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Using Stakeholder Input to Guide Cultural and Contextual Adaptations for a Universal School-Based Intervention

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Abstract

Strong student–teacher relationships foster students' social, emotional, and academic development, particularly for students from marginalized racial/ethnic groups. The current study gathered input from teachers, school and district administrators, and education researchers ($N=22$) regarding strategies that can help teachers build relationships with high school students and to build such relationships in an equitable manner. Participants completed quantitative ratings, open-ended survey questions, and then participated in a series of focus groups. Descriptive analyses of quantitative ratings and content analysis of qualitative data examined teachers' perceptions of the value of relationships generally and equity in relationships in particular. Analyses also examined barriers to relationship building and potential strategies to address barriers. Results suggest that teachers see relationships with students as important, but they vary in the amount of time and effort they invest in relationships. Teachers may not have the requisite training or skills, particularly when dealing with students with behavioral difficulties and/or individualized needs. Some teachers have professional identities that center around their content area and may not conceptualize building relationships with students as part of their role. Finally, structural features of secondary schools and a lack of leadership support were seen as barriers to relationship building. Participants had a number of concrete suggestions for successful school-wide efforts to enhance student–teacher relationships. With regard to equity, participants did not perceive that teachers take an equity lens to relationship building. Attitudinal, systemic, and skills-related barriers to relationships with racial/ethnic minority students were named, and strategies suggested included elevating student voice. The paper concludes with a discussion of implications for future research and practice.

Keywords Student–teacher relationships · Secondary school · Educational equity

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Introduction

Decades of research indicate that positive student–teacher relationships support student academic, social, and emotional outcomes (McNeely et al. 2002; Osher et al. 2007), with moderate to large effect sizes on both achievement and behavior (Hattie 2015; Marzano and Marzano 2003). Positive relationships can potentiate the effects of high-quality instruction and mitigate factors leading to poor school performance (Crosnoe et al. 2010; Howes et al. 2008; Pianta et al. 2008; Rimm-Kaufman and Pianta 2005). The extant literature suggests several potential mechanisms for the influence of student–teacher relationships on student outcomes. When teachers are perceived as warm and supportive, they provide students with the security to explore new ideas, take risks, and persist with challenging tasks (Murray and Greenberg 2000; Watson and Ecken 2003). Teacher emotional support is associated with greater on-task behavior (Rimm-Kaufman et al. 2009). The presence of a supportive relationship is especially important for students who have risk factors for poor engagement and achievement. Liew et al. (2010), for example, found that when students with low effortful control experience positive relationships with their teachers, they perform similarly to children with high effortful control on tests of reading and mathematics achievement.

Although much of the research has focused on the link between student–teacher relationships and student outcomes, some evidence suggests that strong student–teacher relationships also have implications for teacher well-being and sense of professional efficacy. Conflictual student–teacher relationships are stressful for teachers as well as for students (Jennings and Greenberg 2009; Lisonbee et al. 2008). Conversely, positive relationships with students is often mentioned as the most important source of enjoyment and motivation for teachers and represents one of the core reasons for teachers to stay in the profession (Hargreaves 1998, 2000; O'Connor 2008). Indeed, teachers rank relationships with students as more important to their job satisfaction than job security, autonomy, and recognition of achievement (Hargreaves 1998; O'Connor 2008).

Race and Student–Teacher Relationships

Students' and teachers' race play a significant role in relationship quality. In the United States, the majority of teachers are White and female, while the student population is becoming increasingly diverse (Howard 2016). Although racially incongruent student–teacher relationships are increasingly common, teachers tend to perceive them as weaker and less positive (Hughes et al. 2005; Saft and Pianta 2001; Thijs et al. 2012). For instance, Hughes et al. (2005) found that teachers reported lower relationship quality for Black students compared to White students. The quality of the relationship predicts teachers' perceptions of student academic ability, which may contribute to racial/ethnic differences in academic outcomes (Devine 1989; Hughes et al. 2005; Keller 2002; Kellow and Jones 2008; van den Bergh et al. 2010).

Lower-quality relationships with ethnic minority students may be partially explained by teachers' attitudes about diversity. Many teacher candidates come from backgrounds where they have little prior exposure to cultural diversity (Kyles and Olafson 2008; Milner 2005). Previous work has identified a number of problematic beliefs among teacher candidates (Kyles and Olafson 2008; Milner 2005). Some teachers, particularly those from majority backgrounds and predominantly White schools, question whether diversity matters and whether they should be concerned about it (Milner 2005). Some have been taught an explicit "color blind" approach and express concern that talking about race and racism can be harmful, by "making an issue out of nothing" (Milner 2005). Individuals who presume color blindness often equate explicitly acknowledging ethnic, racial, and cultural differences with a form of racism (Gay 2010). Even teachers who recognize racism as a social phenomenon may have difficulty acknowledging the importance of race in their classroom, and may ascribe differences to social class, gender, or the student's personality or family. Further, teachers who recognize the importance of race and culture may still have low self-efficacy in integrating race and culture into their teaching (Gay 2010). Because of fear of making mistakes, inadvertently offending others, and being labeled racists, they avoid tension and controversy by avoiding discussion of cultural and racial differences (Gay 2010). Those with explicitly egalitarian values may still report deficit beliefs about racial minority learners (Ford and Grantham 2003).

Student–Teacher Relationships at the Secondary Level

Student–teacher relationships are particularly difficult to form in secondary school (Hargreaves 2000). School structures present a barrier, and some secondary teachers feel that they are not obliged to meet students' needs for relationships (Hargreaves 2000). Students spend less time with their teachers after the transition to high school, and often report feeling poorly supported and monitored by teachers and principals (Barber and Olsen 2004; Seidman et al. 2016). At the same time, student–teacher relationships may be particularly important in secondary school, especially at the high school transition. At this transition, academic engagement and achievement drops, while risk of dropout increases for all students (Kennelly and Monrad 2007). More students fail ninth grade than any other grade—creating what is known as the ninth-grade bulge—and drop out by tenth grade—contributing to the grade dip (Gray et al. 2006; Herlihy 2007; Wheelock and Miao 2005). The high school transition portends the greatest risk for students in urban, high-poverty schools and for African American and Hispanic students (Edwards 2006; Wheelock and Miao 2005). How students adjust to the transition has significant implications for their long-term academic success (Allensworth and Easton 2005; Archambault et al. 2009; Kennelly and Monrad 2007). A strong student–teacher relationship is a critical protective factor that facilitates successful navigation of the ninth-grade transition (Croninger and Lee 2001; Hamre and Pianta 2006).

The Need for Interventions

A number of promising student–teacher relationship interventions exist, but they primarily focus on elementary school-aged or younger youth, and they often do not integrate equity explicitly. In elementary school, professional development interventions typically train teachers on a combination of relationship building (e.g., regular check-ins with students, reaching out to students and their guardians at home) and behavior management skills (e.g., "if–then" statements; specific, positively stated commands delivered one at a time (Fernandez et al. 2015; Helker and Ray 2009; McIntosh et al. 2000). We are only aware of one applicable professional development program for secondary school teachers, My Teaching Partner-Secondary (MTP-S). MTP-S includes a component on student–teacher relationships, but the program focuses more broadly on teacher–student interactions. MTP-S is also relatively time-intensive and costly. Organized around dimensions of the Classroom Assessment Scoring System-Secondary (CLASS-S), MTP-S provides training and coaching in three domains: Emotional Support (positive climate, negative climate, teacher sensitivity, and regard for adolescent perspectives); Classroom Organization (behavior management, productivity, and instructional learning formats); and Instructional Support (content understanding, analysis and problem solving, and quality of feedback).

The current team of researchers has also developed a professional training focused on student–teacher relationships, called Establish–Maintain–Restore (EMR), which is designed to improve teachers' skills in cultivating, maintaining, and restoring relationships with their students. In EMR, these phases are arranged sequentially as a heuristic that guides teachers' decision-making and practices, but relationships can also fluctuate through the phases in a non-linear manner. The initial phase in any relationship, and first training component of EMR, involves intentional efforts to establish relationships with each student. The key practice for the Establish phase is to find windows of time (i.e., banking time) to interact with individual students outside of instruction. Such interactions can consist of student-selected activities and conversations in which the teacher adopts a stance that is nondirective, validating, and responsive to the student's actions and feelings (Hamre and Pianta 2001; Pianta 1999). Once a relationship is established, active effort is required to maintain a positive relationship. The primary practice associated with the maintain phase is the 5-to-1 ratio of positive to negative interactions (Cook et al. 2017). The last component of EMR is the restore phase. This phase focuses on increasing teachers' skills and efforts to intentionally repair harm to a relationship following a negative interaction with a student. Teacher are trained to select and deliver one of five communication strategies to the student: (1) letting go of a previous incident, (2) taking responsibility/ownership for their part of the problem, (3) an empathy statement to validate student feelings, (4) collaborative problem-solving to identify a mutually agreed upon solution, or (5) a statement of care.

In two randomized-controlled trials with students from elementary and middle school, we found that EMR significantly improved student–teacher relationships, and observer-rated disruptive behavior and academically engaged time with large effect sizes. Although the EMR professional development curriculum led to

significant improvements in student–teacher relationship quality and student behavior for both White and racial/ethnic minority students in previous trials, we found a non-significant trend for ethnic minority students to report lower-quality relationships with their teachers at baseline that remained at post-intervention (References removed for blinding). Evidence of cultural responsiveness is often operationalized as non-significant moderation by race/ethnicity (i.e., the intervention leads to similar changes across groups). We argue, however, that a truly culturally responsive and equitable intervention should at least partially correct for systemic inequities at baseline. Thus, in cases where significant baseline differences exist, an equitable intervention should be more helpful for disadvantaged groups and offset the potential lack of belonging and mistrust that can result from cultural mismatch and misunderstanding (Stephens and Townsend 2015).

The Current Study

The current study sought to identify ways to enhance the student–teacher relationships generally and equity in student–teacher relationships specifically. To accomplish this goal, we solicited input from three different stakeholder groups (ninth grade teachers, school and district administrators, and educational researchers). The study was designed to address the following research questions: (1) What are stakeholder perceptions of need and recommendations for school-wide professional development focused on student–teacher relationships? (2) What are stakeholder perceptions of need and recommendations for enhancing equity in student–teacher relationships?

Method

Participants

A total of 22 stakeholders, including ninth grade teachers, district and secondary school administrators, and education researchers were recruited to participate in the study. None of the participants had any previous exposure to EMR. Teachers ($n=7$) and school administrators ($n=8$) were recruited using purposive snowball sampling from three school districts in the Pacific Northwest. Teachers and administrators were asked to nominate other potential participants based on the following criteria: experience working with ninth graders and racial/ethnic minority youth, ability to clearly articulate ideas in a solution-oriented manner, an understanding of their colleagues' perspectives on culturally responsive teaching and student–teacher relationships, and ability to represent not just their own perspective but those of other teachers and administrators. Researchers ($n=7$) were recruited based on expertise in student–teacher relationships and student engagement, particularly with historically underserved racial/ethnic minority groups, and/or expertise in school-based interventions.

Participants included 12 females (54.5%) and 10 males (45.5%) from the following racial/ethnic backgrounds: 68.2% White, 13.6% Black, 4.5% Multiracial, 13.6% other, and 18.2% Hispanic/Latino. Participants held Bachelor's (18.2%), Master's (50.0%), and Doctoral level (31.8%) degrees. Of the administrators and teachers, the average number of years in their current role was 8.15 ($SD = 6.00$). The teachers and administrators were sampled from school districts with a range of racial/ethnic student composition (3.0–82.6% White at the school level). Table 1 outlines these demographic characteristics by role.

Procedures

Participants were asked to complete a brief online survey to gain a broad view of their perspectives on student–teacher relationships, barriers to building strong and equitable relationships, and potential strategies to overcome those barriers. The "Appendix" details the survey items, which included quantitative ratings and open-ended follow-up questions about the quantitative ratings. All 22 participants completed the survey.

The survey data was used by the study team to plan focus group questions. One participant completed the survey but did not attend the focus groups due to a last-minute scheduling conflict. The focus groups were conducted 3 weeks after the survey during an in-person, all-day event. Immediately prior to the focus groups, the project investigators conducted a presentation for all participants, in which they provided an overview of the goals of the research project and summarized the results from the online survey. Then, participants engaged in two focus group sessions to

Table 1 Demographic distribution of participants across roles

Demographics	Teacher ($n = 7$)	Admin ($n = 8$)	Researcher ($n = 7$)	Total ($N = 22$)
Gender, *n*				
Male	4	4	2	10
Female	3	4	5	12
Race/ethnicity, *n*				
Hispanic	1	3	–	4
Black	1	2	–	3
White	4	4	7	15
Multiracial	1	–	–	1
Other	1	2	–	3
Most advanced degree, *n*				
Bachelor's	1	3	–	4
Master's	6	5	–	11
Doctoral	–	–	7	7
Average years of experience, *M* (*SD*)	10.57 (5.71)	5.33 (5.43)	–	8.15 (6.00)

elicit their input about school-wide professional development and equity in student–teacher relationships, respectively. Each focus group lasted approximately 1.5 h. Consistent with recommendations for conducting focus groups, participants were grouped by role (Morgan 1997; Morgan and Krueger 1993). Therefore, teachers participated in focus groups with other teachers; school and district administrators participated in shared focus groups; and researchers participated in a focus group with other researchers. Separating participants by role allows for comparison of findings across groups and mitigated some of the power differentials that could limit participant comfort (e.g., teachers may be less comfortable providing frank feedback in front of administrators).

A trained moderator and assistant moderator facilitated all focus groups using the Nominal Group Technique (Potter et al. 2004). The Nominal Group Technique is an established procedure intended to facilitate consensus and provide opportunities for all participants to contribute equally (Potter et al. 2004). The technique follows a five-step process: (1) Opening statement: A description of the purpose, rules, and procedures of the process; (2) Silent generation of ideas: Participants individually generate ideas; (3) Round robin: Participants share one idea at a time, with each idea documented on a group flip chart, until all ideas are exhausted; (4) Clarification of ideas: Participants clarify specifics about the ideas raised and similar ideas are combined; and (5) Voting and ranking: Each participant is given three votes per topic to distribute any way they see fit across their top recommendations (e.g., they can place all three votes on one idea).

Measures

Online Survey

The online survey, detailed in the "Appendix", consisted of quantitative and open-ended, qualitative that solicited "additional thoughts" about the quantitative items. The quantitative items assessed participants' perception of teachers' understanding of the importance of student–teacher relationships, teachers' prior training on concrete strategies to build relationships with students, and characteristics of students ninth grade teachers most often struggle to build relationships with. Questions were phrased to elicit perspectives about ninth grade teachers generally, rather than the participants' own personal experiences or opinions.

Focus Group Questions

During the focus groups, participants were asked to provide suggestions regarding how to enhance student–teacher relationships generally and equity in student–teacher relationships specifically. In the first focus group session, participants were asked two questions: (1) What can site administrators (e.g., principals, assistant principals, and other school leaders) do to facilitate the successful adoption, use, and sustainment of a program like EMR? and (2) Aside from the actions of site administrators, what are specific

strategies you think might be successful in facilitating the successful adoption, delivery, and sustainment of a program like EMR?

The second focus group session centered on equity in student–teacher relationships. We asked specifically about racial/ethnic minority students and students with individualized relationship need. Discussions were guided by the following four questions: (1) In what ways does EMR need to be revised in order to enhance effectiveness for racial/ethnic minority youth? (2) In EMR, teachers are asked to use a set of relationship practices in order to establish, maintain, and restore relationships with students. The practices are individualized to each relationship. What practices need to be added, revised, removed, in order to enhance effectiveness for racial/ethnic minority youth? (3) Given the average number of students a high school teacher has, we need to identify ways for teachers to triage the students who need relational practices the most. How can teachers identify students who are most in need of a positive relationship with a teacher? and (4) For students who need additional relationship support from their teachers, what would this support entail?

Data Analyses

The "Appendix" specifies the quantitative and qualitative questions from the survey and focus group discussions that were analyzed for each research question. By way of data reduction, we combined conceptually related items into scales and examined Cronbach's alpha (for scales with three or more items) or inter-item correlations (for scales with two items). Descriptive analyses were conducted by calculating means and standard deviations for quantitative measures. We used analysis of variance to test for differences by participant role (i.e., teachers, administrators, and researchers).

We used content analysis to identify themes from the open-ended survey items. Two of the authors independently developed a coding scheme using themes that emerged from the data. The authors then met to discuss the themes and revised the coding scheme and definitions. Codes and their definitions were trialed twice before a stable set of codes was reached. The coders then coded all of the open-ended questions independently and met to discuss discrepancies and reach consensus. These codes and definitions are summarized in Table 2. For each code, we tallied counts of mentions, which were limited to one count per code per individual. That is, if a participant's responses were coded more than once for a specific code, this was still tallied as one when computing frequencies.

As part of the nominal group technique that was used to conduct the focus groups, the assistant moderator took detailed notes on the participants' recommendations, and provided participants an opportunity to correct or revise the note for clarity and accuracy. Votes for each recommendation were tallied.

Table 2 Codes and definitions derived from qualitative survey items

Code	RQ1: student–teacher relationships generally	RQ2: racial equity in student–teacher relationships
Perceptions		
Understand importance	Mention that teachers have some understanding of the importance of student–teacher relationships	Mention that teachers have some understanding that race and ethnicity play a role in student–teacher relationships
Variability in practice	Mention that there is variability in practice. Variability can be between teachers or between schools	Mention that there is variability in practice, with regard to racial equity in student–teacher relationships. Variability can be between teachers or between schools
Barriers		
Teachers' lack of skills or training	Mention that teachers do not have the knowledge, skills, or training to effectively establish, maintain, and restore relationships with students	Mention that teachers do not have the knowledge, skills, or training to effectively establish, maintain, and restore relationships with students of color
Role conceptualization	Mention about student–teacher relationships not being part of how teachers conceptualize their professional role	N/A
Beliefs and attitudes	N/A	Mention of specific attitudes or beliefs about other racial and ethnic groups. Attitudes and beliefs can be implicit or explicit
Difficulty managing reactions	Mention of difficulty managing their reactions to students with behavioral difficulties or individualized needs, or difficulty overcoming challenges in building relationships with such students	N/A
Administrative or systemic barriers	Mention of leadership or structural factors that impede teachers' relationship building	Mention of leadership or structural factors that impede teachers' equitable relationship building
Solutions		
Skills training	Mention of enhancing knowledge or skills, or providing training focused on student–teacher relationships	Mention of enhancing knowledge or skills, or providing training focused on equitable student–teacher relationships
Changing attitudes	Mention of shifting teacher attitudes, including beliefs about roles	Mention of shifting teacher attitudes about equity
Administrative support/building systems	Mention of leadership strategies or structural changes that could facilitate teachers' relationship-building	Mention of leadership strategies or structural changes that could facilitate teachers' equitable relationship-building

Results

Research Question 1: What are Stakeholder Perceptions of Need and Recommendations for School-Wide Professional Development Focused on Student–Teacher Relationships?

Perceptions

Three quantitative items (survey items 1–3 in the "Appendix") were combined into a scale with good internal reliability ($\alpha = .71$). Results indicate participants generally agreed that teachers understand the importance of relationships with students ($M = 2.59$, $SD = .59$). Responses were not significantly different across teachers, administrators, and researchers ($F_{(2, 19)} = .63$, $p = .54$). Support for this perceived need was also found in the open-ended portions of the survey. As shown in Table 2, we applied the code "understand importance" to any mention that teachers have some understanding of the importance of student–teacher relationships. As summarized in Table 3, this code occurred for 9 of 22 respondents (4 teachers, 2 administrators, and 3 researchers). As an example, one respondent said, "Most teachers would agree with the benefits of teacher–student relationships." In contrast, none of the open-ended responses indicated that teachers did *not* perceive relationships with their students to be important.

While the participants stated that teachers generally perceive relationships with students to be important, there was also significant mention of variability in practice across individual teachers and across schools. This theme, which we labeled "variability in practice" came up eleven times across five teachers, one administrator, and five researchers. One participant, a high school teacher herself said: "Some teachers have skills to de-escalate and effectively resolve conflict and repair harm. Some don't." At times, participants juxtaposed the variability in behavior against the lack of variability in beliefs: "I believe high school teachers generally tend to agree that relationships are important. The degree to which they invest time/energy into building those relationships, however, likely varies tremendously. In other words, beliefs do not always match behavior."

Barriers

A number of barriers could help explain the observed mismatch between beliefs and behavior. Participants rated feasibility of a school-wide initiative as "neutral" (survey items 8 and 9 in the "Appendix", $r = .53$, $M = 2.00$, $SD = .87$). Differences by respondent role were not significant ($F_{(2, 19)} = 1.44$, $p = .27$). From the qualitative responses, we identified four categories of barriers: lack of skills (eight mentions), differing conceptualizations of the extent to which student teacher relationships was "part of the job" of a teacher (nine mentions), difficulty teachers have in managing their reactions to students with behavioral difficulties or individualized needs (eleven mentions), and lack of administrative or systemic supports (nine mentions).

Table 3 Number of mentions for each code derived from qualitative survey items

Code	RQ1: student–teacher relationships generally				RQ2: racial equity in student–teacher relationships			
	Teacher	Administrator	Researcher	Total	Teacher	Administrator	Researcher	Total
Perceptions								
Understand importance	4	2	3	9	0	0	0	0
Variability in practice	5	1	5	11	0	2	1	3
Barriers								
Teachers' lack of skills or training	1	3	4	8	NA	NA	NA	NA
Role conceptualization	3	2	4	9	NA	NA	NA	NA
Beliefs or attitudes	0	0	0	0	3	3	6	12
Difficulty managing reactions	3	3	5	11	0	0	0	0
Administrative or systemic barriers	2	4	3	9	1	2	3	6
Solutions								
Skills training	5	5	4	14	1	2	0	3
Changing attitudes	1	2	0	3	1	1	0	2
Administrative support/building systems	2	4	2	10	0	1	0	1

NA not applicable. The theme did not arise in any participant's response

In terms of lack of skills, one teacher, three administrators, and four researchers observed that many teachers "do not know how [to build relationships] with all students." This is consistent with quantitative ratings. Three items assessing teacher skills were combined into a scale (items 5–7 in the "Appendix", $\alpha = .52$) Respondents generally disagreed with this statement ($M = 1.65$, $SD = .59$). Differences by respondent role were not significant ($F_{(2, 19)} = .70$, $p = .51$).

Many participants mentioned the lack of available relationship-specific training. One administrator stated that relationship building skills "is most likely not even on the radar of most colleges and universities who provide preservice training." Indeed, the quantitative ratings indicate participants, on average, disagreed that "high school teachers have received training on concrete strategies to build relationships with students" ($M = 1.30$, $SD = .92$). Differences by role were marginally significant ($F_{(2, 19)} = .3.26$, $p = .06$). Post hoc comparisons showed that teachers had higher mean scores than researchers on this item.

As another barrier, nine of 22 participants (three teachers, two administrators, and four researchers) believed that some teachers do not conceptualize relationships as part of their professional role. One administrator said: "There is a wide swath of opinion that think that this type of attitude or work is not teaching (especially in secondary), e.g., 'I'm not a social worker.' Teachers' identities are often formed by their content and not their students." Some participants specifically mentioned that teachers may believe that supporting students' social-emotional well-being and resolving relational conflict may be the job of "interventionists" or administrators.

Even if teachers see relationship building as part of their professional role, they may have difficulty managing their reactions to students with behavioral difficulties or individualized needs. This code was applied a total of eleven times, for three teachers, three administrators, and five researchers. In contrast to the "teachers' lack of skills or training" code above, the "difficulty managing reactions" code refers to specific student characteristics that are difficult for teachers to navigate. The most common impediment to student–teacher relationships was externalizing behaviors, with teachers having the most difficulty establishing and maintaining positive relationships with students who were judged to be disruptive, non-compliant, or who "act out." This qualitative data is consistent with the quantitative survey responses, where almost all participants (95%) endorsed that teachers have weak relationships with students with these behavioral profiles. Seventy percent of participants stated that teachers have the most difficulty developing relationships with students who are perceived as "disrespectful" or "disruptive." Other factors that were perceived to impede student–teacher relationships included student physical impairments, student academic performance, students with an English Language Learner designation or an Individualized Education Plan, and students from LGBTQIA+ community.

A final set of barriers to relationship building revolved around systemic and administrative obstacles. These types of barriers were mentioned by nine participants (two teachers, four administrators, and three researchers). Many referred to "inadequacy of resources and time" and the "pressures of time and school structures." Some referred to lack of prioritizing of relationships. For example, one teacher said: "What I experienced in [my previous district] was a nudge–nudge

'develop relationships' but when it came to judging the school, its administration, and teachers, only one thing mattered: scores."

Potential Strategies

Within the survey, participants also raised a number of potential strategies for addressing barriers and improving student–teacher relationships. These were coded as suggestions for further training (14 mentions), shifting educator attitudes (3 mentions), and enhancing systemic supports (10 mentions). Skills training was mentioned by five teachers, five administrators, and four researchers. Many participants proposed specific behaviors teachers can engage into build relationships and restore conflict, such as "greeting students by name," "apologizing," and "sitting down with the student and asking questions." Suggestions for shifting teacher attitudes were raised by one teacher and two administrators and included comments such as "shifting teacher mindsets from deliverer of instruction to coach." Strategies for enhancing systemic supports were raised by two teachers, four administrators, and two researchers. These included changes to school structures to build in opportunities for relationships, such as block scheduling, advisory periods, and teaching teams. Participants also mentioned that explicit and strong leadership support is critical. For example, one teacher said: "the language and vision that administration gives can be a game-changer."

Strategies were also elicited during the focus groups. Participants were asked to identify critical components of potential implementation supports for a professional development focused on student–teacher relationships school-wide. These were compiled using the nominal group technique described above. Because there were a number of recommendations that received zero or one vote, only recommendations receiving two or more votes are included in Table 4. We summarize them here in descending order of frequency, beginning with the most common recommendation across all stakeholder groups. As shown, all stakeholder groups believed it was critical to consistently report out the progress of implementation and the program's observed impact on student outcomes. Indeed, this recommendation was the only recommendation that arose among all three stakeholder groups. One researcher noted that it was important to "make success visible… not just individual success, but school success like changes in discipline numbers."

The second most common recommendation, which emerged only among teachers, was to maintain a focus on student experiences. Teachers saw student feedback as critical to sustaining their motivation to implement new practices. In this group, one participant shared how his school kept student voice front and center in a school improvement effort pre- and post-implementation. In an initiative to inform revision of school policy, student input was solicited, particularly from African American young men and women. Anonymous quotes from students were posted on school grounds, as a way to motivate change and to support the continued involvement of students in school-level policy making.

In the third most common recommendation, both teachers and researchers perceived that it was important for administrators to provide a clear plan for the implementation of any new initiatives, including a description of the initiative, what the

Table 4 Focus group recommendations for improving student–teacher relationships schoolwide

Recommendation	Teacher	Admin	Researcher	Total
1. Report about progress made	4	5	5	14
2. Collect and share student experiences	8	0	0	8
3. Share implementation plan	5	0	3	8
4. Identify opinion leaders or champions among the teachers	0	5	2	7
5. Financially support future professional development around maintenance of the practice	0	6	0	6
6. Provide extra training and consultation to select few to become experts available to provide extra assistance	5	0	0	5
7. Facilitate routine reflection	5	0	0	5
8. Assess school need and readiness	0	3	2	5
9. Set priorities; de-prioritize for teachers	3	1	0	4
10. Foster a growth mindset among teachers to build relationships	3	0	0	3
11. Repeatedly link initiative to school's mission and vision, and teacher evaluations	3	0	0	3
12. Capitalize on teacher peer-to-peer learning	0	0	2	2

potential benefits are, and what the training and consultation will entail. These participants felt that such planning and transparency signal that the school leadership is taking the initiative seriously, which would enhance the likelihood that teachers would not see the initiative as "one more thing" that gets adopted and phased out during the course of a school year. Fourth, identifying opinion leaders among teachers was raised by administrators and researchers, but not by teachers themselves. The fifth recommendation, which only came up in the administrator group, was around budgeting. Participating administrators felt that "carving out time and space" for maintenance trainings is critical, and the financial resources required for those trainings should be planned in advance. Sixth, local internal expertise was deemed to be important by teachers, and they recommended a train-the-trainer model where a small number of school staff would receive additional training and consultation to develop their capacity to lead efforts internally within the building. A similar recommendation emerged from researchers, who suggested that teachers learn best from peers, and trainings are most effective when they allow for peer-to-peer observation and feedback (Recommendation 12). Specific implementation supports suggested included protecting time for "routine, reflective practices within department meetings" (Recommendation 7) and assessing school need and readiness (Recommendation 8). An example was mentioned that punitive or zero tolerance discipline policies would undermine any efforts by teachers to build relationships with students in an equitable manner. Thus, discipline policies that are progressive and emphasize the teaching of skills and repairing of harm should be considered a key indicator of school readiness. Recommendation 9 revolved around "initiative overload," which was identified by teachers and administrators as a significant barrier to school improvement efforts. Participants recommended that administrators should be ready to set priorities and to explicitly de-prioritize some tasks for teachers. In particular, teachers mentioned that their implementation would be enhanced by leadership "messaging that test scores should not trump relationships." Among teachers, some felt that it was important for any training to foster a growth mindset among teachers in regard to relationships. With a more fixed mindset, some teachers may believe that social capabilities are innate and cannot be enhanced.

Research Question 2: What are Stakeholder Perceptions of Need and Recommendations for Enhancing Equity in Student–Teacher Relationships?

Both quantitative and qualitative data suggest that teachers are generally unaware of the role of equity in student–teacher relationships. This construct was measured with two items (survey items 11 and 12 in the "Appendix", $r = .33$). On this scale, participants somewhat disagreed ($M = 1.73$, $SD = .70$). Responses did not differ by participant role ($F_{(2, 19)} = .37$, $p = .70$). These quantitative ratings were consistent with the qualitative codes, which showed no references to teachers having an understanding that race and ethnicity play a role in student–teacher relationships. In fact, one participant said "the opposite is often true." Teachers sometimes 'write off' students because of their background, simply because they do not have the time or resources to provide those students with the experiences they need to succeed.

Some participants, however, did note that there may be variability in this regard. The "variability in practice" code for this research question came up three times (two administrators, one researcher). For instance, one researcher said: "it depends on their experiences with students from different ethnic backgrounds or whether the teachers have examined their implicit biases." The participants felt the factors that contributed to this variability included "district level focus, policy, mission," "teachers' experiences with students from different ethnic backgrounds," and "the quality of racial equity training."

Barriers

Barriers to equitable student–teacher relationships were also coded. The most common barrier mentioned was attitudinal barriers (twelve mentions), followed by systemic barriers (six mentions), and lack of skills (three mentions). In the attitudinal barriers category, we coded responses that referred to implicit or explicit attitudes or beliefs about racial and ethnic minority students. Attitudinal barriers were mentioned by three teachers, three administrators, and six researchers from both White and ethnic minority backgrounds. Many participants mentioned student–teacher match in racial-ethnic background as a facilitator of relationship building. Conversely, a lack of racial match was perceived to be a barrier. For example, one researcher said, "for many relationships, development follows the notion that 'like attracts like'… many teachers may connect more with their white students." Some participants referenced the way that educators, and people in general, tend to respond to differences. For instance, participants said that "teachers, like all of us, bring many biases to their interactions" and these differences may lead teachers to "avoid a student rather than interacting and learning from the student."

Systemic barriers were mentioned by one teacher, two administrators, and three researchers, all of whom were White. Most of these centered on the "predominantly white teaching force" who are now "quite different demographically from their students in many districts and schools." One administrator noted that the "system of school is colonizing and racist. This is experienced by students of color daily when educators and schools try to be ahistorical and use grit/bootstrap frameworks to address structural inequities." Finally, lack of skills was mentioned by one teacher, one administrator, and one researcher. For example, one teacher said, "I think being more culturally responsive is the best response to students who are most in need, but many teachers struggle with what that is."

Strategies

On the survey, participants had limited suggestions for how to improve equity in student–teacher relationships. Potential solutions were only mentioned a total of six times across the three categories. Under skills training, one teacher and two administrators raised ideas for enhancing "understanding and implementation of culturally responsive teaching," building "reflection and practice time to work on implicit bias," and skills for "capitalizing on diversity in the learning environment." Suggestions for changing attitudes were raised by one teacher and one administrator (e.g., "understanding how

their collective lens based on privilege/lack of privilege affects how they relate to students"). Only one systemic potential solution was proposed, by an administrator: "Start an affinity group so students can talk about how they feel with others who have the same experience."

Focus group recommendations for advancing equity in student–teacher relationships are summarized in Table 5. As shown, the most commonly endorsed recommendation is to incorporate student input (eight votes total). Participants raised a variety of ideas, including having students complete evaluations of their relationship with current teachers, providing input based on their past experiences with teachers, and/or requesting mediation. Another common recommendation was around streamlining ways of identifying students most in need (seven votes total). Specifically, participants suggested that it may be helpful to generate an algorithm that can automatically detect and flag changes in student achievement, attendance, or discipline. Protected time for teachers to self-reflect and connect with their colleagues (including their students' previous teachers) was also identified as important (six votes). Other recommendations included building systems to connect eighth grade teachers with ninth grade teachers to discuss student needs (recommendation 4), identifying student needs using structured behavioral guidelines (recommendation 5), having regular opportunities to discuss students (recommendation 6), attending to current political climate (recommendation 7), and using class wide strategies in high-needs classrooms (recommendation 8).

Discussion

Strong student–teacher relationships support students' social, emotional, and academic development, and are especially important for students from marginalized racial/ethnic groups who may have the weakest sense of belonging and connection to school (Cornelius-White 2007; De Wit et al. 2011). This study was intended to inform efforts to enhance student–teacher relationships for all students, and equity in student–teacher relationships in particular. We gathered input from teachers, school and district administrators, and education researchers regarding teachers' beliefs and attitudes, training needs, barriers to student–teacher relationships, and potential strategies to address these barriers. Qualitative input was coded for student–teacher relationships generally and for equity specifically. By gathering feedback from teachers, administrators, and researchers, we were able to capture a range of perspectives and experiences across multiple levels, from direct experience in the classroom, to managing school and district systems to broadly enhance relationships, and finally, to systematically documenting successful relationship strategies across contexts. Thus, the recommendations that emerged from this study were reflective of this broad range of expertise.

Professional Development Focused on Relationship Building

Results suggested the vast majority of participants agreed that student–teacher relationships are critical for student achievement, and although some teachers may navigate relationships well, there is a significant need for consistent training for

Table 5 Focus group recommendations for enhancing equity in student–teacher relationships

Recommendation	Teacher	Admin	Total
1. Incorporate student input	5	3	8
2. Streamline ways of identifying students most in need	4	3	7
3. Provide opportunity for regular, structured teacher self-reflection on student behavior and relationships	2	4	6
4. Connect with 8th grade staff and staff of transfers/new students regarding relational needs	5	0	5
5. Use behavioral observations at the beginning of the school year (e.g., tardiness, disruptive behavior) to guide focus of teacher attention	4	0	4
6. Regular teaming to discuss students	0	3	3
7. Remain aware of political climate and pay special attention to groups who may be currently targeted in the current sociopolitical environment	0	2	2
8. In high-need classrooms, class-wide strategies may be an efficient way to build relationships	1	0	1

Due to time constraints, researchers did not participate in this focus group

all teachers. The most common barrier identified was a lack of skills and training. In addition, some teachers, particularly secondary school teachers, may see their professional role as being centered on teaching content, and may not see relationship building as part of their job. Overall, our findings are consistent with previous research, which suggests that teachers continually report receiving inadequate pre-service and on-the-job training on social and emotional aspects of teaching and learning (Chesley and Jordan 2012; Halford 1998; Lane et al. 2005; Stough 2006).

Systematic and administrative barriers, such as the lack of time and low prioritization by administrators, were also common themes in this study. Previous research suggests that strong support from leadership is an important driver of successful school-wide initiatives (Durlak and DuPre 2008; Kilbourne et al. 2007). Kam et al. (2003) showed that the success of a school-based universal program was dependent on principal leadership. On multiple measures, the program produced positive student outcomes only in schools with high principal support. Participants in the current study focused on two major roles of leaders: setting relationships as a priority and protecting time for teachers to practice and reflect. These are consistent with previous research on the behaviors of effective school leaders. Evidence-based practice guidelines often focus on the role of leaders in formulating a strategic vision, aligning new initiatives with school goals and other program offerings, and allaying staff concerns and inspiring confidence and commitment (Ke and Wei 2008; Lyon et al. 2018; Sandström et al. 2011; Spillane et al. 2004; Youngs and King 2002; Zaccaro and Klimoski 2001). Similarly, our stakeholder recommendations are well aligned with previous work indicating that effective leaders provide necessary resources for implementation and create structures for staff learning (Ke and Wei 2008; Lyon et al. 2018; Sandström et al. 2011; Spillane et al. 2004; Youngs and King 2002).

Equity in Student–Teacher Relationships

Overall, participants did not believe that the majority of teachers understand the importance of taking an equity lens to student–teacher relationships. Indeed, many indicated that the natural tendency is to focus on students one may naturally connect with. Implicit and explicit attitudes were raised as the primary barrier to equitable student–teacher relationships. These attitudinal factors were closely tied to racial mismatch between the teaching workforce and the student population.

The current study's findings point to the need to recruit, support, and retain teachers of color. Villegas and Irvine (2010) reviewed evidence that teachers of color are more likely to work in low-resource urban schools serving large proportions of marginalized youth. They also serve as role models to students and may bring a deep understanding of the lived experiences of students of color. For instance, Cherng and Halpin (2016) found that students rate Latino and Black teachers as more effective. Overall teacher diversity in a school can affect teaching effectiveness for students of color (Banerjee 2018). Other authors have warned, however, that ethnoracial matching is not a panacea. It should be noted that a focus on recruiting teachers of color must be complemented by efforts to support them in their pre-service

training and on the job. As minority members, educators of color are often isolated and tokenized (Atkins and Wilkins 2013). Indeed, data show it is significantly more difficult to retain educators of color, who leave the profession at a rate 24% higher than their White counterparts (Ingersoll and May 2011).

In addition to recruiting and retaining educators of color, high-quality cultural responsiveness training in pre- and in-service is critical. Weinstein et al. (2003) conceptualize culturally responsive teaching as both a mindset and a set of practices. To be culturally responsive, teachers must recognize their own ethnocentrism and biases; have knowledge of students' cultural backgrounds; understand the broader, social, economic, and political context; know and use culturally appropriate strategies; build caring classrooms; communicate with students in culturally consistent ways; and work effectively with families. Across stakeholder groups, a key recommendation was to incorporate student voice throughout the implementation process. Student voice can range from soliciting student feedback to building students' capacity to lead change (Mitra 2006). Student voice has been proposed as an important component of school reform and positive youth development. Mitra (2004) found that student voice activities can enhance students' sense of agency and competence, particularly among those students who are typically disengaged in school.

Additional Implications

There are lessons that emerged from the current study that could be applied more generally to the development of other school-based interventions. For example, it is important for program developers to recognize the prevalence with which attitudinal barriers may impede the implementation of the intended practices, and include training components that address beliefs, motivation, and intention, in addition to skills. Similarly, recognizing potential systemic barriers and problem-solving these barriers with teachers, administrators, and decision-makers may increase the adoption and effectiveness of new initiatives. In addition, our results suggest a need for equity-explicit interventions, where programs forefront the aim of reducing persistent disparities for marginalized groups (Gregory et al. 2016).

Limitations and Future Directions

Several limitations are noteworthy. First, these data were gathered in the Northwestern United States, which may limit the geographic generalizability of the results to areas with similar racial/ethnic diversity, socioeconomic status, and school characteristics. Relatedly, our participants were majority White. In particular, none of the researchers who participated in our study were from a racial/ethnic minority group. This resulted from our selection criteria for researchers, which focused exclusively on research area focus, rather than a diversity of personal lived experiences. Second, although we conducted the focus groups separately based on role and used a structured process that is intended to democratize participation, we nevertheless did not have the sample size necessary to further stratify focus groups (e.g., by race

or gender). Third, none of the recommendations have been tested to demonstrate whether they can improve the effective and equitable delivery of student–teacher relationship practices.

Conclusion

This study highlighted the central role of professional development for teachers to enhance their skills in establishing, maintaining, and restoring relationships with students. Future research should endeavor to empirically test specific student–teacher relationship interventions as an approach to enhance students' successful transition into high school and reduce early warning indicators of dropout, such as truancy, office referrals, and course failure. Special attention should be paid to whether such approaches decrease relationship gaps for ethnic minority students and whether they can narrow longstanding inequities in academic outcomes. Failure to attend to issues of equity may lead to student–teacher relationship approaches that further advantage privileged students relative to those students who are most in need.

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Appendix: Quantitative and Qualitative Questions from the Survey and Focus Groups

Survey Items

1. 9th grade teachers understand that strong student–teacher relationships are critical for student achievement. (0 = *strongly disagree* to 4 = *strongly agree*)
   a. If you would like to expand on your answers, please do so here.
2. 9th grade teachers understand that strong student–teacher relationships are especially important as students transition into high school. (0 = *strongly disagree* to 4 = *strongly agree*)
   a. If you would like to expand on your answers, please do so here.
3. High school teachers understand that students need to feel a sense of belonging and respect in order to engage fully in their learning. (0 = *strongly disagree* to 4 = *strongly agree*)
   a. If you would like to expand on your answers, please do so here.
4. High school teachers have received training on concrete strategies to build relationships with students. (0 = *strongly disagree* to 4 = *strongly agree*)
   a. If you would like to expand on your answers, please do so here.

b. Please describe the typical training that teachers receive on strategies to build relationships with students.

5. High school teachers have the ability to recognize when conflict resolution is needed with certain students. (0 = *strongly disagree* to 4 = *strongly agree*)
   a. If you would like to expand on your answers, please do so here.
6. Teachers have the skills to effectively resolve conflict and repair relational harm with students. (0 = *strongly disagree* to 4 = *strongly agree*)
   a. If you would like to expand on your answer, please do so here.
   b. What specific strategies have you seen teachers use to resolve conflicts with students and restore a positive relationship?
7. There are many 9th grade teachers who struggle to build positive relationships with students. (0 = *strongly disagree* to 4 = *strongly agree*; reverse coded)
   a. If you would like to expand on your answer, please do so here.
8. 9th grade teachers do not have time to implement relationship practices with their students. (0 = *strongly disagree* to 4 = *strongly agree*)
   a. If you would like to expand on your answer, please do so here.
9. Teachers need to receive protected time in order to engage in relationship-building with students. (0 = *strongly disagree* to 4 = *strongly agree*)
   a. If you would like to expand on your answer, please do so here.
10. From your perspective, what types of students do 9th grade teachers most often struggle to build relationships with? (Select all that apply: *Students from certain racial/ethnic backgrounds; Students with specific behavior patterns; Students of a specific gender; Other factors*.)
11. When approaching student–teacher relationships, 9th grade teachers adopt an equity lens to make sure they focus on students who are most in need of teacher support. (0 = *strongly disagree* to 4 = *strongly agree*)
    a. If you would like to expand on your answers, please do so here.
12. Teachers know how to connect with 9th graders of various racial/ethnic backgrounds. (0 = *strongly disagree* to 4 = *strongly agree*).
    a. If you would like to expand on your answers, please do so here.

Focus Group Questions

1. What can site administrators do to facilitate the successful adoption, use, and sustainment of a program like EMR?

2. Aside from the actions of administrators, what are specific strategies you think might be successful in facilitating the successful adoption, delivery, and sustainment of a program like EMR?
3. In what ways does our theory of change need to be revised in order to enhance effectiveness for racial/ethnic minority youth?
4. In EMR, teachers are asked to use a set of relationship practices in order to establish, maintain, and restore relationships with students. The practices are individualized to each relationship. What practices need to be added, revised, removed, in order to enhance effectiveness for racial/ethnic minority youth?
5. Given the average number of students a high school teacher has, we need to identify ways for teachers to triage the students who need relational practices the most. How can teachers identify students who are most in need of a positive relationship with a teacher?
6. For students who need additional relationship support from their teachers, what would this support entail?

References

Allensworth, E. M., & Easton, J. Q. (2005). *The On-Track Indicator as a predictor of high school graduation* (No. 60637; pp. 773–702). Consortium on Chicago School Research Directors Steering Committee Individual Members. Retrieved May 3, 2018 from www.consortium-chicago.org.

Archambault, I., Janosz, M., Fallu, J.-S., & Pagani, L. S. (2009). Student engagement and its relationship with early high school dropout. *Journal of Adolescence, 32*(3), 651–670. https://doi.org/10.1016/j.adolescence.2008.06.007.

Atkins, D. N., & Wilkins, V. M. (2013). Going beyond reading, writing, and arithmetic: The effects of teacher representation on teen pregnancy rates. *Journal of Public Administration Research and Theory, 23*(4), 771–790. https://doi.org/10.1093/jopart/mut001.

Banerjee, N. (2018). Effects of teacher–student ethnoracial matching and overall teacher diversity in elementary schools on educational outcomes. *Journal of Research in Childhood Education, 32*(1), 94–118. https://doi.org/10.1080/02568543.2017.1393032.

Barber, B. K., & Olsen, J. A. (2004). Assessing the transitions to middle and high school. *Journal of Adolescent Research, 19*(1), 3–30. https://doi.org/10.1177/0743558403258113.

Cherng, H. Y. S., & Halpin, P. F. (2016). The importance of minority teachers: Student perceptions of minority versus White teachers. *Educational Researcher, 45*(7), 407–420.

Chesley, G. M., & Jordan, J. (2012). What's missing from teacher prep. *Educational Leadership, 69*(8), 41–45.

Cook, C. R., Grady, E. A., Long, A. C., Renshaw, T., Codding, R. S., Fiat, A., et al. (2017). Evaluating the impact of increasing general education teachers' ratio of positive-to-negative interactions on students' classroom behavior. *Journal of Positive Behavior Interventions, 19*(2), 67–77. https://doi.org/10.1177/1098300716679137.

Cornelius-White, J. (2007). Learner-centered teacher–student relationships are effective: A meta-analysis. *Review of Educational Research, 77*(1), 113–143. https://doi.org/10.3102/003465430298563.

Croninger, R. G., & Lee, V. E. (2001). Social capital and dropping out of high school: Benefits to at-risk students of teachers' support and guidance. *Teachers College Record, 103*(4), 548–581. https://doi.org/10.1111/0161-4681.00127.

Crosnoe, R., Morrison, F., Burchinal, M., Pianta, R., Keating, D., Friedman, S. L., et al. (2010). Instruction, teacher–student relations, math achievement trajectories in elementary school. *Journal of Educational Psychology, 102*(2), 407–417. https://doi.org/10.1037/a0017762.

De Wit, D. J., Karioja, K., Rye, B. J., & Shain, M. (2011). Perceptions of declining classmate and teacher support following the transition to high school: Potential correlates of increasing student mental health difficulties. *Psychology in the Schools, 48*(6), 556–572. https://doi.org/10.1002/pits.20576.

Devine, P. G. (1989). Stereotypes and prejudice: Their automatic and controlled components. *Journal of Personality and Social Psychology, 56*(1), 5–18. https://doi.org/10.1037/0022-3514.56.1.5.

Durlak, J. A., & DuPre, E. P. (2008). Implementation matters: A review of research on the influence of implementation on program outcomes and the factors affecting implementation. *American Journal of Community Psychology, 41*(3–4), 327. https://doi.org/10.1007/s10464-008-9165-0.

Edwards, V. B. (2006). Diplomas count: An essential guide to graduation policy and rates. *Education Week, 25,* n41S.

Fernandez, M. A., Adelstein, J. S., Miller, S. P., Areizaga, M. J., Gold, D. C., Sanchez, A. L., et al. (2015). Teacher–child interaction training: A pilot study with random assignment. *Behavior Therapy, 46*(4), 463–477. https://doi.org/10.1016/j.beth.2015.02.002.

Ford, D. Y., & Grantham, T. C. (2003). Providing access for culturally diverse gifted students: From deficit to dynamic thinking. *Theory into Practice, 42*(3), 217–225.

Gay, G. (2010). Acting on beliefs in teacher education for cultural diversity. *Journal of Teacher Education, 61*(1–2), 143–152. https://doi.org/10.1177/0022487109347320.

Gray, D., Sable, J., & Sietsema, J. (2006). *Documentation for the common core of data state nonfiscal survey of public elementary/secondary education: School year 2004–05 (NCES 2006-441)*. Presented at the Washington, DC: National Center for Education Statistics, US Department of Education. Washington, DC: National Center for Education Statistics, US Department of Education.

Gregory, A., Hafen, C. A., Ruzek, E., Mikami, A. Y., Allen, J. P., & Pianta, R. C. (2016). Closing the racial discipline gap in classrooms by changing teacher practice. *School Psychology Review, 45*(2), 171–191. https://doi.org/10.17105/SPR45-2.171-191.

Halford, J. M. (1998). Easing the way for teachers. *Educational Leadership, 55*(5), 33–36.

Hamre, B. K., & Pianta, R. C. (2001). Early teacher–child relationships and the trajectory of children's school outcomes through eighth grade. *Child Development, 72*(2), 625–638.

Hamre, B. K., & Pianta, R. C. (2006). Student–teacher relationships. In G. G. Bear & K. M. Minke (Eds.), *Children's needs III: Development, prevention, and intervention* (pp. 59–71). Washington, DC: National Association of School Psychologists.

Hargreaves, A. (1998). The emotional practice of teaching. *Teaching and Teacher Education, 14*(8), 835–854. https://doi.org/10.1016/S0742-051X(98)00025-0.

Hargreaves, A. (2000). Mixed emotions: Teachers' perceptions of their interactions with students. *Teaching and Teacher Education, 16*(8), 811–826. https://doi.org/10.1016/S0742-051X(00)00028-7.

Hattie, J. (2015). The applicability of visible learning to higher education. *Scholarship of Teaching and Learning in Psychology, 1*(1), 79–91. https://doi.org/10.1037/stl0000021.

Helker, W. P., & Ray, D. C. (2009). Impact of child teacher relationship training on teachers' and aides' use of relationship-building skills and the effects on student classroom behavior. *International Journal of Play Therapy, 18*(2), 70–83. https://doi.org/10.1037/a0014456.

Herlihy, C. (2007). *State and district-level support for successful transitions into high school*. Retrieved May 3, 2018 from http://www.betterhighschools.org/docs/NHSC_PolicyBrief_TransitionsIntoHighSchool.pdf.

Howard, G. R. (2016). *We can't teach what we don't know: White teachers, multiracial schools* (3rd ed.). New York, NY: Teachers College Press.

Howes, C., Burchinal, M., Pianta, R., Bryant, D., Early, D., Clifford, R., et al. (2008). Ready to learn? Children's pre-academic achievement in pre-kindergarten programs. *Early Childhood Research Quarterly, 23*(1), 27–50. https://doi.org/10.1016/j.ecresq.2007.05.002.

Hughes, J. N., Gleason, K. A., & Zhang, D. (2005). Relationship influences on teachers' perceptions of academic competence in academically at-risk minority and majority first grade students. *Journal of School Psychology, 43*(4), 303–320.

Ingersoll, R., & May, H. (2011). *Recruitment, retention and the minority teacher shortage*. University of Pennsylvania Graduate School of Education. Retrieved May 3, 2018 from https://repository.upenn.edu/gse_pubs/226.

Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research, 79*(1), 491–525. https://doi.org/10.3102/0034654308325693.

Kam, C.-M., Greenberg, M. T., & Walls, C. T. (2003). Examining the role of implementation quality in school-based prevention using the PATHS curriculum. *Prevention Science, 4*(1), 55–63. https://doi.org/10.1023/A:1021786811186.

Ke, W., & Wei, K. K. (2008). Organizational culture and leadership in ERP implementation. *Decision Support Systems, 45*(2), 208–218. https://doi.org/10.1016/j.dss.2007.02.002.

Keller, J. (2002). Blatant stereotype threat and women's math performance: Self-handicapping as a strategic means to cope with obtrusive negative performance expectations. *Sex Roles, 47*(3–4), 193–198. https://doi.org/10.1023/A:1021003307511.

Kellow, J. T., & Jones, B. D. (2008). The effects of stereotypes on the achievement gap: Reexamining the academic performance of African American high school students. *Journal of Black Psychology, 34*(1), 94–120. https://doi.org/10.1177/0095798407310537.

Kennelly, L., & Monrad, M. (2007). *Approaches to dropout prevention: Heeding early warning signs with appropriate interventions*. Washington, DC: American Institutes for Research.

Kilbourne, A. M., Neumann, M. S., Pincus, H. A., Bauer, M. S., & Stall, R. (2007). Implementing evidence-based interventions in health care: Application of the replicating effective programs framework. *Implementation Science: IS, 2,* 42. https://doi.org/10.1186/1748-5908-2-42.

Kyles, C. R., & Olafson, L. (2008). Uncovering preservice teachers' beliefs about diversity through reflective writing. *Urban Education, 43*(5), 500–518.

Lane, K. L., Wehby, J., & Barton-Arwood, S. M. (2005). Students with and at risk for emotional and behavioral disorders: Meeting their social and academic needs. *Preventing School Failure: Alternative Education for Children and Youth, 49*(2), 6–9. https://doi.org/10.3200/PSFL.49.2.6-9.

Liew, J., Chen, Q., & Hughes, J. N. (2010). Child effortful control, teacher–student relationships, and achievement in academically at-risk children: Additive and interactive effects. *Early Childhood Research Quarterly, 25*(1), 51–64. https://doi.org/10.1016/j.ecresq.2009.07.005.

Lisonbee, J. A., Mize, J., Payne, A. L., & Granger, D. A. (2008). Children's cortisol and the quality of teacher–child relationships in child care. *Child Development, 79*(6), 1818–1832. https://doi.org/10.1111/j.1467-8624.2008.01228.x.

Lyon, A. R., Cook, C. R., Brown, E. C., Locke, J., Davis, C., Ehrhart, M., et al. (2018). Assessing organizational implementation context in the education sector: Confirmatory factor analysis of measures of implementation leadership, climate, and citizenship. *Implementation Science, 13*(1), 5. https://doi.org/10.1186/s13012-017-0705-6.

Marzano, R. J., & Marzano, J. S. (2003). The key to classroom management. *Educational Leadership, 61*(1), 6–13.

McIntosh, D. E., Rizza, M. G., & Bliss, L. (2000). Implementing empirically supported interventions: Teacher–child interaction therapy. *Psychology in the Schools, 37*(5), 453–462. https://doi.org/10.1002/1520-6807.

McNeely, C. A., Nonnemaker, J. M., & Blum, R. W. (2002). Promoting school connectedness: Evidence from the national longitudinal study of adolescent health. *Journal of School Health, 72*(4), 138–146. https://doi.org/10.1111/j.1746-1561.2002.tb06533.x.

Milner, H. R. (2005). Stability and change in US prospective teachers' beliefs and decisions about diversity and learning to teach. *Teaching and Teacher Education, 21*(7), 767–786. https://doi.org/10.1016/j.tate.2005.05.010.

Mitra, D. (2006). Increasing student voice and moving toward youth leadership. *Prevention Researcher, 13*(1), 7–10.

Mitra, D. L. (2004). The significance of students: Can increasing "student voice" in schools lead to gains in youth development? *Teachers College Record, 106*(4), 651–688. https://doi.org/10.1111/j.1467-9620.2004.00354.x.

Morgan, D. L. (1997). Planning and research design for focus groups. In D. L. Morgan (Ed.), *Focus groups as qualitative research* (2nd ed., pp. 31–45). Thousand Oaks: Sage Publications.

Morgan, D. L., & Krueger, R. A. (1993). When to use focus groups and why. In D. L. Morgan (Ed.), *Successful focus groups: Advancing the state of the art* (pp. 3–19). Thousand Oaks: Sage Publications. https://doi.org/10.4135/9781483349008.n1.

Murray, C., & Greenberg, M. T. (2000). Children's relationship with teachers and bonds with school. An investigation of patterns and correlates in middle childhood. *Journal of School Psychology, 38*(5), 423–445. https://doi.org/10.1016/S0022-4405(00)00034-0.

O'Connor, K. E. (2008). "You choose to care": Teachers, emotions and professional identity. *Teaching and Teacher Education, 24*(1), 117–126. https://doi.org/10.1016/j.tate.2006.11.008.

Osher, D., Sprague, J., Weissberg, R., Axelrod, J., Keenan, S., Kendziora, K., et al. (2007). A comprehensive approach to promoting social, emotional, and academic growth in contemporary schools. *Best Practices in School Psychology, 5,* 1263–1278.

Pianta, R. C. (1999). *Enhancing relationships between children and teachers*. Washington, DC: American Psychological Association.

Pianta, R. C., Belsky, J., Vandergrift, N., Houts, R., & Morrison, F. J. (2008). Classroom effects on children's achievement trajectories in elementary school. *American Educational Research Journal, 45*(2), 365–397. https://doi.org/10.3102/0002831207308230.

Potter, M., Gordon, S., & Hamer, P. (2004). The nominal group technique: A useful consensus methodology in physiotherapy research. *New Zealand Journal of Physiotherapy, 32*(3), 126–130.

Rimm-Kaufman, S. E., Curby, T. W., Grimm, K. J., Nathanson, L., & Brock, L. L. (2009). The contribution of children's self-regulation and classroom quality to children's adaptive behaviors in the kindergarten classroom. *Developmental Psychology, 45*(4), 958–972. https://doi.org/10.1037/a0015861.

Rimm-Kaufman, S. E., & Pianta, R. C. (2005). Family–school communication in preschool and kindergarten in the context of a relationship-enhancing intervention. *Early Education and Development, 16*(3), 287–316. https://doi.org/10.1207/s15566935eed1603_1.

Saft, E. W., & Pianta, R. C. (2001). Teachers' perceptions of their relationships with students: Effects of child age, gender, and ethnicity of teachers and children. *School Psychology Quarterly, 16*(2), 125–141. https://doi.org/10.1521/scpq.16.2.125.18698.

Sandström, B., Borglin, G., Nilsson, R., & Willman, A. (2011). Promoting the implementation of evidence-based practice: A literature review focusing on the role of nursing leadership. *Worldviews on Evidence-Based Nursing, 8*(4), 212–223. https://doi.org/10.1111/j.1741-6787.2011.00216.x.

Seidman, E., Aber, J. L., Allen, L., French, S. E., Lawrence Aber, J., Allen, L., et al. (2016). The impact of the transition to high school on the self-system and perceived social context of poor urban youth. *American Journal of Community Psychology, 24*(4), 489–515. https://doi.org/10.1007/BF02506794.

Spillane, J. P., Halverson, R., & Diamond, J. B. (2004). Towards a theory of leadership practice: A distributed perspective. *Journal of Curriculum Studies, 36*(1), 3–34. https://doi.org/10.1080/0022027032000106726.

Stephens, N. M., & Townsend, S. S. M. (2015). The norms that drive behavior: Implications for cultural mismatch theory. *Journal of Cross-Cultural Psychology, 46*(10), 1304–1306. https://doi.org/10.1177/0022022115600264.

Stough, L. M. (2006). The place of classroom management and standards in teacher education. In C. M. Evertson & C. S. Weinstein (Eds.), *Handbook of classroom management: Research, practice, and contemporary issues* (pp. 909–923). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.

Thijs, J., Westhof, S., & Koomen, H. (2012). Ethnic incongruence and the student–teacher relationship: The perspective of ethnic majority teachers. *Journal of School Psychology, 50*(2), 257–273.

van den Bergh, L., Denessen, E., Hornstra, L., Voeten, M., & Holland, R. W. (2010). Implicit prejudiced attitudes of teachers: Relations to teacher expectations and the ethnic achievement gap. *American Educational Research Journal, 47*(2), 497–527. https://doi.org/10.3102/0002831209353594.

Villegas, A. M., & Irvine, J. J. (2010). Diversifying the teaching force: An examination of major arguments. *The Urban Review, 42*(3), 175–192. https://doi.org/10.1007/s11256-010-0150-1.

Watson, M., & Ecken, L. (2003). *Learning to trust: Transforming difficult elementary classrooms through developmental discipline*. San Francisco, CA: Jossey-Bass Inc.

Weinstein, C., Curran, M., & Tomlinson-Clarke, S. (2003). Culturally responsive classroom management: Awareness into action. *Theory into Practice, 42*(4), 269–276. https://doi.org/10.1207/s15430421tip4204_2.

Wheelock, A., & Miao, J. (2005). The ninth-grade bottleneck: An enrollment bulge in a transition year that demands careful attention and action. *School Administrator, 62*(3), 36–40.

Youngs, P., & King, M. B. (2002). Principal leadership for professional development to build school capacity. *Educational Administration Quarterly, 38*(5), 643–670. https://doi.org/10.1177/0013161X02239642.

Zaccaro, S. J., & Klimoski, R. J. (2001). *The nature of organizational leadership: Understanding the performance imperatives confronting today's leaders* (1st ed.). San Francisco, CA: Jossy-Bass Inc.

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