Schoolwide interventions are among the most effective approaches for improving students’ behavioral and academic outcomes. However, researchers have documented consistent challenges with implementation fidelity and have argued that school social workers should be engaged in efforts to improve treatment integrity. This study examines contextual influences on the implementation of a whole-school intervention called Responsive Classroom (RC) in one urban K–8 public school serving a diverse student body. RC improves social, emotional, literacy, and math outcomes for disadvantaged students with behavior problems by building on the assets of teachers to intervene with misbehaving students in the classroom setting or school environment. Yet little is understood regarding the factors that constrain or enable implementation of RC in noncontrolled research conditions. Results from a mixed-methods convergent analysis of focus group, observation, and survey data indicate the influence of the following three contextual factors on implementation fidelity: (1) intervention characteristics such as compatibility with staff members’ beliefs about behavior change and management, (2) organizational capacity such as principal and teacher buy-in, and (3) the intervention support system such as training and technical assistance. Implications for future school social work research and practice with respect to the implementation of schoolwide programs are discussed.

KEY WORDS: context; fidelity; implementation; school social work; schoolwide interventions

Emerging evidence suggests that schoolwide and teacher-focused interventions are among the most effective approaches for improving student behavioral outcomes (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). However, scholars have documented consistently low implementation quality when such approaches are delivered outside of controlled research conditions, leading to reduced or nonsignificant impacts on participants (Durlak & DuPre, 2008; Payne, Gottfredson, & Gottfredson, 2006). To contribute to the literature on how to improve treatment fidelity in practice, this mixed-methods study examines contextual influences on the adoption of a whole-school intervention called Responsive Classroom (RC).

CONTEXTUAL INFLUENCES ON IMPLEMENTATION

Durlak and DuPre (2008) provided an organizing framework of factors that may influence program
adoption, including (a) intervention characteristics, (b) organizational capacity, and (c) the intervention support system. Here, we combine this framework with empirical evidence from implementation research in school settings. Intervention characteristics refer to the adaptability and compatibility of the program—how flexible it can be to meet local needs, along with the fit between the intervention and the mission, priorities, and values of the host organization and its staff members (Durlak & DuPre, 2008). For example, when school insiders initiate a program there is often greater congruence between the intervention and the interests of practitioners, leading to greater implementation fidelity (Payne et al., 2006). Organizational capacity refers to a shared vision and buy-in among stakeholders, especially organizational leaders and intervention implementers (Durlak & DuPre, 2008). In the context of schools, studies have consistently found that principal’s support for and teachers’ perceived importance of an intervention is positively associated with program adaptation (Kallestad & Olweus, 2003; Mendenhall, Iachini, & Anderson-Butcher, 2013; Payne et al., 2006). The final category is the intervention support system, which includes training to ensure provider self-efficacy and technical assistance to maintain dedication to programming. Indeed, the amount and quality of training, including consultation and coaching, is often associated with higher program fidelity in school settings (Mendenhall et al., 2013; Payne et al., 2006).

PURPOSE
In an effort to generate new knowledge about the factors noted previously, particularly how they operate when implementing schoolwide interventions, we conducted a mixed-methods study to examine contextual influences on the implementation of an evidence-informed approach to social, emotional, and academic learning called R.C. The following research question guided this study: What factors constrained or enabled high-fidelity implementation of R.C in one diverse K–8 urban public school?

METHOD
A convergent mixed-methods design, in which the authors examined and integrated conceptual relationships between the qualitative and quantitative results, was used to assess school contextual factors that affected the adoption of R.C (Creswell & Plano-Clark, 2011).

The Study Context
This study was developed in collaboration with a K–8 public school partner, hereinafter referred to as the School. The student population at the School is diverse and primarily low income; 58 percent are eligible for the federal free or reduced-price lunch program, and 62 percent are students of color. R.C was selected by teachers, principals, and a behavior specialist as an intervention that fit the needs and interests of the School in improving student behavior.

Intervention
R.C is a universal professional development intervention to strengthen teachers’ abilities to manage problem behavior with student-centered and developmentally appropriate strategies (Rimm-Kaufman et al., 2014). In a random controlled trial and longitudinal studies, R.C has shown efficacy in improving social, emotional, literacy, and math outcomes for disadvantaged students (Rimm-Kaufman, Fan, Chiu, & You, 2007; Rimm-Kaufman et al., 2014). The School decided to implement three core R.C practices (Northeast Foundation for Children, 2007). First was Morning Meeting, during which teachers and students gather every day to participate in community-building exercises that also target academic skills. The second practice was Teacher Language, which involves three strategies: (1) reinforcing positive behaviors with concrete observations of students’ strengths, such as “I’m hearing lots of friendly conversations and seeing people helping each other”; (2) using questions and interactive modeling to remind students of classroom rules and expectations (developed by the students) proactively or reactively when they are off-task (for example, “What are some things you can do today to keep recess safe and friendly for everyone?”); and, (3) redirecting students with direct, specific, and firm statements of instruction if they continue to misbehave, like “Clean off your tables before you line up.” The third practice, Logical Consequences, refers to nonpunitive responses to persistent misbehavior that usually involve some form of reparation, losing a privilege, or individual time to refocus (Northeast Foundation for Children, 2007).

The implementation team included two of the school’s behavior specialists, the first two authors, and three MSW-level social work interns. Adopting a “train the trainer” model, two of the team members (one university faculty, one school behavior specialist)
attended two weeks of training in the R.C approach, led by the program creators. Using materials from this intensive training, the implementation team developed and facilitated two full days of professional development for all school staff at a summer retreat. Throughout the school year, the team facilitated five “booster sessions,” approximately every other month, to address challenges and support intervention adoption. In addition, the behavior specialist provided on-site coaching as needed; regular consultation was also provided to school staff by other members of the implementation team at least twice a month via in-person meetings, e-mail, and Google docs.

**Measures**

**Quantitative.** We used two reliable and valid quantitative measures that were developed specifically to assess R.C implementation. The first is the Classroom Practices Observation Measure (CPOM), which includes 16 items to assess teachers’ use of R.C approaches ($\alpha = .87$), such as “Teacher asks questions or makes statements that invite students to remember expected behaviors” (Abry, Brewer, Nathanson, Sawyer, & Rimm-Kaufman, 2010). Observers rate teacher practices on a three-point scale, with 1 = not at all characteristic of the R.C approach, 2 = moderately characteristic, and 3 = very characteristic. The Classroom Practices Frequency Survey (CPFS) was also used to capture teachers’ self-reported use of intervention strategies, such as “In the morning, I conduct a whole class meeting with the purpose of building classroom community and creating a transition to the academic day.” The CPFS uses 11 items ($\alpha = .88$) on an eight-point scale, with 1 = almost never, 2 = one time per month, 3 = two to four times per month, 4 = one time per week, 5 = two to three times per week, 6 = four times per week, 7 = one time per day, and 8 = more than one time per day (Abry, Rimm-Kaufman, Larsen, & Brewer, 2013).

**Qualitative.** The focus group protocol consisted of two parts. Initially, facilitators asked participants to use sticky notes to anonymously describe factors that constrain or enable R.C implementation at the following levels: school/administrative, classroom, teacher, student, and other. The participants then clustered the notes by theme on posters. The facilitators used this material to ask open-ended questions about the identified themes and examples. Two additional questions were posed: (1) What are/have been the most challenging and rewarding experiences you’ve had when using the R.C approach? (2) What are/were your greatest hopes and fears for using this whole-school approach?

**Procedures**

All procedures and measures were approved by the university institutional review board. Participants provided consent, and $25 gift cards were used as incentives for participation. Once trained by the first two authors, MSW social work students used the CPOM in classroom observations that lasted about 60 minutes, in both the fall and spring semesters. The CPFS was anonymously administered online at the end of the spring semester. The first two authors conducted 10 focus groups with teachers, school social work interns, behavior specialists, and school administrators (separately), during the fall and spring semesters of the school year, using the same protocol throughout.

**Participants**

Participants were recruited from a total population of 35 teachers (58 percent female; 60 percent elementary school educators), three principals (33 percent female; one for each grade level and one for all grades), three behavior specialists (66 percent female; all grades), and three social work interns (100 percent female; all grades). Five teachers declined to participate and did not provide consent. Overall, study participants ($n = 30$; 24 teachers, three administrators, and three social work interns) were representative of all school staff members in terms of grade-level focus and gender, though there was variation by data source. Fifteen participants (46 percent female; 60 percent elementary) completed the first round of focus groups in fall 2013, and 19 individuals (58 percent female; 63 percent elementary) participated in spring 2014. Twenty-four teachers (54 percent female; 60 percent elementary school) participated in classroom observations at both time points, and 19 teachers completed the CPFS (58 percent female; 73 percent elementary school).

**Analysis**

Focus group responses were transcribed verbatim and loaded into ATLAS.ti (Friese, 2014). Template analysis was used by three members of the research team to analyze the qualitative data (King, 2012). Codes were assessed for interrater reliability using Cohen’s kappa ($\kappa = .82$). Independent samples $t$ tests were used on the quantitative data. Due to the small sample size and limits of the measurement tool, $t$ tests...
were run for difference by instructor grade level only. Qualitative and quantitative results were integrated for mixed-methods analysis in which we examined conceptual relationships between t test results and qualitative themes.

RESULTS

Quantitative Findings
Survey results demonstrated that elementary grade teachers reported using RC strategies (minimum = 2.18 and maximum = 6.45, M = 4.9, SD = 1.18) significantly more often than middle grade teachers (minimum = 1.82 and maximum = 4.18, M = 3.0, SD = 0.99; t(15) = 2.91, p < .01). These patterns were also evident in the classroom observation data; elementary grade teachers’ use of the intervention (minimum = 0.78 and maximum = 2.75, M = 2.09, SD = 0.60) was significantly greater than middle grade teachers’ (minimum = 0.53 and maximum = 1.93, M = 1.2, SD = 0.43; t(22) = 4.01, p < .001).

Qualitative Findings
Qualitative analyses led to a final template of nine substantive codes that were organized into three themes using three categories from Durlak and DuPre’s (2008) framework: (1) characteristics of the intervention in terms of compatibility and adaptability, (2) organizational capacity such as a shared vision and the ability to integrate the program into existing structures, and (3) aspects of the intervention support system like training and technical assistance.

Characteristics of the Intervention

Compatibility between the Intervention Model and the Host Organization’s Mission and Values. School staff observed that RC, a schoolwide intervention, ran counter to the School’s culture of individuality. For example, one teacher noted:

One ... characteristic of [the School is] ... there’s a lot of autonomy in terms of how teachers run their classrooms ... it’s a little bit of territorial, like ... I know what I’m doing and I have my way of doing it so I don’t need to participate necessarily in a whole-school anything.

Moreover, this school was part of what the district calls an “innovation network,” where approaches to instruction and school organization were regular sources of experimentation. A school leader noted that “It’s not one new thing; it’s always five new things that we’re working on. I think the attention span is tested.” Another teacher observed, “[I’m] trying to make sure the writing instruction is going the way it’s supposed to and the rollout of our new computers is going the way it’s supposed to ... and then melding the RC on top of it.” The simultaneous implementation of new initiatives limited the amount of professional development that could focus exclusively on RC. The school’s investment in both innovation and independence among teachers within their own classrooms was a challenge to adopting a whole-school intervention.

There were also differing degrees of alignment between the intervention and teachers’ assumptions about social and emotional development. Many teachers, across all grade levels, noted the synchronicity between RC’s focus on relationship building and their own beliefs about behavior change. In particular, Morning Meeting, in which teachers led students through a process of greeting, sharing, and team building, was highlighted as a good fit:

Just having that time [in morning meeting] to connect with students in that way that you can just see them for who they are a little bit more is really helpful ... sometimes [it] brings up what’s going on at home ... it’s a good time for them to build that relationship a little bit more.

RC’s emphasis on the development of trust and community among students and teachers was a factor that many school staff felt was the foundation for addressing the root causes of misbehavior.

In contrast, some middle school staff members’ beliefs about the value of punitive responses to problem behavior were incompatible with the core tenets of the intervention, which emphasized inclusion and opportunities to learn: “When you steal, there are real consequences; there’s jail or fines ... ; if there was that heavy consequence then we wouldn’t have to worry because the kids would monitor it themselves.” These staff members believed that zero-tolerance policies, which use punishment as an extrinsic motivator for behavior change, were more effective than RC approaches, which aim to enhance students’ intrinsic motivation to improve.

Flexibility of the Intervention to Adapt to Local Needs. Many school staff expressed sentiments that RC did not address serious misconduct that posed the greatest challenges to classroom management.
Although RC is a Tier 1, preventive intervention not intended to address clinically significant behavioral issues that require intensive individualized supports, school staff members were frustrated that it could not be adapted for serious or repeated student discipline incidents that may be rooted in family or neighborhood disadvantage. One teacher observed, “This school has a higher number of those students that are really high needs, high risk. . . . You can’t [use RC] because there is a lot of physical safety [issues] and just extreme behaviors that you have to deal with.” A different instructor commented that RC was not effective with one of her problematic students “because there’s so much stuff going on at home. So it’s not ‘cause she’s being defiant. She needs to go see a social worker. She needs counseling.”

More generally, school staff were discouraged that RC could not be adapted to meet the high end of their students’ social and emotional needs. The lead elementary school principal remarked, “I am not associating RC right now with highly effective management of extreme behaviors.” This view was echoed by the lead middle school principal:

I’ve noticed [a few teachers] in particular that . . . really do try to do the RC and eventually run out of like what to do . . . ; they feel they shouldn’t do what they would have normally done, which would be, you know, [punitive] stuff, because it’s not RC. So then that sort of manifests itself over the year, [with some students] getting worse and worse and worse.

Similarly, a teacher observed, “There is [not] a resource once you get past that redirection . . . you try another redirection and then another one, and then the behavior persists.”

Finally, participants reported that a key RC strategy, Logical Consequences, in which a response to student misbehavior is tied to the specific incident and creates an opportunity for learning, was too unwieldy to implement in a way that students could anticipate and incorporate:

I totally agree with the theory behind logical consequences where you want the consequences that match the behavior and that’s, like, respectful to the child and respectful to the teacher. But it’s hard because it’s different every time. . . . It’s not a system where they know, like, oh, if I do this I know what’s going to happen.

These teachers contrasted RC to positive behavior interventions, such as token economies and sticker charts, which had the downside of treating each infraction as the same, but could be tracked more easily throughout the day by members of the classroom community.

Organizational Capacity

*Ability to Integrate the Intervention into Existing Structures and Routines.* School staff observed that RC’s emphasis on maintaining students in the classroom was not consistent with past protocols in which teachers sent difficult young people to the office for punitive consequences:

Where [does] RC balance out with true choices we need to make as a school about how do we expel, suspend, deal with these on a real and also logical consequences level . . . that aren’t just sort of an RC consequence. There were also comments noting that the requirements of RC, such as Morning Meeting, displaced class content. For example, a middle school teacher asked, “Is it OK to spend 20 minutes [with students practicing positive behaviors] and then not doing writer’s workshop that day?” Another middle school teacher shared a similar sentiment: “Interactive modeling requires the most time and the most patience. It’s okay, we’re going to stop a lesson today and we’re going to line up until we do it correctly. . . . That means you stop doing the other academic stuff.”

*Shared Vision and Buy-In.* Participants reported inconsistencies in the School’s vision for and commitment to RC. For example, one of the leaders of the elementary grades perceived lower buy-in from the lead middle school administrator (although the school serves K–8 students, it had three “lead partners” or principals: one for K–5, one for grades 6–8, and a third whose responsibilities spanned the middle and elementary grades):

There may be inconsistent buy-in from [the middle school lead] and maybe an even better way of saying it is, the follow-through on their part or the integration of them using it, talking about it, presenting it, as a cohesive piece of who we are at [the School] . . . I see it as somewhat of different camps [middle vs. elementary] . . . It feels separate still.
This principal felt that the lead middle school principal saw RC as separate from what the School does; that it was an add-on, versus a shared vision, which likely influenced the practices of teachers. Indeed, one of the behavior interventionists observed differences among elementary school and middle school teachers in their adoption of Morning Meeting:

I see a lot of lower grades able to successfully follow the Morning Meeting format. Really all the way up through fifth grade . . . they’re doing it pretty consistently with a morning message, some activity, a share . . . it follows the format and I think it works really well . . . And then when I look at middle school, they are just, like, kinda doing their own thing. Like, they have a half hour of time that they call Morning Meeting . . . some days they just use it for announcements and discussion . . . sometimes they just use it for extra planning time for testing. . . . It gets used in a lot of different ways across the school.

These qualitative themes regarding a lack of consistent buy-in across all grades mirror the quantitative findings regarding lower implementation among middle school teachers.

**Intervention Support System**

School staff members perceived that among the most important supports for high-quality implementation of RC were initial professional development and ongoing support to reinforce skills. For example, a teacher observed that booster sessions, in which intervention strategies were revisited after school staff had opportunities to practice them, were especially helpful:

One thing that was really helpful in particular in terms of this year is that I would use the language and then forget the language and so you’re coming back in and checking in with us in the [booster session] meetings, [which] really remind[s] me, oh, yeah, I gotta do that. . . . Just like our students, I need to be taught more than once. And reminded more than once, especially when you get in the stress of testing and other stuff, you forget about the language; so I appreciate that support, the repeated instructions.

Ongoing technical assistance was also viewed as valuable because teachers encountered new dilemmas that they would not have anticipated at the start of the year. One teacher noted, “I don’t think I could have foreseen the challenges that I have this year.” Another teacher observed, “At the beginning of the year you’re trying to do so much and it was new this year, so I’ve liked being able to just try it out and not have to feel like I’m being judged.”

**DISCUSSION**

This study examined the implementation of RC, a schoolwide intervention aimed at increasing staff members’ capacity to maintain and support misbehaving students in the classroom. The presence of technical assistance was identified by participants as the most meaningful factor in support of implementation quality, with professional development workshops and individualized coaching positively affecting teachers’ adoption of this approach. This finding parallels that of another study of RC implementation (Wanless, Patton, Rimm-Kaufman, & Deutsch, 2013) and is also supported by research on the adaptation of other schoolwide interventions (Mendenhall et al., 2013; Payne et al., 2006).

Mixed-methods results indicated substantial implementation differences between grade levels, with less fidelity among middle school teachers than elementary school teachers. Participants reported this was, in part, a reflection of inconsistent buy-in at the leadership level, with the lead principal for the elementary school grades reporting greater investment and commitment to RC than the middle school leader. This mirrors results from other studies that have found teachers’ perceptions of limited principal buy-in as a significant barrier to intervention adoption (Payne et al., 2006; Wanless et al., 2013).

Teacher buy-in also differed by grade level because middle school teachers felt that the implementation of RC strategies took time away from teaching reading or math skills. This concern among the middle school teachers is understandable, given the need to prepare students for high school freedoms and academics, as well as the current nationwide emphasis on accountability for student performance. This is not to imply that elementary school teachers lack accountability to student testing outcomes, but elementary school teachers presented almost no concerns about melding RC strategies with academics.

Finally, our study suggests that the adaptability of the intervention to local priorities and its compatibility with stakeholders’ belief systems are salient factors in implementation quality. In particular, attitudes
about age-appropriate punishments for middle school students, as compared with elementary school students, appeared to contribute to different levels of implementation between the grade levels. Some middle school teachers felt that if students were not held to “real world” consequences like suspension, they would not learn how behaviors such as fighting will be addressed in high school, in the community, or in students’ careers. These divergent attitudes may be due to the self-selection of teachers into different grade levels. Studies of preservice teachers indicate that those who plan to teach in a secondary school, rather than elementary, are more likely to place lower importance on teacher-directed behavior management and have negative perceptions of student motivation and likability (see, for example, Rimm-Kaufman, Storm, Sawyer, Pianta, & LaParo, 2006).

Limitations
Our quantitative sample size was small, and the measures were limited by the types of items R.C developers created to assess implementation. Participants in the focus groups, classroom observations, and surveys were largely representative of the faculty and staff at the School but may not be generalizable beyond the study site.

Implications and Conclusions
There is growing consensus among school social work scholars that the most promising service models reflect an ecological orientation that extends beyond individual students to target school environments (Kelly, Raines, Stone, & Frey, 2010). Our findings indicate a need for additional attention and resources to support the translation of such schoolwide interventions into public schools. Mixed-methods results indicate that implementation of R.C was influenced by three categories outlined by Durlak and DuPre (2008): (1) intervention characteristics (for example, program—school fit), (2) organizational capacity (for example, buy-in), and (3) the intervention support system (for example, professional development opportunities). Our findings suggest that the match between the ethos of a school and the intervention is an important factor to assess when choosing an intervention. Results also indicate that implementing whole-school approaches for behavior management may require a differentiated model of professional development by grade level that addresses middle school staff members’ beliefs about the effectiveness of punitive responses to misbehavior. Finally, this study illustrates the importance of cultivating strong principal buy-in prior to program implementation.

In light of these findings, school social workers should be encouraged to collaborate with school personnel to address contextual factors that limit the adoption of whole-school interventions. For example, school social workers are in a position to use motivational interviewing techniques with key stakeholders, such as principals, to ensure there is clear buy-in before proceeding with implementation (Frey, Sims, & Alvarez, 2013). In addition, school social workers can provide technical assistance and coaching support for school staff as they learn to implement intervention strategies. Several models for this type of consultation have been recently outlined in Children & Schools (see, for example, Frey, Sabatino, & Alvarez, 2013). This study offers additional evidence to support claims that school social workers have a crucial role in ensuring implementation fidelity of evidence-informed interventions.

In terms of future research, there is an urgent need for studies that illustrate how to modify teacher and administrator beliefs about effective behavior management, particularly among educators working with secondary school students. Growing evidence indicates that punitive and exclusionary discipline practices, such as out-of-school suspension, are not effective and can actually harm students’ academic, behavioral, and social trajectories (see, for example, Fabelo et al., 2011). Yet when educators, such as the middle school staff members in our sample, believe that older adolescents will only change their behavior in response to “rules and consequences” or “jail and fines,” it is unlikely they will implement evidence-informed interventions like R.C with fidelity. Researchers have suggested that access to high-quality research and professional development, legislation, credentialing reforms that redefine teachers’ roles as intervention implementers, and use of multimedia strategies to increase empathy for students’ social and emotional needs may change educators’ beliefs and attitudes toward humanistic, preventive interventions (see, for example, Kallestad & Olweus, 2003), but empirical evidence in support of these approaches is scant and of low quality. In short, there is a strong body of literature that indicates stakeholder beliefs predict intervention adoption and implementation fidelity, and that these attitudes are associated with strong organizational leadership, but experimental studies that identify
mechanisms for changing teachers’ or administrators’ beliefs are sorely needed.

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