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Guest Editorial

Early Childhood Teachers of Color in New York City: heightened stress, lower quality of life, declining health, and compromised sleep amidst COVID-19

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A B S T R A C T
Stress and well-being are known to influence the quality of teacher–student interactions, teachers’ delivery of emotional and instructional support, and the social competence and executive function skills of young learners—dynamics that impact the education and development of young children. Even prior to COVID-19, 46% of teachers reported notably high levels of daily stress. Given the additional stressors associated with the pandemic, this multi-methods study explores the well-being of Latinx, Black, and multiracial early childhood teachers in New York City, where communities of Color have been particularly hard hit by COVID-19. Via an amalgamation of descriptive and interpretive approaches—a survey, time-use diaries, and qualitative interviews—this study documents early childhood teachers’ experiences making sense of and negotiating the impacts of intersecting stressors on their stress, health, quality of life, and sleep amidst COVID-19. Survey findings show reduced well-being across measures among the early childhood teachers in the sample, while qualitative findings illustrate the many layers of challenges that teachers of Color faced during the pandemic. Time-use diaries show extremely high demands and long work hours associated with concerning lack of self-care and attention to mental health. Interviews elucidate how stress is layered across environmental, occupational, and racial factors. This study points to the need to attend to the well-being of Black, Latinx, and multiracial early childhood teachers in urban settings during and after COVID-19 recovery.

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1. Introduction

The COVID-19 pandemic and measures to mitigate its spread affected every facet of education and society. The closure of sites of early care and education posed risks to the health, nutrition, social well-being, and emotional development of young children (UNESCO, 2020). In the U.S., threats to the quality of life and wellness of early childhood teachers and young children ages birth to 8 (early childhood according to definition issued by the National Association for the Education of Young Children) intensified existing inequities. These inequities were visible in stigmatizing children and families in neighborhoods with high infection rates; trauma emanating from the death and bereavement of family members; loss of employment and economic hardships; more young children living in extreme poverty; disruptions to child protection services; and higher rates of depression, anxiety, and stress (Jalongo, 2021). Stress, anxiety, and disrupted sleep, expected responses to a threat as sizeable as the COVID-19 pandemic, were further exacerbated by racialized inequities in access and rates of vaccination (World Health Organization, 2020).

In March 2020, New York City (NYC) became the U.S. epicenter of COVID-19. Stay-at-home orders were instituted. Adults in some families were able to work from home; others were pushed into harm’s way as they sought to feed their families, in many cases due to or in fear of job loss. These new reality patterns directly connected to race. A map developed by the NYC Association
for Neighborhood and Housing Development showed that COVID-19 hit Black, Latinx, Asian American, and multiracial communities hardest (Dickson, 2020). NYC’s enduring lack of affordable housing and other injustices delineated the landscape of COVID-19. Concomitantly, Black, Latinx, and other communities of Color were also navigating racial injustices, white supremacy, xenophobia, police brutality, and related unrest, visible in #BlackLivesMatter marches and anti-ICE protests.

As centers, preschools, and schools closed, teachers were tasked (primarily) with teaching online. Many students lacked the technology and/or a place to access online education, and many low/no-income families were in temporary housing (shelters) and/or did not have sufficient financial resources to access online opportunities. In-person early education—located disproportionately in family childcare homes and community-based childcare centers—underwent major changes, including the use of masks, social distancing, and other preventive measures (Nagasawa & Tarrant, 2020; Porter, Bromer, Ragonesse-Barnes & Molloy, 2020; Tarrant & Nagasawa, 2020). Many teachers accumulated multiple roles—e.g., teaching their students while seeking to support their own children’s learning. Although NYC would “offer both early childcare centers as well as K–12 sites for the children of first responders and health care workers, transit workers, sanitation workers, and City agency essential staff,” such services excluded teachers, grocery and delivery workers, social service nonprofit workers, street vendors, and building cleaners (Office of the New York City Comptroller, 2020, para. 42). Essential/frontline workers excluded from access to early care and education were mostly female (80%) and of Color—an umbrella term encompassing Black, Latinx, Asian American, and multiracial persons (75%). Among childcare workers, those excluded were predominantly Black (35%) and Latinx (22%). These challenges shed light on some added stressors disproportionately affecting Black and Latinx women teachers.

While early educators of Color experienced high levels of stress, disrupted sleep, and low quality of life even prior to COVID-19 (Al-Adwan & Al-Khayat, 2017; Fujishiro, Farley, Kellmen & Swooboda, 2017; Jeon, Kwon, Walsh, Burnham & Choi, 2019; Kwon et al., 2020; Ouellette et al., 2018), survey-based research identified the prevalence of heightened stress, physical health and emotional/mental health challenges among early childhood educators in New York during the COVID-19 pandemic (Nagasawa & Tarrant, 2020; Tarrant & Nagasawa, 2020). These findings, combined with knowledge that communities of Color are large, particularly Latinx and Black communities, were disproportionately affected by COVID-19, informed our focus on Latinx and Black early educators. Thus, examining racial, occupational, and environmental factors in tandem, we attend to this complex, layered, yet critical gap in the literature.

2. Literature review

Robust links have been established between early childhood teacher health, stress, sleep, and well-being—interrelated factors (Toker & Melamed, 2017)—and young children’s learning and development across domains (e.g., Al-Adwan & Al-Khayat, 2017; Sandilos, Goble, Rimm-Kaufman & Pianta, 2018; Whitaker, Dearth-Wesley & Gooze, 2015). Early childhood teacher health, stress, sleep, and well-being have been shown to affect the quality of teacher–student interactions (Whitaker et al., 2015); emotional and instructional support (Sandilos et al., 2018); children’s social competence (Siekkinen et al., 2013); and young children’s psychological, social, and emotional growth (Al-Adwan & Al-Khayat, 2017). Whitaker et al. (2015) study of Head Start teachers (N = 1001) established links between teachers’ workplace stress and greater conflict in their relationships with children being key to young children’s social–emotional competence and academic achievement. Sandilos et al. (2018) showed that preschool teachers’ (N = 427) stress was related to emotional and instructional support. Siekkinen et al. (2013) linked teacher stress and instructional quality for 6-year-olds, with effects for young children’s social skill development. Al-Adwan and Al-Khayat (2017) found high levels of psychological burnout in early childhood female teachers (N = 96; teaching children ages 3–6), visible in their compromised sleep, anxiety, and other mental health issues, visible in tiredness, sarcasm, and emotional detachment, having negative psychological, social, and emotional consequences for the children they taught. Overall, stressors have been linked to detrimental health effects for teachers, including inadequate sleep (Fujishiro et al., 2017) and lowered quality of life (Yuh & Choi, 2017).

Early childhood teachers of Color in urban contexts experience layered constellations of stressors including occupational stress from managing high demands with low rewards (occupational factors), stress related to working in urban-intensive settings (Milner, 2012) (environmental factors), and stress linked to racism and systemic inequity (racial factors). Prior to COVID-19, 46% reported a level of daily stress on par with the stress levels reported by doctors and nurses (Gallup, 2014). The general population of teachers have significantly more sleeping problems in comparison to other professions and to professionals overall (Redin & Erro-Garcés, 2020). Notably, the COVID-19 pandemic exacerbated early educators’ stressors, ever the more so in urban-intensive settings (Bigras et al., 2021; Nagasawa & Tarrant, 2020). Thus, here we attend to the co-existence of layered stressors via occupational, environmental, and racial factors.

2.1. Occupational factors

Despite (re)new(ed) focus on the importance of early education, the lives of early childhood teachers remain mired in weighty demands and insufficient resources. Early childhood teacher well-being matters, teachers who experience well-being have been shown to be more attentive to the classroom environment and possess the psychological resources to foster positive interactions with young children (Jeon, Buettner & Grant, 2018). Occupational burnout, the layered exhaustion of physical, mental, and emotional stressors, reduce teachers’ capacity to remain meaningfully engaged in educating and supporting the development of young children—and has been estimated to affect most U.S. early educators (Schack, Le & Stedron, 2020). Despite its prevalence, burnout has detrimental effects; children whose teachers experience occupational burnout are more likely to externalize behaviors and have lower academic achievement (Grant, Jeon & Buettner, 2019). Early childhood teachers’ physical and psychological well-being are disproportionately adverse; they regularly report “poorer mental health when compared to other professions” despite the fact that their “well-being is vital for improving the quality of education and student achievement” (Peele & Wolf, 2021, p. 275). Indeed, research has clearly documented the significance of the relationship between teacher health and well-being with respect to practices including classroom climate, teacher–child interactions, instruction, and communication with families, as well as young children’s learning and development (Jeon & Ardeleanu, 2020; Schack et al., 2020; Schwartz et al., 2019). Notwithstanding the knowledge that poor working conditions and associated stressors negatively affect early educators’ well-being and teacher–student interactions, psychological and physical challenges and subpar working conditions have been largely neglected as a workforce issue, to date (Kwon et al., 2020).

During the COVID-19 pandemic, ordinary occupational stressors were exacerbated by new work-related demands. Educators working from home faced the unique challenge of continuing to care for and teach very young children through a computer
screen (Nagawawa & Tarrant, 2020). At the same time, those who continued and/or eventually returned to working in person navigated new burdens of constantly changing policy requirements (e.g., socially distanced drop-off and play, mask wearing, and added time cleaning and sanitizing surfaces) without receiving additional compensation for their time or personal risk (Porter et al., 2020; Tarrant & Nagasawa, 2020). Despite evidence of added occupational demands and studies on children’s time-use shifts amidst COVID-19—e.g., screen time and play (Dodd, Nesbit & Maratchi, 2021; Radesky et al., 2020)—we found no studies on how early childhood teachers’ time use changed during this time.

2.2. Environmental factors

In urban-intensive settings, early childhood teachers encounter considerable challenges, including inadequate resources, overcrowding, and other stressors (Ouellette et al., 2018). Some literature has linked policies on accountability to teacher stress and turnover (Ryan et al., 2017; Von der Embse, Schoemann, Kilgus, Wicoff & Bowler, 2017), particularly prominent in urban contexts with high concentrations of students of Color (Shernoff, Mehta, Atkins, Torf & Spencer, 2011). A high percentage of early childhood teachers in urban-intensive settings report more stress and less job satisfaction than early childhood teachers working in higher-income suburban and urban settings, with early childhood teachers in urban-intensive settings more likely to experience exacerbated stress, depression, food insecurity, physical illness, poor quality of life, and burnout/turnover (Johnson, Phillips, Partika, Team & Castle, 2020; Ouellette et al., 2018; Peele & Wolf, 2021). In such settings, early childhood teachers are also “more likely to experience reduced emotional functioning (e.g., stress, depression), a decreased sense of control over their environment, and limited resources” (Sandilos et al., 2015, p. 1113). This stress has been found to negatively impact teacher absenteeism and teacher–student relationships (Jeon et al., 2018; Schwartz et al., 2010; Whitaker et al., 2015).

Compounding existing stressors associated with working as an early childhood educator in an urban-intensive setting (Bottani, Duran, Pas & Bradshaw, 2019; Gallup, 2014), 2020 brought COVID-19. Urban-intensive settings have borne the brunt of the pandemic’s effects, accounting for an estimated 90% of all reported cases worldwide (United Nations, 2020). This has brought increasing attention to issues of urban density, housing access and inadequacy, joblessness, public infrastructure and transportation, and environmental quality, all of which disproportionately affect multiply marginalized communities. These pandemic realities exacerbated documented stressors associated with early childhood teaching for urban teachers and the families they care for, many of whom had limited access to technology and materials, lived in communities with high COVID-19 rates, and were impacted by unemployment (Tarrant & Nagasawa, 2020). All of this makes studies of teacher stress, health, and well-being an urgent matter, especially in urban-intensive settings where the COVID-19 pandemic accentuated deep, racialized structural inequities.

2.3. Racial factors

The COVID-19 pandemic brought into focus the need to attend to the cohort of early childhood teachers and/in settings most affected by the pandemic—those who are Black and Latinx (Laurencin & McClinton, 2020). Race-related stressors affect the mental health of racially and ethnically minoritized populations (Carter & Pieterse, 2020). As Latinx and Black persons are more likely than whites to experience chronic or persistent depression with severe symptoms and impairments, it is essential to attend to racial factors in the experiences of Latinx and Black early educators.

The COVID-19 pandemic disproportionately affected communities of Color (Dickson, 2020), with several times higher transmission rates, confirmed cases, hospitalizations, and deaths compared to white people (Centers for Disease Control, 2021). There remain steep inequities in vaccine access among communities of Color, with white and Asian people receiving higher shares of vaccinations compared to their share of cases in most states, while Black and Latinx people are receiving smaller shares of vaccine compared to their share of cases (Ndugga, Pham, Hill, Artiga & Mengistu, 2021). In NYC, only 35% of Black and 47% of Latinx adults had been fully vaccinated, compared to 76% of Asian and 51% of white adults (City of New York, 2021) at the time of this writing. Added to economic impacts, these rates of vaccination suggest that communities of Color will continue to feel the impacts of the pandemic for months to come. Compounding COVID-19-related stressors are racialized stressors—(further) fueled by the inequities brought about by the COVID-19 pandemic—including police brutality, violence against Asian Americans, and associated unrest.

Across occupational, environmental, and racial factors, we sought to document and understand the stress, quality of life, sleep, and health of Latinx and Black early childhood teachers in an urban-intensive setting. We recognized the urgent need to augment understandings of their health, stress, sleep, and quality of life—attending to how these intersect. Such work is overdue, especially given racialized disparities in access to and knowledge of health services in the overall population (U.S. Department of Health and Human Services, 2001). We do so through the lens of stress theory, which links environmental demands and stressful life events (perceived stress) to negative emotional responses and poor decisions and behaviors.

3. Theoretical framework

Stress theory brings together conceptualizations of epidemiological stress, psychological stress, and biological stress—attending to perceived stress as well as to quality of life, sleep, and health. Epidemiological stress is linked to conditions and experiences considered stressful because it is widely agreed that they threaten the physical and social well-being of a society (Cohen, Gianaros & Manuck, 2016), as was the case of the COVID-19 pandemic. Psychological stress attends to individuals’ perceived stress brought about by life events and their assessments of threats—and of existing, available, and effective coping resources. Biological stress accounts for “brain-based perturbations of physiological systems...essential for normal homeostatic regulation and metabolic control” (p. 456). Cohen and colleagues combined environmental, psychological, and biological conceptualizations of stress, explaining that environmental demands in the form of stressful life events lead to perceived stress and elicit negative emotional responses activating hypothalamic-pituitary-adrenal system and sympathetic-adrenal-medullary mediators, which co-occur with poor health decisions and behaviors. Together, they lead to disease-related physiological changes—e.g., immune, cardiovascular—shown to increase the risk of disease onset and progression. Stress theory helps us understand stressors as layered. Given that little is known about the entanglements of race, racism, and mental health (Carter & Pieterse, 2020), we combine stress theory with race-based traumatic stress, attending to the situated representation of this phenomenon as it relates to Latinx and Black early educators (Carter & Scheuermann, 2020) amidst the COVID-19 pandemic.

Latinx and Black early childhood teachers in urban-intensive settings already experienced racially disproportionate levels of stress, depression, and anxiety prior to COVID-19 (Bottani et al., 2019; Gallup, 2014), exacerbated by intersectional systems of in-
equity including but not limited to racism (Carter, 2007). The “psychological and emotional energy required to manage stress in academic and social contexts as well as systemic and everyday racism can be overwhelming and taxing” (McGee & Stovall, 2015, p. 493)—even apart from COVID-19. Race-based traumatic stress, a lens to understand how racism functions similarly to other life stressors (Carter & Scheuermann, 2020), attends to the interplay of racism, stress, and mental health, supporting the identification of effective ways to redress harms.

In the present study, this theoretical framework allows us to consider how stress factors and teacher well-being may be connected, which may ultimately have impacts on child outcomes (Fig. 1). That is, Latinx and Black early childhood teachers in urban settings experience multiple layers of stressful factors (i.e., occupational, environmental, and racial) in their day-to-day work, all of which were exacerbated during the COVID-19 pandemic. These factors appear in various forms of stress (i.e., epidemiological, psychological, biological, and race-based traumatic stress) that may manifest in teachers’ reports of well-being, including perceived stress levels, physical and mental health, sleep, and quality of life. This framework allows us to unpack the constellation of stressors that ECE teachers of Color in urban settings face in their day-to-day lives, taking the COVID-19 context as a case study of how these factors intersect to impact teacher well-being.

4. Context, materials, and methods

The Centers for Disease Control’s (2020) warning on the added stress resulting from the COVID-19 pandemic affirmed the importance and timeliness of this study about how NYC Latinx, Black, and multiracial early childhood educators experienced the layering of COVID-19-associated stressors. This multi-methods research study engaged survey, time diaries, and interviews to map the stress, health, sleep, and quality of life of Latinx, Black, and multiracial early childhood teachers in NYC, an urban-intensive metropolis mired by economic inequities, where, added to the responsibilities they have as educators, early childhood teachers have long been the most frequent providers of mental health services (Ouellette et al., 2018).

The survey was guided by the research questions: (1) What is the level of perceived stress of Latinx, Black, and multiracial early childhood teachers in NYC, an urban-intensive setting? (2) What is the health—physical functioning, role functioning (physical and emotional), energy/fatigue, emotional well-being, social functioning, pain, general health, and health change—of Latinx, Black, and multiracial early childhood teachers in NYC? (3) Do Latinx, Black, and multiracial early childhood teachers who work in NYC, an urban-intensive setting, experience regular sleep disturbances? (4) What is the quality of life of Latinx, Black, and multiracial early childhood teachers working in NYC, an urban-intensive setting, in each of the following domains—physical health, psychological, social relationships, and environment? To address these research questions, we surveyed Latinx, Black, and multiracial early childhood teachers via a secure online survey platform (December 2020 – January 2021). Via time-use diaries and phenomenological interviews (January and February 2021), we sought to better understand how Latinx, Black, and multiracial early childhood teachers made sense of and negotiated teaching amidst COVID-19 to help explain the survey findings, asking: (5) How do they spend their time amidst the pandemic? (6) How do they describe their teaching practices and caregiving experiences prior to and amidst the COVID-19 pandemic? Time-use diaries were collected from 6 teachers and sets of 3 interviews conducted with 3 of those teachers.

4.1. Survey

4.1.1. Participants

The survey data analyzed in the present study is a subset of a larger survey of 363 teachers (66 white, 297 of Color). Respondents of the larger survey taught primarily in 5 states—New York (242), California (55), Illinois (14), Connecticut (10), and Michigan (9). They taught children ages 0–5 (42.4%), primary grades (24.2%), elementary grades (21.2%), middle school (9.1%), high school (21.2%), and post-secondary/college (9.1%); 242 teachers taught children birth to age 8. For the larger study, the survey was e-mailed to 200 educators, who were asked to forward to potential respondents (utilizing a snowball sampling technique for recruitment; Sadler, Lee, Lim & Fullerton, 2010). The current study analyzes data from 58 early childhood teachers who identified as Latinx, Black, or multiracial and taught in NYC; there was not a sufficient sample of Asian American teachers to include in this subsample. All participants identified as cisgender females. The average participant in the subsample was Latina, under 35, had at least a mas-
ter's degree, and was married and/or had children. Table 1 offers detailed demographics. While this subsample did not aim to be representative, it raises important points regarding the experiences of Latina, Black, and multiracial early educators in an urban-intensive area during COVID-19.

4.1.2. Measures

The online survey collected information about teacher characteristics and 4 normed scales on health and well-being. Where relevant, timescales on the surveys were changed (e.g., from “the last 4 weeks” to “since the onset of COVID-19”).

4.1.2.1. Teacher characteristics. Demographic characteristics included race, age, gender, highest degree attained, marital status, and parenting status. Teaching characteristics included years of experience, distance between home and school, and impetus for becoming a teacher. All characteristics were collected on the survey as categorical variables. Table 1 summarizes descriptive statistics for all teacher characteristics. In addition to racial identity variables, a subset of these teacher characteristics was used as covariates in regression models. For data analysis purposes, age was split into binary variables for 35 or under and 36 or older. Teaching experience was split into 0–2 years, 3–5 years, and 6 or more years because we hypothesized that very new teachers and moderately new teachers (0–2 and 3–5 years of experience, respectively) might have different experiences teaching during the pandemic compared to more experienced teachers, and because teachers of Color are more likely to leave the field within 5 years (Achinstein, Ogawa, Sexton & Freitas, 2010). Distance between home and school was split into a binary variable for whether teachers lived in the same city/county where they taught or in a different city/county; no teachers in the sample lived in the community where they taught.

4.1.2.2. Perceived stress scale (PSS). The PSS is a commonly used psychological instrument measuring perceived stress by determining the degree to which situations are appraised as stressful (Cohen & Williamson, 1988). Ten Likert-style items were asked on a scale from never (0) to very often (4). Higher PSS scores indicate higher levels of perceived stress. Norm/reference group information for all scales is provided in Table 2.

4.1.2.3. Medical outcome study short form 36 (MOS-36). The MOS-36 is a generic patient-reported outcome measure that quantifies health status and measures health-related quality of life (Ware & Sherbourne, 1992). The scale includes 9 subscales comprised of a mix of question types (e.g., Likert style, true/false), each transformed to a 0–100 point scale. The subscales measure: physical functioning, role limitations due to physical health, role limitations due to emotional problems, energy/fatigue, emotional well-being, social functioning, general health, and health change over time (RAND Corporation, n.d.). In the current sample, the subscales had high internal consistency (Cronbach’s α=0.80); we thus took the mean of the 9 subscales to create a single overall scale for use as a regression model outcome variable. Across subscales, lower scores indicate poorer health/well-being outcomes.

4.1.2.4. The national institutes of health patient reported outcomes measurement information system (PROMIS) sleep-related impairment questionnaire (v. 1.0; 8b). PROMIS measures self-reported alertness, sleepiness, tiredness, and functional impairments associated with sleep problems (National Institutes of Health, 2021). This Likert-style survey includes eight items ranging from not at all/never/very poor (1) to very much/always/very good (5). Raw scores are generated by taking the sum of all items, ranging from 8–40. Adjusted standardized t-scores range from 0–100 and are normed around a mean of 50 and standard deviation of 10 (HealthMeasures, 2021). Higher PROMIS scores indicate greater sleep disturbance.

4.1.2.5. World health organization quality of life instruments (WHOQOL-BREF). WHOQOL-BREF is an abbreviated generic Quality of Life Scale developed by the World Health Organization (1996). It includes 26 Likert-style items ranging from not at all/very poor/very dissatisfied/never (1) to completely/very good/very satisfied/always (5). These questions are sorted into 4 quality of life domains ranging from 0–100: physical health, psychological well-being, social relationships, and environment. In addition, 2 items ask about overall perceived quality of life and health (also transformed to a 0–100 scale). In the current sample, the subscales had high internal consistency (Cronbach’s α=0.86) so we took the mean of the 6 subscales to create a single overall scale for use as a regression model outcome variable.

4.1.3. Data analysis

To address research questions 1–4, we first examined descriptive statistics with respect to survey norms and reference groups (or for similar populations where norms were not provided by the scale’s creator) for the full sample and by racial/ethnic identity. To observe individual variation in each of the 4 outcome measures we then ran linear regression models on 4 outcome variables of interest: PSS sum, a mean composite of the MOS-SF 36 subscales, PROMIS sleep disturbance sum, and a mean composite

| Table 1 | Teacher characteristics. |
|---------|--------------------------|
| Racial and/or Ethnic identification | % |
| Black | 13 22.4 |
| Latinx | 38 65.5 |
| Multiracial | 7 12.1 |
| Age | |
| Under 25 | 10 17.2 |
| 26–35 | 27 39.7 |
| 36–45 | 10 17.2 |
| 46–55 | 13 22.4 |
| 56–65 | 2 3.4 |
| Gender identity | % |
| Cisgender male | 58 100 |
| Highest education level | |
| Bachelor’s | 14 24.1 |
| Master’s | 46 72.4 |
| Doctorate | 2 3.4 |
| Marital status | |
| Single | 21 29.3 |
| Married | 38 56.5 |
| Divorced | 2 3.4 |
| Prefer not to answer | 1 1.7 |
| Years of experience teaching at the level you currently teach | |
| 0–2 years | 6 10.3 |
| 3–5 years | 12 13.8 |
| 6–10 years | 13 22.4 |
| 11–20 years | 24 41.4 |
| 20+ years | 7 12.1 |
| How far do you live from the school where you teach? | |
| Live/work in same city/adjacent communities | 29 50.0 |
| Live/work in nearby cities/counties | 11 12.1 |
| Live/work far (up to 40 min away) | 13 22.4 |
| Live/work quite far (over 40 min) | 9 15.5 |
| My primary impetus for becoming a teacher was... | |
| To change schools and provide better experiences than I had | 46 79.3 |
| Having wonderful teachers at school | 10 10.3 |
| Other = Needed a job; money; finances | 6 10.3 |
of all WHOOQL-BREF subscales. Each linear regression model included the same set of covariates (all binary indicator variables): race/ethnicity, age, has children, years of experience teaching, and whether they live and work in the same city/county. These variables were included in all 4 models primarily on account of model parsimony and theoretical motivation (i.e., we expected to see differences in measures of stress, health, sleep, and quality of life, specifically in the COVID-19 context, in each of these variables). Other variables of interest (e.g., marital status, education level, impetus to teach) were not included in final models because they either lacked theoretical motivation, were overly colinear in a small sample, and/or lacked sufficient variability, especially when cross-tabbed with other key covariates (e.g., racial/ethnic identity).

4.2. Time-Use diaries

From survey respondents, we identified a subsample of 6 early educators who work in NYC public (pre)schools, and were interested and willing to keep a time use-diary (Gersbuny & Sullivan, 1998; Orben & Przybylski, 2019) over the course of a week, seeking to construct case studies. Participants identified as Black (1), Afro-Latina (2), and Latina (3), and taught preschool (2), kindergarten (2), and first grade (2). They were asked to text messages every half an hour to report what they were doing—which was done on a 4-day workweek to assess teachers’ concerns that they might not be able to keep up with the check-ins. While we initially had planned to ask them to keep diaries, given their concerns that they would forget to write down what they were doing, we modified the data collection method, shifting some of the onus of keeping a time-use diary onto ourselves. Every half hour, teachers received texts asking them to report what they were doing; from this data the researchers constructed a time-use diary for each participant. Texts were sent in 30-minute intervals (6:30am-11pm, unless participants indicated that they had gone to sleep earlier). We collected 816 entries (34/day, 4 days, 6 participants). All participants in time-use diaries and interviews taught in NYC (pre)schools serving predominantly low-/no-income young children of Color at least 1 year prior to COVID-19 and were teaching during COVID-19 (pre)school closures.

4.3. Interviews

Selected to be available, 3 of 6 teachers who had kept time-use diaries engaged in a series of 3 individual interviews. They were asked to describe teaching before and amidst COVID-19 (Interviews 1 and 2, respectively). Then, after watching a video in which Arundhati Roy (2020) invites viewers to re-envision the pandemic as a portal, they shared their reflections and visions for possibilities beyond COVID-19 (Interview 3). Interviews, which took place on Zoom, befitting COVID-19-related restrictions, lasted 38–75 min each and were recorded and transcribed. Prompts/probes were as follows:

- Interview 1: Tell me about you, who you are as a teacher, and your teaching before COVID-19 closed your pre/school/center.
- Interview 2: Talk to me about teaching amidst COVID-19 since March 2020. What has it been like? How have you been feeling? What are your thoughts?
- Interview 3 [After watching video]: Talk to me about the future. Based on what teaching was like before COVID-19 and your experiences teaching amidst COVID-19, talk to me about what you would take with you and what you would leave behind if the pandemic were a portal.

We concluded each interview by asking them to identify 3 key points that captured their responses to the research prompts we had asked them to comment on. This guided our initial analysis, focusing our gaze on what the participants had identified as critical to ensure trustworthiness (Souto-Manning, 2014). To ensure trustworthiness, shortened versions of original transcripts constructed to highlight emotional hot points in the data—transcripts (Cahnmann-Taylor, Wooten, Souto-Manning, & Dice, 2009)—were presented to teachers at the beginning of the subsequent interview for member check if the quotes captured key points they had identified. This ensured that participants had time and support to make sense of their experiences, consider a variety of experiences, and identify the most pertinent points (Table 6). Rather than seek to reach cross-interview reliability, we worked to establish interviewer–interviewee agreement, prioritizing what was critical to participants while deprioritizing our own interpretations.

Table 2

Health and well-being scales.

|                         | Norm/ref M | Norm/ref SD | Sample M | Sample SD | Sample Range | SD Diff from norm |
|-------------------------|------------|-------------|----------|-----------|--------------|------------------|
| Perceived Stress Scale (PSS)¹ | 14.7       | 7.2         | 28.66    | 5.85      | 9–35         | +1.94            |
| MOS SF-36 Health Scale²  | –          | –           | 41.65    | 13.50     | 14.67–71.00  | –                |
| Physical functioning     | 70.61      | 27.42       | 79.83    | 27.75     | 25–100       | +0.34            |
| Role limitations due to physical health | 52.97       | 40.78       | 35.34    | 35.98     | 0–100        | –0.43            |
| Role limitations due to emotional problems | 65.78       | 40.71       | 15.52    | 29.43     | 0–100        | –1.23            |
| Energy/fatigue           | 52.15      | 22.39       | 17.33    | 9.33      | 0–30         | –1.56            |
| Emotional well-being     | 70.38      | 21.97       | 34.76    | 15.76     | 8–64         | –1.62            |
| Social functioning       | 78.77      | 25.43       | 41.81    | 13.76     | 25–75        | –1.45            |
| Pain                     | 70.77      | 25.46       | 75.60    | 27.15     | 22.5–100     | +0.19            |
| General health           | 56.99      | 21.11       | 44.48    | 14.92     | 20–75        | –0.59            |
| Health change            | 59.14      | 23.12       | 79.83    | 27.75     | 0–75         | 0.89             |
| PROMIS Disturbed Sleep Scale (raw)³ | –          | –           | 30.74    | 4.22      | 26–40        | –                |
| PROMIS T-score (standardized)⁴ | 50         | 10          | 61.82    | 5.74      | 56.3–76.5    | +1.18            |
| WHOOQL-Brief Quality of Life Scale⁴ | –          | ~           | 48.76    | 18.32     | 28.13–91.77  | –                |
| Physical health           | 73.5       | 18.1        | 52.16    | 19.25     | 25–96.43     | –1.18            |
| Psychological             | 70.6       | 14.0        | 45.91    | 21.11     | 12.5–91.67   | –1.76            |
| Social relationships      | 71.8       | 18.2        | 62.07    | 23.99     | 16.67–100    | –0.53            |
| Environment               | 75.1       | 13.0        | 52.26    | 18.83     | 25–87.5      | –1.76            |
| Overall quality of life   | –          | –           | 34.48    | 26.42     | 0–75         | –                |
| Overall health            | –          | –           | 45.69    | 31.46     | 0–100        | –                |

Notes:
1 PSS ranges from 0–40; higher scores indicate more stress; reference group is Black adults [Cohen, Kamarck & Mermelstein, 1994].
2 MOS-36 range 0–100; lower ratings indicate worse outcomes; reference data from the Medical Outcomes Study (RAND Corporation, n.d.).
3 PROMIS raw scores range from 8–10; T-scores are standardized from 0–100 (HealthMeasures, 2021); higher scores indicate more sleep disturbance.
4 WHOOQL-Brief range 0100; lower ratings indicate worse outcomes; norms from an Australian population [Hawthorne, Herman & Murphy, 2006].
5. Findings

Findings show high levels of stress and low quality of life experienced by early childhood teachers of Color in NYC amidst COVID-19.

5.1. Survey

Survey data from the 58 early childhood teachers of Color indicate concerning levels of stress, health and well-being, sleep, and quality of life during COVID-19. Findings were consistently low across all 4 scales; descriptive statistics are summarized above norm/reference information in Table 2. In sum, teachers in our sample reported much higher levels of perceived stress, lower ratings of emotional health (including energy/fatigue, emotional well-being, and social functioning), more sleep disturbances, and lower quality of life compared to available scale norms and reference groups, with sample means between 1 and 2 standard deviations above/below reference means. Despite extreme psychological and environmental stress, teachers were physically healthy, on average. Although we do not have measures of teachers' health and well-being pre-COVID, these descriptive statistics paint a disturbing picture of the magnitude of teachers' experiences during the pandemic. Descriptive statistics on scales and subscales by racial/ethnic identity are presented in Table 3.

Linear regression models revealed interesting and sometimes divergent associations across the 4 scales (Table 4). Holding other variables constant, Latina teachers reported significantly higher levels of perceived stress compared to Black and multiracial teachers, as well as higher levels of sleep disturbance compared to multiracial teachers. Moderately new teachers who had been in the field for 3–5 years reported higher levels of stress than teachers with 0–2 and 6 or more years of experience, while both very new and moderately new teachers reported more sleep disturbances than more experienced teachers. Teachers who had their own children at home reported more sleep disturbances, lower health, and lower quality of life compared to teachers without children. Finally, teachers who lived in adjacent communities and/or within the same city as their school reported higher perceived stress, but also higher quality of life. Together, the survey findings suggest that the impacts of COVID-19 may have been more deeply felt by early career teachers who were still learning to navigate the occupational stresses of teaching, as well as those who had children at home and/or lived in NYC and therefore had to contend with the small living spaces that come with urban contexts. The sample was uneven in terms of racial and ethnic identity—comprising mostly of Latinx teachers (66%), comparatively few Black teachers (22%), and very few multiracial (12%) teachers—so firm conclusions cannot be drawn about the variations observed between these groups; even so, the finding that Latina teachers faced slightly more challenges may be explained by the higher impacts of COVID-19 on Latinx communities in NYC (City of New York, 2021). These results should be interpreted with caution given the small sample (58 respondents) and single timepoint design. Nevertheless, they offer a stark portrait of the stress, quality of life, sleep, and health of Latinx, Black, and multiracial early childhood teachers in NYC amidst COVID-19.

5.2. Time-Use analysis

A subsample of 6 teachers was asked to respond to text messages every half an hour to report what they were doing throughout a 4-day workweek. As we received texts sent from 6am on a Tuesday until 11pm on a Friday (34 texts/day), we compiled responses into time-use diaries for each participant. Guided by Gersbuny and Sullivan’s (1998) sociological uses of time-use analysis, we treated time “as a linear sequence of activities and...[measured] the duration and density of the activities that constitute those sequences” (p. 71). In analyzing time-use data, we found that all teachers were simultaneously juggling multiple activities, often in the same half-hour period. This is illustrated by how the number of segments reported ranged from 142 to 184, even with only 136 segments available. Entirely unprompted, teachers reported engaging in overlapping tasks 4%-35% of the time; as they were not prompted to report more than 1 activity per time slot, their simultaneous engagement in multiple tasks is likely underrepresented. Table 5 only reports activi-
ties with 2+ occurrences across at least 2 participants or 4+ occurrences in individual participants.

Time-use diaries were analyzed descriptively to document kinds of activities teachers engaged in, how much time they spent in each activity, and the proportion of teachers who participated in each activity daily and weekly. Descriptive analysis of time-use diaries shows they spent 73%-90% of their awake hours teaching and doing other work-related tasks and 10%-24% of their awake hours engaging in housework and care work. At the end of the week, when asked if this week was lighter, typical, or heavier than typical, 5 of 6 teachers rated the 4-day work week as lighter than typical, workwise. Teachers spent 9%-19% of their time on personal matters. Notably, the teacher who spent 19% of her time engaging in personal tasks contracted COVID-19 during the time when time-use diary data was being collected. Thus, the 9%-11% range is more representative.

Table 5 shows the number of hours and associated percentages of awake hours (6am-11pm) teachers spent in each category. In terms of participation, all teachers engaged in planning, teaching, professional meetings, and making calls to address student needs and crises. They all reported worrying and needing head space to process issues pertaining to students and students' families (e.g., whether to report a domestic assault with the knowledge that the family was undocumeted), 50% of the teachers spent time in graduate school class and associated work, and another 50% (though not the same individuals) spent time teaching teachers and conducting professional development. In terms of household/care work, all teachers engaged in cooking, cleaning, laundry, and grocery shopping, and 50% dedicated time to homework help with their own children and to the care of elders in their families. Participant 6, the only teacher spending time in both the homework help and eldercare categories, also had the highest percentage of reported overlap (reporting 184 activities for 136 slots, 115 being work-related and 33 being household/care work). Although all participants reported spending time in entertainment and social tasks, this was the category where they spent the least amount of time. One might surmise that the time burdens of work related to their occupation and housework/care led them to neglect their personal needs, self-care, and related tasks.

Analysis of time-use data shows the layered accumulation of tasks—across factors—over 17-hour days. While we did not monitor their sleep, several of the teachers responded to the first message of the day, which stated: “Good morning! Welcome to day X. Thanks for participating in this study. When you wake up, please
response to this message letting me know what you are up to. “We received responses like: “Been up for way too long! About to pour my third cup of coffee” and “Sleep? What’s that”! This indicated that some teachers did not get 7 hours of sleep, a finding well aligned with survey results. Most notable in our analysis was the number of segments that participants dedicated to work-related tasks—overall and daily (100–123 segments, daily averages ranging 12.5–15.37 h/week—signaling heavy professional loads). There were doctor appointments and visits to hospitals, but no instances of mental health appointments; health-related reports described only physical symptoms related to COVID-19. Our analysis of the time-use data signals the discrepancy between work-related pressures and responsibilities and personal care (physical and mental health, well-being, sleep), a pattern likely to negatively affect quality of life in the long term. Having a child, time-intensive and a source of pressure and responsibility, was related to more stress. Further, living closer to school was found to be more stressful, a finding perhaps related to the uneven and racialized impact of COVID-19 on NYC communities (National Center for Disaster Preparedness, 2020).

Findings from our analysis of teachers’ time use point toward long working hours as a possible factor negatively impacting participants’ sleep, mental and physical health. Not only were they engaged in what one teacher called “extreme double Dutch” (in an interview), jumping multiple ropes simultaneously coming from many directions, they were likely experiencing institutionally imposed self-neglect, given the long work hours and mounting demands documented. There was limited time dedicated to leisure and the absence of physical exercise in participants’ reports. One teacher described the situation (in interviews) as “nonstop working and worrying.” This is coherent with survey results regarding perceived stress, fatigue, and low energy. Teachers’ lack of leisure and time to engage in personal hygiene were likely combined with added demands pertaining to domestic chores—ingredients likely to reduce quality of life.

5.3. Interviews

Although all 6 time-use participants expressed the desire to participate in interviews, 3 shared that their health (one reported contracting COVID-19 during the collection of time-use diaries), family responsibilities, and work schedules rendered their participation unfeasible. Carla, Isa, and Sonia (pseudonyms) committed to participate in a set of 3 interviews. Isa taught preschool in a community-based publicly funded program in a community 44% Latinx and 32% Black. Sonia taught inclusive kindergarten in a public school in a community over 50% Latinx and over 35% Black. Carla taught in an inclusive dual-language first grade in a public school in a community 70% Latinx. They had been lead early childhood teachers 2-13 years (mean = 7.3). One was a first-generation Dominican immigrant; the other 2 (daughters of immigrants) had been born and grown up in NYC. Carla, Isa, and Sonia entered the teaching profession to improve schools; they reported having never experienced or regarded schools as happy places. Each had decided to become a teacher to author a counterstory to the education they had personally experienced.

With respect to teaching prior to COVID-19, Carla, Isa, and Sonia used the following descriptors: stressful, fail, no support, lack of trust, more work and pressure on teachers of Color, white families get what they need, “This is not how we always done it,” lack of understanding of students’ lives, and punishing students. Clearly, their pre-COVID teaching conditions were problematic. From their identification of these important points (Table 6), we identified the theme codes: stress, failure, support, trauma, trust, workload, race, status quo, respect, knowledge, learning, healing, and punishment. Interviews were transcribed. These themes, used to code full interview transcripts, were all present multiple times (3–18 occurrences of each per transcript) within and across transcripts. As we read and coded the full interview transcripts, these codes provided common ways of describing teaching prior to COVID-19. We then combined the codes into themes via constant comparative analysis. The theme “pileup of stressors”—the combination and compression of stressor events and stress responses, with greater pileup referring “to a temporal pattern of increased activations within a certain time window” (Almeida et al., 2020), in this case during COVID-19—encoded the initial codes of stress, failure, trauma, workload, race, and (lack of) trust and support. This theme particularly highlighted the occupational and environmental factors associated with being an early childhood teacher in an urban setting, as well as a Latina, Black, or multiracial person, and sometimes a parent, during COVID-19. “Racialized structures” subsumed race, status quo, and punishment. “[De]Humanizing teachers and students of Color” incorporated support, trust (presence of), respect, knowledge, learning, race, and healing. Unsurprisingly, racial factors cut across all themes; all teachers were Latina, Black, or multiracial and taught in communities comprised of at least 70% Black

| Teachers       | Interview 1 / pre-COVID-19                                                                 | Interview 2 / during-COVID-19                                                                 | Interview 31 future                                                |
|----------------|-------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| Carla          | - Stressful.                                                                              | - Special education support services went away.                                             | Supports for teachers and kids to heal.                            |
| First grade    | - The system is set up to fail us and our kids.                                          | - Uncertainty, stress, and more demands on my time.                                        | More respect for our knowledge and investment in our learning.    |
|                | - There’s no support—for us or the kids.                                                | - Clash between the priorities of administrators and families.                            | Leave behind the notion that we teachers are “essential workers” in times of crises but are on our own when it comes to learning and evolving in our profession. |
| Isa            | - Lack of support and trust from administrators.                                         | - Increased surveillance by parents, administrators.                                       | No punitive discipline. Instead, putting needed supports in place. |
| Preschool      | - More work and pressure on Latina teachers compared to White ones.                      | - Sheer exhaustion.                                                                        | Smaller class sizes.                                              |
|                | - White families getting what they want, kids of Color getting leftovers.                 | - Not new, but White families prioritized.                                                  | Working together with BIPOC families to determine priorities, identify needs. |
| Sonia          | - “This is not how we always done it” attitude [air quotes].                             | - Lack of regard for my health, safety, and well-being.                                    | Books, curriculum, and materials where kids of Color are at the center. |
| Kindergarten   | - Limited understanding of students’ lives and trauma.                                   | - Little contact with others.                                                               | We need to bring the stories of children’s lives into our everyday work with children. |
|                | - Punishing students for every little thing, even when it’s not their fault, like being late. | - Trying to balance my teaching and the schooling of [my children].                         | Having more teachers of Color.                                    |

Table 6

Teachers’ priorities.
and Latinx residents. Environmental, occupational, and racial factors cut across all aspects of teachers’ lived experiences.

5.3.1. Pileup of stressors

Pileup of stressors—the “accumulation of either stressor events (e.g., work conflict), stress responses (e.g., elevated negative affect), or a combination of stressor events and responses across time” (Almeida et al., 2020, p. 109)—was a theme across all interviews but dominated the first 2 interviews, being identified as detrimental to participants’ stress and well-being. Pileups of stressors are comprised of 7 aspects: heightened stress, lower quality of life, increasing demands, isolation, lack of support, frustration, and exhaustion. Although we do not report on all instances where a pileup of stressors was visible in interview transcripts, we selected illustrative quotes as insights into how Carla, Isa, and Sonia experienced and expressed the situated representations of stress factors in their lives. In the first interview, Carla stated that teaching before COVID-19 was “stressful, but because we care more about the kids we teach, we’re more stressed.” This heightened stress was linked to racial factors. When Author Mariana Souto-Manning (henceforth, Mariana) probed: “What do you mean?” Carla responded: “They are our kids you know, kids like our own children. They are not other people’s kids to us like so many of the [white] teachers see them.” In her second interview, Carla confessed that this stress had been piled up and affected student learning and her own quality of life. In her second interview, Carla shared that many “special education services went away,” including inclusive classrooms (co-taught by a special educator and a general educator), occupational therapy, and physical therapy. This meant that some of the responsibilities of developing and implementing accommodations were now theirs, as teachers. These exemplify occupational factors adding to stress.

Added to racial and occupational stress factors related to the children they taught and the teaching conditions they experienced, environmental stressors related to violence and injustice affecting students’ families increased their already high pileup of stressors. Carla explained what teaching amidst COVID-19 means: “Every day, I am trusted with the experiences of families experiencing unemployment, sexual assault, domestic violence. It’s so much. I need head space to process it all. And there’s no support. I am going to therapy every weekend, but that’s on me.” Teachers’ mental health and well-being was positioned as an individual responsibility. Addressing her quality of life amidst COVID-19, Sonia shared: “I don’t have time to relax, to do something with [my children]. I just don’t. There’s no time.” She went on to explain how the added demands impinged on her well-being and mental health: “It’s been really hard trying to balance my teaching and the schooling of [my children]. And I’m truly blessed. I have family nearby. I’m not starting my teaching career now. But it’s like, you know, I’m expected, I’m expected to be at 3 places, giving my full attention all the time. I feel that I’m failing [my children]. I also know that I’m not 100% at the top of my teaching game. It’s impossible. But I blame myself. I wish I could do better, be better.”

The lack of time and added trauma related to rises in domestic abuse, sexual assault, and loss of employment due to COVID-19 conditions were exacerbated by teachers’ experiences of social isolation. Sonia explained in her second interview: “I guess what affected me the most is how alone I am. I have little contact with other teachers. There is no time [wipes tears] and less strong relationships with families. There’s no drop off, pick-up time to chat, to get to know them.” Sonia also detailed her perceived lack of support: “There was extreme lack of regard for my health, safety, and well-being by the union, by the [NYC] DOE and by the school administrators. I was so at a loss. So many times. I cried. So many times.” Consequences of the pileup of stressors experienced were visible. During interviews, they cried many times. When asked if they wanted to stop, all echoed Isa’s reply: “No, this is like therapy for me.”

All 3 teachers expressed frustration with occupational factors both during and before COVID-19. It would be easy to attribute their frustration to COVID-19-related work conditions, as expressed by Carla when she talked about teaching amidst COVID-19: “The union, mayor, chancellor basically told us our lives don’t matter. That’s violence.” Yet, in their first interviews Isa and Sonia also expressed frustrations about teaching prior to COVID-19. Isa stated: “Lack of support and trust from administrators. This frustrates me to no end.” Sonia talked about being frustrated when she proposed something new and co-teachers and administrators rejected the idea outright, voicing: “This is not how we always done it.” She confessed frustration regarding the dismissal of her ideas: “Just because I’m new, they think I don’t know, but I know the kids, you know?” Thus, while it is important to note heightened stress and negative impacts to quality of life and sleep exacerbated by COVID-19, these patterns had been in place already, reflecting environmental, occupational, and racial stressors.

The stress and workload associated with teaching amidst COVID-19 were described more sharply by the teachers in their second interviews. Carla described working extremely long hours, articulating how outcomes of the interplay of high environmental and occupational stressors were impinging on her time: “Uncertainty about whether we were going to be in-person or online really made my planning so much more time-intensive.” Isa voiced: “Sheer exhaustion,” after which she took a deep breath, looked down, and remained silent for several seconds. Carla confessed palpable consequences to her quality of life as she taught during COVID-19: “There are so many days that I get no sleep. There’s just so much to do.” Exhaustion, stress, lack of energy, and disrupted sleep—factors present across survey, time-use diaries, and interviews but worse during COVID-19—signaled a pileup of stressors experienced by Latina, Black, and multiracial early educators in NYC.

5.3.2. Racialized structures

Teachers described their workplaces prior to and during COVID-19 as being marked by structural conditions such as gaslighting, surveillance, racialized inequities (in their work and students’ learning conditions), identifying the pervasive and ingrained occupational and racial stress factors they experienced. Teachers confessed that the way the system was set up led them to feel manipulated, confused, and anxious, sometimes even causing them to question their own perceptions of reality and/or distrust their own knowledge and actions. In her first interview, Carla shared: “The system is set up to fail us and our kids. There is a scholar who wrote that recruiting teachers of Color but doing nothing to change the system would be a failure. The system failed me as a student and was failing me as a teacher. This is what teaching before COVID-19 was like. Mission impossible.” She continued: “There’s no support for us or for the kids we teach. And when kids don’t do well, it is our fault.” Carla notes extremely high expectations for teachers of Color teaching children of Color, without the system structure shifts necessary to even come close to supporting those teachers. These racialized factors and structures (re)produce institutional gaslighting. The teachers interviewed shared feeling, even prior to COVID-19: “Nothing I do will ever be good enough” (Isa).

Occupational and racial factors undergirded teachers’ feelings that they were the object of administrators’ control and experienced ongoing surveillance. While this feeling about surveillance had been in place prior to COVID-19, it had worsened amidst environmental factors brought about by COVID-19, including online and hybrid teaching. Isa described in her second interview expe-
riencing “increased surveillance” by “parents, administrators.” She continued by asking Mariana, who was interviewing her: “Can you believe that in the middle of all that’s going on, admin is popping in to see what I’m doing?” This occupational stress was not isolated; Carla’s second interview illustrated how surveillance was impacting teachers occupationally, exacerbating stress and causing discomfort.

Carla: I have so many people watching me teach. Every once in a while, I wonder if something I say will end up on the internet, on YouTube, out of context, you know?

Mariana: What do you mean?

Carla: There’s grandma watching so that she can help her grandkid at home. I know that and that’s okay. But what really gets to me are…parents that try to be sleek and sign in from work under the name of their kid. I started asking “why are there 2 [student’s name] here?” Then, I realized that parents were logging in and this level of surveillance felt really uncomfortable. Problematic… [These were not my parents, my families of Color.

Carla, Isa, and Sonia experienced layered constellations of stressors via mounting racial, occupational, and environmental factors exacerbated by the pandemic. In her first interview, Isa described “more work and pressure on Latinx teachers compared to white teachers,” unveiling racialized workload inequities as racial stress factors. She explained that even teaching assignments were racialized; white teachers more likely to co-teach or push-in while Latinx teachers were often expected to teach children with and without identified disabilities bilingually, needing to plan and differentiate for students in multiple languages, across disabilities, all by themselves. This illustrated the layering of racial and occupational stress factors. Referring to white teachers, who were often afforded special privileges, Isa asked: “Guess who gets permission to teach remotely, even without the medical documentation? Not me.”

Amidst COVID-19, teachers reported that racialized teaching arrangements became more prevalent and racialized structures gained fortitude. Identifying the entanglement of occupational and racial stress factors, Isa, Carla, and Sonia noted that white families’ and white teachers’ demands were prioritized. In her first interview, Sonia noted the limited “understanding of students’ [of Color] life conditions and trauma,” resulting in their needs being marginalized and going unaddressed. Although the preschool in which she taught had close to 90% students of Color, Isa described “white families getting what they need…kids of color get leftovers.” Teachers described the prioritization of the demands and needs of white families as gaining even more attention amidst COVID-19 and associated environmental stress factors. In her second interview, Carla said in frustration: “there’s no connection between the priorities of administrators and those of our families of Color. None. It’s all about pleasing the white parents so that they don’t leave.” She explained: “Not new, but again, white families prioritized and guided administration decisions. The voices of families of Color, most of the families…are missing. And what do they say? Well, these families had the opportunity to show up and they didn’t. Give me a break! Do they have the time? Internet access? Do they feel comfortable showing up? They never ask that.” Isa explained that many families of Color were working in high-risk delivery, grocery, and cleaning jobs; they were not, like many white parents, sitting in front of computers. A mirage of access and inclusion reified racial stressors, protecting the interests and priorities of white families and children.

5.3.3. Humanizing teachers and students of color

This theme captured the tensions between teachers’ lived realities (Interviews 1–2) and the needs, hopes, and visions for the future described in third interviews. Connecting to the 2 prior themes, it underscores the need to humanize teachers and students of Color through healing, relationships, and assets-based teaching and learning, offering powerful insights regarding more humane and just futures for teachers and students of Color. Responding to Arundhati Roy’s (2020) video, in their third interviews, Isa, Carla, and Sonia spoke about humanizing and healing spaces in which teachers and students alike right wrongs and interrupt practices that inflict trauma and foster harm. Carla expressed: “We need to recognize what’s harmful and no longer serving us as educators. Attention to kids’ trauma and acknowledgement that many children of Color experience harm and trauma in society as well as in school. Attention to teachers’ trauma. More supports for teachers and kids to heal as part of the reparations plans for the harm schools and society have caused to students and teachers of Color.” This required upending racial and environmental factors resulting in stress for students and racial, environmental, and occupational factors compounding stress and affecting teachers’ health, well-being, sleep, and quality of life.

Isa explained: “Seeing early childhood as a time and classrooms as spaces to make mistakes, play, be children without marginalization or fearing for their lives.” In her third interview, Isa expressed the need to right wrongs inflicted by punitive discipline practices in early education, visible in the disproportionate rate of suspensions for Black boys. Sonia, a mother of 2, shared: “My children have suffered at the hands of white teachers.” Her vision of the future included “Having more teachers who are Black and of Color, so that kids can see themselves in their teachers who know and can teach about African heritage, history, and the diaspora.” This would require pragmatic action.

Denouncing the pervasiveness of environmental factors (Ouellette et al., 2018) as compounding stressors, Isa shared: “Smaller class sizes so that we can get to know all of our students and all of our families, developing trust. These relationships would be the foundation for our schools. Working together with BIPOC families to determine priorities, identify needs, instead of labeling Black and Brown children.” As she imagined post-pandemic teaching, Sonia also noted the role of environmental factors when she shared: “We cannot go back to the way things were before the pandemic. We need books, curriculum, and materials where kids of Color can see themselves and where Black, Indigenous, and people of Color are at the curriculum center.” She went on to explain that teachers need to “focus on student strengths, on what they know, and develop instruction from their assets…infusing them into our curriculum. We need to bring the stories of children’s lives outside the classroom into our everyday work with children.”

As for the need to humanize early childhood teachers of Color, Carla’s vision follows:

“There’s investment in our knowledge and learning; we are respected. This is created by the creation of spaces for ongoing teacher learning—for us, by us. Where we teachers decide where we want to grow and how we want to learn. Where there is an understanding that there is more expertise distributed across the learning community than in any one person. We need to leave behind the notion that we teachers are ‘essential workers’ in times of crises but are on our own when it comes to learning and evolving in our profession.”

Carla, Isa, and Sonia offer powerful insights into the layered stressors they experienced as NYC teachers during the COVID-19 pandemic. While the early childhood education profession has been associated with occupational stress due to a combination of high demands and low rewards, there are added environmental stressors for teachers working in urban-intensive settings. During the COVID-19 pandemic, these environmental stressors were exacerbated. Further, stress linked to racism and systemic inequality (racial factors) amidst racial injustice and associated unrest mounted in/as a great pileup of stressors for Black, Latina
and multiracial teachers, according to the lived experiences of Isa, Carla, and Sonia. Even before COVID-19, teachers reported a level of daily stress on par with the stress levels reported by doctors and nurses and presented more sleeping problems than other professionals (Gallup, 2014; Redin & Erro-Garcés, 2020), and these findings suggest that the COVID-19 pandemic exacerbated early educators' stressors in urban-intensive settings.

6. Discussion

Findings across the study raise concerns about the health, stress, quality of life, and sleep of early childhood teachers who identified primarily as Latina and Black, and who experienced a pileup of environmental, occupational, and racial stressors in an urban-intensive setting during the COVID-19 pandemic. Survey results paint a broad but clear picture of 58 Latina, Black, and multiracial NYC early childhood teachers experiencing severe challenges impacting their stress levels, health and well-being, sleep, and quality of life during the pandemic. While we do not have baseline data on the extent to which these teachers may have struggled with these variables in their daily occupational demands and environmental factors before COVID-19, the data are startling. The pandemic clearly posed a formidable frontier to balancing work responsibilities and demands. Other studies have similarly highlighted increased work-related stress (occupational factors) amidst the COVID-19 pandemic, including heightened stress (emotional drainage, fatigue, frustration), anxiety, and depression, as well as financial burdens by early childhood teachers (Crawford et al., 2021).

Our findings also indicated some interesting differences in well-being by various teacher characteristics. Perhaps unsurprisingly, teachers with their own children reported worse health outcomes, more sleep problems, and lower quality of life than teachers without children. Very new and moderately new teachers reported more disturbed sleep and moderately new teachers also reported higher perceived stress compared to their more experienced colleagues as they navigated new occupational challenges in their work; this might be because these teachers have been shown to take on more responsibilities—inside and outside the classroom—though these efforts are likely to go unrecognized (Skeen, Lewis, Van Buren & Hodges, 2020). Racial factors also seemed to play a role (Dixon, Griffin & Teoh, 2019). Latina teachers reported significantly more disturbed sleep than multiracial teachers and higher perceived stress than Black and multiracial teachers. This may be because in NYC specifically, case, hospitalization, and death rates were slightly higher among Latinx populations than Black, white, or Asian American populations (City of New York, 2021), and teachers from these communities may thus have been more likely than other teachers of Color to experience the direct effects of COVID-19. Environmental factors such as living in the city also seemed to have an impact, such that teachers who lived further away from their schools reported higher stress levels but also higher quality of life, perhaps a tradeoff between being accessible to children and families in the school community but also perhaps having more space to juggle work-home responsibilities. These findings add to those from a survey of 3355 New York early educators (Nagawawa & Tarrant, 2020) that showed mental health support as the most frequently identified need. Given the impacts teachers reported and the scale of the pandemic, a trauma-informed systems perspective is needed to support early educators, specifically attending to racial trauma. Supported by other research, our study shows significant challenges—in the form of environmental, occupational, and racial factors—experienced by Latina, Black, and multiracial early education teachers during COVID-19 in NYC, challenges that likely affected their well-being.

Although our samples were small, our time-use and interview findings shed light on the question of how COVID-19 exacerbated existing stressors—via mounting environmental, occupational, and racial factors—leading, in turn, to poor well-being outcomes for Latinx, Black, and multiracial early childhood teachers working in urban settings with primarily children of Color. These findings make clear that early childhood teachers are caring for and teaching our youngest learners in conditions marked by occupational, environmental, and racial factors—all compounded due to COVID-19. Both time-use and interview analyses shed light onto a pileup of occupational stressors, as teachers were dedicating most of their time to professional matters, while neglecting self-care, mental health, and well-being. This is concerning as piles of stressors have been linked to burnout and overload (Almeida et al., 2020; Crawford et al., 2021). The time-use data also point toward the need to reexamine occupational demands placed upon teachers of young children. Although COVID-19-related measures exacerbated workload via mandates for mask wearing, social distancing, and surface disinfecting, they also gave us pause to attend to the sustainability of the demands on teachers in an already underappreciated workforce (Nagawawa & Tarrant, 2020).

Analysis of interview data suggests that navigating their students’ trauma and how the pandemic was affecting students’ lives increased the stress levels of teachers. Despite these teachers’ concerns about students and their families and the psychological and emotional harms they themselves were experiencing, it had been their experience that few or no voices or actions sought to address these issues. Instead, actions taken by administrators, the teachers union, and the school district focused on student instruction, largely ignoring teachers’ expressed needs, well-being, health, and stress. This stress was comprised of environmental (teaching in an urban-intensive setting), occupational (job pressures, limited resources), and racial factors (being Latinx, Black, multiracial) that contributed to the experience of epidemiological, psychological, and biological stress that emerged in the survey findings. As the City of New York (2021) noted, “racist policies and discriminatory practices across institutions, including government agencies, and society—prevents communities of color from accessing vital resources (such as health care, housing and food) and opportunities (such as employment and education), and negatively affects overall health and well-being.” Stress was acutely aggravated in communities unduly affected by COVID-19, like those where study participants taught.

6.1. Limitations

This study has several limitations. The survey was conducted at a single timepoint during the pandemic, and without a baseline we cannot draw conclusions about the extent to which COVID-19 led to changes in teacher well-being. The survey sample is self-selected and small, and the time-use and interview sample even smaller, and as such does not yield generalizable conclusions about the population of Latinx, Black, and multiracial early childhood teachers in NYC. Still, while the sample does not represent the entire demographic group, it offers insights into their experiences. Another limitation is that no infant and toddler teachers participated in time-use diaries or interviews. Also, while the contextualization of this case study in NYC is important, it limits our understanding of the stressors experienced by teachers of Color in predominantly white communities and settings that are not urban intensive. Finally, the low response rate from Asian American teachers meant that we were unable to unpack their experiences during a time when these communities also experienced racialized trauma.
6.2. Implications

Although this study focused on the traumatic period of the height of COVID-19 infections, some lessons can be carried beyond the pandemic. Our data suggest that there is no “return to normalcy” that does not continue to cause harm to early childhood teachers of Color, particularly those working in urban areas with high concentrations of students of Color. While our survey data only captured a single point in time during the pandemic, it is clear from our interviews that many of these themes were not brand new. Rather, they were existing conditions that COVID-19 brought to light, with implications for practice, policy, and research.

6.2.1. Implications for practice

Findings from this research shed light onto the need to account for racialized stressors and attend to teacher mental health. While there is growing emphasis on trauma-informed practices for young children, little attention has been paid to similar practices to support the well-being of early educators (Nagasawa & Tarrant, 2020). This is problematic because prior research has underscored the likelihood of adults who experienced abuse, stress, and trauma passing on those experiences to young children (Sauvé et al., 2021). Thus, trauma-informed practices will likely be ineffective if the well-being and mental health of those implementing such curricula and facilitating teaching and learning experiences remain ignored. Further, given the racial factors informing stress and trauma, it is essential that trauma-informed practices attend to racial trauma, yet, this is no guarantee in trauma-informed frameworks. As Simmons (2021) has detailed, trauma-informed frameworks “risk... becoming white supremacy with a hug if we do not apply an anti-oppressive, antiracist lens” (p. 31).

While our research findings are not generalizable, they offer us pause, urging us to attend to teacher stress, health, sleep, and well-being—and beyond the COVID-19 pandemic. Also, the preparation of new teachers needs to attend to stress and well-being, especially given the many ways the pandemic exacerbated stressors and inequities (Kim, Wee & Meacham, 2021). Further, we join Pressley (2021) who advised: “To limit teacher burnout, schools and districts need to monitor teachers during the COVID-19 pandemic and provide support” (p. 3). In general (Pressley, 2021) and in the education of children from birth to age 8 (as this study shows), teachers are experiencing extremely high levels of stress during the pandemic, a pattern likely to persist so long as inequities in vaccination and infection persist. This reality calls attention to the urgent need to support early childhood teachers, a move that may positively impact teacher efficacy and children’s social and emotional development.

6.2.2. Implications for policy

This study points toward the need for policy to attend to and fund teachers’ mental health and well-being, affirming and extending research calls for social policy to attend to teacher well-being (García & Weiss, 2020). Although teachers’ mental health, stress levels, sleep, and well-being were challenged prior to COVID-19, being affected by factors discussed earlier, the pandemic added significantly to teachers’ already “demanding workloads, which even before COVID-19 affected teacher burnout and anxiety” (Pressley, 2021). This might be particularly poignant for Latinx and Black teachers; not only do we know that their rates of attrition are higher than of their white counterparts, but they are more likely to successfully teach children of Color, significantly impacting their lives and futures (Carver-Thomas, 2018; Kaput, 2019). Given the associations between early childhood teacher stress and well-being and child outcomes, we should be concerned about both teachers (for their own sake) and children of Color, who comprise the majority of the NYC school population. Higher stress is associated with teacher turnover in early childhood generally and among teachers of Color specifically (Djonko-Moore, 2020; Grooms, Mahatmya & Johnson, 2021; Lees, Vélez & Laman, 2021; Souto-Manning, 2019). In the absence of additional support, the early childhood community may lose a great many of the teachers of Color (including Latinx, Black, and multiracial teachers), who have held up the workforce despite being historically underappreciated for their essential role.

6.2.3. Implications for further research

Given the small sample of this study, large-scale research should attend to the racialization of stressors affecting Latinx, Black, and other teachers of Color. This would allow for the much-needed examination of race and ethnicity as these pertain to stressors and, importantly, is likely to afford (with some more nuanced items pertaining to characteristics) a more detailed examination of diversities within racial and ethnic groups. As Pressley (2021) has noted, we know that ongoing research on teacher stress, mental health, and quality of life is likely to yield more generalizable findings. In early childhood education, future research might attend to teachers of infants and toddlers or focus on a subset of early childhood teachers—those teaching and caring for children birth to age 5. This might elucidate whether top-down academic pressures noted in some of our interviews are limited to preschool through Grade 2 teachers or whether they affect the entire sector. Comparing stressors controlling for race, experience, and setting would significantly add to our understanding of stressors experienced by early childhood teachers, offering us insights into how to mitigate them. Finally, because we know that stressors tend to be heightened for Latinx and Black persons in predominantly white spaces, future research might be situated in settings different from this study (e.g., suburban, rural) or across settings.

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