Validity of Measurement of Suicidal Ideas in Very Young Children

To the Editor:

The recent article in the November 2015 issue of the *Journal* by Whalen *et al.*[1] reported that 11% of their sample of 3- through 7-year-old children manifested some form of suicidal cognition or behavior (SI). Because this study represented the first systematic examination of suicidal cognitions and behaviors in very young children, the authors are to be commended. However, an apparent inconsistency in the findings seems worthy of follow-up. Endorsement of SI during 3 to 7 years of age was the strongest predictor of SI during 7 to 12 years of age, yet endorsement of SI during 3 to 7 years was not associated with a diagnosis of depression during 3 to 7 years after controlling statistically for several covariates, which raises a question about the validity of the measurement of SI.

The authors measured SI with questions from the Preschool Age Psychiatric Assessment (PAPA)[2] that covered 3 items: thoughts about death or suicide, suicidal plans, and suicidal attempts. In their sample of 306 young children, at least 1 of these items was endorsed 37 times, 76% of which was accounted for by thoughts about death or suicide. An important issue seems to be, what did thoughts of death or suicide sound like? The online supplement provided examples of 6 cases but appears to have provided only the most clearly suicidal statements.

I have similar data from a group of 330 children 3 through 6 years of age, of whom 284 were exposed to trauma.[3] This letter reports the data on suicidal items for the first time. Using the same questions from the PAPA, I found that 42 met these SI criteria. Consistent with Whalen *et al.*, the item "Thinking about death" was by far the most commonly endorsed. Of the 42 who met SI criteria in our sample, 83% were accounted for by those who endorsed only "Thinking about death."

We took it a step further and examined what parents reported as examples of these items. Although some examples seemed to reflect suicidal thoughts, such as "Says he wants to die and would cut himself," the vast majority seemed to be more curious about death and/or normal developmental play, such as "Asks 'Am I going to die'," "Asks questions about what happens after death," "Killing bugs and shooting games," "People drown or die in games," "Saying he doesn't want to live to 100 because that's when you die," "Talks about loved ones who have died," and "Worried about getting hurt or killed." Based on the examples, I estimate that a more conservative estimate of true suicidal ideas in our total sample at 4%.

It would be helpful for the field for the authors to examine and describe what the children in their study actually said about suicide or death, and perhaps they would arrive at a more conservative estimate of true suicidal ideas, and a reanalysis of their data with that estimate would be quite interesting. An examination of this nature could help clinicians differentiate developmentally appropriate cognitive curiosity about death versus true suicidal ideas or intentions.

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Dr. Whalen *et al.* reply:

We appreciate the thoughtful response to our recent article.[1] In particular, we were pleased to see other researchers dedicating their efforts to understanding suicidality in young children, a topic worthy of further investigation. Moreover, we were interested to hear of a replication of our findings in a similar sample of 330 young children, many of whom had experienced trauma, and we believe this further supports the importance of assessing suicidal cognitions and behaviors in young children. Although Dr. Scheeringa highlights a relatively smaller proportion of children endorsing suicidal thoughts in that sample, we believe that the presence of any suicidal thoughts in children younger than 7 years is alarming and worthy of further attention and investigation.

The letter raises an important concern about the distinction between suicidal cognitions that are out of the norm and developmentally appropriate curiosity about death. This is an extraordinarily relevant comment, particularly when examining suicidality in young children. Based on the procedures we used in our study, we believe that the measure of suicidal cognitions reflects non-normative and clinically relevant phenomena. To further clarify our basis for

considering suicidal cognitions (as measured in this study) to be clinically relevant, we provide more detail about our psychiatric interviews and coding of suicidal cognitions and behaviors, and we describe unpublished data from a new sample of treatment-seeking young children with depression (3–6 years old) that also highlight the importance of assessing suicidal cognitions and behaviors in young children. Furthermore, we hope that this response and preliminary findings serve as a platform for continuing research that aims to further investigate the meaning and origins of suicidal thoughts and behaviors expressed by children this young.

A modified version of the Major Depressive Disorder (MDD) module of the Preschool-Age Psychiatric Assessment (PAPA)[2] and the clinician-rated Preschool and Early-Childhood Functional Assessment Scale (PECFAS)[3] were used to create our suicidal cognition and behavior (SI) variable. In this modified version of the MDD module of the PAPA, normative thoughts about death or dying were included as a subclinical code (e.g., 1 on a 0–3 scale), and extensive training was done on these distinctions. In addition, after being trained to reliability on the 2 interviews, a subsample of PAPA interviews was calibrated in an ongoing fidelity-and-review process with a master coder and the principal investigator (Luby). Therefore, we are quite confident that normative statements and behaviors related to death and/or dying were not deemed clinically significant and were not included in the creation of our SI variable.

Dr. Scheeringa also notes a seeming inconsistency in the association between SI and symptoms of psychopathology in our study.[1] In particular, he draws attention to the fact that the SI variable was not related to concurrent symptoms of depression in children 3 to 7 years old. However, this analysis included a wide array of covariates, such as gender, family income-to-needs ratio, maternal psychopathology, and co-occurring disorders (e.g., attention-deficit/hyperactivity disorder, oppositional defiant disorder, conduct disorder, and anxiety). When these covariates are removed, depression during 3 to 7 years of age does demonstrate zero-order associations with SI (Table 2 in article), because 76% of young children in our sample who reported SI had a diagnosis of depression. Although we agree that the findings containing the covariates are unexpected, we also note that SI during 3 to 7 years of age was associated with externalizing disorders (attention-deficit/hyperactivity disorder, oppositional defiant disorder, and conduct disorder) during the same period. Because so little research is available to inform interpretations of these findings, we believe that SI during 3 to 7 years of age could serve as a nonspecific signal of distress that might not be related to any particular diagnosis but rather to other more general environmental stressors. Again, additional research is clearly needed to confirm these hypotheses and help determine what a young child's suicidal cognitions and behaviors actually mean.

We fully agree with Dr. Scheeringa that the meaning of preschool-onset SI is unclear, yet we believe, based on our coding process, that the thoughts and behaviors observed in our study were not normative. We are currently designing an assessment that aims to address some of these critical questions on the meaning and risk of SI in young children. Specifically, it will be important for future research to assess the meaning behind SI by asking children specific and detailed questions about their understanding of death and dying and by investigating other key psychosocial correlates and exposures. For example, whether a family member has expressed SI or whether they are exposed to media in which SI is occurring will be crucial for future studies to assess.

Although it is not feasible for us to conduct these types of interviews with participants from our previously published data (which were based on parent report and clinician ratings of child SI), we intend to collect this information in the aforementioned sample of treatment-seeking children 3 to 6 years old. To date, 169 children have been enrolled in a treatment study for early-onset depression that is still ongoing. Each of these children and their primary caregivers completed a PAPA MDD module and a preschool version of the Schedule for Affective Disorders and Schizophrenia for School-Age Children (K-SADS)[4] with clinicians trained to reliability. Using the parallel questions from the K-SADS-Early Childhood, an alarming 20.7% (n = 35) of preschoolers with depression whose caregivers sought participation in our treatment study met the clinical threshold for recurrent thoughts about death during the previous month, and 6.5% (n = 11) met the clinical threshold for suicidal ideation in the previous month. Four preschoolers engaged in suicidal gestures within the previous month, before enrollment in this study, including trying to choke himself or herself, placing robes/belts/scarves/toys around his or her neck, and running into the street stating an intent to die and wishing to get hit by a car.

By using multiple assessment methods and asking children detailed follow-up questions about their understanding of death, we aim to address some of the difficulties inherent in this type of research and provide insight into the significant ambiguities that remain regarding the nature and course of preschool-onset SI.

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