Reducing Racial and Ethnic Disproportionality in School Discipline through an Assessment-to-Intervention Process: A Framework and Process

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Abstract

Racial and ethnic disproportionality in discipline (REDD) represents a longstanding and pervasive issue in the United States educational system. However, researchers and interventionists have not sufficiently provided educators with appropriate frameworks and feasible tools to disrupt REDD and promote equity. The goal of this paper is to present a framework of eight malleable factors associated with REDD, and describe the Disproportionality in Discipline Assessment for Schools (DDAS). The DDAS is a suite of user-friendly tools based on this framework, designed to help school teams identify and address REDD. Two studies are described. Study 1 presents the results of educator feedback on a presentation of the framework and the DDAS in terms of its feasibility, usability, and validity. Study 2 presents the process of applying the DDAS in four real-world school settings. Results indicated that the framework and the DDAS were considered highly useful and feasible tools to help schools address REDD. Modifications to the framework and the DDAS were made to improve validity and appropriateness.

Reducing Racial and Ethnic Disproportionality in School Discipline through an Assessment-to-Intervention Process: A Framework and Process

Racial and ethnic disproportionality in discipline (REDD) represents a longstanding and pervasive issue in the United States educational system with severe, negative consequences for both individuals and society. While educators may be deeply concerned about the issue, few know how to address it, leading to well-intentioned but unsystematic and ineffective efforts that may not be grounded in theory and research (Center, 2020). Researchers and interventionists have not adequately equipped educators with useful frameworks and tools to reduce disproportionality. Moreover, most research on REDD has focused on documenting the presence of the problem, with few studies designed to systematically develop and test interventions. Fortunately, there are a variety of research-based practices to reduce exclusionary discipline that could be tailored to the specific strengths, needs, and contexts of individual schools. However, comprehensive, validated assessments of school contextual factors that explain why REDD exists are currently unavailable, leaving school leadership teams without critical information about what may be causing REDD, and without guidance for selecting corresponding researchbased solutions. This paper presents a proposed model for reducing REDD through a suite of assessment-to-action tools aligned with eight domains that have been empirically and theoretically associated with REDD, the Disproportionality in Discipline Assessment for Schools (DDAS). We then present two studies that describe the iterative development and pilot testing of the DDAS, conducted in participatory partnership among researchers, educators, racial equity experts, mental health consultants, and school district leadership.

Educational Problem of Practice: Racial and Ethnic Disproportionality in Discipline

For nearly 40 years, researchers have documented that students of color are disciplined at

higher rates than other demographic groups (Losen & Gillespie, 2012: US Department of Education Office for Civil Rights, 2014). REDD exists on every measure of punitive discipline, including suspensions, expulsions, arrests, and referrals to law enforcement (US Departments of Education Office for Civil Rights, 2014). Black students are two to three times more likely than their White peers to be referred to the principal's office, suspended, or expelled, even for the same infractions (Losen & Gillespie, 2012; Skiba et al., 2011). REDD contributes to academic disparities, lifetime inequities, and deep social fissures that negatively impacts mental health, wastes human potential and hinders economic growth. Exclusionary disciplinary practices are associated with lost instructional time, academic disengagement, and dropout (Marchbanks et al., 2015). Punitive disciplinary practices are part of the "school-to-prison pipeline" that funnels marginalized youth out of educational systems into the criminal justice system (Skiba et al., 2014). It is imperative to develop concrete processes to address REDD in schools to disrupt these negative consequences.

The REDD Assessment-to-Action Tools

Despite educators' concerns, many feel unprepared to address REDD and promote racial equity. For example, in a recent, nationally-representative survey with over 800 educators, while 84% reported being willing to teach or support anti-racist curriculum, only 14% reported they had the training and resources to do so (Center, 2020). Educators are likely unaware that research has identified multiple malleable factors associated with REDD, and are unaware of how their school fares on these factors. School self-assessment tools grounded in theoretical frameworks offer multiple benefits to help identify and develop common understandings of a school's strengths and needs. While numerous school assessment tools exist that produce data on topics relevant to REDD, these have several limitations that lesson potential to reduce REDD. They do not specifically focus on REDD and are not grounded in a theoretical conceptual model of REDD, they are not race-explicit, do not comprehensively address multiple factors, and/or they require the involvement of an expensive coach instead of being self-administered.

To address this gap, the DDAS provides school teams with an assessment-to-action suite of tools grounded in a theoretical conceptual model of malleable factors associated with REDD. The ultimate purpose of the DDAS is to facilitate a decision-making and implementation process that is locally-managed within schools (i.e., self-assessment), and that explicitly attends to REDD via assessment, prioritization, and practice phases (see Figure 1).

The DDAS walks teams through five steps using three tools. The *assessment tool* involves three steps that gather context-specific information: 1. Gathering data that informs school teams about the malleable factors that explains why REDD is occurring in their school; 2. Quantifying the specific strengths and needs of the school across each of these factors; 3. Equitably obtaining input from school staff, administrators, parents, and others on each factor. The current version of the assessment tool features 52 items across the DDAS domains, with scale options including "in place," "needs improvement," "not in place," or "don't know." Example items include "The school makes specific efforts, using a variety of different approaches, to welcome and engage families who are under-represented," and "Discipline and supports data are disaggregated by race and reviewed to ensure that supports are offered and provided equitably." The recommended process is for the team to complete the assessment via a process of consensus decision making, first by each team member independently completing the DDAS assessment tool, and then meeting as a team to develop consensus. This process is intended to spur discussion among team members so each member has a better understanding of the strengths and needs of the school, the malleable factors associated with REDD, and how these factors interact to produce disproportionality.

The action piece of DDAS includes two final steps: 4. Structuring thoughtful and inclusive dialogue to facilitate the selection of intervention strategies that target the malleable factors found to explain why REDD exists; and 5. Guiding educators towards evidence-informed interventions aligned with the strengths, needs, and priorities of their school. In step 4, teams use the *reflection and prioritization worksheet tool* to help prioritize their needs. This worksheet helps teams recognize that schools may not be ready to tackle the factors of greatest need. Small victories can be achieved by tackling factors that have a high amount of staff buy-in, are "low-hanging fruit," or that are consistent with the school's broader strategic plan or other ongoing efforts. The tally sheet helps teams weigh their options and choose which factor to address while avoiding factors where progress would have too many barriers or is infeasible. In step 5, teams use the *assessment-to-action menu tool* providing specific, evidence-based interventions have been developed to address discipline in general, rather than REDD, because there are very few existing interventions with evidence to specifically impact REDD.

Malleable Factors Associated with REDD

The current iteration of the DDAS conceptualizes that there are 8 interconnected malleable factors that contribute to REDD, and that schools are heterogeneous with regard to their strengths and weaknesses among these factors. These factors are: 1) expressions of implicit bias and systemic racism; 2) school/district written policy and interpretation; 3) reactive discipline practices; 4) proactive discipline practices; 5) teacher-student-family relationships; 6) culturally responsive pedagogy; 7) screening and selective supports, and 8) data-based decision

making. By "malleable," we mean that these domains are alterable, reasonably within the control of schools and districts, and subject to change in response to intervention. These domains were identified via 1) an extensive literature review, and 2) collaborative, participatory input from educators and decision-makers during pilot studies (The original DDAS included six domains - *expressions of racial bias and systemic racism* and cul*turally responsive pedagogy* were added based on feedback from potential end-users as a part of Study 1 and have since been fully integrated into the DDAS framework. We present all eight here to better convey the entire DDAS theoretical framework.) While other factors associated with REDD exist (e.g., inequitable funding, residential trends in school catchment areas, state-wide discipline policies), this measure specifically targets domains associated with REDD that are malleable within a school context.

Racial Bias and Systemic Racism. Racial biases are associations that one makes between racial groups and personal characteristics, and manifest in conscious and unconscious thought (called "explicit" and "implicit biases," respectively). These associations are primed by pervasive stereotypes reinforced by a system of systemic racism, where social processes and policies systematically privilege certain groups and oppress others (Carter et al., 2017). Systemic racism limits opportunities for authentic participation from Black and other people of color, and centers conversations on the values and success of White people and White power structures. Individual biases and systematic racism go hand-in-hand as a self-perpetuating cycle, as systems of power and oppression engender stereotypes, prejudices, and discrimination, and individuals maintain these systems consciously and unconsciously through everyday actions and decisions.

All people, including educators, hold implicit and explicit racial biases. These biases impact their ability to build relationships, expectations for students' academic success and social and emotional competencies, engagement in instruction, and interpretation of and reaction to student behavior (Gilliam et al., 2016). These educator practices and behaviors, in turn, impact students' academic achievement and discipline outcomes (Girvan et al., 2016). Many interventions have been developed to reduce racial biases themselves, but these have primarily taken place in laboratory settings (see Forscher et al., 2019 for a meta-analysis of over 500 intervention studies). In education settings, most bias-reduction interventions have focused on mitigating the negative impact of biases on educators' decisions and actions with students; they have demonstrated promise regarding the malleability of behavioral expression of racial biases and subsequent student outcomes (Duong et al., 2020; Gaias et al., in press; McIntosh et al., 2014). Researchers have also begun to outline and implement frameworks for addressing systemic racism in schools, through disrupting existing power structures between educators, students, and families, interrogating traditional forms of knowledge generation, and focusing on strengths as opposed to deficit-based models when providing student services (Crutchfield et al., 2020).

Discipline Policy. Discipline policy refers to school-wide rules, protocols, or systems that set expectations for how individual educators or other school staff should address issues related to student behavior. Discipline policies tend to begin with established behavioral expectations or codes of conduct, which are influenced by educators' biases and cultural background. Linked to these codes of conduct are disciplinary procedures that guide educator decisions in response to student behavior, which for many behaviors results in exclusionary discipline through office referrals, suspensions, and expulsions. Discipline policies constructed in this way disproportionately impact students of color (American Psychological Association Zero Tolerance Task Force, 2008; Skiba & Peterson, 2000). In contrast, school policies focused on PBIS, threat assessment and restorative justice reduce exclusionary discipline and likely

reduce REDD (Gregory et al., 2018). Schools and districts from diverse regions across the US have enacted concrete policy changes that have reduced REDD (Gross et al., 2016; Losen, 2013).

Reactive Discipline Practices. Reactive discipline practices refer to the ways in which a staff responds to student misbehavior. Race is a significant predictor of the severity of a disciplinary action, regardless of the severity of misbehavior (Skiba, Chung, et al., 2014). Reactive discipline practices are malleable. Intervention research indicates that positive behavior support methods and restorative practices hold promise for reducing the frequency of staff referrals and severity of punishment, but there are yet to be rigorous studies isolating the effects of these reactive strategies on reducing REDD (Gregory et al., 2018).

Proactive Classroom Management Practices. Proactive classroom management refers to a teacher's strategies to promote academic engagement and prevent incidents of misbehavior by creating a positive and predictable learning environment through establishing and reinforcing clear expectations. Proactive practices, such as positively greeting students at the door, reduce student misbehavior in the classroom and the need for exclusionary disciplinary actions (Larson et al., 2018). However, whether proactive practices reduce REDD is unclear. Theory and empirical intervention research suggests that, in order to impact REDD, anti-bias and culturally responsive practices need to be integrated into proactive management (Bradshaw et al., 2018). For instance, teachers may need to intentionally consider students' backgrounds and solicit student voice in setting behavioral expectations, to ensure that such expectations are culturally relevant (Swain-Bradway et al., 2014).

Student-Teacher-Family Relationships. Positive, trusting relationships between teachers, students, and their families facilitate social, emotional, and behavioral competence and academic engagement (Cornelius-White, 2007; Roorda et al., 2011). Correlational and

experimental research has demonstrated an association between relationship quality and REDD (Gregory et al., 2016). Relationship quality has a stronger impact on outcomes for students of color, yet students of color most often report poorer relationships with teachers (Booker, 2006; Faircloth & Hamm, 2005; Murray et al., 2008). Implicit biases and cultural misalignment can impede relationship building between a predominantly White teaching force and an increasingly diverse student body (Kunesh & Noltemeyer, 2019). Students of color often are less likely to see their cultural backgrounds reflected in their schools, which limits their sense of trust and connectedness (Gay, 2010). Interventions focused on improving relationships to reduce disparities highlight the malleability of this domain (Gaias et al., in press).

Culturally Responsive Pedagogy. Culturally responsive pedagogy refers to instructional strategies and curricular activities that incorporate students' identities and backgrounds into the learning experience. Through the use of classroom materials, lesson topics, and instructional practices that reflect students' cultural backgrounds and frames of reference, learning is made more relevant and effective (e.g., Gay, 2010). Emerging intervention research highlights that enhancing teachers' use of culturally responsive pedagogy facilitates student engagement and cooperation (Aronson & Laughter, 2016; Howard, 2010) and improves academic performance (Dee & Penner, 2016). Teachers' use of culturally responsive practices are positively associated with use of proactive classroom management practices and positive student classroom behavior (Larson et al., 2018). Research also provides evidence of the association between culturally responsive pedagogy and REDD (Grainger, 2016; Thoms, 2014).

Screening & Selective Supports. Screening and selective supports refers to the proactive and universal use of valid instruments to identify students in need, and providing them with appropriate and high-quality supports. This is a needs-driven process that is designed to ensure

equitable access to supports, and reduces misclassification of behavior that is subject to educator biases (Wallace et al., 2008). Careful attention has to be given to the cultural appropriateness of the screening tool and process to ensure that students of color are not being over- or underidentified and connected to supportive, non-stigmatizing interventions--not special education referral processes (Chafouleas et al., 2010). Students of color are consistently less likely to access needed behavioral health supports. Even when services are accessed, they are more likely to be inappropriate and ineffective (Banta et al., 2013; Thomas et al., 2011). Screening and targeted supports is associated with reduced discipline referrals and increased capacity for schools to respond proactively to students' needs (McIntosh et al., 2006; Robinson et al., 2013).

Data-Based Decision Making. Data-based decision making (DBDM) refers to the ongoing collection and analysis of data to guide decisions to continuously improve educational processes and outcomes (McIntosh et al., 2014). DBDM has demonstrated significant impacts for improving school processes and academic and behavioral student outcomes (McIntosh et al., 2013), and has been recommended by the US Department of Education Office of Civil Rights (2014) as an essential component in the process of reducing disparities. Data can be used to demonstrate the extent to which REDD is a concern, the precise contextual elements that contribute to REDD (e.g., location, type of infraction, time of day), and whether practices and policies are having their intended impact to reduce REDD (Gregory et al., 2017; McIntosh et al., 2018). Disaggregation of disciplinary data by race/ethnicity can contribute to increased precision and impact in decision making around where, when, and how to intervene to create more equitable outcomes (McIntosh et al., 2013). Schools, districts, and states have used DBDM to implement school-wide contextually-relevant strategies for reducing REDD (Boneshefski & Runge, 2014; McIntosh et al., 2018; Positive Behavioral Interventions & Supports, 2014).

Team assessment and decision making

Although concerns regarding assessment validity and social desirability cannot be fully mitigated, a high-quality teaming process can help lessen the effect of individual biases on decisions. In the DDAS theoretical model, team characteristics moderate the use of DDAS and reductions in REDD. Multiple characteristics contribute to team assessment and decision-making, including shared norms, understanding and recognition of bias and systemic racism, inclusion of diverse perspectives, engaged and supportive leadership, collaboration, and content knowledge (Sugai & Horner, 2006).

Overall Purpose of the Current Studies

The DDAS framework described above outlines both a unified conceptual framework of malleable factors associated with REDD and a 5-step process for schools to make contextually-relevant decisions regarding reducing REDD in their school aligned with those factors. In order to inform the appropriateness, feasibility, and sustainability of the DDAS framework, two pilot studies were conducted. The goal of the first study was to gain open-ended qualitative feedback and suggestions from educators to improve the DDAS theoretical model, the assessment tool, and the assessment-to-action process. The purpose of Study 2 was to pilot the DDAS process with four elementary schools as part of a real-world implementation effort.

Study 1

Purpose and approach

Though the DDAS was developed in collaboration with real-world educators, there had been no review of the DDAS by educators who were external to its development. Therefore, the purpose of Study 1 was focused on gathering pre-implementation feedback from end-users of the DDAS in order to modify and improve its content, structure, and process. Study 1 was determined exempt from review by the University of Washington Institutional Review Board, ID STUDY00006609.

Participants

Participants included a total of 59 educators and school staff (teachers, school counselors, administrators). Due to concern that participants may not respond honestly because surveys were being collected by the DDAS authors, we ensured anonymity by not collecting demographic or other descriptive data along with survey data. Participants were verbally screened as being educators or school staff.

Procedures and measures

Participants were attendees at one of two conferences or participated in a virtual, asynchronous webinar. Data were collected from 22 attendees at the 2019 Northwest Positive Behavioral Intervention and Supports (NWPBIS) conference, and 22 attendees at the 2019 "MTSS Fest East" (Multi-Tiered Systems and Supports) conference. Data collection occurred during a conference presentation by the authors (MP and LG). Over May and June of 2019, 15 participants, who were recruited via a posting on a Cultural Responsiveness and Equity in education practice group listserv, completed an asynchronous webinar. Several pre-recorded presentations followed by online data collection activities were embedded into a survey using the Qualtrics application.

All participants observed presentations (either live or pre-recorded) describing the DDAS structure and tools (i.e., program assessment, team reflection and prioritization, and the assessment-to-intervention menu) and six of the DDAS factors. (Racial bias & systemic racism and culturally responsive pedagogy were not included because they were added due to study results described below). All participants rated four questions: 1) How useful is the [tool] (e.g.

program assessment, team reflection and prioritization, or assessment-to-intervention menu) for making decisions regarding reducing REDD, 2) How feasible is it for a racial equity or similar team to complete the [tool]?, 3) How appropriate would it be for a racial equity or similar team to complete the [tool]?, 4) How valid would the results of the [tool] be in guiding decisions regarding reducing REDD? Response options for all items above ranged from 1 = Not at all, 2 = A little, 3 = Somewhat, 4 = Quite a bit, 5 = Extremely. For each tool, participants were asked to provide open-ended comments and suggestions, including any important considerations they believed should be taken into account for the DDAS process. Only participants from the NWPBIS conference answered three questions for each factor: 1) How feasible or practical would it be to attempt to address this factor in your school?, 2) If your school made efforts to address this factor, how effective do you think it might be; and 3) How motivating would it be to the teachers, staff, and leadership of your school to address this factor? Finally, only participants in the virtual focus group rated which tool was the most and least feasible to conduct.

Analyses

Subscale scores were computed for 1) mean feasibility, effectiveness, and motivation ratings across all DDAS factors, 2) mean DDAS factor ratings (e.g. screening and selective supports, student-teacher relationships, etc.), and 3) mean usefulness, feasibility, appropriateness, and validity ratings for each of the three tools. We took a QUAN + QUAL, complementarity/elaboration approach to the mixed methods analysis (Palinkas et al., 2011). In this approach, quantitative and qualitative data are viewed as equally important, with the qualitative data being used to elaborate on the quantitative findings. For quantitative data, we ran simple descriptive statistics (means and standard deviations). Due to the small sample sizes and the descriptive nature of this study, no statistical tests were run. Qualitative data were analyzed using a consensus-based conventional content analysis approach (Hsieh & Shannon, 2005). The two investigators (LG and MP) read each response and developed common agreement as to their meaning and how that meaning applied to the overall context of the question.

Results

Quantitative analyses

Figure 2 displays the mean scores for the feasibility, effectiveness, and motivation to address ratings for each of the DDAS factors presented at the NWPBIS conference session (n = 22). Mean scores ranged from 3.4 to 4.3, generally nearest the "quite a bit" scale anchor. Examining the overall factor quality mean scores (not shown in figure) revealed that participants rated the overall effectiveness of factors (M = 3.8, SD = .80) slightly higher than motivation (M = 3.7, SD = .61) and feasibility (M = 3.6, SD = .67). The overall factor mean score found the average scores for each factor were similar; from highest to lowest rated: data-based decision making (M = 3.8, SD = .52), reactive discipline (M = 3.8, SD = .70), proactive discipline (M = 3.8, SD = .69), policy (M=3.7, SD = .54), screening and selective supports (M = 3.6, SD = .71), and student-teacher relationships (M = 3.5, SD = .80)

Figure 3 depicts means and standard deviations for ratings of usefulness, feasibility, appropriateness, and validity of each DDAS tool. Overall mean ratings ranged from 3.7 to 4.1, nearest the "quite a bit" scale anchor. Mean scores on each type of rating were very similar among the three tools: appropriateness (M = 4.0, SD = .99), feasibility (M = 3.9, SD = .87), usefulness (M = 3.8, SD = .67), and validity (M = 3.8, SD = .75). There was also little difference among overall mean ratings of tools (program assessment M = 3.9, SD = .71, reflection and prioritization M = 3.9, SD = .74, assessment-to-intervention menu M = 3.8, SD = .80).

Qualitative analyses

Several participants requested additional domains to be added to the DDAS framework for culturally responsive pedagogy, and bias and systemic racism. Prior to this study, racial bias and systemic racism had been considered intrinsic to all of the DDAS factors, but multiple participants believed that these should be better highlighted by adding a factor. Other factors mentioned by one or two participants included disparities in school physical conditions by school demographic makeup, teacher social/emotional competencies, and teacher feelings of support. No participant believed any factors should be removed.

Participants qualitatively expressed some concern about the validity of responses that would be obtained via the program assessment tool, consistent with the fact that validity had the lowest quantitative ratings for the DDAS tools. One representative response was, "I think the validity of the results depends largely on who is on the team making the assessment, the degree to which the process is truly consensual, and people's comfort level with engaging about race/equity." Other participants believed validity would be impacted by trust within a team and whether the team included diverse stakeholders (e.g., students, families, community members), and the amount of time teams would have to establish trust and work through disagreements.

Regarding the reflection and prioritization tool, participants appreciated that the tool helped "reduce the overwhelming feeling of having to tackle the whole system," and "prioritize other areas besides those that are the greatest need." Several had identical concerns about validity as described in the program assessment review. Participants described the tool as userfriendly, practical, and laid out to help teams move forward with action.

Comments about the assessment-to-action menu indicated that participants found it to be "concise and not overwhelming" and "excellent in encouraging schools to use the consensusbased data to drive the development of the action plan." Consistent with the goals of the DDAS, some participants emphasized the possible greater impact if schools would "integrate this work into other visions/goals/plans that are driving the school, rather than looking at it in isolation." **Discussion**

Results from Study 1 indicated that participants felt the overall DDAS theoretical model was feasible to address, potentially effective at reducing DDAS, and motivating to address. While none of the existing factors were believed to be extraneous or not applicable, several participants advocated for the inclusion of culturally responsive pedagogy. Based on these findings, in addition to literature demonstrating that this factor facilitates classroom engagement and cooperation, academic outcomes, and teacher's use of proactive classroom management strategies (Aronson & Laughter, 2016; Howard, 2010), this factor was added this to the DDAS model. Participants additionally advocated for the inclusion of implicit bias and systemic racism as a separate factor. Implicit bias and systemic racism had been presented to participants in the original DDAS conceptualization as central and causal forces at the heart of all of the other malleable factors in terms of their impact on REDD. To respond to these concerns, the malleable factor of implicit bias and systemic racism was added as a separate factor. While a few other possible factors were mentioned by one participant each, these were deemed to be already addressed by existing factors or not to have empirical support as being associated with REDD.

Findings indicated that study participants, who were potential end-users of the DDAS, believed it would be a useful, feasible, appropriate, and valid approach to addressing REDD. Each of the three tools provided by the DDAS (the program assessment, reflection and prioritization, and assessment-to-action menu) received similar, high ratings, indicating that no one tool stood out as notably weaker or stronger relative to others. The lowest rated characteristic was validity, which was also mentioned in the open-ended responses. Participants provided several recommendations to improve validity, all of which were related to the teaming process, such as ensuring trust among the team, diversity of team members, and adequate protected time for teams to work through the tool. These recommendations have been added to the DDAS suggested administration procedures.

The results from this study have resulted in positive changes to the DDAS, and suggest it is ready for a more formal validation study to obtain its psychometric properties, conduct item reduction, and identify external validity of scores obtained. In particular, a study of the association between DDAS scores and rates of REDD would help confirm the validity and appropriateness of the factors. A future study of the impact of the DDAS tool on schools' selection and implementation of REDD would establish the utility of the tool at increasing REDD reduction efforts that are thoughtful, systematic, grounded in research, and effective.

Study 2

Purpose and approach

Study 2, a pilot study of DDAS implementation, was embedded in a broader project to address trauma, racism, and inequity in education. This project emerged from a multi-year school-university partnership intended to improve trauma-informed policies and practices within a partnering school district. The partnership focused on building educator capacity to understand the impact of trauma on student success and well-being and to implement key components of trauma-informed care. Equity and cultural responsiveness are integral to trauma-informed approaches based on current conceptualizations. Simultaneous to this trauma work, the district was immersed in a multi-year effort to address a consent decree to reduce the opportunity gap and REDD. The district contracted with university consultants who were already supporting its trauma-informed efforts to facilitate a deeper exploration of the connection between impacts of trauma, racism and inequity on Black and Brown students. The DDAS was introduced to increase data-focused efforts to reduce REDD.

The specific goal of the pilot was to create or enhance school systems, structures and practices to more effectively educate Black and Brown students and to reduce the opportunity gap between Black and White students. A cohort of four elementary schools committed to a year-long process during which they would participate in four three-hour Professional Learning Communities (PLCs), two hour-long site visits, and two hour-long conference calls; complete the DDAS, and develop a school-wide action plan to reduce trauma and racial inequity in their buildings. PLCs were designed to provide education about the intersection of racism and trauma and its impact on Black and Brown students, as well as create opportunities for peer collaboration and learning. Content focused on: 1. Context setting, including definitions, understanding concepts of community and historical trauma, and systemic racism; 2. Raising self-awareness about privilege, unconscious bias, microaggressions and self-care; and 3. Guiding school teams through an assessment of racial inequity in their buildings and developing an action plan toward reducing the inequity. Consultants selected the DDAS as its assessment tool given its focus on discipline disparities and broader examination of racial inequity in school practices.

Participants

Participants included staff and teachers at four K-5 elementary schools from a small Illinois city of approximately 90,000 residents within a metropolitan area of about 239,000. The represented district has a diverse student body: 36% of students were Black, 35% White, 12% Latinx, 9% Asian, and 8% multiracial. The population of teachers is much less diverse: 82% were White, 8% Black, 5% Latinx, and 5% Asian. Participating schools were charged with creating or using a pre-existing equity team to complete the work of this pilot. Equity team membership ranged from 10 to 20 members, and included principals, assistant principals, teachers, mental health personnel (e.g., social workers), and in one case, a parent. Over 95% of the participants on the equity teams were White. Not all team members participated in the PLCs. Of the 22 participants who did participate in the PLC, only 2 (9%) were Black.

Procedures

When the pilot initiated, the cohort was informed their work would include completing the DDAS in order to inform an action plan to develop trauma-informed practices and address school-based racial inequities and REDD. The DDAS was introduced during the second PLC where consultants explained the instrument and guided each team through the assessment process. Each school was asked to develop an assessment team that may or may not include all of its equity team members. Schools were instructed to consider the following factors in creating its assessment team: 1) Include no more than six to ten people, 2) Assemble a team who is prepared to engage in racial equity work, 3) Ensure diversity of members by personal background, experience, role in the school, and perspective about the school, and 4) Consider including caregivers/parents on the team.

During the PLC, teams were provided guidance on how to enhance the validity of the assessment by assembling an appropriate team, allowing sufficient time for completion of the DDAS, and emphasizing the importance of ensuring equity and safety of voice while being mindful of power differentials within the team. Next, each team member was to individually complete the DDAS. Upon completion of individual ratings, teams were instructed to meet and create a consensus rating for each of the assessment's components. Teams were encouraged to find a one-hour block of time to participate in consensus-building without interruption (e.g., plan ahead of time for coverage of classroom and other duties as much as possible). They were told to

prioritize time on assessment items with the most divergent individual ratings and allow team members with lowest and highest scores to initiate consensus-building by explaining their scores.

Once consensus was reached, teams were instructed to use the DDAS instrument to tally their scores, and use their ratings to reflect on the questions provided in the assessment to determine priority areas to address, based on building strengths, practicality, motivation to act, alignment to other building goals, and whether identified needs were already being addressed in the building. Finally, teams were encouraged to review the DDAS Assessment-to-Intervention menu to inform potential action plan goals and action items. Completion of the pilot was abruptly halted by the Coronavirus-19 (COVID-19) pandemic, which resulted in the cancellation of the fourth and final scheduled PLC, in which schools were to present their action plans.

Methods

The original data collection plan was both quantitative and qualitative. The quantitative data included DDAS data and end of the year satisfaction ratings, while the qualitative data consisted of notes from onsite visits to each school, interviews with administrators, observations from PLC sessions, action plans, and comments in the satisfaction surveys. The end of the year survey was intended for in-session satisfaction evaluation. Due to remote learning and COVID-19, consultants were unable to collect data in person and the survey was therefore sent electronically at the end of the academic year. The online survey focused on fidelity, satisfaction with the PLCs, and pandemic impact and consequences (including desire for support to administer the DDAS in the future).

Results

Attendance at the first two PLC sessions was high, with 100% attendance at each. Attendance at the third PLC was 64% and may have been impacted by inclement weather. Only six (27%) PLC attendees completed the online survey, limiting the consultants' ability to comprehensively summarize the pilot experience (satisfaction and outcomes). Of those who responded, 100% indicated that they would revisit the use of the DDAS at the start of the next and 80% reported a desire for consultant support to complete the action plan for the upcoming year. In addition, 80% of respondents indicated that they were satisfied (20%) or very satisfied (60%) with the training and consultation received.

Successes

The PLC format appeared to be conducive for facilitating shared learning across schools. For example, while PLC attendees acknowledged an awareness of disparities, they expressed that utilizing the tool gave them greater understanding of how to approach REDD, allowing for an executable plan. Common priority areas included building better relationships with families, working toward racial equity in opportunities for academic achievement, focusing on building a more trauma-informed school, strengthening PBIS programming, and streamlining discipline policies.

The equity teams took advantage of opportunities provided, such as working within the PLC sessions, convening other school key opinion leaders, and working to connect school staff, despite scheduling challenges. Each school handled scheduling differently, meeting during planning periods, afterschool, or pushing into existing meeting agendas. Completing the DDAS with the team was an exercise that required coordination across school staff, including those external to the PLC membership. Qualitative feedback provided by administrators involved in the process indicated that school staff were engaged with the content and the discovery process, which was consistent with observations in the PLC sessions.

Another success was the high level of buy-in and support for addressing REDD present in the district. Funding was allocated for after-school compensation, goals related to race and equity were included in district strategic planning, district representatives were present at all PLC sessions, and district administrators presented on this work at a national conference focused on school mental health. School district support also helped prepare pilot schools for the integration of the assessment, as teams were informed about participation expectations during summer orientation, giving them the opportunity to prepare to take on assessment. The advance preparation in the beginning of the year allowed for a planful introduction of the DDAS tool, scheduling time with the team, and accommodating the assessment into their activities. Those teams who completed the DDAS were well positioned for the next steps in the process: goalsetting and completing formal action plans.

Barriers

Despite the provision of consultation and creation of timelines for DDAS implementation, the equity team encountered barriers in adhering to the timeline. At the third of four scheduled PLC sessions, school teams were expected to have completed the DDAS and brainstorm a goal statement for their action plans. Two of the four schools completed the DDAS using the recommendation to follow individual ratings with a consensus-building process. One school completed the assessment by averaging the assessment teams' individual ratings (rather than engaging in the recommended consensus process), and the fourth school was scheduled to develop its consensus rating later during the week of PLC session.

Many of the other barriers related to this pilot of the DDAS implementation resided in the unexpected turns of the academic year that were impacted by the global pandemic. As in districts around the country, the school district abruptly switched to remote learning, with all staff working to implement virtual programming. The focus of the staff and administrators was on equipping students with technology, modifying curriculum for remote learning, and adjusting to new platforms. Additionally, other forms of support were needed to address material needs, such as food distribution for students eligible for free and reduced lunch.

Discussion

Despite the challenges of COVID-19, results of this pilot indicate that integration of the DDAS into a broader trauma-responsive school model, rather than approaching REDD in isolation from other school goals and priorities is a promising approach. Results also indicate that PLC participants found the assistance of consultants and the guidance of the assessment tool beneficial. The model of having an equity team lead the work also appears promising, as reflected by the high level of engagement in the PLC sessions. This pilot also demonstrated the ways that school district support can facilitate school uptake of the DDAS and investment in the learning process. On the other hand, while it was helpful to have consultation and opportunities for shared learning through the PLC, results indicate that teams may need additional support to adhere to timelines to continue to move the process forward in the face of often urgent competing priorities. It is possible that adjusting the timing of implementation, such that schools prioritize DDAS completion at the beginning of the academic year, might be beneficial. Furthermore, emphasizing written goal-setting and action planning, with incremental accountability and commitments would be preferable to focusing on the culminating products at the end of the calendar year. One viable approach to increase sustainability is to integrate the DDAS and efforts to address REDD into existing school strategic plans, budget discussions, or into annual school-improvement efforts.

It is also important to note the impact of COVID-19 on the work embedded in the pilot. The shift to online learning and the need to focus on critical priorities related to learning and educational access greatly reduced school capacity to focus on Social Emotional Learning, staff professional development, and development of action plans for improving equity and reducing REDD. These and other activities that were deemed "nonessential" came to a halt, a situation that was recognized by district leadership as potentially increasing existing disparities and creating new ones within the school community. This serves as a cautionary tale about the importance of integrating this work into the central work of schools and districts, rather than including it as an "add-on."

Discussion

While educators are deeply concerned about REDD, few know how to begin to address the issue. The purpose of this manuscript was to describe a 5-step assessment-to-action process for reducing REDD, grounded in a comprehensive, unified theoretical framework of eight malleable factors associated with REDD. In addition, we present two initial pilot studies highlighting the potential promise of this framework and contributing to its most recent iteration. The results of these two studies reveal that educators believed the DDAS framework provides educators with a valid and useful starting point for understanding and addressing malleable factors associated with REDD. Participants believed the DDAS was a promising, feasible, and useful resource for school teams. As a result of Study 1, the framework was expanded from a beta 6 factor version to the 8 factor version we describe, and the initial impressions of end-users found it to be feasible and useful. Additionally, the suggested administration procedures for the DDAS were expanded to emphasize characteristics of the teaming process important to ensuring response validity and equitable involvement. As a result of Study 2, the 6 factor DDAS framework was shown to be feasible to implement in real-world settings, and even though the application of the DDAS was interrupted by a global pandemic, all educators responding to the survey indicated that revisiting the DDAS at the start of the next school year was a priority. While there were concerns that were raised about potential issues with the DDAS validity, these concerns were offset by the fact that the DDAS is a process tool, used to spur conversation, communication, and thoughtful planning by school teams.

Future directions should emphasize the implementation process to ensure the DDAS is used as planned to gather context-valid information that leads to educators' engaging in specific actions that reduce REDD. A careful examination of the implementation supports necessary to successfully use the tool should examine the outer setting factors of the school district (e.g., policy, allocation of resources, aligning and braiding the work with other priorities) that contribute to inner setting factors (e.g., protected time for collaboration and reflection, fidelity audits and feedback). Future directions also involve maintaining an unwavering commitment to address discipline disparities, with strategic efforts to disseminate and support the adoption of tools like DDAS to early adopters and districts in need of strategies for change. These early studies indicate that the tool can support that process. In order to remain as an innovative tool, useful in the present social/political landscape, additional efforts to examine how DDAS can become more adaptable in its usage and scope (e.g. systemic racism, during remote learning) is essential.

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