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ORIGINAL PAPER

A Qualitative Study of the Sources and Impact of Stress Among Urban Teachers

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Abstract Although urban teachers are at-risk of experiencing significant work-related stress, urban teacher stress has been neglected in the research literature to date. Through semi-structured interviews conducted with a sample of K-4 urban teachers ($N = 14$) from three high-poverty schools in a large, Midwestern city, we examined teachers' perceptions regarding sources and impact of stress and the resources needed to address identified stressors. Results from consensual qualitative research (CQR; Hill et al. in Couns Psychol, 25:517–572, 1997; Hill et al. in Consensual qualitative research: an update, 2005) suggest that at least one-half of the cases identified lack of resources, excessive workload, school-level disorganization, managing behavior problems, and accountability policies as significant sources of stress. The majority of teachers reported that occupational stress significantly impacted their personal relationships and physical health, and teachers identified human and material resources as most important to reducing work-related stress. Implications for organizationally based interventions and school policies to address urban teacher stress are discussed.

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Introduction

Since the publication of *A Nation at Risk* (1983), there has been a continuous stream of reports, national commissions, and studies focused on low teacher quality, troubling gaps in achievement based on minority status, and the erosion of US public schools (National Center for Education Statistics, 2005). Teachers have come under fire for student achievement gaps, and reform policies have been enacted to improve public schools and teacher effectiveness (Boyd & Shouse, 1997; Lambert & McCarthy, 2006). Against this backdrop, the rewards of teaching have become increasingly obscured by the demanding work conditions characterizing many of our nations' schools. Alarming rates of teacher stress come as no surprise, with large proportions of teachers experiencing psychological distress, mental and physical fatigue, and psychological burnout when compared with other professions (Guglielmi & Tatrow, 1998; Kovess-Masféty, Rios-Seidel & Sevilla-Dedieu, 2007).

The challenging work conditions teachers face in high-poverty, urban schools are also well documented, including overcrowding, limited resources, and physical deterioration (Atkins, Graczyk, Frazier & Adil, 2003; Boyd & Shouse, 1997; Cappella, Frazier, Atkins, Schoenwald, & Glisson, 2008). Urban teachers are burdened by policies that emphasize test scores; teach high numbers of students with complex learning and mental health needs that go unmet; and report high rates of job dissatisfaction when compared with their suburban and rural counterparts (Kataoka, Zhang, & Wells, 2002; Langley, Nadeem, Kataoka, Stein,

& Jaycox, 2010; Smylie, 1999). Dissatisfaction with teaching may manifest itself most dramatically in teacher attrition and migration, with some inner-city schools losing up to 40% of new teachers within their first few years of teaching (Barnes, Crowe, & Schaefer, 2007; Shann, 1998).

Although teachers in high-poverty, urban schools are at-risk of significant work-related stress and early burnout, these two lines of research—teacher stress and urban schooling—have developed independently. Little effort has been made to bridge these literatures, and few studies have examined the phenomenology and impact of stress from the perspective of urban teachers. With these issues in mind, the goal of this study was to examine urban teachers' experience of stress in an effort to inform mental health practice in urban schools. Specifically, we proposed to identify areas of concern to urban teachers toward the goal of promoting teacher mental health as a mechanism for enhancing urban children's school experience.

Nature and Consequences of Teacher Stress

Although the teacher stress literature has suffered from considerable heterogeneity in methods and conceptual definitions, stress has been generically defined as an unpleasant emotional experience associated with feelings of anger, anxiety, tension, and frustration and linked with specific environmental triggers (Kyriacou, 2001; Lazarus & Folkman, 1991). The most dominant occupational stress model posits that work-related stress emerges under conditions in which job demands are perceived as excessive while control, autonomy, and decision making are low (Guglielmi & Tatrow, 1998). *Burnout*, a theoretically and conceptually distinct construct, is defined as the by-product of prolonged stress, whereby individuals experience emotional, physical, and attitudinal exhaustion (see Maslach & Goldberg, 1998).

Although the causal link between stress and specific teacher outcomes is not well-established, unremitting occupational stress and resultant burnout has been associated with a *minimalist* coping response, whereby teachers spend less time preparing for lessons, take less personal responsibility for student learning, and invest less energy in teaching (Hughes, 2001; Lens & Neves de Jesus, 1999; Maslach & Goldberg, 1998). Recent studies have found that teachers experiencing the highest burnout rates struggled the most to implement new curricular practices (Ransford, Greenberg, Domitrovich, Small, & Jacobson, 2009) and were the least likely to refer students for school-based support services (Pas, Bradshaw, Hershfeldt, & Leaf, 2010). Some evidence also suggests that a subset of teachers with the highest rates of stress and burnout are actually the least likely to leave their jobs, a phenomena characterized as *on-the-job-retirement*, in which teachers are frequently absent, invest less time preparing engaging and creative lessons, and distance themselves from their students and their work (Dworkin, Haney, & Teschow, 1988; Hughes, 2001).

Prolonged teacher stress is hypothesized to impact classroom climate and the quality of teacher–student relationships, both considered core resources for effective teaching and student learning (Hamre & Pianta, 2005). Studies have found that teachers experiencing high rates of occupational stress are more likely to criticize their students, lose their temper, and resort to punitive discipline strategies when compared with teachers experiencing lower stress (Lens & Neves de Jesus, 1999; Yoon, 2002). Stress also impacts teachers' ability to deliver instruction effectively, which has implications for student learning and achievement (Ransford et al., 2009).

Interventions Targeting the Predictors of Teacher Stress

Efforts to identify the empirical predictors of teacher stress have isolated *individual predictors* (e.g., gender, age, years of experience, prior mental health functioning) and *organizational predictors* (e.g., classroom and school climate, workload, role ambiguity), with organizational factors more consistently predicting stress (Burke & Greenglass, 1995; Dorman, 2003). However, the majority of interventions to address teacher stress target individual predictors and focus on what teachers can do to mitigate and overcome job-related stress, including stress inoculation training and stress management (Cecil & Forman, 1990; Tunnecliffe, Leach & Tunnecliffe, 1986); progressive relaxation training (Bertoch, Nielson, Curley, & Borg, 1989); meditation (Anderson, Levinson, Barker, & Kiewra, 1999); and improvements in health, fitness, and nutrition (Michela, Lukaszewski, & Allegrante, 1995).

Individually focused interventions have produced some positive short-term outcomes related to coping and stress reduction and are less costly and complex than interventions targeting organizational change. However, evidence suggests that such programs often fail to have a sustained impact, presumably because they ignore work-setting characteristics and features of the classroom and school context that teachers report being most stressful and impairing to their job performance (Burke & Greenglass, 1995; Kyriacou, 2001). Social support from colleagues, defined as interpersonal transactions that provide emotional, instrumental, or informational support perceived as beneficial to educators, is perhaps the most widely investigated mediator of teacher stress to date (see House, 1981). Some evidence suggests that social support from colleagues provides a stronger buffer against stress than other sources of support (e.g., friends and family) and can also

promote relational trust at an organizational level (Bryk & Schneider, 2002).

Study Aims

Reviews of the stress and burnout literature highlight significant methodological and conceptual weaknesses, including a lack of theoretical frameworks to unify and guide empirical work, a preponderance of cross-sectional and retrospective research designs and frequent use of measures with unknown psychometric properties (Guglielmi & Tatrow, 1998; Pithers, 1995). The teacher stress literature has frequently relied on quantitative methods for assessing stress, including highly structured rating scales with fixed response options. Open-ended methods that allow teachers to elaborate on the meaning and phenomena of stress from their perspective have rarely been used, but have the potential to provide a more in-depth understanding of their experience of stress. Toward that end, understanding the sources and impact of urban teacher stress, an area that has been largely neglected in the research literature to date, can be an important first step toward developing effective intervention and prevention programs targeting the most robust predictors of stress-related work impairment (cf., Schoenwald & Henggeler, 2003). With these issues in mind, three areas of focused inquiry guided this study: (1) What are the sources of stress for urban teachers? (2) How does stress impact teachers? (3) What additional resources and supports are needed to alleviate and address stress?

Method

Participants

Schools

Three low-performing elementary schools located in high-poverty urban neighborhoods in a large Midwestern city agreed to participate in the study. The three participating schools were randomly assigned to a comparison condition (i.e., services as usual) in a larger mental health services reform project underway in six urban schools (see Cappella et al., 2008 for a detailed description of the larger study). Participating schools were identified by screening K-8th grade schools within this urban district ($n = 325$) based on the following criteria: 85% or greater African American students, 85% or greater low-income, average reading scores on statewide testing below the 30th percentile ($M = 28$, SD = 3.8), and school population within one standard deviation of the district mean ($M = 702$, SD = 306). Schools were characterized as 99% African American students, 99% free-reduced lunch status, and state reading test scores below the 33rd percentile.

Teachers

Twenty K-8 teachers were randomly selected from a sample of teachers ($N = 56$) working in the three comparison schools who had consented to participate in the larger study. Of twenty teachers initially contacted in the summer, six declined to participate. Five teachers reported that they were not planning to return to their jobs the following fall and thus did not want to participate in the study, and one teacher was struggling with health issues and thus declined to participate. Of the final sample ($N = 14$), twelve teachers were female, mean age was 33 years (SD = 10.36), mean years of teaching experience was 4.8 ($n = 8$ had 1–2 years; $n = 3$ had 3–5 years, and $n = 3$ had 12–18 years of experience). Eight teachers were European American, four were African American, one was Latina, and one self-identified as "Other."

Procedures

University and district IRB approval was obtained prior to initiating study procedures. The research team was comprised of two female faculty (one European American, one Biracial): one female, European American bachelors' level research assistant and one male, European American advanced undergraduate student. Three members of the research team (two faculty and one bachelors level RA) conducted interviews to reduce the possible effects of interviewer style and bias, and all four members of the research team served as judges for the consensual qualitative research (CQR) analyses (see Hill et al., 1997, 2005). CQR is an iterative, five-step process for in-depth analyses of qualitative interview data that is described in further detail (see Analytic Strategy). Given the variation in educational background of the research team, extensive training occurred prior to conducting the semi-structured interviews and coding tasks (i.e., reviewing the interview protocol, conducting practice interviews, and CQR training). In addition, one faculty member accompanied the third interviewer during initial interviews to provide feedback and to ensure established guidelines for interviewing and probing were followed (see Hill et al., 1997).

Teacher participants were randomly assigned to interviewers who contacted prospective participants to discuss the purpose of the interview, procedures for audiotaping and transcribing the interviews, and procedures for ensuring confidentiality. Individual face-to-face interviews took approximately one hour to complete and were conducted at each teacher's school. Immediately after each interview was conducted, interviewers completed field notes to

record the length of the interview, location, impressions of the interviewee, and any additional information related to the interaction between the interviewer and interviewee (see Hill et al., 1997, 2005). All semi-structured interviews were audiotaped and transcribed verbatim by two experienced transcribers trained in transcribing conventions utilized in the social sciences (see McLellan, MacQueen, & Neidig, 2003). All transcriptions were checked by the interviewer against the audiotapes for accuracy.

Measures

The semi-structured interview protocol was informed by a review of the literature on teacher stress and was designed to elicit teachers' perceptions regarding the three areas of focused inquiry; specifically, the stressors facing teachers working in high-poverty schools, the impact of those stressors, and perceptions regarding additional resources and supports needed to reduce stress (a copy of the protocol is available from the first author). Interviews began with general questions ("Tell me what it is like to be a teacher in [Name of District]") to establish rapport. General questions were followed by an introduction of the topic to orient the interviewee ("Now, I would like to know how you experience the stressors you have identified since we started talking") and open-ended probes for each area of inquiry ("How do you see the stress you experience at work affecting your life"). This format ensured respondents could answer in an unstructured manner and allowed the interviewer to gain a deeper understanding of how the respondent experienced that area of inquiry (Hill et al., 1997). Teachers completed a demographic survey at the end of the interview.

Analytic Strategy

After interviews were transcribed, we generated descriptive information regarding the stressors experienced by teachers using consensual qualitative research (CQR; Hill et al., 1997, 2005). CQR is an iterative process that is especially valuable during the initial stages of research because it combines gathering vivid, rich data with systematic procedures for analyses. CQR specifies a series of five steps to analyze data within and across participants.

Step 1: Coding Responses into Domains

We developed an initial start list of domains based on a review of the literature and the semi-structured interview (Miles & Huberman, 1994). Next, we randomly assigned two interviews to be scored by two pairs of raters that always included one faculty member. These pairs of raters independently assigned raw data (i.e., interview excerpts) from these first two interviews into domains. A consensus version that included domain titles and raw data for each domain was generated to create clear distinctions between domains and to calibrate the fit of the domains early in CQR. After the initial domains were modified, ten interviews were randomly assigned by the lead author to rotating pairs of raters who independently assigned data into domains and then met to develop consensus versions of the product. Two interviews were set aside for stability check (described in Step 5). The research team modified the domains via the coding and consensus process, which resulted in a final list of domains highlighted in Table 1.

Step 2: Abstracting Core Ideas Within Domains

Second, two raters independently reviewed raw data within each domain and developed core ideas (i.e., summary statements) for each domain. These core ideas were developed to capture the essence and content of all interview data succinctly and concisely (Hill et al., 1997, 2005; Ladany et al., 1997). Next, the two raters met to develop a consensus version of the abstracted core ideas.

Step 3: Cross-Analysis

Cross-analysis involved identifying patterns of responses within domains that converged across participants (Hill et al., 1997, 2005; Ladany et al., 1997). As such, those same pair of raters created categories to represent similarities within the core ideas for each domain across teachers. The research team then worked together to develop a consensus version of those categories. Finally, to highlight both the representativeness of the sample and the variation within the sample, we clustered categories into three domains, including general, typical, and variant (described later) based on CQR conventions.

Step 4: Auditing of Cross-Analysis

Auditing was completed by one of the four research team members who were excluded from the original team of raters who completed the first three steps of CQR. Auditing included an independent review of the categories identified in the cross-analysis and was conducted to ensure that core ideas were appropriately specified and accurately represented. This step included determining whether the raw data were placed in the correct domain, all critical material in the domain was abstracted, and the wording of the core ideas accurately reflected the raw data (Ladany et al., 1997). Discrepancies were reviewed with the original team for possible changes.

Table 1 Summary of domains, categories, and frequencies

Sources of stress	Cases	Impact of stress	Cases
Limited resources and supports		Physical health	
Lack of basic materials	12	Physical illness	8
Lack of other human resources	11	Eating habits	7
Forced to spend own money	7	Sleep disruptions	6
Lack of instructional resources	5	Exhaustion and fatigue	5
Excessive workload		Personal relationships	
Demands exceed time	12	Immediate family	9
Workload intrusions	5	Work–life balance	6
Paperwork requirements	3	Family/friend relationships	4
School-level disorganization		Work performance	
Limited communication	10	Delivery of instruction	6
Lack of school-wide rules	8	Decreased effort/ preparation	2
Administrator turnover	3		
Restructured school	2		
Managing disruptive behavior		Emotional well-being	
Unexpected frequency/ intensity	8	Negative mood	7
Interference with instruction	7	Preoccupied/distracted	2
Accountability policies			
Pressure to raise test scores	8		
Intense scrutiny	5		
Teaching to the test	5		
Heterogeneous learners			
Students below grade level	7		
Varied academic levels	4		
Difficulty engaging students	4		
Excessive class size	2		
Urban poverty			
Students' basic needs unmet	7		
Community violence	3		
Role overload			
Multiple helping roles	7		
Job demands beyond teaching	4		
Mentoring new teachers	1		
Teacher preparation			
On-the-job training	6		
Early career teacher status	5		
Urban setting	4		

Table 1 continued

Supports needed to reduce stress	Cases
Human and material resources	
Classroom-based support	11
Basic materials	8
School-wide support	4
PD specific to urban teachers	
Instructional support	6
Managing disruptive behavior	3
Enhanced school relationships	
Leadership support	5
Increased contact with colleagues	4
Parent resources	
Educational and job training	3
Parenting classes	2
Mental health resources	1
Community changes	
Increased neighborhood safety	4
Community partners	4

General = 13 or more cases; Typical = 8 to 12 cases; Variant = 4 to 7 cases

Step 5: Stability Check

The first author conducted a stability check to verify that all domains, core ideas, and categories were identified. This step included reviewing the two cases that were originally set aside to assess the extent to which the addition of these new cases altered the findings (see Hill et al., 1997). The stability check indicated that the two cases did not add anything new to the previous analyses, suggesting that the results represented the phenomena for this group of urban teachers (Hill et al., 1997, 2005).

Results

Table 1 summarizes the modified list of domains developed via the iterative CQR analyses and the number of cases fitting into each category. As per guidelines established by Hill et al. (1997, 2005), *general* applied to categories that converged across almost the entire sample allowing for one outlier (i.e., 13 or more cases); *typical* included more than one-half of the cases (8 to 12 cases); and *variant* applied to fewer than 50% of cases (4 to 7 cases). General, typical, and variant categories are described in text based on the frequency with which each domain emerged and are also highlighted in Table 1. Categories including three or fewer cases are only depicted in Table 1.

Sources of Stress

Limited Resources and Supports

The most prominent source of stress that emerged for teachers in this sample was the acute lack of resources, with four subdomains consistently emerging (see Table 1). First, teachers highlighted that the lack of access to basic supplies and equipment (e.g., books, paper, pencils, toilet paper, soap, copier, and computers) was a significant source of stress, "There's not toilet paper or soap in the bathrooms which is a normal common thing in a workplace. You should be able to walk into the bathroom and there should be toilet paper and soap." Second, lack of access to basic supplies created frustration and resentment as some teachers felt forced to spend their own money, "We never have a copy machine that works, which seems like such a small thing, but when you need copies for your children it becomes a huge thing…spending hundreds of dollars a month on copies." Third, teachers described stress related to lack of human resources (e.g., inadequate security, no school nurse, limited in-class support). Finally, teachers shared frustration around limited access to coaches, mentors, and content specialists, which left them feeling isolated, "I'm struggling with finding out what the third graders need to know…I'm lost and I don't have a mentor or anybody really to talk to about it or help me in my classroom."

Excessive Workload

Most of the teachers in this sample reported experiencing stress related to having too much to do in too little time and that their regular work hours were insufficient to adequately perform job-related tasks. Some teachers reported that covering the required academic material within the allotted school day was a source of stress. The perception of excessive workload forced some teachers to prepare lessons and grade assignments on evenings and weekends, which intruded on personal relationships and responsibilities, "You can't really do… the paperwork requirements during the day… All that gets done on evenings and weekends."

School-Level Disorganization

Table 1 highlights that the majority of teachers in the sample identified lack of support from principals, assistant principals, and the leadership team as a significant source of stress. This included lack of support and feedback around job performance and poor communication around policy changes. Teachers described having to rely on colleagues to inform them of paperwork deadlines rather than receiving the information directly from administration and described the lack of school-wide rules and discipline plans as a source of strain. This included lack of consequences for aggressive, unsafe behaviors (e.g., bringing weapons to school, property destruction), and arbitrary discipline policies (e.g., no suspensions for K-2nd graders). Teachers speculated that the lack of discipline policies created a chaotic school environment, including chronic noise, constant interruptions, and filthy work conditions.

> I don't know if you can hear it now, there's constant noise, constant chaos, there's no order whatsoever, there don't seem to be any school rules here… I think I've just reached my limit with that. I can't sit in this noise all day long without it just, I feel like I'm wound up like a spring by the time I leave here.

Managing Disruptive Behavior

Teachers in this sample reported that dealing with chronic disruptive behavior was a significant source of stress. Teachers described feeling overwhelmed and ineffective around managing noncompliance, verbal and physical aggression, and inattention. Some teachers also reported that the time spent addressing disruptive behaviors significantly interfered with instruction and student concentration, "I can't teach what I want to teach because I have to deal with … constant… behavior struggles with the kids."

Accountability Policies

Teachers described intense pressure and stress around accountability policies with three subdomains consistently emerging (see Table 1). First, teachers described intense stress, pressure, and personal responsibility to raise students' test scores and feeling helpless when students did not make adequate progress, "That [low test scores] is so stressful…you feel bad about it…'well maybe I should do this and maybe I should do that.' And you keep trying and they keep failing." Second, teachers identified intense scrutiny and rigorous oversight by the principal and local superintendent as an underperforming school a source of stress. Teachers described excessive oversight and resultant stress around frequent district "walk-throughs" perceived to be focused on the presence of superficial materials (e.g., specific bulletin boards) diffusely related to learning. Third, teachers identified stress at feeling forced to "teach to the test." Some teachers described feeling limited control in planning and executing lessons and ethically torn by mandates that teachers' focus intensively on students most likely to reach proficiency on standardized tests. One teacher described:

> It's openly said to us by our principal that there are students that do so poorly on the test, who are the lowest students that to just let them go, that's just not who we spend our time on…we need to focus on these kids who are right on the border who they could get over to … passing. Absolutely wrong in servicing children…that's a major stressor…because I'm supposed to be doing this targeted instruction and I can't do it and feel like a person of values and ethics.

Teaching Large Heterogeneous Groups of Learners

Teachers reported that teaching large groups of students with varied academic levels also contributed to work stress (e.g., "Sometimes I feel stuck and I don't know what to do next…I have a full range of students..some low, I have some high, I have some in the middle and just getting to everybody during a lesson is hard"). Some teachers reported feeling frustrated because they were constantly revising and adapting the curriculum, occasionally the same lesson multiple times, to meet all learners' needs. Teachers also reported feeling distressed when students were difficult to engage or had given up on learning.

Urban Poverty

Stress associated with urban poverty was typically related to students' not having access to basic necessities (e.g., food, shelter, and clothing) and resources (e.g., limited access to phones which restricted home–school communication). Several teachers revealed feeling worried about how poverty affected student health and well-being (e.g., "I go home and think about it at night. Maybe if I did have the older ones I could tune it out a little bit more, but it's hard to do when the babies are walking in, you know, looking so hollow, looking hungry").

Teachers occasionally reported stress associated with frequent incidents of community violence and fears regarding student safety (e.g., "Last year, the entire month of May we could not go outside because there was a shooting outside every single day").

Role Overload

Table 1 illustrates stress related the perceived lack of balance and unreasonable number and extent of expectations placed on this sample of teachers. Some teachers described feeling burdened by fulfilling multiple helping roles with students (e.g., "We are mommy, daddy, nurse, social worker, teacher…I mean we're everything"). Role overload created personal stress because those responsibilities were perceived as unreasonable (e.g., managing emergencies due to the lack of school nurse and inadequate security), unpredictable (e.g., covering gym last minute because the physical education teacher was fired without warning), and out of their control (e.g., feeling forced to do After School or Saturday School).

Teacher Preparation

Several new teachers reported stress associated with acquiring new skills on-the-job (e.g., teaching new curriculum and managing an entire classroom) and shared negative feelings that accompanied being an early career teacher. Teachers highlighted the lack of preparation for an urban school, with one veteran commenting:

> [New teachers] are so enthusiastic and hard working when they get here. They've got all these great ideas, and they want to try this and … they want to implement programs, but by the end of their two short years, they're burnt. You know, they leave and then we get a new batch of kids that are the same way…the stress of the job drives them away, the fact that there's nobody supporting them …and they never worked in urban schools, so they don't really understand what this experience is like.

Impact of Stress

Teachers in the sample reported that work-related stress impacted their physical health, personal relationships, work performance, and emotional well-being (highlighted in Table 1). First, in terms of physical health, teachers reported frequent illness, sleep difficulties, unhealthy eating habits, and frequent exhaustion (e.g., "I'm a stress eater…[and] logically I should be like, 'Oh I should go to the gym and work out, that'll relieve stress' but I'm so exhausted mentally and physically when I get home, that's the last thing on my mind"). Second, with regard to personal relationships teachers described decreased patience with family, irritability when parenting, work–life imbalance, and difficulty remaining connected with friends (e.g., "I had 30 five year olds all day, and then I went home to my own five year old? I didn't have anything left for him. He got nothing…I had no patience left"). Third, teachers reported that their work performance suffered due to the loss of concentration during lessons and reduced time and effort preparing for teaching (e.g., "I lose track of what I was about to say… I'm kind of stressed out that it's [disruptive behaviors] happening again and, you know, I'm like 'ok what was I doing next' and I can't concentrate during lessons"). Fourth, teachers reported feeling withdrawn, anxious, irritable, and depressed, reflecting the impact of stress on their emotional well-being (e.g., "Stress

puts me in a foul mood most of the time. Screaming at my students all day").

Supports Needed to Reduce Stress

Teachers highlighted five sources of support that would help reduce work-related stress (see Table 1). First, teachers described the need for access to additional human and material resources, including classroom aides, content experts, high-quality substitutes, and enhanced security (e.g., "It would be helpful to have another body in this room, but somebody who is going to be helpful…It is very stressful to look across the room at my assistant playing on the internet when I've got kids that need help"). Basic instructional supplies (e.g., paper, pencils, and books) were also identified by teachers as important to reducing work stress. Second, teachers described the need for professional development specific to teaching in an urban school (e.g., classroom management) and suggested professional development should include in-class modeling and demonstration (e.g., "It takes a lot to be a good teacher… I wish there would have been maybe like more modeling on how to teach a lesson"). Third, several teachers reported that a leadership team that supported teachers' emotional and mental health and enhanced collegial relationships professionally and personally would reduce stress (e.g., "I think it's probably true of any place you work that if there's people that are friendly that are your coworkers that it makes it a better place to go …and so I wish I had more opportunities to be with my colleagues and learn from them"). Fourth, teachers reported that additional resources for parents (e.g., GED classes, parenting workshops, mental health resources, job training) would help reduce stress (e.g., "I feel like if they [parents] felt the support of others than they would be more willing to give us support"). Finally, teachers reported that community changes, including enhanced safety (e.g., greater police presence, removing liquor stores that are in close proximity to the school) and fostering stronger partnerships with churches and local businesses would help reduce stress and anxiety regarding student safety and role overload (e.g., "Building this link between the school and the community….so parents and students have someplace else to go for support").

Discussion

The goal of the current study was to gain a better understanding of the sources and impact of stress facing teachers working in highly distressed urban schools and the resources required to address those stressors. Schools are one of the most powerful contexts for enhancing children's long-term social, behavioral, and academic outcomes (Atkins, Hoagwood, Kutash & Seidman, 2010; Cappella et al., 2008), and data suggest that students experience schools through teachers via strong associations between high-quality instruction and children's academic success (e.g., Crone & Teddlie, 1995). Hence, effective support for teachers working in the most disadvantaged schools is likely one of the most direct, pivotal links in the chain of mental health promotion for children living in urban poverty. Results from this small sample of teachers working in high-poverty, urban schools highlight that teachers are overextended and drained by their jobs and that stress impacted the quality of their work and their functioning and relationships outside of work.

Sources of Occupational Stress

Through in-depth interviews, three important findings emerged regarding the types of occupational stressors facing teachers in this small sample. First, a general theme of imbalance emerged such that the demands of teaching were perceived as overwhelming (e.g., work overload, intense behavioral and learning needs among students, accountability pressures) while the resources to meet them were perceived as extremely scarce (e.g., lack of supplies, limited social support, and few instructional resources). Although the demands-control model (i.e., job stress results from high work demands and limited control) is the most well-known and influential theory explaining job stress to date (Guglielmi & Tatrow, 1998), lack of control and autonomy did not emerge as a consistent predictor of stress except in the context of role overload and accountability policies. Instead, a disturbance in the equilibrium between perceived demands and resources appeared to be the breeding ground for teacher stress in this study (see Bakker, Demerouti, De Boer, & Schaufeli, 2003; Hakanen, Bakker, & Schaufeli, 2006; Maslach & Goldberg, 1998). One plausible explanation for this finding may relate to urban teachers' hierarchy of needs and the reality of their everyday work experience and that their instinctual motivation to fulfill basic physiological needs (e.g., supplies, student safety in and outside the building) superseded more complex needs related to personal esteem and feelings of accomplishment (Maslow, 1987).

Second, the sources of stress highlighted in this study (e.g., work overload, role overload, student disruptive behaviors, accountability pressures, lack of resources) were consistent with previous literature related to teacher occupational stress (Pithers, 1995; Smylie, 1999) and expected given that schools in economically disadvantaged communities often suffer from overcrowding, insufficient or fragmented resources, and high numbers of students with unmet mental health needs (Boyd & Shouse, 1997;

Kataoka et al., 2002; Langley et al., 2010). The overwhelming nature of poverty and its impact on students and teachers was also evident in these interviews. Interestingly, although the literature identifies lack of rewards (e.g., monetary, status and recognition, opportunities for advancement) as a common predictor of teacher stress, those issues did not emerge in the context of these interviews (see Ingersoll, 2001). Perhaps, the difference between our findings and other studies may be an artifact of how our questions were asked and that we were interested in understanding the *sources* of teacher stress and aspects of the job that were challenging, while lack of rewards (e.g., low pay and lack of prestige) might not directly contribute to a more demanding, stressful job. This is also consistent with Hanushek's proposal to align school resources with factors that impact student achievement (Hanushek, 2009). This is not to say that salary is unimportant to teachers but that resource needs appear to be overwhelming their ability to teach effectively.

Third, the sources of stress and frustration reflecting work-setting and job characteristics (e.g., managing behavior problems, varied instructional abilities) were more prominent than individual factors (e.g., early career teacher status, grade level taught), which is consistent with previous research on teacher stress (Hakanen et al., 2006; Kyriacou, 2001). Teachers also highlighted that stress was often the product of the situational context (e.g., chaotic school environment) despite being expressed at the individual level (e.g., irritability with students). These findings are particularly concerning given the role that workplace conditions play in teacher retention and long-term commitment to teaching and suggest that enhancing urban teachers' coping skills and providing individualized support in areas in which they struggle may be necessary, but insufficient unless those workplace conditions and organizational sources of stress are directly targeted as well.

Given that teachers operate within two organizational units or systems (i.e., the classroom and the school community), both may be critical targets for interventions to address urban teacher stress. This includes providing teachers with classroom-based support around the predictors of stress in addition to services that target the school community and school social context. *Organizational intervention strategies* applied in both private industry (Burke, 1993) and more recently in human service organizations (see Glisson & Schoenwald, 2005; Glisson, 2002) provide a useful framework for developing school-wide interventions targeting the organizational predictors of stress. Glisson (2002) presents a conceptual model of organizational social context that targets culture (i.e., shared norms, values, and goals for the school) and structure (i.e., procedures and decision-making processes, hierarchy of leadership), toward the goal of improving climate (i.e., shared perceptions regarding the psychological impact of the work environment on personal well-being) and work performance. Professional Learning Communities (i.e., schools working collaboratively to develop collective responsibility for school improvement and student learning) are a rapidly expanding professional development model that may provide a framework for addressing both classroom and organizational sources of stress (Louis & Marks, 1998). This includes setting aside time for the leadership team and faculty to identify stressful work conditions, sharing evidence-based strategies for coping with those stressors, and developing shared goals for addressing classroom and organizationally based stressors.

Impact of Occupational Stress

Results from this study underscore the extensive personal and organizational costs associated with urban teacher stress. These findings were consistent with literature documenting physical symptoms (e.g., fatigue and illness) in addition to mental health problems associated with stress (e.g., anxiety, depression, and irritability) (see Kyriacou, 2001; Kovess-Masféty et al., 2007; Maslach & Goldberg, 1998). Several teachers described the direct negative impact that stress had on their work performance and their interactions and relationships with students. Stress is known to decrease teachers overall job satisfaction—in the short-term increasing the likelihood that students are encountering teachers who might prefer another career, and in the long-term perhaps an antecedent to disengagement, withdrawal, absenteeism, and attrition (Rosenholtz, 1991).

Additional Resources and Supports Needed

Given that the majority of teachers identified limited resources and supports as a primary source of stress, it is not surprising that additional resources emerged as its own theme in the context of this study. Teachers reported wanting more contact with their colleagues both professionally and personally and that enhanced relationships with principals and other school leaders would also help alleviate their stress. Although there is a growing literature suggesting that social support can directly impact occupational stress (Bryk & Schneider, 2002; Dworkin et al., 1988), the cellular structure of elementary schools often leaves teachers isolated and struggling privately to manage stressors with little or no support or direction. Bryk and Schneider (2002) conceptualize these collegial interactions in the context of *relational trust*, characterized by mutual respect and personal regard that facilitates risk taking and experimentation with new practices. Educational sociologists focus on a sense of community, cohesion, and

belongingness central to school effectiveness and urban school reform (Rosenholtz, 1991), while social capital theory points to how the nature and function of social relationships support individual and group development (Smylie & Hart, 1999). Creating and nurturing the social networks of urban teachers thus provides another mechanism for reducing stress and enhancing instruction.

Limitations

Although CQR provides a rigorous methodology for qualitative analyses, as with all qualitative research, it is unclear the extent to which the results from this small sample generalize to urban teachers or to the general population of teachers. In addition, of the twenty teachers randomly selected to participate, six declined, and it is unclear whether those teachers who declined would have reported different sources and reactions to workplace stressors. Furthermore, although CQR methodology attempts to address researcher bias via consensus coding strategies, it is still possible that some of the findings from this study reflect the unique way in which the research team interpreted these data. However, extensive time spent on training, coding independently, and reaching consensus increases our confidence in the objectivity of our findings. Replication and extension with other research teams and additional samples of urban teachers would help enhance the external validity of the study. Longitudinal studies are also needed to cast light on the causal pathways and mechanisms by which teacher stress is influenced and changes over time. Although this study reveals a great deal about urban teachers experiences, more research is needed to understand the association between those stressors, teacher practices, and student outcomes in order to guide interventions that maximize enhanced teacher mental health and student learning.

Future Directions

We contend that very little progress will be made in supporting enhanced learning and mental health outcomes for children facing profound challenges related to urban poverty until teachers of those students have access to sustained support around the most robust predictors of stress and job dissatisfaction. Given that schools represent one of the most influential settings in which to support children's mental health and that students experience schools directly through teachers (Atkins et al., 2010), there are significant public health and policy implications associated with addressing the sources of urban teacher stress at both the classroom and organizational level. Organizational models help contextualize our findings and provide a framework for job embedded, practice-relevant support in the areas in which teachers struggle. This includes a continuum of services for teachers, including preventive efforts to stave off the predictable sources of stress (e.g., targeted support around effective classroom management practices early in the school year) combined with natural, indigenous sources of support for teachers experiencing chronic stress (e.g., access to social and human resources including colleagues) to promote resilience, wellness, and enhanced job functioning.

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