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Considering Developmental Phenotypes of Suicidality for Young Black Children

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ABSTRACT

Suicide is currently the 5th leading cause of death among children aged 5–11, a rate that has more than tripled in the last decade, and one that has increased significantly more among Black compared to White children. Specifying early childhood phenotypes of suicidality is critical for prevention of suicidal behavior. Such phenotypes need to be culturally relevant and rigorously tested in Black youth to yield data that will inform prevention science. We used the Interpersonal Theory of Suicide, to guide both the development of a theoretical model and a research protocol to conduct a study on suicidality in young Black children. The model was informed by an ecological adaptation which considers the context of structural, systemic, and interpersonal racism as critical for conceptualizing suicidal risk and identifying factors that reduce the likelihood of suicidal ideation and behaviors among Black youth. Developmental adaptations of IPTS components were based on existing research supporting associations between theoretically similar constructs and early childhood depression and/or later suicidality. Model components include loneliness and lack of family connectedness, low self-worth and hopelessness, and impulsivity. The components are measured via questionnaires and reactivity to behavioral probes as measured by facial emotion, heart rate variability, and self-reported mood. Risk and protective factors include exposure to racism and discrimination and racial identity and socialization, respectively. An accelerated, longitudinal design, enrolling 5–9-year-old children for 6 repeated assessments over 45 months will allow us to test stability from early childhood to early adolescence. Conducting robust tests of early risk and stability of suicidality in the context of culturally relevant risk factors (e.g., racism) and protective factors (e.g., racial socialization and identity) will contribute to efforts to reverse recent trends in Black youth suicide.

1 | Prevalence and Trends in Youth Suicidal Ideation and Behavior

Suicide is currently the 5th leading cause of death among children aged 5–11 (Centers for Disease Control and Prevention 2020). Suicide rates for children 10–14 years increased three-fold from 2007 to 2018, and rates have since remained steady

(Curtin and Garnett 2023). Rates of youth suicide are significantly higher among Black compared to White children (Bridge et al. 2018). Recent data from the Adolescent Brain Cognitive Development (ABCD) study also reflect these trends: 8.4% of 9–10-year-olds reported past or current suicidal ideation (DeVile et al. 2020), rates of suicidality were higher for Black preadolescents compared to nonblack youth, and racial

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discrimination was positively and significantly associated with suicidality (Argabright et al. 2022). When measured in early childhood, suicidal ideation appears to be relatively stable. In a sample of Black and White 3–7-year-olds oversampled for depression symptoms, suicidal ideation was endorsed by 11% of the sample, and 73% of those children continued to endorse suicidal ideation at ages 7–12 years (Whalen et al. 2015). The authors followed this sample through ages 14–19 and reported that approximately half of the children who experienced suicidal thoughts and behaviors (STBs) in adolescence first exhibited STBs in early childhood (Whalen et al. 2022).

2 | Early Childhood Phenotypes of Psychological Constructs Are Critical for Prevention and Early Intervention

Given these trends in youth suicide, assessments of suicidality in early childhood are needed, especially assessments that are relevant for Black youth. Such assessments require the use of developmentally and culturally informed tools and appropriate sampling; these are critical to accurately describe the psychological process. With few exceptions, the research to date has lacked the application of developmentally informed approaches to describe suicidal processes, and as a result may have led to omissions or errors in the understanding of the ontogeny of suicide. For example, Nock et al. (2013) reported that suicidal ideation is rare before the age of 10 and that the prevalence rapidly increases between 12 and 17 years of age. These findings, however, were based on data from interviews with 13–18-year-olds using questions from the Composite International Diagnostic Interview (Kessler and Ustun 2004) (e.g., ‘You seriously thought about killing yourself’). Both the age of the participants and the method were likely not optimal for assessing suicidality in children under the age of 10 years. Research on early childhood suicidality has been impeded by the lack of age-appropriate methods, and relatedly, concern that the assessment of suicidality in younger children is developmentally inappropriate from a cognitive development perspective. This latter concern is countered by research showing that by age 4 years, most children understand death concepts such as universality, causality, irreversibility and cessation (Hennefield et al. 2019).

Historically, other areas of developmental psychopathology also were met with resistance to conducting research on diagnostic and/or disordered phenotypes in early childhood due to concerns about developmental inappropriateness and pathologizing normal behavior including ADHD and disruptive behavior disorders (Wilens et al. 2003; Keenan and Wakschlag 2003; McClellan and Speltz 2003), depression (Semrud-Clikeman and Hynd 1991), and autism (Matson, Wilkins, and González 2008). Rigorous, developmentally informed research, however, ultimately yielded support for the internal consistency, and concurrent and predictive validity of these early childhood constructs. Work conducted within our research group, for example, led to evidence for the validity of disruptive behavior disorders in early childhood for Black youth, specifically oppositional defiant and conduct disorders (ODD and CD) (Keenan and Wakschlag 2004), including strong internal consistency and concurrent (Keenan et al. 2007) and predictive validity (Keenan et al. 2011).

The study of depression phenotypes in early childhood, to which Luby and colleagues have contributed substantially, has provided evidence that children as young as 3 years of age experience clinically significant episodes of major depressive disorder (MDD) (Luby et al. 2003a). The validity of this depressive syndrome was established via tests of internal consistency and associations with social impairment and family history of related disorders (Luby et al. 2002, 2003b). Moreover, young children with depression displayed altered patterns of hypothalamic-pituitary-adrenal axis stress reactivity relative to age-matched comparison groups; patterns that were consistent with those observed in depressed adults (Luby et al. 2003c). Representation of Black youth in the studies on early childhood depression was relatively limited; the authors tested, but did not find differences, in the validity of depression phenotypes as a function of child race.

Importantly, the availability of early childhood phenotypes has facilitated the deployment of rigorous intervention research such as PCIT for depression in preschoolers (Luby et al. 2020), adaptations of effective interventions for early childhood for ADHD (Sugaya et al. 2022), as well as early screening, surveillance, and deployment of indicated and universal preventive interventions to support the emotional health of young children and reduce the risk for exacerbation of symptoms (e.g., Lewis et al. 2023; Sourander et al. 2016).

Preventing childhood suicidality will require, in part, a similar effort. Only a handful of studies have been conducted on preschool suicidality. Luby and colleagues have shown that suicidal ideation assessed in the early childhood period (3–7 years), is associated with greater mastery of concepts of death including universality, applicability, irreversibility, cessation, and causality (Hennefield et al. 2019) and greater preoccupation with death (Luby et al. 2019). Little to no research has been conducted, however, to elucidate the psychological context in which suicidal ideation in early childhood occurs, and none have been focused on the process for youth at highest risk. Even within the earlier studies focusing on Black youth, including our own, the context of racism and discrimination has largely been ignored.

3 | Incorporating Age and Race Into the Interpersonal-Psychological Theory of Suicide

The Interpersonal-Psychological Theory of Suicide (IPTS; Joiner 2007), is widely used for understanding the suicidal process, and as such is a reasonable starting point for conceptualizing how to study suicidality in early childhood in Black youth. According to the IPTS, a specific combination of psychological experiences elicits thoughts of death and dying and suicidal attempts: lack of belongingness and burdensomeness together with hopelessness leads to suicidal ideation, and capacity to engage in self-harm leads to suicidal behavior. The model was developed based on studies of adults (Chu et al. 2017), and some components have been validated for adolescents (Calear et al. 2021; Pagliaccio et al. 2024). IPTS components have been reliably measured in children as young as 10 years of age and such components have been associated with suicidality (Horton et al. 2016; Roberts et al. 2020; Stewart et al. 2017).

Although there has been no study conducted to date testing the reliability and validity of the IPTS components in early childhood, data from several studies provide support for such a proposal. Hopelessness has been measured in the context of “losing” and “winning” deals in a card game with 5-year-old children by Murray et al. (2001). Children whose mothers had a history of depression were more likely than children whose mothers had no history of depression to express hopelessness, pessimism, and low self-worth following “losing” deals. Lack of family connectedness in early childhood based on observed parent-child interactions was associated with later suicidality and was more salient with respect to later suicidality than connectedness in middle childhood (Khoury et al. 2019; Lyons-Ruth et al. 2013). Regarding capacity to engage in self-harm, in a prospective follow-up study of 4–6-year-old children who were clinically referred for ADHD symptoms of impulsivity in early childhood were predictive of later suicide attempts (Chronis-Tuscano et al. 2010). These data suggest that constructs consistent with the IPTS model can be assessed in early childhood and are associated with suicidality.

Data also support the validity of IPTS model components for Black adolescents. For example, using data from wave 1 of the longitudinal Adolescent Health Study, Boyd et al. (2022) reported that lack of family and parental support was associated with an increased risk of suicidal ideation among Black adolescents. In a community sample of 6th and 7th grade Black youth, self-worth was associated with suicidality (Lambert, Boyd, and Jalongo 2022). Significant associations between lack of belongingness in the family and school contexts and suicidality have been observed in several studies of Black youth (Boyd et al. 2024; Douglas et al. 2024; Vélez-Grau et al. 2023a, 2023b)

The IPTS model was further elaborated by Robinson et al. (2022) to be relevant for Black youth by incorporating two observations. First, the higher risk of suicide among Black American youth compared to White youth is likely due in large part to exposure to systemic and structural racism and discrimination (SSRD), which is associated with suicidality in Black children and adolescents (Argabright et al. 2022; Cahill, Illback, and Peiper 2024; Galán et al. 2021; Jelsma, Chen, and Varner 2022). Second, the ubiquity of such exposure, however, also leads one to consider evidence for relevant protective factors that buffer Black youth against their disproportionate exposure to SSRD. Robinson and colleagues added exposure to systemic, structural, and interpersonal racism as risks for, and racial socialization and identity as protective against, hopelessness, lack of belongingness, and burdensomeness (Robinson et al. 2022).

A recent 30-year review of research on the mental health of Black adolescents identified several protective factors including racial-ethnic identity and socialization (Loyd et al. 2024). A positive racial-ethnic identity reduced Black adolescents' depression and anxiety symptoms (Loyd et al. 2024). Results from studies conducted with young adults support the hypothesis that racial-ethnic identity serves a protective role against suicidal thoughts and behaviors. Suicidal ideation was positively associated with perceived racism, and negatively associated with ethnic identity (Hong et al. 2024). Among a sample of Black American women who had a suicide attempt in the past year, racial identity was associated with reasons for living (Street et al. 2012).

Polanco-Roman and Miranda (2013) reported that higher ethnic identity was associated with lower hopelessness and less suicidal ideation and moderated a mediated pathway from acculturative stress and perceived discrimination to suicidal ideation via hopelessness. Together, these findings suggest that racial identity may protect youth from the risk conferred by racism-related stress on depression and suicidal ideation.

Family racial socialization has been shown to be both health promotive and protective against the negative impact of racism and discrimination on the psychological well-being of Black American youth (Neblett et al. 2006; Varner et al. 2018). Research on the protective effects of racial identity and socialization in early childhood is less developed, but results are consistent with findings for older children. Parents do engage in race socialization practices in the preschool period including communicating messages of cultural pride and preparation for bias (Caughy et al. 2002). Parents of young children view racial socialization as an important part of school readiness (Anderson et al. 2015; Caughy and Owen 2015). Furthermore, messages of racial pride in the preschool period are positively associated with child adjustment in first grade (Contreras et al. 2021).

Both racial identity and racial socialization are multidimensional constructs, however, and the potential health optimization of these constructs is likely a function of balancing child specific and environmental factors. For example, in one study of Black American middle school students residing in the Midwest of the United States, higher levels of parental preparation for bias increased the strength of association between interpersonal discrimination and depressive symptoms (Dotterer and James 2018). Other researchers have highlighted important sex differences in the association between dimensions of racial identity and parental racial socialization and child well-being (e.g. Stokes et al. 2020). Thus, hypotheses regarding the protective effects of racial identity and socialization needs to be informed by an approach that recognizes the dynamic interplay of identities, parental messaging, and contextual factors.

To summarize, there appears to be sufficient evidence for building upon the IPTS model in two ways to inform the study of suicidality in Black youth. One way is to consider developmental adaptations of the model components, adaptations that would lend themselves to measurement with standard and reliable methods. The other way is to consider the cultural contexts that shape the psychological experiences of burden, belongingness, and hopelessness. This latter consideration has been expertly outlined by Robinson et al. (2022). We build on their work in our developmental adaptation and testing of the suicidal process in early childhood in Black youth.

4 | Developing Approaches to Assessing Suicidality in Young Children That Are Developmentally and Racially Relevant: The Pittsburgh Girls Study—Mood Organization in Black Youth

In an excellent review and call for applying a developmental psychopathology framework to the study of suicidality, Openheimer, Glenn and Miller (2022) invoked guiding

principles of the field including that behavior ranges from typical to atypical, expression of risk may change across development, and that behavior moves along the continuum of typicality over time. Consistent with this call, we have recently launched a program of research aimed at articulating and testing a developmentally based theoretical model of suicidality in young Black children, which we present here. The program is organized around three aims. The first is to test the validity and stability of hypothesized constructs of the suicidal process in early childhood in Black youth. We hypothesize that our measured constructs of loneliness and lack of connectedness (lack of belongingness), low self-worth (burdensomeness), hopelessness, and impulsivity in early childhood will yield individual differences that range from typical to atypical, and that such differences will be moderately stable from early to mid-childhood, and from mid-childhood to early adolescence. The second aim relates to how behavior moves along the continuum of typicality over time. We hypothesize that our measured suicidal processes in early childhood will be prospectively associated with suicidal ideation and behavior. Finally, we aim to examine the impact of family and social contexts on individual differences in and stability of early childhood suicidality in Black youth. Consistent with existing research and theory (Robinson et al. 2022), we propose that family exposure to systemic, structural, and interpersonal racism will confer risk, and maternal racial socialization and maternal and child racial identity will serve as protective factors against the development of suicidality.

Our program is further guided by two primary considerations. The first is to include participants who manifest a continuum of suicidality similar to what would be observed in the general population of Black youth. To this end, we identified the children of mothers enrolled in The Pittsburgh Girls Study (PGS) as a representative cohort. The PGS is a community-based study that enrolled 2450 5–8-year-old girls living in the City of Pittsburgh in 2000 (Keenan et al. 2010). The girls and their primary caregivers (95% identified as the mother) completed annual interviews for 20 consecutive years that largely included standardized questionnaires of behavioral and emotional functioning and family and peer relations. About half of the 2450 now-adult participants in the PGS identify as Black ($n = 1309$). Information on pregnancies, births and sex at birth has been

collected from PGS participants as part of the annual interviews. Thus, we are connecting with women from the PGS who self-identify as Black and who have a child 5–9 years of age for our PGS substudy, Mood Organization in Black Youth (PGS-MOBY).

We further describe the design and protocol (data sharing is not applicable to this article as no new data are presented or analyzed in this publication). An accelerated longitudinal design was selected as the optimal design for testing the study aims. Two cohorts of children of equal numbers ($n = 150$) will be enrolled: cohort 1 will be 5–7 years of age and cohort 2 will be 7–9 years of age. We will conduct assessments every 9 months for 6 assessments (spanning 45 months total duration). Thus, the younger cohort of children will complete their first assessments at ages 5–7 years and will be 8–10 years at the end of the study (see blue figures in Figure 1). The older cohort will complete their first assessments at ages 7–9 years and will be 10–12 years at the end of the study (see green figures in Figure 1). The 9-month time interval in between each of the six assessments will facilitate capturing shifts in mood and limit the duration of the period of recall. The overlapping ages at assessment for the younger and older cohorts (ages 7, 8, 9 and 10 years) will allow us to test whether the expression of suicidal risk changes across development from early to middle childhood, and from middle childhood to early adolescence.

The second consideration is to assess hypothesized elements of the suicidal process in early childhood, lack of connectedness, loneliness, low self-worth, and impulsivity, via multiple measures across multiple systems including emotional, behavioral, and psychophysiological (see Table 1). To this end, we identified probes to generate measures of behavior, self-reported mood, and reactivity of heart rate variability, and questionnaires that are reliable and valid in children as young as 5 years of age. Cyberball (Williams and Jarvis 2006), a computer game in which the participant and two virtual players toss a ball to each other that has been adapted for preschoolers (Vacaru et al. 2020), will be used to assess feelings of being ostracized and loneliness. Lack of connectedness will be coded from recorded mother-child interaction tasks using the Coding Interactive Behavior Manual (CIB; Feldman 1998), a system that has been validated in longitudinal studies spanning infancy

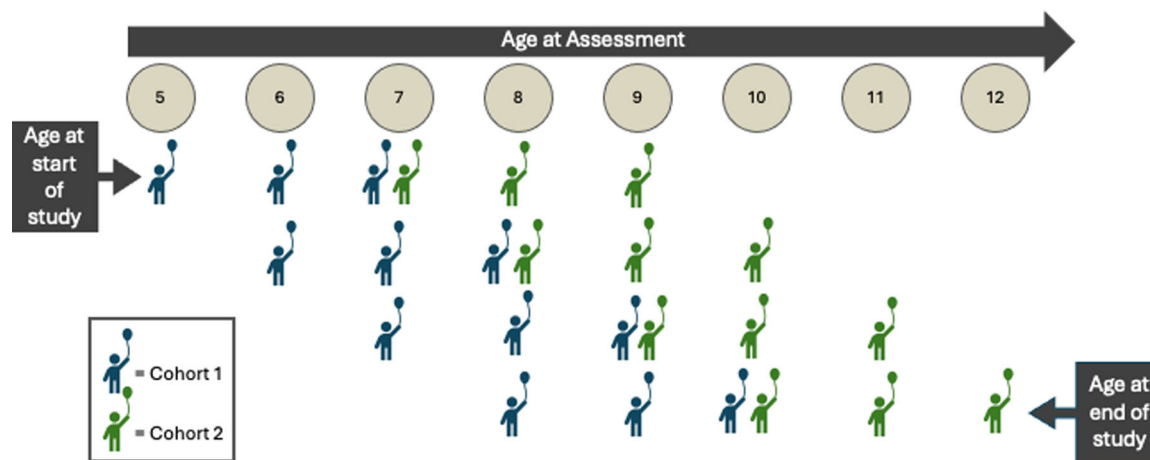


FIGURE 1 | Depiction of accelerated longitudinal design.

TABLE 1 | Description of measurement protocol.

| IPTS component | Measured construct | Questionnaire/probe |
|---|---------------------------------|---|
| Lack of belongingness | Loneliness | Loneliness and Social Dissatisfaction Questionnaire (Cassidy and Asher 1992) (child & maternal report) |
| | | School Liking and Avoidance Questionnaire (Ladd and Price 1987) (child & maternal report) |
| | | Emotion, HRV, mood in response to Cyberball Task (Williams and Jarvis 2006) |
| | Lack of family connectedness | Security Scale (Kerns et al. 2015) (child report) |
| | | Parent Child Relationship Scale (Driscoll and Pianta 2011) (maternal report) |
| Burdensomeness | Low Self-worth | Emotion, HRV, mood in relation to observed dyadic connectedness (Melby and Conger 2001) during tasks |
| | | Harter Perceived Competence - Global Self-worth (Harter 1982) (child & maternal report) |
| | | Peer Victimization Questionnaire (Kochenderfer and Ladd 1996) (child report) |
| Hopelessness | Hopelessness | Emotion, HRV, mood in response to wins and losses during game play (Murray et al. 2001) |
| | | Hopelessness Scale for Children (Kazdin, Rodgers, and Colbus 1986) (child report) |
| | | Childhood Symptom Inventory – Depression Scale (Gadow and Sprafkin) (child & maternal report) |
| Capacity | Impulsivity | Urgency–Premeditation–Perseverance–Sensation seeking–Scale (Geurten et al. 2021) (child & maternal report) |
| | | Emotion, HRV, mood in response to the Balloon Emotional Learning Task (Humphreys, Tottenham, and Lee 2018) |
| Suicidality | Suicidality | Interview using Columbia Suicide Severity Rating Scale (Posner et al. 2011) (child & maternal report) |
| Other factors | Construct | Questionnaire/probe |
| Death understanding | Death understanding | Children's understanding of life and death Interview (Slaughter and Griffiths 2007) (interview with child) |
| Protective factors | Child racial socialization | Parent's Experience of Racial Socialization Scale (Caughy et al. 2002) (maternal report) |
| | | Coded maternal verbalizations during the Racial Socialization Task (Anderson et al. 2024) |
| | Child racial identity | Multidimensional Inventory of Black Identity-Teen (Scottham, Sellers, and Nguyễn 2008) (child report 8 and older) |
| | Mother racial identity | Multidimensional Inventory of Black Identity—Race and Gender Centrality (Sellers et al. 1997) (maternal report) |
| | Spirituality | Daily Spiritual Experiences Scale (Underwood and Teresi 2002) (maternal report) |
| Risk factors | Maternal Health | Flourishing Life Scale (Diener et al. 2010) (maternal report) |
| | Maternal stress exposure | Perceived Stress Scale (Cohen, Kamarck, and Mermelstein 1983) (maternal report) |
| | | Difficult Life Experiences Scale (Barnard et al. 1989) (maternal report) |
| | Maternal experience with racism | Racism and Life Experiences Scales (Harrell 2000)—Brief (maternal report) |
| Contextualized Stress Measure (Jackson, Hogue, and Phillips 2005) (maternal report) | | |

(Continues)

TABLE 1 | (Continued)

| Other factors | Construct | Questionnaire/probe |
|---------------|------------------------------|---|
| | Child experience with racism | Perceptions of Racism in Children and Youth (Pachter et al. 2010) (maternal & child report) |
| | Maternal depression | Adult Symptom Report Inventory (Gadow, Sprafkin, and Weiss 2004) (maternal report) |
| | Maternal suicidality | Interview using the Columbia Suicide Severity Rating Scale (Posner et al. 2011) (maternal report) |

to adolescence (Feldman 2012). Age-appropriate adaptations of the “Snap card game” (Murray et al. 2001), in which win and loss rounds are controlled and fixed, are being used to assess hopelessness and low self-worth. The Balloon Emotional Learning Task (BELT; Humphreys, Lee, and Tottenham 2013), a computer-based measure of risk taking in which children pump up balloons for points, is used to assess impulsivity.

Results from numerous studies show associations between lower heart rate variability (HRV) and suicidality in adolescents and adults (Bellato et al. 2023; Chesin et al. 2020; Kang et al. 2020; Sheridan et al. 2021). Thus, we are measuring baseline and changes in HRV in response to each of the behavioral probes. In addition, age validated methods developed by Durbin (2010) capture self-reported mood in response to each probe. Parent and child report on standardized questionnaires are paired with the behavioral probes to assess loneliness, lack of family connectedness, low self-worth, hopelessness, and impulsivity (see Table 1).

Assessment of protective and risk factors for Black youth center on racial identity and socialization, and racism-related stressors, respectively. Mothers will be administered the *Multidimensional Inventory of Black Identity* (MIBI; Sellers, Chavous, and Cooke 1998; Sellers et al. 1997) and children ages 10 and older the *Multidimensional Inventory of Black Identity*-teen version (MIBI-teen; Scottham, Sellers, and Nguyễn 2008) to assess racial identity. We include parent report and observations of racial socialization. The *Parent's Experience of Racial Socialization* (PERS) Scale (Stevenson 1999) and an adaptation of the PERS by Caughy et al. (2002) for use with parents of preschoolers is used to measure parent communication of specific messages to their children. The Racial Socialization Observational Task and Coding System (RSOTCS; Smith-Bynum 2008; Smith-Bynum and Usher 2004; Smith-Bynum et al. 2005) involves multiple 5-min discussions between Black parents and their adolescent children about how to address racially charged dilemmas presented in audio vignettes. The original measure was adapted for use as early as 10 years of age (Anderson, O'Brien Caughy, and Owen 2022), and work in our laboratory has further developed the measure for ages 5–9 years (ROST-EC; Keenan et al. 2024). These interaction tasks are recorded, and the conversations are coded for messages such as preparation for bias and racial pride.

Racism-related stressors experienced by the mother are measured using the Contextualized Stress Measure (Jackson, Hogue, and Phillips 2005), and for the child using the Perceptions of Racism in Children and Youth (PRaCY; Pachter et al. 2010), a valid and reliable 10-item measure of perceived racism and discrimination for children 7–18 years (Marcelo and Yates 2019). We have

permission from the author to use parent as a proxy measure for children under 7 years of age.

Suicidality is measured by parent and child report with the Columbia Suicide Severity Rating Scale (C-SSRS Posner et al. 2011), a semi-structured interview for ages six and older. The C-SSRS assesses passive and active ideation, intent, and plans. Recent work has led to the validation of the C-SSRS down to age 5 years. In addition, we administer an interview about children's understanding of death (Slaughter and Griffiths 2007) that assesses five components: inevitability ('tell me some things that die'), applicability ('tell me some things that don't die'), irreversibility ('can a dead person ever become a living person?'), cessation ('When a person is dead, do they need food?'), and causation ('tell me something that might happen that would make someone die'). The interview was developed for use with children as young as 4 years of age (Posner et al. 2010). The two interviews together will help inform whether the level of understanding of death is associated with suicidality and or the predictive validity of suicidality in early childhood.

5 | Conclusions

The increasing prevalence of suicidal thoughts and behaviors among Black youth have led to multiple calls for action (Molock et al. 2023; Richardson et al. 2024; Sheftall et al. 2022; Sumlin et al. 2024). The program described here is designed to support one component of an effort that will require multiple components. We aim to conduct robust tests of early risk and stability of suicidality in the context of culturally relevant risk and protective factors, by embedding a study of early childhood suicide phenotypes in Black children of PGS participants. Assuming support for our hypotheses and replication of results, prevention research would be the next goal, albeit a distal one. More proximal efforts to reverse recent trends in Black youth suicide are critical, including developing and deploying racially and culturally informed prevention and intervention programs (e.g., Lindsey et al. 2024; Robinson et al. 2024), broadening and refining screening and surveillance systems in pediatric care settings (Hua et al. 2024), supporting the capacity of families and communities to deepen and strengthen reasons for living (Hill et al. 2023), and dismantling racist systems and structures (Robertson et al. 2022).

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Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The authors have nothing to report.

Peer Review

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References

- Anderson, A. T., A. Jackson, L. Jones, D. P. Kennedy, K. Wells, and P. J. Chung. 2015. "Minority Parents' Perspectives on Racial Socialization and School Readiness in the Early Childhood Period." *Academic Pediatrics* 15: 405–411.
- Anderson, L. A., M. O'Brien Caughy, and M. T. Owen. 2022. "The Talk' and Parenting While Black in America: Centering Race, Resistance, and Refuge." *Journal of Black Psychology* 48: 475–506.
- Anderson, L., K. Mbayiwa, and S. Walton, et al. 2024. *Racial Socialization Observation Task—Early Childhood (RSOT-EC)*. University of Chicago. Unpublished manuscript.
- Argabright, S. T., E. Visoki, T. M. Moore, et al. 2022. "Association Between Discrimination Stress and Suicidality in Preadolescent Children." *Journal of the American Academy of Child & Adolescent Psychiatry* 61, no. 5: 686–697. <https://doi-org.proxy.uchicago.edu/10.1016/j.jaac.2021.08.011>.
- Barnard, K., S. Johnson, C. Booth, and H. Lee. 1989. *The Difficult Life Circumstances Scale*. Seattle, WA: NCAST.
- Bellato, A., M. A. Admani, C. Deak, et al. 2023. "Autonomic Dysregulation and Self-Injurious Thoughts and Behaviours in Children and Young People: A Systematic Review and Meta-Analysis." *JCPP Advances* 3, no. 3: e12148. <https://doi.org/10.1002/jcv2.12148>.
- Boyd, D. T., A. Gale, C. R. Quinn, et al. 2024. "Do We Belong? Examining the Associations Between Adolescents' Perceptions of School Belonging, Teacher Discrimination, Peer Prejudice and Suicide." *Journal of Racial and Ethnic Health Disparities* 11: 1454–1464.
- Boyd, D. T., C. R. Quinn, K. V. Jones, and O. W. J. Beer. 2022. "Suicidal Ideations and Attempts Within the Family Context: The Role of Parent Support, Bonding, and Peer Experiences With Suicidal Behaviors." *Journal of Racial and Ethnic Health Disparities* 9: 1740–1749.
- Bridge, J. A., L. M. Horowitz, C. A. Fontanella, et al. 2018. "Age-Related Racial Disparity in Suicide Rates Among US Youths From 2001 through 2015." *JAMA Pediatrics* 172: 697–699.
- Cahill, M., R. Illback, and N. Peiper. 2024. "Perceived Racial Discrimination, Psychological Distress, and Suicidal Behavior in Adolescence: Secondary Analysis of Cross-Sectional Data from a Statewide Youth Survey." *Healthcare* 12: 1011.
- Calear, A. L., S. McCallum, D. Kazan, A. Werner-Seidler, H. Christensen, and P. J. Batterham. 2021. "Application of the Interpersonal Psychological Theory of Suicide in a Non-Clinical Community-Based Adolescent Population." *Journal of Affective Disorders* 294: 235–240.
- Cassidy, J., and S. R. Asher. 1992. "Loneliness and Peer Relations in Young Children." *Child Development* 63: 350–365.
- Caughy, M. O., and M. T. Owen. 2015. "Cultural Socialization and School Readiness of African American and Latino Preschoolers." *Cultural Diversity & Ethnic Minority Psychology* 21: 391–399.
- Caughy, M. O., P. J. O'Campo, S. M. Randolph, and K. Nickerson. 2002. "The Influence of Racial Socialization Practices on the Cognitive and Behavioral Competence of African American Preschoolers." *Child Development* 73: 1611–1625.
- Centers for Disease Control and Prevention. (2020). Web-based Injury Statistics Query and Reporting System (WISQARS): Leading causes of death reports, national and regional.
- Chesin, M., M. Cascardi, W. Tsang, and S. Smith. 2020. "Blunted Arousal in Response to Psychological Stress is Associated with Current Suicide Ideation." *Archives of Suicide Research* 24: S381–S390.
- Chronis-Tuscano, A., B. S. G. Molina, W. E. Pelham, et al. 2010. "Very Early Predictors of Adolescent Depression and Suicide Attempts in Children with Attention-Deficit/Hyperactivity Disorder." *Archives of General Psychiatry* 67: 1044–1051.
- Chu, C., J. M. Buchman-Schmitt, I. H. Stanley, et al. 2017. "The Interpersonal Theory of Suicide: A Systematic Review and Meta-Analysis of a Decade of Cross-National Research." *Psychological Bulletin* 143: 1313–1345.
- Cohen, S., T. Kamarck, and R. Mermelstein. 1983. "A Global Measure of Perceived Stress." *Journal of Health and Social Behavior* 24: 385.
- Contreras, M. M., K. R. Osborne, A. A. Walsdorf, L. A. Anderson, M. O. Caughy, and M. T. Owen. 2021. "Holding Both Truths: Early Dynamics of Ethnic-Racial Socialization and Children's Behavioral Adjustment in African American and Latinx Families." *Journal of Social Issues* 77, no. 4: 987–1013.
- Curtin, S. C., and M. F. Garnett. 2023. "Suicide and Homicide Death Rates Among Youth and Young Adults Aged 10-24: United States, 2001-2021." *NCHS Data Brief* 471: 1–8.
- DeVile, D. C., D. Whalen, and F. J. Breslin, et al. 2020. "Prevalence and Family-Related Factors Associated With Suicidal Ideation, Suicide Attempts, and Self-Injury in Children Aged 9 to 10 Years." *JAMA Network Open* 3: e1920956.
- Diener, E., D. Wirtz, W. Tov, et al. 2010. "New Well-Being Measures: Short Scales to Assess Flourishing and Positive and Negative Feelings." *Social Indicators Research* 97: 143–156.
- Dotterer, A. M., and A. James. 2018. "Can Parenting Microprotections Buffer Against Adolescents' Experiences of Racial Discrimination?" *Journal of Youth and Adolescence* 47: 38–50.
- Douglas, R. D., J. O. Alli, N. Gaylord-Harden, I. Opara, and T. Gilreath. 2024. "Examining the Integrated Model of the Interpersonal-Psychological Theory of Suicide and Intersectionality Theory Among Black Male Adolescents." *Suicide & Life-Threatening Behavior*. Published ahead of print, February 27, 2024. <https://doi.org/10.1111/sltb.13066>.
- Driscoll, K., and R. C. Pianta. 2011. "Mothers' and Fathers' Perceptions of Conflict and Closeness in Parent-Child Relationships During Early Childhood." *Journal of Early Child and Infant Psychology* 7: 1–24.
- Durbin, C. E. 2010. "Validity of Young Children's Self-Reports of Their Emotion in Response to Structured Laboratory Tasks." *Emotion* 10: 519–535.
- Feldman, R. 1998. *Coding interactive behavior*. Ramat Gan, Israel: Bar-Ilan University.
- Feldman, R. 2012. "Parenting Behavior as the Environment Where Children Grow." In *The Cambridge Handbook of Environment in Human Development*, edited by L. Mayes, and M. D. Lewis, 535–567. New York: Cambridge University Press.
- Gadow, K., J. Sprafkin, and M. Weiss. 2004. *The Adult Self-Report Inventory-4*. Stony Brook, NY: Checkmate Plus.
- Galán, C. A., L. R. Stokes, N. Szoko, K. Z. Abebe, and A. J. Culyba. 2021. "Exploration of Experiences and Perpetration of Identity-Based Bullying Among Adolescents by Race/Ethnicity and Other Marginalized Identities." *JAMA Network Open* 4: e2116364.
- Geurten, M., C. Catale, P. Gay, S. Deplus, and J. Billieux. 2021. "Measuring Impulsivity in Children: Adaptation and Validation of a Short

- Version of the UPPS-P Impulsive Behaviors Scale in Children and Investigation of its Links With ADHD." *Journal of Attention Disorders* 25: 105–114.
- Harrell, S. P. 2000. "A Multidimensional Conceptualization of Racism-Related Stress: Implications for the Well-Being of People of Color." *American Journal of Orthopsychiatry* 70: 42–57.
- Harter, S. 1982. "The Perceived Competence Scale for Children." *Child Development* 53: 87–97.
- Hennefield, L., D. J. Whalen, G. Wood, M. C. Chavarria, and J. L. Luby. 2019. "Changing Conceptions of Death as a Function of Depression Status, Suicidal Ideation, and Media Exposure in Early Childhood." *Journal of the American Academy of Child & Adolescent Psychiatry* 58: 339–349.
- Hong, J. H., D. C. Talavera, M. O. Odafe, C. D. Barr, and R. L. Walker. 2024. "Does Purpose in Life or Ethnic Identity Moderate the Association for Racial Discrimination and Suicide Ideation in Racial/Ethnic Minority Emerging Adults?" *Cultural Diversity & Ethnic Minority Psychology* 30 no. 1: 1–10. <https://doi.org/10.1037/cdp0000245>.
- Horton, S. E., J. L. Hughes, J. D. King, et al. 2016. "Preliminary Examination of the Interpersonal Psychological Theory of Suicide in an Adolescent Clinical Sample." *Journal of Abnormal Child Psychology* 44: 1133–1144.
- Hua, L. L., J. Lee, M. H. Rahmandar, and E. J. Sigel, Committee on Adolescence, & Council On Injury, Violence, and Poison Prevention. 2024. "Suicide and Suicide Risk in Adolescents." *Pediatrics* 153: e2023064800.
- Humphreys, K. L., S. S. Lee, and N. Tottenham. 2013. "Not All Risk-Taking Behavior is Bad: Associative Sensitivity Predicts Learning During Risk Taking Among High Sensation Seekers." *Personality and Individual Differences* 54: 709–715.
- Humphreys, K. L., N. Tottenham, and S. S. Lee. 2018. "Risky Decision-Making in Children With and Without ADHD: A Prospective Study." *Child Neuropsychology* 24: 261–276.
- Jackson, F. M., C. R. Hogue, and M. T. Phillips. 2005. "The Development of a Race and Gender-Specific Stress Measure for African American Women: Jackson, Hogue, Phillips Contextualized Stress Measure." *Ethnicity and Disease* 15: 594–600.
- Jelsma, E., S. Chen, and F. Varner. 2022. "Working Harder Than Others to Prove Yourself: High-Effort Coping as a Buffer Between Teacher-Perpetrated Racial Discrimination and Mental Health Among Black American Adolescents." *Journal of Youth and Adolescence* 51: 694–707.
- Joiner, T. 2007. *Why People Die by Suicide*. Cambridge, MA, USA: Harvard University Press.
- Kang, G. E., M. A. Patriquin, H. Nguyen, et al. 2020. "Objective Measurement of Sleep, Heart Rate, Heart Rate Variability, and Physical Activity in Suicidality: A Systematic Review." *Journal of Affective Disorders* 273: 318–327.
- Kazdin, A. E., A. Rodgers, and D. Colbus. 1986. "The Hopelessness Scale for Children: Psychometric Characteristics and Concurrent Validity." *Journal of Consulting and Clinical Psychology* 54: 241.
- Keenan, K., L. Anderson, and K. Mbayiwa, et al. 2024. *Racial Socialization Observation Task—Early Childhood (RSOT-EC)*. Unpublished manual. University of Chicago.
- Keenan, K., D. Boeldt, D. Chen, et al. 2011. "Predictive Validity of DSM-IV Oppositional Defiant and Conduct Disorders in Clinically Referred Preschoolers." *Journal of Child Psychology and Psychiatry* 52: 47–55.
- Keenan, K., A. Hipwell, T. Chung, et al. 2010. "The Pittsburgh Girls Study: Overview and Initial Findings." *Journal of Clinical Child & Adolescent Psychology* 39: 506–521.
- Keenan, K., and L. S. Wakschlag. 2003. "Psychiatric Diagnosis in Preschool Children." *Journal of the American Academy of Child & Adolescent Psychiatry* 42: 129–130.
- Keenan, K., and L. S. Wakschlag. 2004. "Are Oppositional Defiant and Conduct Disorder Symptoms Normative Behaviors in Preschoolers? A Comparison of Referred and Nonreferred Children." *The American Journal of Psychiatry* 161, no. 2: 356–358. <https://doi.org/10.1176/appi.ajp.161.2.356>.
- Keenan, K., L. S. Wakschlag, B. Danis, et al. 2007. "Further Evidence of the Reliability and Validity of DSM-IV ODD and CD in Preschool Children." *Journal of the American Academy of Child & Adolescent Psychiatry* 46: 457–468.
- Kerns, K. A., B. L. Mathews, A. J. Koehn, C. T. Williams, and S. Siener-Ciesla. 2015. "Assessing Both Safe Haven and Secure Base Support in Parent–Child Relationships." *Attachment & Human Development* 17: 337–353.
- Kessler, R. C., and T. B. Üstün. 2004. "The World Mental Health (WMH) Survey Initiative Version of the World Health Organization (WHO) Composite International Diagnostic Interview (CIDI)." *International Journal of Methods in Psychiatric Research* 13, no. 2: 93–121. <https://doi.org/10.1002/mpr.168>.
- Khoury, J. E., P. Pechtel, C. M. Andersen, M. H. Teicher, and K. Lyons-Ruth. 2019. "Relations Among Maternal Withdrawal in Infancy, Borderline Features, Suicidality/Self-Injury, and Adult Hippocampal Volume: A 30-Year Longitudinal Study." *Behavioural Brain Research* 374: 112139. <https://doi.org/10.1016/j.bbr.2019.112139>.
- Kochenderfer, B. J., and G. W. Ladd. 1996. "Peer Victimization: Cause or Consequence of School Maladjustment?" *Child Development* 67: 1305–1317.
- Ladd, G. W., and J. M. Price. 1987. "Predicting Children's Social and School Adjustment Following the Transition from Preschool to Kindergarten." *Child Development* 58: 1168–1189.
- Lambert, S. F., R. C. Boyd, and N. S. Ialongo. 2022. "Protective Factors for Suicidal Ideation Among Black Adolescents Indirectly Exposed to Community Violence." *Suicide & Life-Threatening Behavior* 52: 478–489.
- Lewis, K. M., P. Barrett, G. Freitag, and T. H. Ollendick. 2023. "An Ounce of Prevention: Building Resilience and Targeting Anxiety in Young Children." *Clinical Child Psychology and Psychiatry* 28, no. 2: 795–809.
- Lindsey, M. A., L. Mufson, C. Vélez-Grau, et al. 2024. "Engaging Black Youth in Depression and Suicide Prevention Treatment Within Urban Schools: Study Protocol for a Randomized Controlled Pilot." *Trials* 25: 112.
- Loyd, A. B., M. L. Humphries, C. Moore, C. L. Owens, A. M. Smith, and N. Williams. 2024. "Identifying Risk and Protective Factors in Research on Mental Health and Black American Adolescents: 1990 Through 2022." *Journal of Black Psychology* 50 no. 4: 448–475. <https://doi.org/10.1177/00957984241249360>.
- Luby, J. L., K. Gilbert, D. Whalen, R. Tillman, and D. M. Barch. 2020. "The Differential Contribution of the Components of Parent-Child Interaction Therapy Emotion Development for Treatment of Preschool Depression." *Journal of the American Academy of Child & Adolescent Psychiatry* 59: 868–879.
- Luby, J. L., A. Heffelfinger, C. Mrakotsky, K. Brown, M. Hessler, and E. Spitznagel. 2003c. "Alterations in Stress Cortisol Reactivity in Depressed Preschoolers Relative to Psychiatric and No-Disorder Comparison Groups." *Archives of General Psychiatry* 60: 1248–1255.
- Luby, J. L., A. K. Heffelfinger, C. Mrakotsky, et al. 2003a. "The Clinical Picture of Depression in Preschool Children." *Journal of the American Academy of Child & Adolescent Psychiatry* 42: 340–348.
- Luby, J. L., A. K. Heffelfinger, C. Mrakotsky, M. J. Hessler, K. M. Brown, and T. Hildebrand. 2002. "Preschool Major Depressive Disorder: Preliminary Validation for Developmentally Modified DSM-IV Criteria." *Journal of the American Academy of Child & Adolescent Psychiatry* 41: 928–937.

- Luby, J. L., C. Mrakotsky, A. Heffelfinger, K. Brown, M. Hessler, and E. Spitznagel. 2003b. "Modification of DSM-IV Criteria for Depressed Preschool Children." *American Journal of Psychiatry* 160: 1169–1172.
- Luby, J. L., D. Whalen, R. Tillman, and D. M. Barch. 2019. "Clinical and Psychosocial Characteristics of Young Children with Suicidal Ideation, Behaviors, and Nonsuicidal Self-Injurious Behaviors." *Journal of the American Academy of Child & Adolescent Psychiatry* 58: 117–127.
- Lyons-Ruth, K., J. F. Bureau, B. Holmes, A. Easterbrooks, and N. H. Brooks. 2013. "Borderline Symptoms and Suicidality/Self-Injury in Late Adolescence: Prospectively Observed Relationship Correlates in Infancy and Childhood." *Psychiatry Research* 206, no. 2–3: 273–281. <https://doi.org/10.1016/j.psychres.2012.09.030>.
- Marcelo, A. K., and T. M. Yates. 2019. "Young Children's Ethnic-Racial Identity Moderates the Impact of Early Discrimination Experiences on Child Behavior Problems." *Cultural Diversity & Ethnic Minority Psychology* 25: 253–265.
- Matson, J. L., J. Wilkins, and M. González. 2008. "Early Identification and Diagnosis in Autism Spectrum Disorders in Young Children and Infants: How Early is Too Early?" *Research in Autism Spectrum Disorders* 2: 75–84.
- McClellan, J. M., and M. L. Speltz. 2003. "Psychiatric Diagnosis in Preschool Children." *Journal of the American Academy of Child & Adolescent Psychiatry* 42: 127–128.
- Melby, J. N., and R. D. Conger. 2001. "The Iowa Family Interaction Rating Scales: Instrument summary." In *Family Observational Coding Systems: Resources for Systemic Research*, edited by P. K. Kerig, and K. M. Lindahl, 33–58. Philadelphia, PA: Brunner/Mazel.
- Molock, S. D., R. C. Boyd, K. Alvarez, et al. 2023. "Culturally Responsive Assessment of Suicidal Thoughts and Behaviors in Youth of Color." *The American Psychologist* 78: 842–855.
- Murray, L., A. Hipwell, M. Woolgar, and P. Cooper. 2001. "Cognitive Vulnerability to Depression in 5-year-old Children of Depressed Mothers." *Journal of Child Psychology and Psychiatry and Allied Disciplines* 42: 891–899.
- Neblett, E. W., C. L. Philip, C. D. Cogburn, and R. M. Sellers. 2006. "African American Adolescents' Discrimination Experiences and Academic Achievement: Racial Socialization as a Cultural Compensatory and Protective Factor." *Journal of Black Psychology* 32: 199–218.
- Nock, M. K., J. G. Green, I. Hwang, et al. 2013. "Prevalence, Correlates, and Treatment of Lifetime Suicidal Behavior Among Adolescents: Results from the National Comorbidity Survey Replication Adolescent Supplement." *JAMA Psychiatry* 70: 300–310.
- Oppenheimer, C. W., C. R. Glenn, and A. B. Miller. 2022. "Future Directions in Suicide and Self-Injury Revisited: Integrating a Developmental Psychopathology Perspective." *Journal of Clinical Child and Adolescent Psychology* 51: 242–260.
- Pachter, L. M., L. A. Szalacha, B. A. Bernstein, and C. García Coll. 2010. "Perceptions of Racism in Children and Youth (PRaCY): Properties of a Self-Report Instrument for Research on Children's Health and Development." *Ethnicity & Health* 15: 33–46.
- Pagliaccio, D., A. Bitran, J. S. Kirshenbaum, et al. 2024. "Testing the interpersonal Theory of Suicide in Adolescents: A Multi-Wave Longitudinal Study." *Journal of Child Psychology and Psychiatry, and Allied Disciplines* 65, no. 5: 668–679. <https://doi.org/10.1111/jcpp.13868>.
- Polanco-Roman, L., and R. Miranda. 2013. "Culturally Related Stress, Hopelessness, and Vulnerability to Depressive Symptoms and Suicidal Ideation in Emerging Adulthood." *Behavior Therapy* 44: 75–87.
- Posner, K., D. Brent, C. Lucas, et al. (2010). Columbia-Suicide Severity Rating Scale (C-SSRS) Very Young Child/Cognitively Impaired—Lifetime Recent. The Columbia Lighthouse Project Website. Available at <https://cssrs.columbia.edu/documents/c-ssrs-full-lifetime-recent-scale-young-children-4-5/>.
- Posner, K., G. K. Brown, B. Stanley, et al. 2011. "The Columbia-Suicide Severity Rating Scale: Initial Validity and Internal Consistency Findings from Three Multisite Studies With Adolescents and Adults." *American Journal of Psychiatry* 168: 1266–1277.
- Richardson, S. C., J. A. Williams, and M. V. Michelle, et al. 2024. "Informing Equitable Prevention Practices: A Statewide Disaggregated Analysis of Suicide for Ethn racially Minoritized Adolescents." *Prevention Science* 25: 532–544.
- Roberts, C. M., K. L. Gamwell, M. N. Baudino, et al. 2020. "The Contributions of Illness Stigma, Health Communication Difficulties, and Thwarted Belongingness to Depressive Symptoms in Youth With Inflammatory Bowel Disease." *Journal of Pediatric Psychology* 45: 81–90.
- Robertson, R. A., C. J. Standley, J. F. Gunn, 3rd, and I. Opara. 2022. "Structural Indicators of Suicide: An Exploration of State-Level Risk Factors Among Black and White People in the United States, 2015–2019." *Journal of Public Mental Health* 21: 23–34.
- Robinson, W. L., C. R. Whipple, K. Keenan, C. E. Flack, S. Lemke, and L. A. Jason. 2024. "Reducing Suicidal Ideation in African American Adolescents: A Randomized Controlled Clinical Trial." *Journal of Consulting and Clinical Psychology* 92: 61–74.
- Robinson, W. L., C. R. Whipple, K. Keenan, C. Fleck, and L. Wingate. 2022. "Suicide in African American Adolescents: Understanding Risk By Studying Resilience." *Annual Review of Clinical Psychology* 18: 359–385.
- Scottham, K. M., R. M. Sellers, and H. X. Nguyễn. 2008. "A Measure of Racial Identity in African American Adolescents: The Development of the Multidimensional Inventory of Black Identity—Teen." *Cultural Diversity & Ethnic Minority Psychology* 14: 297–306.
- Sellers, R. M., T. M. Chavous, and D. Y. Cooke. 1998. "Racial Ideology and Racial Centrality as Predictors of African American College Students' Academic Performance." *Journal of Black Psychology* 24: 8–27.
- Sellers, R. M., S. A. Rowley, T. M. Chavous, J. N. Shelton, and M. A. Smith. 1997. "Multidimensional Inventory of Black Identity: A Preliminary Investigation of Reliability and Construct Validity." *Journal of Personality and Social Psychology* 73: 805–815.
- Semrud-Clikeman, M., and E. W. Hynd. 1991. "Review of Issues and Measures in Childhood Depression." *School Psychology International* 12: 275–298.
- Sheftall, A. H., F. Vakil, D. A. Ruch, R. C. Boyd, M. A. Lindsey, and J. A. Bridge. 2022. "Black Youth Suicide: Investigation of Current Trends and Precipitating Circumstances." *Journal of the American Academy of Child and Adolescent Psychiatry* 61: 662–675.
- Sheridan, D. C., S. Baker, R. Dehart, et al. 2021. "Heart Rate Variability and its Ability to Detect Worsening Suicidality in Adolescents: A Pilot Trial of Wearable Technology." *Psychiatry Investigation* 18: 928–935.
- Slaughter, V., and M. Griffiths. 2007. "Death Understanding and Fear of Death in Young Children." *Clinical Child Psychology and Psychiatry* 12: 525–535.
- Smith-Bynum, M. 2008. *Observing Racial Socialization in Action: A Construct Validity Study with African American families*. Paper presented at the biennial meeting of the. Chicago, IL: Society for Research on Adolescence.
- Smith-Bynum, M., and K. Usher. 2004. "Really, he had a Racist Teacher": African American Parent-adolescent Conversations About Racial Discrimination. Paper presented at the biennial meeting of the. Baltimore, MD: Society for Research on Adolescence.
- Smith-Bynum, M., K. K. Usher, T. A. Callands, and E. T. Burton. 2005. *An Observational Measure of African American Parent-Adolescent Communication About Racial Discrimination*. Paper presented at the biennial conference of the. Atlanta, GA: Society for Research on Child Development.
- Sourander, A., P. J. McGrath, T. Ristkari, et al. 2016. "Internet-Assisted Parent Training Intervention for Disruptive Behavior in 4-Year-Old Children: A Randomized Clinical Trial." *JAMA Psychiatry* 73: 378–387.

- Stevenson, H. 1999. *Parents Experience of Racial Socialization*. Unpublished manuscript. Philadelphia: University of Pennsylvania, Graduate School of Education.
- Stewart, S. M., M. Eaddy, S. E. Horton, J. Hughes, and B. Kennard. 2017. "The Validity of the Interpersonal Theory of Suicide in Adolescence: A Review." *Journal of Clinical Child & Adolescent Psychology* 46: 437–449.
- Stokes, M. N., E. Hope, Q. Cryer-Coupet, and E. Elliot. 2020. "Black Girl Blues: The Roles of Racial Socialization, Gendered Racial Socialization, and Racial Identity on Depressive Symptoms Among Black Girls." *Journal of Youth and Adolescence* 49: 2175–2189.
- Street, J. C., F. Taha, A. D. Jones, et al. 2012. "Racial Identity and Reasons for Living in African American Female Suicide Attempters." *Cultural Diversity and Ethnic Minority Psychology* 18: 416.
- Sugaya, L. S., G. A. Salum, W. de Sousa Gurgel, et al. 2022. "Efficacy and Safety of Methylphenidate and Behavioural Parent Training for Children Aged 3–5 Years With Attention-Deficit Hyperactivity Disorder: A Randomised, Double-Blind, Placebo-Controlled, and Sham Behavioural Parent Training-Controlled Trial." *The Lancet. Child & Adolescent Health* 6: 845–856.
- Sumlin, E., R. Hill, N. Asim, D. Busby, J. L. Brown, and C. Sharp. 2024. "Quantifying the Representation of Black Adolescents in Suicide Intervention Research." *Research on Child and Adolescent Psychopathology* 52: 159–168.
- Underwood, L. G., and J. A. Teresi. 2002. "The Daily Spiritual Experience Scale: Development, Theoretical Description, Reliability, Exploratory Factor Analysis, and Preliminary Construct Validity Using Health-Related Data." *Annals of Behavioral Medicine* 24: 22–33.
- Vacaru, S. V., J. E. van Schaik, E. de Water, and S. Hunnius. 2020. "Five-Year-Olds' Facial Mimicry Following Social Ostracism is Modulated By Attachment Security." *PLoS One* 15: e0240680.
- Varner, F. A., Y. Hou, T. Hodzic, N. M. Hurd, S. T. Butler-Barnes, and S. J. Rowley. 2018. "Racial Discrimination Experiences and African American Youth Adjustment: The Role of Parenting Profiles Based on Racial Socialization and Involved-Vigilant Parenting." *Cultural Diversity and Ethnic Minority Psychology* 24: 173–186.
- Vélez-Grau, C., I. M. Magan, and M. Gwadz. 2023b. "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.
- Vélez-Grau, C., M. McTernan, L. Mufson, and M. A. Lindsey. 2023a. "The Role of Thwarted Belongingness and Perceived Burdensomeness in Passive Suicide Ideation Among Latinx and Black Youth." *Suicide & Life-Threatening Behavior*. Published ahead of print, September 18, 2023. <https://doi.org/10.1111/sltb.13003>.
- Whalen, D. J., K. Dixon-Gordon, A. C. Belden, D. Barch, and J. L. Luby. 2015. "Correlates and Consequences of Suicidal Cognitions and Behaviors in Children Ages 3 to 7 Years." *Journal of the American Academy of Child & Adolescent Psychiatry* 54: 926–937.e922.
- Whalen, D. J., L. Hennefield, N. M. Elsayed, R. Tillman, D. M. Barch, and J. L. Luby. 2022. "Trajectories of Suicidal Thoughts and Behaviors From Preschool through Late Adolescence." *Journal of the American Academy of Child and Adolescent Psychiatry* 61: 676–685.
- Wilens, T. E., J. Biederman, T. J. Spencer, and M. Monuteaux. 2003. "Psychiatric Diagnosis in Preschool Children." *Journal of the American Academy of Child & Adolescent Psychiatry* 42: 128–129.
- Williams, K. D., and B. Jarvis. 2006. "Cyberball: A Program for Use in Research on Interpersonal Ostracism and Acceptance." *Behavioral Research Methods* 38: 174–180.