief; 2019:1-8.

41. Sheftall AH, Miller AB. Setting a ground zero research agenda for preventing Black youth suicide. JAMA Pediatr. 2021;175(9):890-892. https://doi.org/10.1001/jamapediatrics.2021.1112

42. Thornton VJ, Asanbe CB, Denton ED. Clinical risk factors among youth at high risk for suicide in South Africa and Guyana. Depress Anxiety. 2019;36(5):423-432. https://doi.org/10.1002/da.22889

43. Wasserman D, Thanh T, Minh P, Goldstein M, Nordenskiöld A, Wasserman C. Suicidal process, suicidal communication and psychosocial situation of young suicide attempters in a rural Vietnamese community. World Psychiatry. 2008;7(1):47-53. https://doi.org/10.1002/j.2051-5545.2008.tb00152.x

44. Flores JP, Stuart EA, Swartz KL, Jallah NA, Wilcox HC. Risk and protective factors associated with suicidal thoughts and behaviors among Maryland middle school students. Sch Ment Health. 2022;14(4):1024-1043. https://doi.org/10.1007/s12310-022-09521-6

45. Pettit JW, Buitron V, Green KL. Assessment and management of suicide risk in children and adolescents. Cogn Behav Pract. 2018;25(4):460-472. https://doi.org/10.1016/j.cbpra.2018.04.001