

## **Towards Racial Equity in Trauma-Informed Schools: A Modified Delphi Study of Essential Intervention and Implementation Strategies**

Z. Ayotola Onipede

*University of California, Los Angeles*

Tamar Kodish

*University of Colorado, Boulder*

Anna S. Lau

*University of California, Los Angeles*

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### **ABSTRACT**

Consensus regarding elements of a trauma-informed school (TIS) is essential for promoting desired youth outcomes and racial equity is lacking. This study aimed to establish consensus on TIS intervention components and implementation strategies that are: 1) important for youth outcomes, 2) important for racial equity in outcomes, and 3) feasible to implement. We utilized a three-round Delphi survey, and recruited participants (n=49) with relevant TIS expertise. Participants provided importance and feasibility ratings on a set of TIS components and strategies (n=55) related to organizational/policy reforms, workforce professional development, and educational/clinical practices. Approximately 90% of components reached consensus on high importance for youth outcomes and racial equity. However, despite broad consensus on the importance of most components, fewer, approximately 50%, were viewed as highly feasible to implement in practice. Findings regarding the extant TIS literature and their implications for responding equitably to youths' needs are discussed.

**Keywords:** trauma-informed schools, racial equity, youth mental health, Delphi study

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Exposure to trauma during childhood and adolescence has far-reaching consequences for youth. Disproportionately impacted are racially/ethnically minoritized (REM) youth, whom studies have shown experience worse mental health, academic performance, and life opportunity when exposed to trauma (Andrews et al., 2015; Lopez et al., 2017). Trauma-informed schools (TIS) which aim to respond to student trauma and prevent re-traumatization, have been recognized as structural innovations with unexamined potential to promote racial equity in student outcomes. Accordingly, federal, state, and local policy guidance on implementing trauma-informed schools has emerged. Schools have increasingly prioritized implementing trauma-informed approaches, yet there remains limited consensus on which practices, policies, and strategies constitute a TIS and which components are essential for achieving desired student and school outcomes (Onipede et al., 2024). Recent critiques of TIS have also highlighted the limited attention to practices that advance racial equity in student mental health and educational outcomes. An articulation of best practices essential to the implementation of TIS is needed to facilitate future studies of TIS effectiveness. There is currently a dearth of controlled research evaluating the outcomes of TIS (Maynard et al., 2019), and a clear definition of TIS and identification of essential components to measure are necessary to enhance clarity and rigor in evaluation of TIS outcomes (Onipede et al., 2024). The purpose of this study is to achieve expert consensus regarding what practices are most important to achieving desired youth outcomes with TIS. In addition, to inform implementation priorities, expert consensus will be sought to identify the TIS practices most important for promoting racial equity and the most feasible to implement at scale.

### **RACIAL/ETHNIC MINORITIZED (REM) YOUTH AND EXPOSURE TO TRAUMA**

Youth exposure to traumatic events is a pervasive and urgent public health issue. Youth with early trauma exposure are at increased risk of worse mental health, cognitive functioning, academic performance, and less job opportunities later in life (Dye, 2018; Perfect et al., 2016). REM youth are disproportionately impacted by trauma and its sequelae (Andrews et al., 2015; Lopez et al., 2017, Maguire-Jack et al., 2020). In particular, studies find that Black and Latinx youth are observed to experience significantly higher exposure to trauma compared to White youth (Lopez et al., 2017; Maguire-Jack et al., 2020). In addition to more commonly documented forms of trauma, REM youth also face racial trauma stemming from institutional, intergenerational, interpersonal, and vicarious encounters with race-based discrimination, harassment, and violence (Carter, 2007; Comas-Diaz et al., 2019; Henderson et al., 2019; Williams et al., 2018).

Within schools, increased media reports of violence towards REM students, in particular Black and Latinx students, at the hands of school security and personnel, have highlighted the high potential for re-traumatization in schools serving REM communities that compounds racial trauma (Henderson et al., 2019; Merkwae, 2015). Indeed, schools have long been arbiters of racialized stress and trauma for REM youth by way of enacting inequitable policies and practices related to student discipline, and school safety. Zero tolerance disciplinary policies, and inequitable and systemically

biased responses to student behavioral needs in schools have contributed to stark racial disparities in exclusionary discipline (U.S. Department of Education Office for Civil Rights [OCR], 2021). Moreover, the adoption of carceral and coercive structures in schools (e.g., school policing, personal searches, security apparatus, locked campuses) purported to promote student safety, have harmed REM youth and have been associated with heightened distress and decreased sense of safety (Cuellar & Coyle, 2020; King & Bracy, 2019; Tanner-Smith et al., 2017). Minoritized students learning within environments that are highly surveilled, and where their behavior is likely to be mischaracterized can contribute to heightened racialized stress (Mallet, 2016; Welsh & Little, 2018). The specific role that schools have played in compounding trauma exposure for REM youth has informed calls for the implementation of TIS, which aims to respond to student trauma and resist re-traumatization. Many descriptions of trauma-informed principles are rooted in attending to and disrupting how historical patterns of marginalization, bias, and cultural exclusion in schools shape trauma experiences (Substance Abuse and Mental Health Services Administration [SAMHSA], 2014).

### **TRAUMA-INFORMED SCHOOL MODELS AND CURRENT LIMITATIONS**

A trauma-informed approach, in accordance with SAMHSA's key assumptions and principles, aims to understand the impact of trauma on student well-being, recognize signs of trauma, respond to student trauma, and prevent re-traumatization (SAMHSA, 2014). Trauma-informed approaches are grounded in ensuring safety, fostering trust and transparency, strengthening peer support, encouraging collaboration and shared decision-making, and promoting community empowerment, voice, and choice. They also emphasize the importance of recognizing how cultural and historical contexts influence trauma exposure and the high potential for re-traumatization in systems serving youth (SAMHSA, 2014).

Federal, state, and local policies have encouraged service systems—including schools—to adapt trauma-informed principles to fit their specific contexts. Despite this encouragement, local educational authorities and schools have received little concrete guidance on the essential components of a trauma-informed school and the implementation strategies needed to put them in place, leading to substantial variation and limited research on TIS outcomes. Schools have leveraged a range of trauma-informed intervention components (i.e., reforms to school practices, policies, and procedures) and implementation strategies (i.e., processes for developing, adopting, and sustaining trauma-informed reforms). The components have generally included changes to school policies/procedures, workforce professional development, and mental health/instructional practices (Avery et al., 2021; Hanson & Lang, 2016; Onipede et al., 2024). One hallmark of a trauma-informed school is that change is school-wide, across all aspects of school operation, rather than, for example, focusing on changes affecting subgroups of students. However, this whole-school approach often remains aspirational; commonly, changes are in select areas such as introducing topics in educator professional development or introducing student behavioral health services for youth with demonstrated need, while neglecting changes to school

discipline policies, classroom behavior management procedures, or mechanisms for community engagement. A lack of clear guidance on what TIS intervention components and implementation strategies are essential has contributed to inconsistent design and implementation and presents a barrier to evaluating and demonstrating impact.

Finally, although frameworks of trauma-informed care center the importance of addressing cultural and historical factors shaping experiences of trauma and re-traumatization of REM youth, a recent scoping review revealed that explicit efforts to promote racial equity—such as de-implementing exclusionary discipline practices or incorporating culturally inclusive curricula—are scarce in currently published TIS descriptions (Onipede et al., 2024). This scoping review coded descriptions of TIS to characterize their intervention components and implementation strategies, and to examine the extent to which TIS descriptions had an explicit focus on promoting racial equity. Studies were considered to have a racial equity focus if they included at least one intervention component with the specific objective of promoting equity. The review found that only 30% of TIS descriptions included components that explicitly attended to advancing racial equity (Onipede et al., 2024). Moreover, when components were present, they tended to center practices that celebrate cultural differences in students lived experiences, but neglect to address racialized stress and the dismantling of structures that contribute to trauma within schools and communities. Such neglect limits TIS's responsiveness to the needs of REM youths. This review identified a core problem with existing TIS frameworks: a lack of attention to cultural responsiveness and racial equity in their implementation. Further, the findings underscore the need for research to identify the intervention components and implementation strategies of TIS that promote equity in student outcomes, and to explore potential barriers to their low implementation (Onipede et al., 2024).

### **Current Study Aims**

To optimize future implementation efforts and evaluations of TIS, as well as to build capacity for trauma-informed schools to address issues of racial inequity, the current study aimed to establish expert consensus on a core set of trauma-informed intervention components and implementation strategies. A recent scoping review examined published TIS descriptions, documenting the frequency with which intervention components and implementation strategies were reported, including strategies for promoting cultural responsiveness and equity (Onipede et al., 2024). Building on this review, the present study aimed to establish consensus on the importance of these components and strategies for improving student outcomes, their feasibility for implementation in school contexts, and their role in advancing racial equity. Perceptions of importance and feasibility are a critical point of consensus, as they often influence the acceptability and adoption of school mental health innovations (Lyon et al., 2019; Waltz et al., 2015).

Given the critique that TIS frameworks neglect to address questions of how to promote anti-racism and cultural responsiveness, incorporating racial equity as a lens of importance provides a more comprehensive understanding of which TIS components are viewed as critical for responding to the needs of REM youth. In

addition, establishing consensus across the three domains – importance for outcomes, importance for racial equity, and feasibility – could surface potential implementation tensions (e.g., items that are low in feasibility but high in importance for racial equity). Identifying such tensions is critical to TIS implementation, as it highlights potential barriers that may obstruct equity-promoting reforms despite strong expert consensus on their importance. By mapping the relative importance, feasibility, and equity impact of TIS components, this study provides needed guidance on how trauma-informed reforms and implementation can move towards explicitly promoting cultural responsiveness and advancing racial equity in schools.

To accomplish this, a modified Delphi survey approach was used to evaluate and generate consensus among a group of experts, including both TIS research experts and TIS practice experts. The inclusion of practice experts with experience designing and mounting TIS reforms offered a valuable and sometimes underutilized source of insight. Generating consensus among subject matter experts is considered an important formative step when there remain questions on how concepts should be defined. Delphi surveys are an ideal approach to generating consensus due to key defining characteristics, including their iterative design and opportunities to collect expert feedback throughout the study. The study had two aims. First, we sought to establish expert consensus for TIS intervention components and implementation strategies that were (1) most important to achieving youth outcomes, (2) most important to advancing racial equity in youth outcomes, and (3) most feasible to implement in public schools and local educational authorities. Second, we sought to illustrate areas of alignment and divergence between the findings from the Onipede et al. scoping review (2024) and the findings of expert consensus.

## METHODS

The goal of a Delphi expert survey is to attain consensus from a group of experts about a specific issue or question, in this case, “What elements of TIS are essential to promoting youth mental health and academic outcomes?” Standard Delphi procedures include iterative rounds, each including three steps: (1) participants complete a survey comprised of judgment ratings for a set of items related to a specific issue, (2) after the survey the study facilitator aggregates responses to identify items that did and did not reach pre-determined thresholds for group consensus, and (3) the facilitator delivers controlled feedback about the group’s average judgment ratings and participants are asked to re-rate those items that had not yet reached consensus (Jorm, 2015; Rowe & Wright, 2001). Defining characteristics of this method include anonymity: allowing respondents to express their judgments freely, iterative design: allowing participants to repeatedly express and adjust their judgements based on emerging group consensus, and opportunity for expert feedback: allowing expert participants to suggest new items for inclusion in a Delphi study defining an issue or concept (Jorm, 2015; Rowe & Wright, 2001).

Consistent with best practice guidelines, the Delphi process in this study was modified by using three survey rounds, and the study was initiated with a set of pre-determined survey items (Jorm, 2015; Trevelyan & Robinson, 2015). Participants were provided four weeks to complete each round of the survey, and the duration of

time between each round ranged from six to eight weeks to allow sufficient time for data analysis and creation of the next round of the survey. Participants were provided with a \$25 gift card for each completed survey (Round 1: \$25, Round 2: \$25, Round 3: \$25). Study procedures were approved by the University of California, Los Angeles Institutional Review Board.

## **Participants**

Eligible study participants included TIS experts with specialized knowledge and/or experience in at least one of the following domains: trauma-informed training and consultation, trauma-specific intervention development, trauma-informed school program design, trauma-informed school program evaluation, racial equity standards and practices, and policies and standards in trauma-informed practice. Purposive and snowball sampling methods were used to identify study participants. Expert participants were identified from two pools: (a) published academic experts in the field of TIS identified from recent scoping and systematic reviews of the literature, and (b) community practice experts from a national network of leaders in child traumatic stress. Participants from these identified pools were also encouraged to nominate their peers with similar expertise for study participation.

Published academic experts were identified from the study list in a TIS scoping review (Onipede et al., 2024) and a TIS systematic review (Maynard et al., 2017). Eligible participants were 1. first and senior authors, 2. with at least one paper discussing a relevant TIS domain (trauma-informed training and consultation, trauma-specific intervention development, trauma-informed school program design, trauma-informed school program evaluation, racial equity standards and practices, and policies and standards in trauma-informed practice).

Community practice experts were identified from a national network of partners with the National Child Traumatic Stress Network. Eligible participants had 1. professional experience in at least one domain of school, district, or state level implementation of trauma-informed practice (trauma-informed training and consultation, trauma-specific intervention development, trauma-informed school program design, trauma-informed school program evaluation, racial equity standards and practices, and policies and standards in trauma-informed practice).

Across groups, 109 participants were determined to be eligible and invited via email to participate in the study. A total of  $n = 49$  participants enrolled in the study and completed Round 1 of the survey. Round 2 of the survey had a 75% retention rate ( $n = 37$ ), and Round 3 of the survey had a 73% retention rate ( $n = 36$ ).

## ***Participant Characteristics***

Table 1 provides detailed demographic information of the full sample ( $n=49$ ). The sample was 88% female, and 14% identified as Black or African American; 74% of participants preferred not to indicate their race. Participants all held advanced degrees; most participants held a doctoral degree (71%). Regarding years of experience with TIS, 55% of the sample had more than 10 years of experience, while 45% of the sample had 10 or less years of experience. Participants endorsed a wide

range of areas of TIS expertise, 90% indicated expertise with trauma-informed training and consultation, 70% had expertise in trauma-informed school program design, 65% had expertise in trauma-informed school program evaluation, 53% had expertise in racial equity standards and practices, 51% had expertise in trauma-specific intervention development, and 39% had expertise in policies and standards in trauma-informed practice.

**Table 1: Demographics**

<b>Demographic Category</b>	<b>n (%)</b>
<i>Age</i>	
26-35 years	5 (10.2%)
36-45 years	20 (40.8%)
56-65 years	15 (30.6%)
65 + years	6 (12%)
Prefer not to say	3 (6.1%)
<i>Race</i>	
Asian or Asian American	3 (6.1%)
Black or African American	7 (14.3%)
White	2 (4.1%)
Biracial or Multiracial	1 (2%)
Hispanic or Latina/o/x	2 (4.1%)
Prefer not to Say	36 (73.5%)
<i>Gender</i>	
Male	6 (12.2%)
Female	43 (87.8%)
<i>Education Level</i>	
Master's Degree	14 (28.6%)
Doctoral Degree	35 (71.4%)
<i>TIS Domain of Expertise</i>	
TIS Training and Consultation	44 (89.8%)
Trauma-Specific Interventions	25 (51%)
TIS Program Design	34 (69.4%)
TIS Program Evaluation	32 (65.3%)
Racial Equity Promotion	26 (53%)
Policy and Standards in Trauma-Informed Practice	19 (38.8%)

**Years of TIS Experience**

Less than 5 years	4 (8.2%)
5-10 years	18 (36.7%)
11-15 years	17 (34.7%)
16-20 years	5 (10.2%)
21-25 years	3 (6.1%)
25+ years	2 (4.1%)

**Round 1 Survey**

The Round 1 survey comprised demographics questions (e.g., age, race/ethnicity, professional degree, TIS years of experience, TIS domain of expertise, years of professional experience), a pre-populated set of trauma-informed intervention components and implementation strategies, and an open-response section soliciting expert feedback and inviting the addition of intervention components and implementation strategies not listed.

The pre-populated set of TIS components and implementation strategies was drawn from a scoping review that characterized common elements from published TIS descriptions (Onipede et al., 2024). The scoping review identified 32 trauma-informed intervention components and implementation strategies organized across three domains: Organizational Policy Reforms (i.e., school-wide policies and procedures), Workforce Professional Development (i.e., trauma-informed training for school staff), and Educational & Clinical Practice (i.e., trauma-informed instructional or school mental health services). Participants rated each survey item on three dimensions using a 5-point Likert scale. Items were rated for “*importance to achieve student mental health, educational, and social outcomes*” (0 = not at all important, 1 = slightly, 2 = moderately, 3 = very, 4 = extremely), “*importance for advancing racial equity in student mental health, educational, and social outcomes*” (0 = not at all important, 1 = slightly, 2 = moderately, 3 = very, 4 = extremely), and “*feasibility of implementation in schools*” (0 = not at all feasible 1 = slightly, 2 = moderately, 3 = very, 4 = extremely). Open response fields were also included in the Round 1 survey to allow experts to suggest any important TIS components and strategies not already included in the survey, to be rated by experts in subsequent rounds. See Supplemental Information for full questionnaire.

**Round 2 Survey**

The Round 2 survey included an updated set of 44 trauma-informed intervention components and implementation strategies, with 32 original Round 1 items & 12 expert-generated items for participants to rate. Participants were provided with Round 1 group consensus ratings for the importance and feasibility of each item. Items that reached consensus (IQR  $\leq 1$ ) were highlighted, and their corresponding median ratings and interquartile range values were listed alongside them in the survey. Participants were then instructed that they had the opportunity to adjust their ratings

considering the group consensus. Emergent items ( $n=12$ ) were rated for the first time. As before, each item was rated on the same 5-point Likert scales on importance for achieving youth outcomes, importance for advancing racial equity in youth outcomes, and feasibility of implementation. Open response fields were also included to allow experts to suggest important TIS components and strategies not already included in the survey, for rating in subsequent rounds.

### **Round 3 Survey**

The Round 3 survey included an updated set of 55 trauma-informed intervention components and implementation strategies (44 Round 2 items & 11 newly expert-generated items) for participants to re-rate/rate. Participants were provided with updated group consensus ratings (i.e., consensus items ( $IQR \leq 1$ ) were highlighted, and their corresponding median ratings and interquartile range values were listed in the survey) for the importance and feasibility of each item from Round 2 and allowed to adjust their ratings of Round 2 items based on group consensus. Emergent items ( $n=11$ ) were rated for the first time. Again, each item was rated on the same three 5-point Likert scale dimensions for importance and feasibility.

### **Analyses**

After each survey round, indices of central tendency and dispersion (median and interquartile range [IQR]) were calculated for each TIS component to determine consensus in expert judgements of importance/feasibility, in accordance with guidelines for Delphi methodology (Trevelyan & Robinson, 2015). Items were considered to reach consensus in each round if their  $IQR \leq 1$  (Raskin, 1994; von der Gracht, 2012) and items with median Likert scale ratings of “very important” or “extremely important”, and “very feasible” or “extremely feasible” (e.g., ratings  $\geq 3$ ) were considered to meet the threshold for importance and feasibility.

Qualitative content analysis strategies were used to code the trauma-informed components and strategies generated by expert participants via the open-response survey prompts. Following conventional qualitative content analysis approaches (Graneheim & Lundman, 2004; Hsieh & Shannon, 2005). The lead author first reviewed all open-ended survey responses, and (1) removed participant responses with insufficient clarity or elaboration to generate a TIS component description, (2) classified responses according to an established coding taxonomy from Onipede et al's (2024) scoping review of TIS components: Organizational Policy Reform, Workforce Professional Development, Educational & Clinical Practice, (3) determined if the newly nominated items overlapped with any existing TIS component items. Similar or overlapping responses were synthesized with existing items to minimize repetition, and (4) novel responses were drafted into new survey items and item descriptions by the first author. These new items and descriptions were reviewed and finalized through two rounds of feedback from a group that included study authors and additional graduate students, postdoctoral scholars, and faculty with expertise in school mental health, racial equity promotion, and implementation science. Finalized expert-nominated TIS components were incorporated into the

subsequent survey round for expert ratings. This process was completed after Round 1 and Round 2; no open responses were collected during Round 3.

Following the three-round survey and based on final expert ratings, strategies that achieved consensus were visually represented in a “Go-Zone” scatterplot based on their mean ratings of importance and feasibility. This scatterplot was divided into four quadrants (QI–QIV), using the grand mean of importance and feasibility as the axis midpoints. Quadrant I (QI), also called the “Go-Zone”, included items rated above the mean on both importance and feasibility, reflecting high-priority items. Quadrant II (QII) represented items with relatively high feasibility but relatively low importance. Quadrant III (QIII) represented items with relatively low feasibility and relatively low importance. Quadrant IV (QIV) represented items with relatively high importance and relatively low feasibility (Kodish et al., 2020; Lyon et al., 2019; Waltz et al., 2015).

## RESULTS

### **Aim 1 - Consensus on TIS Components and Strategies**

Table 2 depicts TIS intervention components and implementation strategies, consensus ratings, and each strategy’s Go-zone quadrant. In Round 1, consensus (IQR  $\leq 1$ ) was met for 80% of TIS components and strategies on their importance for achieving youth outcomes. In Round 2, 92% of components and strategies met consensus, and in Round 3, 94% met consensus. Of those that met consensus by Round 3, 92% were considered very or extremely important for affecting youth mental health and academic outcomes.

Consensus on the importance of TIS components and strategies for advancing racial equity in youth outcomes was 68% in Round 1. In Round 2, 86% of components and strategies met consensus, and in Round 3, consensus increased to 98%. Of the components that met consensus by Round 3, 92% were considered very or extremely important for advancing racial equity.

Consensus on the feasibility of implementing TIS components and strategies was 32% in Round 1. In Round 2, consensus increased to 96%, and in Round 3, 98% of components and strategies met consensus. Of the elements that met consensus by Round 3, 54% were considered very or extremely feasible.

Fig. 1 depicts components and strategies mapped onto Go-zones, illustrating relative importance for affecting student outcomes and feasibility. Nineteen strategies (35%) were in Quadrant 1 (QI), indicating higher than average importance and higher than average feasibility. Of the strategies in QI, 95% were also considered to be of high importance for advancing racial equity. Ten strategies were in QII, indicating higher feasibility and lower importance. Sixteen strategies were in QIII, indicating lower feasibility and lower importance. Nine strategies were in QIV, indicating higher importance and lower feasibility. Components and strategies were color-coded to indicate group consensus on racial equity importance, with items colored in red considered extremely important for racial equity and those colored in orange considered very important for racial equity.

**Table 2: Consensus Ratings for Importance, Feasibility, and Racial Equity**

Trauma Informed School Components & Strategies	Type	Quadrant	Round 1						Round 2						Round 3					
			Imp.		Feas.		Rac. Equ.		Imp.		Feas.		Rac. Equ.		Imp.		Feas.		Rac. Equ.	
			M	I	M	I	M	I	M	I	M	I	M	I	M	I	M	I	M	I
<i>Organizational/Policy Reforms</i>																				
1. Outside Authorities on School Grounds	IC	QII	4	1	4	0	5	1	4	0	4	0	5	0	4	0	4	0	5	0
2. Carceral Apparatuses/Structures of Surveillance	IC	QIII	4	1	3	1	5	1	4	0	3	0	5	0	4	0	3	0	5	0
3. Use of Force Limitations	IC	QI	5	0	4	1	5	0	5	0	5	0	5	0	5	0	5	0	5	0
4. Exclusionary School Discipline	IC	QIII	4	1	3	1	5	1	4	1	3	0	5	0	4	0	3	0	5	0
5. Alternative Interventions	IC	QI	5	1	4	1	5	1	5	0	4	0	5	0	5	0	4	0	5	0
6. Individualized Student Plans	IC	QIII	4	2	3	1	4	2	4	2	3	1	4	2	4	1	3	0	3	1
7. Staff Well-being	IC	QI	5	0	4	1	5	2	5	0	4	0	4	1	5	0	4	0	4	0
8. Implementation Champions	IS	QI	5	1	4	2	4	2	5	0	4	0	4	1	5	0	4	0	4	0
9. Utilization of Incentives	IS	QIII	3	1	3	1	3	2	3	1	3	1	3	2	3	0	3	0	4	1
10. Develop Partnerships	IS	QII	4	1	3	1	4	2	4	0	4	1	4	2	4	0	4	0	4	1
11. Community Advisory Boards	IS	QI	5	1	4	1	5	0	5	0	4	0	5	1	5	0	4	0	5	0



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12. Outreach to Parents/Caregivers	IC	QII	4	1	4	1	4	2	4	0	4	0	4	0	4	0	4	0	4	0
13. Cultural Broker	IC	QIII	4	1	3	1	4	2	3	1	3	0	4	0	3	0	3	0	4	0
14. Community Task Sharing	IS	QIII	4	0	3	1	5	1	4	0	3	1	4	1	4	0	3	0	4	0
15. Language Access	IC	QIV	5	1	3	2	5	0	5	0	3	1	5	0	5	0	3	0	5	0
16. Implementation Readiness	IS	QI	5	1	4	2	4	1	5	0	4	1	4	2	5	0	5	0	4	0
17. Implementation Monitoring	IS	QI	5	1	4	1	4	1	5	0	4	1	4	1	5	0	4	0	4	0
18. Community Needs Assessment	IS	QII	4	1	3	1	4	2	4	0	4	1	4	0	4	0	4	0	4	0
19. Student Outcome Monitoring	IS	QIII							4	1	3	1	4	1	4	0	3	0	4	0
20. Share Feedback Data	IS	QI							5	1	4	1	4	1	5	0	4	0	4	0
21. Crisis Response Protocols	IC	QI							5	0.25	4	0.25	5	1	5	0	4	0	5	0
22. Withholding Learning Opportunities	IC	QII							4	1	4	2	5	1	4	0	4	0	5	0
23. De-Implement Corporal Punishment/Restraints	IC	QI							5	0	5	1	5	1	5	0	5	0	5	0
24. Staff Learning Collaboratives	IS	QIII							4	1	3	1	4	1	4	0	3	0	4	0
25. Leadership Support	IS	QI							5	1	4	1	4	2	5	0	4	0	4	2
26. Staff Reflect Cultural/Racial Diversity of Community	IC	QIV							5	1	3	1	5	1	5	0	3	0	5	0
27. Mission & Vision Statement	IS	QII							3	1	4	0.25	3	1	3	0	4	0	3	0
28. Safe Physical Environment	IC	QIV							5	1	3	1	4	1	5	0	3	0	4	0
29. Basic Needs Resources	IC	QIII							4	1	3	1	4	1	4	0	3	0	4	0
30. LGBTQ+ Protections	IC	QIV							5	1	4	1.25	5	1	5	0	3	1	5	0
31. Payment of Community Stakeholders	IC	QIII													4	2	3	2	4	2

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32. Race Conscious Developmentally Appropriate Practices	IC	QIII															4	1	3	1	4	1
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***Workforce Professional Development***

33. Training Opportunities	IS	QI	5	0	4	1	5	1	5	0	4	0	5	0	5	0	4	0	5	0
34. Consultation/Coaching or Supervision	IS	QI	5	1	4	1	5	1	5	0	4	0	5	0	5	0	4	0	5	0
35. Annual Training	IS	QI	5	1	4	1	4	1	5	0	4	0	5	0	5	0	4	0	5	0
36. Common Responses to Trauma	IC	QIV	5	1	3	1	5	1	5	0	3	0	5	0	5	0	3	0	5	0
37. Identify/Respond to Trauma	IC	QII	4	1	4	2	4	2	4	0	4	1	4	1	4	0	4	0	4	0
38. Secondary Traumatic Stress	IC	QI	5	0	4	1	5	1	5	0	4	0	5	0	5	0	4	0	5	0
39. Cultural Responsiveness	IC	QI	5	0	4	1	4	1	5	0	4	0	5	0	5	0	4	0	5	0
40. Historical Context of School Re-Traumatization	IC	QII							4	2	4	1	4	1	4	2	4	0	4	0
41. Bullying	IC	QII							4	1	4	0	4	1	4	0	4	0	4	0
42. Trauma-Informed Suicide Prevention	IC	QI							5	1	4	1	5	1	5	0	4	0	5	0
43. All Staff Training	IS	QI	5	0	4	2	5	0	5	1	4	1	5	0			4	0	5	0
44. Train-the-Trainer	IS	QIII							4	0	3	1	4	1	4	0	3	0	4	0
45. Sexual Misconduct	IC	QII													5	1	4	1	3	1

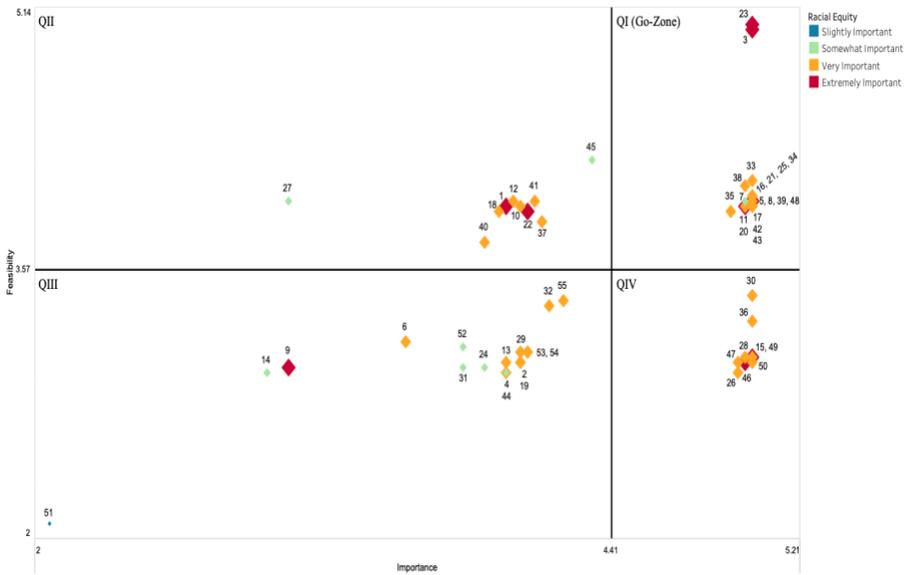
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46. Historically/Culturally Accurate Curriculum	IC	QIV	5	1	3	1	5	0	5	0	3	0	5	0	5	0	3	0	5	0
47. Cultural Experience as Knowledge (Cultural Fit)	IC	QIV	5	1	3	1	5	0	5	0	3	0	5	0	5	0	3	0	5	0
48. Tier 1 Practices	IC	QI	5	0	4	2	5	1	5	0	4	1	5	0	5	0	4	0	5	0
49. Tier 2 Practices	IC	QIV	5	1	3	1	4	1	5	0	3	0	4	0	5	0	3	0	4	0
50. Tier 3 Practices	IC	QIV	5	1	3	1	4	1	5	0	3	0	4	0	5	0	3	0	4	0
51. Universal Trauma Screening	IC	QIII	3	2	2	1	3	2	2	1	2	0	3	1	2	0	2	0	3	0
52. Indicated Trauma Screening	IC	QIII	4	2	3	1	4	2	4	2	3	0	4	2	4	2	3	0	4	1
53. External Mental Health Services	IC	QIII	5	1	4	2	5	1	4	1	3	1	4	2	4	0	3	0	4	1
54. Trauma-Informed Teaching Pedagogy	IC	QIII							4	1	3	1	5	1	4	0	3	0	5	0
55. Share Feedback and Track Referrals	IS	QIII													4	1	3	1	4	2

**Aim 2 – Areas of Alignment and Divergence with Onipede et al., 2024 Review**

Table 3 illustrates how expert consensus on TIS components of highest importance and feasibility relates to findings from Onipede et al.’s (2024) review regarding the extent to which these components are reported in TIS. The table describes the “go-zone” components and strategies, the nineteen components from Figure 1 with the highest ratings of importance and feasibility. The table also includes corresponding reports of their frequency in published TIS studies as described in Onipede et al.’s (2024) review.



**Figure 1: Go-Zone Plot**



**Table 3: Go-Zone Components and Strategies**

“Go-Zone” Components & Strategies	Type	% of Published TIS Studies with Reports of the Component/Strategy (Onipede et al., 2024)
<b>Organizational/Policy Reforms</b>		
<b>3. Use of Force</b> - School policy limits the use of force against students by school personnel, including School Resource Officers.	IC	0%
<b>5. Alternative Interventions</b> - Use of non-exclusionary discipline practices to address student conduct.	IC	37%
<b>7. Staff Well-being</b> - School promotes a healthy and safe working environment for staff to prevent high stress & burnout.	IC	10%
<b>8. Implementation Champions</b> – School identifies an individual or set of individuals to encourage staff adoption, and sustainment of trauma-informed practices.	IS	23%
<b>11. Community Advisory Boards</b> - Involvement of diverse community members (e.g., students, parents) on school advisory boards to review and develop school policies and practices.	IS	20%



<b>16. Implementation Readiness</b> - School conducts assessment of organizational barriers and facilitators prior to implementing trauma-informed practices/policies.	IS	23%
<b>17. Implementation Monitoring</b> - School routinely collects data to monitor the progress of the implementation of trauma-informed practices.	IS	77%
<b>20. Share Feedback Data</b> - School shares feedback data from implementation progress and outcome monitoring broadly with staff and community members.	IS	-
<b>21. Crisis Response Protocols</b> - School procedures for responding to crisis situations are (re) designed to prevent re-traumatization.	IC	-
<b>23. De-Implement Corporal Punishment/Restraints</b> - School policy prohibits the use of practices that risk physical and emotional harm to students (e.g. corporal punishment, restraints).	IC	-
<b>25. Leadership Support</b> - School leadership declares priority of new trauma-informed practices and their determination to have practices implemented.	IS	-

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**Workforce Professional Development**

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<b>33. Training Opportunities</b> - School provides initial staff training on trauma-informed practices.	IS	90%
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<b>34. Consultation/Coaching or Supervision</b> - School provides ongoing consultation or supervision to support staff use of trauma-informed practices.	IS	70%
<b>35. Ongoing Training</b> - School provides ongoing staff training in new trauma-informed practices.	IS	37%
<b>38. Secondary Traumatic Stress</b> - Staff training develops awareness about secondary traumatic stress (e.g., compassion fatigue) experienced by staff.	IC	20%
<b>39. Cultural Responsiveness</b> - Staff training develops skills in culturally responsive, trauma informed practices.	IC	10%
<b>42. Trauma-Informed Suicide Prevention</b> - School personnel receive training in trauma-informed suicide risk detection, prevention, and/or postvention strategies.	IC	-
<b>43. All Staff Training</b> - Training on trauma-informed practices is required for all school and district staff.	IS	-

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**Educational & Clinical Practices**

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<b>48. Tier 1 Practices</b> - School provides Tier 1 or universal interventions to address needs of all students (e.g., school-wide social emotional learning interventions).	IC	70%
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## DISCUSSION

This study aimed to generate expert consensus on the essential components of a trauma-informed school. Experts rated TIS intervention components and implementation strategies on features of importance, feasibility, and relevance for achieving racial equity. Using a three-round Delphi survey approach, over ninety percent of intervention components and implementation strategies achieved expert consensus – indicating a high degree of alignment among experts regarding which TIS elements are essential for achieving desired outcomes. Among the components and strategies that reached consensus, over 90% were rated as highly important for achieving desired youth outcomes and for advancing racial equity. In contrast, only 54% of components and strategies were rated feasible to implement.

Using a go-zone plot to map components by importance and feasibility, we identified 19 components as both highly important for youth outcomes and relatively feasible to implement (see Figure 1). The upper-right quadrant, where the highest perceptions of importance and feasibility converge, constitutes the “go-zone” and captures components with the greatest likelihood of successful implementation and outcome attainment (Trochim & Kane, 2005; Waltz et al., 2015). Accordingly, the discussion that follows focuses primarily on this subset of high-priority “go-zone” components. We examine how components in the “go-zone” align with, or diverge from, current TIS design and implementation as reported in Onipede et al.’s (2024) scoping review and the broader literature. In addition, we consider the limited representation of components essential for advancing racial equity within the “go-zone”, and the implications this poses for equity-centered trauma-informed reform.

### **“Go-Zone” TIS Intervention Components and Implementation Strategies**

The “go-zone” included nineteen intervention components and implementation strategies from all three domains of trauma-informed practice (e.g., Organizational & Policy Reforms, Workforce Professional Development, and Educational & Clinical Practices). See Table 3 for a list of “go-zone” components and strategies. The “go-zone” included components focused on reforming school policies and procedures to minimize re-traumatization, enhancing staff professional development related to student trauma, and enhancing staff well-being. It also included implementation strategies related to training, outcome monitoring, improving staff buy-in, and aligning trauma-informed reforms with existing school and community needs. While some of these components and strategies align closely with elements frequently reported in current TIS design and implementation efforts, several components and strategies within the “go-zone” are inconsistently or not at all represented in TIS design and implementation.



### ***Alignment of “Go-Zone” with Current TIS Design and Implementation***

From the “go-zone”, a handful of intervention components and implementation strategies align closely with frequently reported practices in TIS.

Tier 1 Practices were highlighted in a scoping review of intervention components most reported in TIS design (Onipede et al., 2024). Tier 1 practices, as conceptualized within multi-tiered systems of support, are practices that are applied across the school population to support education and behavioral development. Consistent with TIS frameworks, this emphasizes universal prevention and early intervention. In TIS, these practices include social-emotional learning and school-wide positive behavioral supports, which have been linked to improved student emotion regulation, stress levels, and peer relationships (Herrenkhol et al., 2019; Mendelson et al., 2019).

In addition, implementation strategies, including Implementation Monitoring, Training Opportunities, and Consultation or Coaching/Supervision, landed in the “go-zone” and are among the strategies most reported in TIS implementation (Onipede et al., 2024). School personnel consistently cite training, coaching, and implementation monitoring as essential facilitators of trauma-informed practice (Wassink et al., 2022; Wittich et al., 2020). More broadly, these strategies have also been identified as core drivers of adoption of evidence-based innovations in school and community settings (Domitrovich et al., 2008; Lyon & Bruns, 2019; Owens et al., 2014).

### ***Underrepresentation of “Go-Zone” in Current TIS Design and Implementation***

In contrast, several “go-zone” components and strategies are less frequently, or not at all, observed in TIS models as described in the published literature. Underrepresented components included targeted professional development for staff, staff well-being, and structural reforms to advance racial equity. Underrepresented implementation strategies included training, outcome monitoring, improving staff buy-in, and aligning trauma-informed reforms with existing school and community needs. In a scoping review on TIS, these components and strategies emerged in approximately one-third of TIS descriptions or less. Of note, components related to structural reform of re-traumatizing school policies and procedures were not at all present in any published TIS descriptions (Onipede et al., 2024). The following paragraphs discuss how strategies identified in this study underscore gaps in the existing literature and provide ideas about how to move forward to improve TIS practices in the future.

**Gaps in Intervention Components.** Several components that reflect shifts towards reforming school policies and procedures to minimize disproportionate re-traumatization of REM students were in the “go-zone” but are scarce in reports of TIS. These components included: Limits to Use of Force (e.g., reforming protocols to limit allowable use of force by personnel in responses to student misconduct), Alternative Interventions (e.g., non-exclusionary and non-punitive discipline practices to address student conduct), Crisis Response Protocols (e.g., trauma-sensitive crisis procedures that prioritize emotional safety), and De-Implementation

of Corporal Punishment. Despite evidence highlighting that school crisis response procedures, use of force, and punitive discipline can be re-traumatizing and contribute to poorer mental health and school outcomes and reduced life opportunities among racially minoritized youth, components noted above that target these problems have not been reported in current TIS models (Onipede et al., 2024). It may be that outer context barriers, such as state-level policy and legacy funding for carceral approaches to school safety, limit the adoption of these reforms. Alternatively, scholars writing about TIS may be working in contexts where these reforms have already occurred. Nonetheless, explicitly naming such components in TIS frameworks and descriptions is essential to promote standardized measurement of TIS. While structural reforms to discipline remain scant, Onipede et al.'s scoping review (2024) found that TIS primarily attend to discipline reform through integration of interventions such as restorative justice or Positive Behavioral Interventions and Supports, which have been shown to reduce re-traumatizing disciplinary incidents, decrease racial disparities, and improve student behavior and school climate (Lodi et al., 2022; McIntosh et al., 2014; Zakszeski & Rutherford, 2021). In accordance with expert judgments, increased incorporation of these components has the potential to foster safe and supportive learning environments that improve outcomes for REM youth. Future TIS research and policy work should focus on reducing barriers to implementing these school discipline and safety-related reforms and on examining their long-term effects on key outcomes.

Also minimally incorporated in current TIS, but represented in the “go-zone”, are intervention components aimed at enhancing workforce capacity to respond to students’ trauma-related needs: Trauma-Informed Suicide Prevention Training and Cultural Responsiveness Training. School-based procedures for responding to students who disclose suicidal thoughts and behaviors, such as reliance on emergency first responders (including police) and involuntary hospitalization, can exacerbate student distress and promote mistrust (Asarnow et al., 2020; Kodish et al., 2020). Trauma-informed suicide prevention training holds the promise of preparing school staff to respond to students experiencing suicidality using trauma-informed principles such as connection, belonging, and trust to promote student safety and decrease re-traumatization, further isolation, and mistrust. While these approaches are not well represented in the literature on TIS models, they emerged as an expert-nominated component in this study. Similarly, although cultural responsiveness is essential to creating inclusive school climates and mitigating race-related trauma for students and staff, cultural responsiveness training is not consistently integrated into TIS models. A recent scoping review observed cultural responsiveness training in only 10% of published TIS descriptions (Onipede et al., 2024). Extant literature suggests that cultural responsiveness practices, such as integrating students’ cultural knowledge into instruction or interrogating biases, have the potential to improve academic and social-emotional outcomes for students (Byrd, 2016; Gay, 2018; Ladson-Billings, 2014). Evidence and expert priorities suggest that professional development in domains of cultural responsiveness and trauma-informed suicide prevention could benefit student well-being and make the case for increased study of such components in TIS.

Finally, intervention components such as Secondary Traumatic Stress (STS) Training, and Staff Well-being (e.g., school-based strategies to reduce stress and burnout), were also in the “go-zone”, but were observed in less than 20% of published TIS descriptions from a scoping review of TIS practices (Onipede et al., 2024). STS has been linked to educator burnout, absenteeism, and diminished quality of student interactions (Lawson et al., 2019; Oberg et al., 2023), but few TIS models incorporate strategies to reduce this impact on school personnel. Research indicates that schools that invest in professional development related to developing staff awareness of STS, and invest in organizational wellness resources, such as regular peer debriefing, access to mental health supports, and workload accommodations, see lower rates of staff burnout and stronger implementation outcomes (Cieslak et al., 2014; McIntyre et al., 2019). According to expert consensus in this study, targeted professional development in secondary traumatic stress and organizational staff wellness supports has positive impacts on TIS implementation; however, integrating these into the TIS framework is currently limited.

**Gaps in Implementation Efforts.** Implementation strategies such as All Staff Training, Annual Training, Sharing Feedback Data, Leadership Support, Implementation Champions, Community Advisory Boards, and Implementation Readiness—are less consistently observed in published examples of TIS in the literature, despite their presence in the “go-zone”, and endorsed importance in implementation science (Cook et al., 2019; Lyon & Bruns, 2019; Owens et al., 2013). These strategies target barriers that frequently emerge when scaling school-based innovations, such as insufficient training opportunities, low staff buy-in, misalignment between the innovation and community priorities, and inadequate organizational readiness (Cook et al., 2019; Lyon & Bruns, 2019; Owens et al., 2013). Research demonstrates that when school leaders actively message the importance and pave the way with dedicated time and resources for staff to launch new initiatives, and when champions and community members are engaged in shaping and executing changes, initiatives are more likely to be adopted and sustained (Aarons et al., 2014; Damshroder et al., 2009; Triplett et al., 2022). This cluster of implementation strategies includes involvement from multiple stakeholder groups (e.g., leaders, providers, and communities), underscoring the need to integrate multi-level strategies to optimize TIS implementation.

### **Components not Included in “Go-Zone”: Concerns about Feasibility with Advancing Racial Equity in TIS**

Notably, while most components and strategies in this study were considered essential for advancing racial equity, only 34% of those rated highly for racial equity also fell into the “go-zone.” This discrepancy reflects expert concerns about the feasibility of implementing specific trauma-informed components in school settings. Although nearly 90% of strategies were endorsed as necessary for promoting both student outcomes and racial equity, approximately half of these were viewed as less feasible to implement in practice.

Components explicitly tied to racial equity and cultural responsiveness and rated as important but least feasible included: Cultural Brokers, Carceral Apparatus, Exclusionary Discipline Reform, Race-Conscious Developmentally Appropriate Practices, Limited Law Enforcement on School Grounds, Historical Context of Re-Traumatization, Language Access, Staff Reflecting the Cultural/Racial Diversity of the Community, Cultural Fit/Experience as Knowledge, Historically/Culturally Accurate Curriculum.

These components are foundational to fostering racially equitable, culturally responsive trauma-informed schools. For example, de-implementing exclusionary discipline and limiting the role of law enforcement in schools are critical to disrupting the deleterious effects of discipline and traumatizing security measures on REM youth's mental health and life opportunities (Skiba et al., 2014). Further, components related to developing culturally relevant curriculum and adopting culturally responsive pedagogy have been linked to improved student engagement and achievement (Byrd, 2016; Gay, 2013).

### ***Identifying and Addressing Barriers to Feasibility of Strategies Advancing Racial Equity***

Given that perceptions of feasibility can influence the adoption of mental health innovations, the lower perceptions of feasibility associated with racial equity-focused components in this study have concerning implications. Trauma-informed school models that neglect to recognize the role of schools as arbiters of race-related stress/trauma for youth, and do not incorporate practices to resist this traumatization, risk reinforcing the harm they seek to heal, and pathologizing student reactions to inequity/marginalization as trauma. Further, excluding equity-focused and culturally responsive components from TIS frameworks limits their relevance and effectiveness for REM students.

Several multi-level barriers likely contribute to perceptions of low feasibility for racial equity-focused components. It is possible that school personnel may not feel adequately equipped to address issues related to culture, bias, and structural racism, due to limitations in training opportunities (Blitz et al., 2016; Melendez et al., 2021). Another often cited barrier is a lack of adequate funding in schools to invest in resources and staff to implement equity-focused reforms, resulting in a de-prioritization of equity-focused initiatives in schools (Woodward et al., 2021). Notably, efforts to implement racial equity-focused reforms, particularly those related to school discipline, law enforcement, and school security, are often undermined by broader state and federal education policy that mandates or highly encourages continued use of exclusionary and carceral measures (Annamma et al., 2019).

Ultimately, these findings underscore a central tension in the field: while there is growing recognition of the importance of equity in trauma-informed schools, schools continue to face substantial barriers to implementing the very components needed to realize this reform. Addressing these barriers requires a dual focus. On the one hand, schools must expand their adoption of equity-centered practices and policies. Alongside this, state and federal funding systems and education policy must be restructured to align with equity goals. School financing systems are entrenched in

inequity, with schools serving higher proportions of racially and ethnically minoritized youth often receiving fewer total resources (Owens, 2020; Rothstein, 2017). This has historically left the schools that could most benefit from equity-promoting practices and policies with the fewest resources to implement them. To support schools' implementation efforts, school financing systems need to be redesigned to (1) equitably allocate funds across schools according to demonstrated need rather than discriminatory metrics such as property taxes, and (2) establish dedicated, long-term funding streams specifically for equity initiatives. Equally critical is policy change. Current federal and, in some cases, state guidance has not nationally prohibited corporal punishment, nor adequately addressed the inequitable and harmful application of zero-tolerance discipline and law enforcement practices in schools (Camacho et al., 2024). Despite broad recognition of their detrimental effects, these practices remain permitted with limited oversight or accountability and few incentives for their de-implementation. To meaningfully support schools, education policy must move toward explicitly prohibiting exclusionary and punitive discipline, limiting law enforcement involvement in schools, and incentivizing the adoption of restorative and healing-centered approaches. Such reforms would provide schools with the policy and fiscal environment necessary to sustain equity-centered trauma-informed change.

## **Limitations**

While this study offers critical insight into expert perceptions of the importance and feasibility of trauma-informed school (TIS) components and implementation strategies, some key limitations should be considered when interpreting its findings. First, participants were provided the option to decline disclosing their race/ethnicity, which resulted in limited demographic data being collected. Given the small pool of TIS experts from which we were sampling, this option was offered to preserve participant anonymity in the Delphi process and to increase participation. However, this limitation means it is unclear whether the group of experts who contributed to the study included individuals with personal lived experience of racial inequity, and it precludes examination of how participant race/ethnicity may have shaped perspectives on TIS and racial equity. Future research by the authors will prioritize a more robust collection of participant demographic data to better address these important considerations. It is also important to note that findings reflect consensus within a defined group of experts. Although the study intentionally included both researchers and practitioners to enhance diversity of perspective, this sample does not capture the views of all relevant voices within TIS, particularly frontline educators, students, families, and individuals from underrepresented communities most impacted by trauma and structural inequities. Future research should triangulate expert perspectives with those of school-community members to ensure that trauma-informed frameworks reflect lived experience as well as professional expertise.

Another consideration relates to the potential for response bias in Delphi studies. Since participants are presented with group consensus information between rounds, they may feel pressure to conform to majority views. While this risk cannot be eliminated entirely, several design features were employed to mitigate it, including

providing multiple rounds to re-rate items and maintaining participant anonymity. It is also important to note that the components and strategies examined in this study may not be exhaustive of all components that are important and currently implemented in TIS. The review, which informed the components for this study, was limited to published descriptions of TIS, and components suggested by participants may be limited by their relevant domains of expertise.

Interpretation of consensus findings should also take into account the critical tension observed in results: experts rated many racial equity-focused components as highly important, yet less feasible to implement. While this insight is valuable, feasibility judgments are often influenced by organizational systems and constraints, and do not always reflect issues with the components themselves. Thus, low feasibility ratings should not be immediately interpreted as a rationale for exclusion of specific components but rather as an urgent call to identify the barriers that make components, particularly equity-focused components, challenging to implement in school systems.

Finally, this study did not conduct stability analyses to support consensus determinations. In Delphi studies, stability analyses (along with consensus thresholds) are typically used to assess whether participant judgements have converged across rounds, which then informs termination of the study. To avoid elongation of the study timeline, we employed a pre-determined three-round structure as the endpoint rather than conducting stability analyses. Though prior research suggests three rounds are sufficient to determine consensus (Belton et al., 2019; Trevelyan & Robinson, 2015), stability analyses can provide more rigorous confirmation that consensus has been reached.

## **CONCLUSION**

In sum, findings from this study reveal strong expert consensus around the components and strategies most essential to adequate and equitable trauma-informed school implementation. While some elements are well-aligned with current TIS frameworks, many components endorsed highly by experts remain underutilized, particularly those targeting staff well-being, suicide prevention, re-traumatizing school practices, and racial equity. Importantly, components aimed at advancing racial equity were frequently perceived as less feasible, underscoring a critical tension between equity goals and implementation realities. Addressing these gaps will require not only expanding the scope of trauma-informed frameworks but also identifying and dismantling multi-level barriers that impede the integration of more transformative reforms. Future research would benefit from identifying implementation strategies that can facilitate systemic change and developing trauma-informed models that are not only broadly relevant but deeply responsive to the needs of historically marginalized students and the adults who support them.

We also hope that the findings from this study can inform the refinement or development of new fidelity and outcome measurement tools for TIS that are in accordance with expert perspectives on best practice and attentive to the goals of promoting equity. As trauma-informed school implementation continues to expand, there remains a dearth of psychometrically sound measurement tools to assess

implementation fidelity and to assess schools' attention to racial equity and cultural responsiveness (Champine et al., 2019). Without this, evaluations of TIS are limited in their ability to establish the effectiveness of TIS components on outcomes of interest such as student mental health and achievement, school climate and safety, or racial equity in school discipline. Towards addressing this gap, we have compiled the expert-identified components from the Delphi study into the *Equity in Trauma-Informed Schools Self-Assessment Checklist* (see Supplementary Material). This tool is designed to help schools reflect on their current implementation of trauma-informed practices, including practices that promote racial equity, and identify areas of strength as well as opportunities for growth in their implementation effort. While validation and further refinement of this checklist remain important next steps, it provides a promising initial framework for integrating equity-centered practices into both the evaluation and implementation of TIS.

## REFERENCES

- Aarons, G. A., Ehrhart, M. G., Farahnak, L. R., & Sklar, M. (2014). Aligning leadership across systems and organizations to develop a strategic climate for evidence-based practice implementation. *Annual Review of Public Health, 35*(1), 255–274. <https://doi.org/10.1146/annurev-publhealth-032013-182447>
- Andrews, A. R., 3rd., Jobe-Shields, L., López, C. M., Metzger, I. W., de Arellano, M. A., Saunders, B., & Kilpatrick, D. G. (2015). Polyvictimization, income, and ethnic differences in trauma-related mental health during adolescence. *Social Psychiatry and Psychiatric Epidemiology, 50*(8), 1223–1234. <https://doi.org/10.1007/s00127-015-1077-3>
- Asarnow, J. R., Goldston, D. B., Tunno, A. M., Inscoc, A. B., & Pynoos, R. (2020). Suicide, self-harm, & traumatic stress exposure: A trauma-informed approach to the evaluation and management of suicide risk. *Evidence-based practice in child and adolescent mental health, 5*(4), 483–500. <https://doi.org/10.1080/23794925.2020.1796547>
- Avery, J. C., Morris, H., Galvin, E., Misso, M., Savaglio, M., & Skouteris, H. (2021). Systematic review of school-wide trauma-informed approaches. *Journal of Child & Adolescent Trauma, 14*(3), 381–397. <https://doi.org/10.1007/s40653-020-00321-1>
- Belton, I., MacDonald, A., Wright, G., & Hamlin, I. (2019). Improving the practical application of the Delphi method in group-based judgment: A six-step prescription for a well-founded and defensible process. *Technological Forecasting and Social Change, 147*, 72–82. <https://doi.org/10.1016/j.techfore.2019.07.002>
- Blitz, L. V., Yull, D., & Clauhs, M. (2020). Bringing sanctuary to school: Assessing school climate as a foundation for culturally responsive trauma-informed approaches for urban schools. *Urban Education, 55*(1), 95–124. <https://doi.org/10.1177/0042085916651323>
- Byrd, C. M. (2016). Does culturally relevant teaching work? An examination from student perspectives. *Sage Open, 6*(3), 2158244016660744. <https://doi.org/10.1177/2158244016660744>

- Camacho, K. A., Fenning, P. A., Hyzer, R. H., Green-Robinson, K., & Chakkalakeel, S. (2024).  
Advocating for Disciplinary Reform Through a Systematic Review of School Discipline Laws and State Guidance Across the United States. *School Psychology Review*, 54(3), 382–397. <https://doi.org/10.1080/2372966X.2024.2369496>
- Carter, R. T. (2007). Racism and psychological and emotional injury: Recognizing and assessing race-based traumatic stress. *The Counseling Psychologist*, 35(1), 13-105. <https://doi.org/10.1177/0011000006292033>
- Champine, R. B., Lang, J. M., Nelson, A. M., Hanson, R. F., & Tebes, J. K. (2019). Systems measures of a trauma-informed approach: A systematic review. *American Journal of Community Psychology*, 64(3-4), 418–437. <https://doi.org/10.1002/ajcp.12388>
- Cieslak, R., Shoji, K., Douglas, A., Melville, E., Luszczynska, A., & Benight, C. C. (2014). A meta-analysis of the relationship between job burnout and secondary traumatic stress among workers with indirect exposure to trauma. *Psychological services*, 11(1), 75. <https://doi.org/10.1037/a0033798>
- Comas-Díaz, L., Hall, G. N., & Neville, H. A. (2019). Racial trauma: Theory, research, and healing: Introduction to the special issue. *American Psychologist*, 74(1), 1–5. <https://doi.org/10.1037/amp0000442>
- Cook, C. R., Lyon, A. R., Locke, J., Waltz, T., & Powell, B. J. (2019). Adapting a compilation of implementation strategies to advance school-based implementation research and practice. *Prevention Science*, 20, 914-935.
- Cuellar, M. J., & Coyle, S. (2020). Assessing disparities in school safety: implications for promoting equality in current efforts to keep kids safe. *Security Journal*, 34(1), 658–684. <https://doi.org/10.1057/s41284-020-00254-2>
- Domitrovich, C. E., Bradshaw, C. P., Poduska, J. M., Hoagwood, K., Buckley, J. A., Olin, S., Romanelli, L. H., Leaf, P. J., Greenberg, M. T. & Jalongo, N. S. (2008). Maximizing the implementation quality of evidence-based preventive interventions in schools: A conceptual framework. *Advances in school mental health promotion*, 1(3), 6-28. <https://doi.org/10.1080/1754730X.2008.9715730>
- Dye, H. (2018). The impact and long-term effects of childhood trauma. *Journal of Human Behavior in the Social Environment*, 28(3), 381–392. <https://doi.org/10.1080/10911359.2018.1435328>
- Fixsen, D. L. (2005). Implementation research: A synthesis of the literature. *University of South Florida, Louis de la Parte Florida Mental Health Research Institute, The National Implementation Research Network*.
- Gay, G. (2013). Culturally responsive teaching principles, practices, and effects. In *Handbook of urban education* (pp. 391-410). Routledge.
- Graneheim, U. H., & Lundman, B. (2004). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 24(2), 105-112. <https://doi.org/10.1016/j.nedt.2003.10.001>
- Hanson, R. F., & Lang, J. (2016). A critical look at trauma-informed care among agencies and systems serving maltreated youth and their families. *Child Maltreatment*, 21(2), 95–100. <https://doi.org/10.1177/1077559516635274>

- Henderson, D. X., Walker, L., Barnes, R. R., Lunsford, A., Edwards, C., & Clark, C. (2019). A framework for race-related trauma in the public education system and implications on health for black youth. *Journal of School Health, 89*(11), 926–933. <https://doi.org/10.1111/josh.12832>
- Herrenkohl, T. I., Hong, S., & Verbrugge, B. (2019). Trauma-informed programs based in schools: Linking concepts to practices and assessing the evidence. *American Journal of Community Psychology, 64*(3-4), 373-388. <https://doi.org/10.1002/ajcp.12362>
- Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative health research, 15*(9), 1277-1288. <https://doi.org/10.1177/1049732305276687>
- Jorm, A. F. (2015). Using the Delphi expert consensus method in mental health research. *Australian & New Zealand Journal of Psychiatry, 49*(10), 887-897. <https://doi.org/10.1177/0004867415600891>
- King, S., & Bracy, N. L. (2019). School security in the post-Columbine era: Trends, consequences, and future directions. *Journal of contemporary criminal justice, 35*(3), 274-295. <https://doi.org/10.1177/1043986219840188>
- Kodish, T., Schueller, S. M., & Lau, A. S. (2023). Barriers and strategies to improve digital mental health intervention uptake among college students of color: A modified Delphi study. *Journal of Behavioral and Cognitive Therapy, 33*(1), 10-23. <https://doi.org/10.1016/j.jbct.2022.12.002>
- Ladson-Billings, G. (2014). Culturally relevant pedagogy 2.0: aka the remix. *Harvard educational review, 84*(1), 74-84. <https://doi.org/10.17763/haer.84.1.p2rj131485484751>
- Lawson, H. A., Caringi, J. C., Gottfried, R., Bride, B. E., & Hydon, S. P. (2019). Educators' secondary traumatic stress, children's trauma, and the need for trauma literacy. *Harvard Educational Review, 89*(3), 421-447. <https://doi.org/10.17763/1943-5045-89.3.421>
- Lodi, E., Perrella, L., Lepri, G. L., Scarpa, M. L., & Patrizi, P. (2022). Use of restorative justice and restorative practices at school: A systematic literature review. *International Journal of Environmental Research and Public Health, 19*(1), 96. <https://doi.org/10.3390/ijerph19010096>
- López, C. M., Andrews III, A. R., Chisolm, A. M., De Arellano, M. A., Saunders, B., & Kilpatrick, D. (2017). Racial/ethnic differences in trauma exposure and mental health disorders in adolescents. *Cultural Diversity & Ethnic Minority Psychology, 23*(3), 382. <https://doi.org/10.1037/cdp0000126>
- Lyon, A. R., & Bruns, E. J. (2019). From evidence to impact: Joining our best school mental health practices with our best implementation strategies. *School mental health, 11*, 106-114. <https://doi.org/10.1007/s12310-018-09306-w>
- Maguire-Jack, K., Lanier, P., & Lombardi, B. (2020). Investigating racial differences in clusters of adverse childhood experiences. *American Journal of Orthopsychiatry, 90*(1), 106. <https://doi.org/10.1037/ort0000405>
- Mallett, C. A. (2016). The school-to-prison pipeline: A critical review of the punitive paradigm shift. *Child and Adolescent Social Work Journal, 33*(1), 15–24. <https://doi.org/10.1007/s10560-015-0397-1>

- Maynard, B. R., Farina, A., Dell, N. A., & Kelly, M. S. (2019). Effects of trauma-informed approaches in schools: A systematic review. *Campbell Systematic Reviews*. <https://doi.org/10.1002/c12.1018>
- McIntosh, K., Ty, S. V., & Miller, L. D. (2014). Effects of school-wide positive behavioral interventions and supports on internalizing problems: Current evidence and future directions. *Journal of Positive Behavior Interventions*, 16(4), 209-218. <https://doi.org/10.1037/spq0000039>
- McIntyre, E. M., Baker, C. N., & Overstreet, S. (2019). Evaluating foundational professional development training for trauma-informed approaches in schools. *Psychological services*, 16(1), 95. <https://doi.org/10.1037/ser0000312>
- Meléndez Guevara, A. M., Lindstrom Johnson, S., Elam, K., Hilley, C., Mcintire, C., & Morris, K. (2021). Culturally responsive trauma-informed services: A multilevel perspective from practitioners serving Latinx children and families. *Community Mental Health Journal*, 57, 325-339. <https://doi.org/10.1007/s10597-020-00651-2>
- Mendelson, T., Tandon, S. D., O'Brennan, L., Leaf, P. J., & Ialongo, N. S. (2015). Brief report: Moving prevention into schools: The impact of a trauma-informed school-based intervention. *Journal of Adolescence*, 43, 142-147. <https://doi.org/10.1016/j.adolescence.2015.05.017>
- Merkwae, A. (2015). Schooling the police: Race, disability, and the conduct of school resource officers. *Michigan Journal of Race and Law*, 21(1), 147-181. <https://doi.org/10.36643/mjrl.21.1.schooling>
- Oberg, G., Carroll, A., & Macmahon, S. (2023). Compassion fatigue and secondary traumatic stress in teachers: How they contribute to burnout and how they are related to trauma-awareness. In *Frontiers in Education*, 8, 1128618. <https://doi.org/10.3389/feduc.2023.1128618>
- Owens, J. S., Lyon, A. R., Brandt, N. E., Masia Warner, C., Nadeem, E., Spiel, C., & Wagner, M. (2014). Implementation science in school mental health: Key constructs in a developing research agenda. *School mental health*, 6, 99-111. <https://doi.org/10.1007/s12310-013-9115-3>
- Owens, E. G. (2017). Testing the school-to-prison pipeline. *Journal of Policy Analysis and Management*, 36(1), 11-37. <https://doi.org/10.1002/pam.21954>
- Onipede, Z. A., Park, A. L., & Lau, A. S. (2024). Common elements of trauma-informed schools and attention to racial equity: A scoping review. *School Mental Health*, 16, 1038-1051. <https://doi.org/10.1007/s12310-024-09721-2>
- Perfect, M., Turley, M., Carlson, J. S., Yohannan, J., & Gilles, M. S. (2016). School-related outcomes of traumatic event exposure and traumatic stress symptoms in students: A systematic review of research from 1990 to 2015. *School Mental Health*, 8, 7-43. <https://doi.org/10.1007/s12310-016-9175-2>
- Raskin, M. S. (1994). The Delphi study in field instruction revisited: Expert consensus on issues and research priorities. *Journal of Social Work Education*, 30(1), 75-89.
- Rothstein, R. (2015). The racial achievement gap, segregated schools, and Segregated neighborhoods: A constitutional insult. *Race and Social Problems*, 7(1), 21-30. <https://doi.org/10.1007/s12552-014-9134-1>

- Rowe, G., & Wright, G. (2001). Expert opinions in forecasting: the role of the Delphi technique. In *Principles of forecasting: A handbook for researchers and practitioners* (pp. 125-144). Springer.
- Skiba, R. J., Arredondo, M. I., & Williams, N. T. (2014). More than a metaphor: The contribution of exclusionary discipline to a school-to-prison pipeline. *Equity & Excellence in Education*, 47(4), 546–564. <https://doi.org/10.1080/10665684.2014.958965>
- Substance Abuse and Mental Health Services Administration. (2014). *SAMHSA'S Concept of Trauma and Guidance for a Trauma-Informed Approach*. <https://store.samhsa.gov/product/samhsas-concept-trauma-and-guidance-trauma-informed-approach/sma14-4884>
- Tanner-Smith, E. E., Fisher, B. W., Addington, L. A., & Gardella, J. H. (2018). Adding security, but subtracting safety? Exploring schools' use of multiple visible security measures. *American Journal of Criminal Justice*, 43, 102-119. <https://doi.org/10.1007/s12103-017-9409-3>
- Trevelyan, E. G., & Robinson, N. (2015). Delphi methodology in health research: how to do it?. *European Journal of Integrative Medicine*, 7(4), 423-428. <https://doi.org/10.1016/j.eujim.2015.07.002>
- Triplett, N. S., Woodard, G. S., Johnson, C., Nguyen, J. K., AlRasheed, R., Song, F., Stoddard, S., Mugisha, J. C., Sievert, K., & Dorsey, S. (2022). Stakeholder engagement to inform evidence-based treatment implementation for children's mental health: A scoping review. *Implementation Science Communications*, 3(1), 82. <https://doi.org/10.1186/s43058-022-00327-w>
- Trochim, W., & Kane, M. (2005). Concept mapping: an introduction to structured conceptualization in health care. *International journal for quality in health care*, 17(3), 187-191. <https://doi.org/10.1093/intqhc/mzi038>
- U.S. Department of Education, Office for Civil Rights. (2021, May). *2017–2018 Civil Rights Data Collection: Suspensions and Expulsions in Public Schools*. <https://civilrightsdata.ed.gov/publications>.
- Von Der Gracht, H. A. (2012). Consensus measurement in Delphi studies: review and implications for future quality assurance. *Technological Forecasting and Social Change*, 79(8), 1525-1536. <https://doi.org/10.1016/j.techfore.2012.04.013>
- Waltz, T. J., Powell, B. J., Matthieu, M. M., Damschroder, L. J., Chinman, M. J., Smith, J. L.,
- Enola, K. P., & Kirchner, J. E. (2015). Use of concept mapping to characterize relationships among implementation strategies and assess their feasibility and importance: results from the Expert Recommendations for Implementing Change (ERIC) study. *Implementation Science*, 10, 1-8. <https://doi.org/10.1186/s13012-015-0295-0>
- Wassink-de Stigter, R., Kooijmans, R., Asselman, M. W., Offerman, E. C., Nelen, W., & Helmond, P. (2022). Facilitators and barriers in the implementation of trauma-informed approaches in schools: A scoping review. *School Mental Health*, 14, 470–484. <https://doi.org/10.1007/s12310-021-09496-w>
- Welsh, R. O., & Little, S. (2018). The school discipline dilemma: A comprehensive review of disparities and alternative approaches. *Review of Educational Research*, 88(5), 752–794. <https://doi.org/10.3102/0034654318791582>

- Williams, M. T., Metzger, I. W., Leins, C., & DeLapp, C. (2018). Assessing racial trauma within a DSM-5 framework: The UConn Racial/Ethnic Stress & Trauma Survey. *Practice Innovations*, 3(4), 242.
- Wittich, C., Rupp, C., Overstreet, S., Baker, C., & The New Orleans Trauma-Informed Schools Learning Collaborative. (2020). Barriers and Facilitators of the Implementation of Trauma-Informed Schools. *Research and Practice in the Schools*, 7(1), 33–48. [https://www.txasp.org/assets/docs/taspjournal/Volume%207%20Issue%201\\_Complete%20Issue.pdf](https://www.txasp.org/assets/docs/taspjournal/Volume%207%20Issue%201_Complete%20Issue.pdf)
- Woodward, E. N., Singh, R. S., Ndebele-Ngwenya, P., Melgar Castillo, A., Dickson, K. S., & Kirchner, J. E. (2021). A more practical guide to incorporating health equity domains in implementation determinant frameworks. *Implementation Science Communications*, 2(1), 61. [tps://doi.org/10.1186/s43058-021-00146-5](https://doi.org/10.1186/s43058-021-00146-5)
- Zakszeski, B., & Rutherford, L. (2021). Mind the gap: A systematic review of research on restorative practices in schools. *School Psychology Review*, 50(2-3), 371-387. <https://doi.org/10.1080/2372966X.2020.1852056>
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**Z. AYOTOLA ONIPEDE**, is a clinical psychology doctoral student at University of California, Los Angeles. Her research explores how racism is embedded in youth-serving structures (e.g., schools) and shapes the development of racially marginalized youth. Her recent research has focused on examining the role of trauma-informed schools in advancing racial equity, and examining structural determinants (e.g., financing) of school districts' implementation of equity advancing interventions/initiatives. Email: [zonipe@ucla.edu](mailto:zonipe@ucla.edu)

**TAMAR KODISHT**, PhD, is an Assistant Professor of Psychology and Neuroscience at University of Colorado, Boulder. Her community-partnered research focuses on access, engagement, and quality of mental health services for marginalized young people with depression, anxiety, and suicidal ideation. She is especially interested in non-traditional mental health delivery paradigms, such as digital mental health, school-based services, and peer coaching models. Email: [tamar.kodish@colorado.edu](mailto:tamar.kodish@colorado.edu)

**ANNA S. LAU**, PhD, is a Professor of Psychology at University of California, Los Angeles. Her work examines how evidence-based practices can be deployed to promote mental health equity in community settings that reach underserved youth and families. Her recent community-partnered research has focused on the implementation of strengths-based, trauma-informed interventions in schools serving primarily immigrant communities. Email: [alau@psych.ucla.edu](mailto:alau@psych.ucla.edu)

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