

ECE Workforce Well-Being and Racial and Ethnic Concordance

Chapin Hall Research Brief

Study: Teacher stress and depression and its relationship to racial and ethnic concordance

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BACKGROUND

The early care and education (ECE) workforce is experiencing concerning levels of stress and depression (Elharake et al., 2022; Jennings et al., 2020). The well-being of these workers affects staff turnover and their interactions with children (Kwon et al., 2020; Smith & Lawrence, 2019). Research has shown that racial concordance (or matching) between teachers and their students has a positive effect on children's outcomes (Redding, 2019) and lowers stress in teachers of kindergarten through 12th grade (McCarthy et al., 2023). However, no research has looked at how racial concordance between teachers and their students affects teacher well-being in ECE settings. Furthermore, as the U.S. becomes more racially diverse, ECE teachers will likely be in more racially diverse classrooms, which has been found to benefit children's learning (Reid & Kagan, 2015). Yet the association between classroom diversity and the well-being of the ECE workforce has not been studied. In order to help create positive environments for teachers and children, we need to understand how these factors are related.

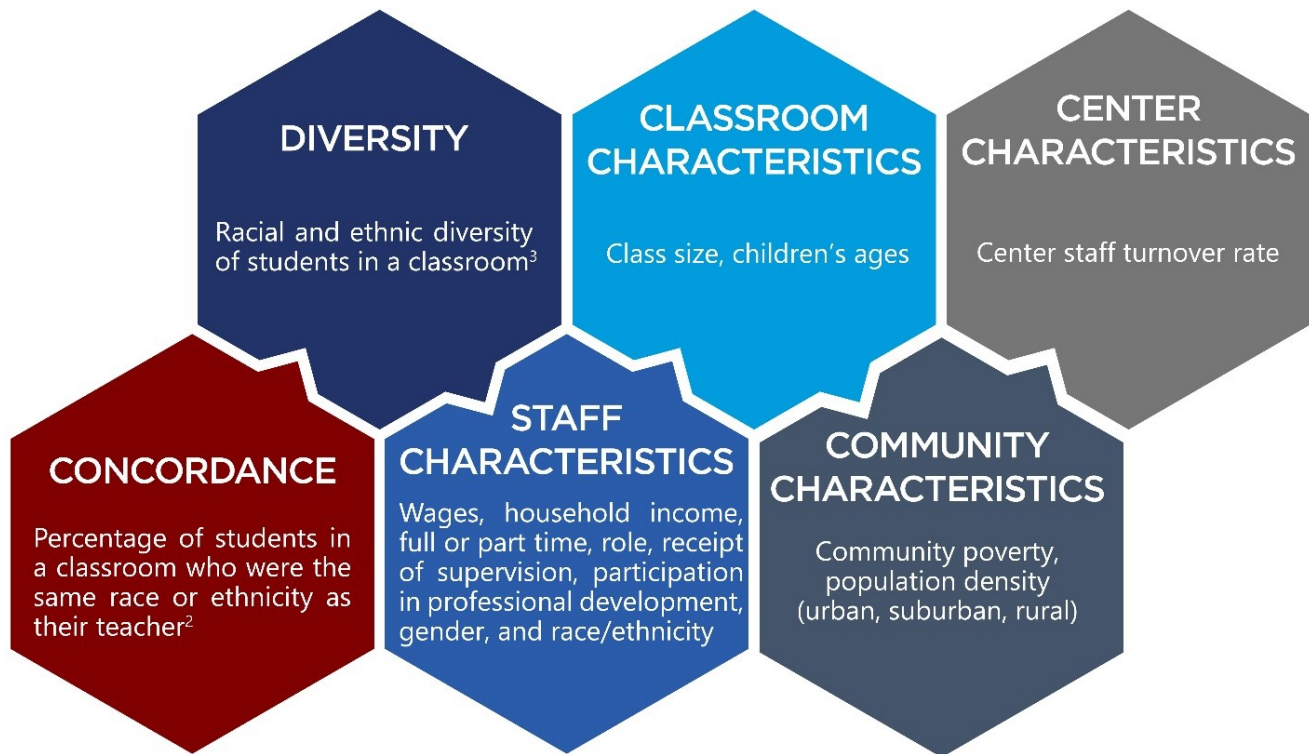
METHODS

We researched links between teacher stress and depression, the level of racial concordance between teachers and students, and classroom diversity. We used data collected in 2019 for the National Survey of Early Care and Education (NSECE), a survey that asks teachers and staff questions about the children in their classrooms, professional development policies, roles and responsibilities, and well-being. We analyzed survey responses using multiple linear regression models.¹ After completing our analysis, we convened an expert panel to discuss the study's findings and potential practice implications. The 10 panelists were ECE experts and included child care providers, center administrators, faculty from ECE workforce education programs, and mental health consultants. They represented diverse personal identities (for example, race, gender, age) and professional experiences.

¹ We used survey-weighted linear regression. Design-corrected standard errors were estimated in order to account for stratification and clustering in the NSECE survey design. All results with a $p < .05$ were considered significant.

Research Question: What factors predict stress and depression among frontline staff in ECE programs in the U.S., and do those factors have a different effect depending on staff race and ethnicity or concordance with the classroom?

Figure 1. Variables Used to Analyze Factors Predicting Stress and Depression in ECE Teachers



It is important to note that this study only uses data from the survey. Therefore, we do not know why or how any of the variables affect teacher well-being—we only know that there is a relationship between some of the variables we analyzed. For example, teachers answered a question about having access to a supervisor, but we do not know if that support was seen as positive or negative, or anything about the quality of supervision.

Our sample included:

- 3,547 teachers; 97% female; 77% worked full time; 67% were lead teachers
- Average teacher wages = \$14.81/hour; 48% of teachers had household incomes over \$30,000
- Teacher race or ethnicity: 4% Asian, 23% Black, 25% Hispanic, 48% White
- Average concordance level was 58%

² In our sample, the average concordance was 58%, meaning that 58% of students in a class were the same race or ethnicity as their teacher. Teacher racial and ethnic identity was self-reported by teachers; child race and ethnicity were estimated by teachers. Racial and ethnic groups included in the sample were Asian, Black, Hispanic, and White (mutually exclusive); all other racial groups and multiracial respondents were excluded from the sample to allow for teacher-student racial matching.

³ We defined diversity as being between 0 and 1, where 0 meant that all children in the classroom were one race or ethnicity and 1 meant that the four racial/ethnic groups in our sample were equally represented (each group made up 25% of students; Simpson, 1949).

WHAT DID WE LEARN?

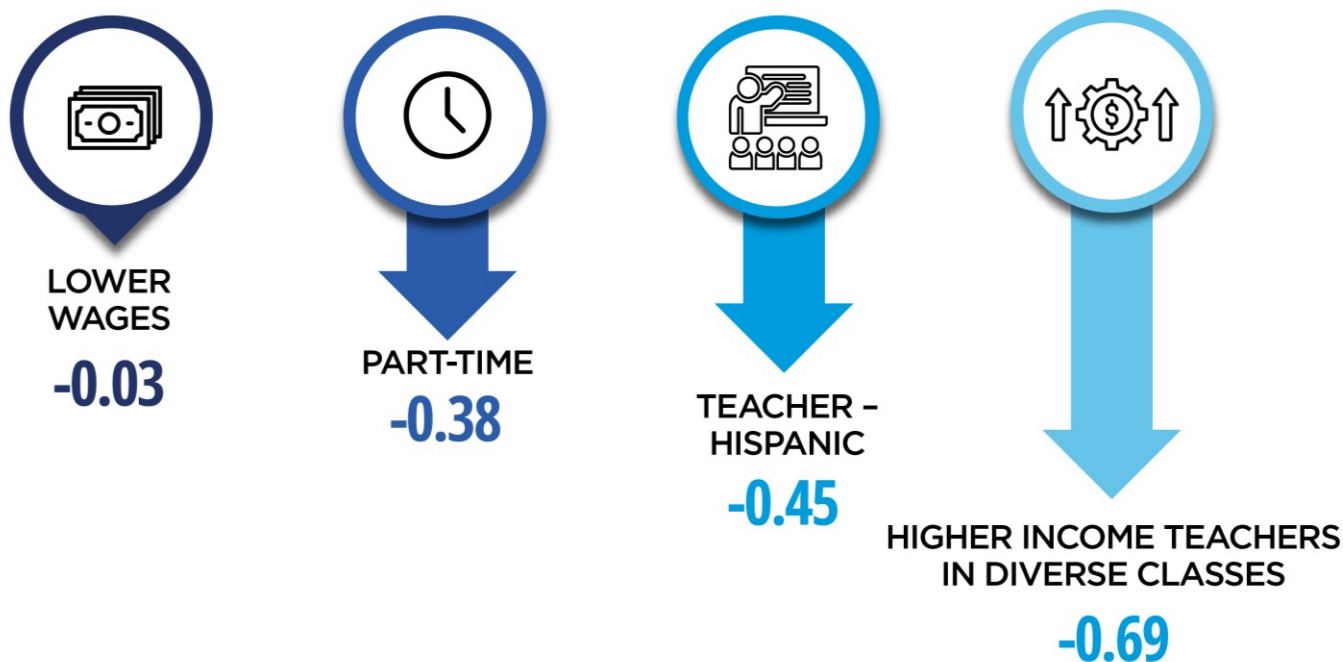
We wanted to understand four main topics:

1. ECE teachers' job stress level (measured by 4 survey items)⁴
2. ECE teachers' depression level (measured by 7 survey items)⁵
3. Classroom racial and ethnic concordance (measured by the percentage of children in a classroom who are the same race or ethnicity as their teacher)
4. Classroom diversity (measured by the racial and ethnic composition of children in a classroom)

Teacher Stress

Teacher stress levels **were not** associated with how racially concordant teachers and their students were. We found four variables that **were** associated with job stress, as seen in Figure 2. The numbers are standardized coefficients, which represent the amount the job stress score decreased for teachers, controlling for all the other variables (job stress score ranges from 4 to 12).

Figure 2. Variables Associated with Lower Teacher Job Stress



⁴ We used 4 items adapted from the Curbow Child Care Worker Job Stress Inventory (Curbow et al., 2000).

⁵ We used the depression variable calculated from the 7-item Center for Epidemiologic Studies Depression Scale (CESD7; Levine, 2013).

Lower-wage staff: ↓ stress levels

We were surprised by our findings that teachers who reported lower wages also reported lower stress levels. Other studies have found that teachers with lower wages or household incomes reported higher psychological distress (Madill et al., 2018) and that teachers with higher wages were more emotionally available in their interactions with children (King et al., 2016). Another study found compensation was unrelated to teachers' reported emotional exhaustion or attitude about work (Jeon et al., 2016).

Part-time staff: ↓ stress levels

We found that ECE workers who were working less than full time had lower stress levels. Prior research has found similar results regarding full-time staff having higher stress levels (Wagner et al., 2013); it is intuitive that working more hours is linked to having higher stress levels.

Hispanic teachers: ↓ stress levels

Hispanic teachers reported lower stress levels than White teachers. While Asian and Black teachers also reported lower stress than White teachers, the difference was not statistically significant between these groups. Some studies have found that Hispanic and Black K–12 teachers have reported lower levels of stress than White teachers (Bottiani et al., 2019; McCarthy et al., 2023). Other studies found the opposite, such as one study reporting Hispanic teachers had higher stress (Cordaro et al., 2023). Our expert panel pointed out the importance of understanding how cultural views of stress, depression, and the role of work can influence well-being.

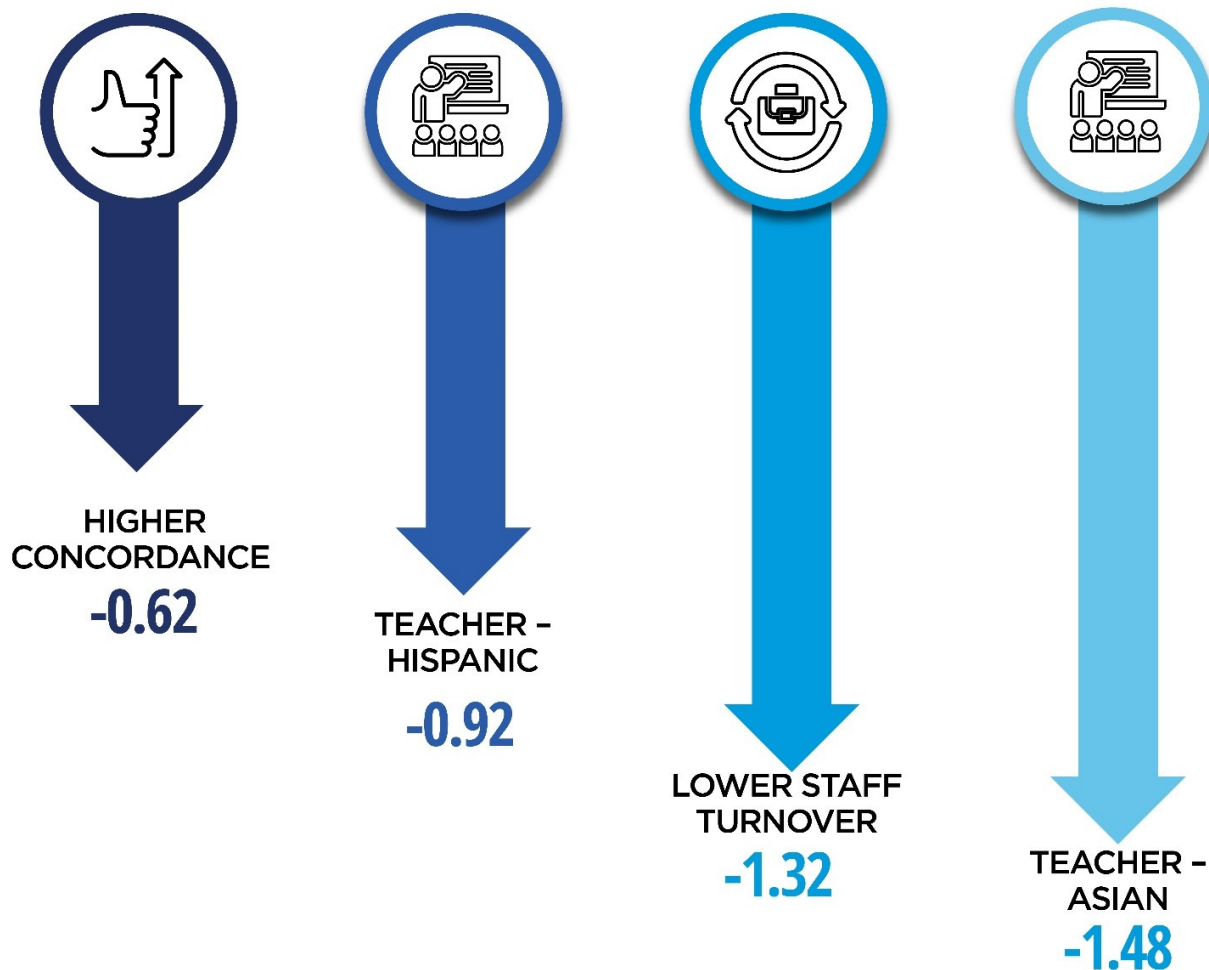
Teachers with higher household incomes in diverse classrooms: ↓ stress levels

We found that for teachers whose household income was above \$30,000, those who had a greater variety of student racial and ethnic diversity in the classroom also had lower stress levels. This means that for teachers whose income was above average (for our sample), they had lower stress levels when in racially and ethnically diverse classrooms. We are unaware of other studies that have looked at the association between classroom diversity and workforce well-being, taking into account the teacher's household income, and do not have additional data to help explain this finding.

Teacher Depression

Teacher depression levels **were** associated with how racially concordant teachers and their students were. We also found three other variables that **were** associated with teacher depression, as seen in Figure 3. The numbers shown in Figure 3 are standardized coefficients, which represent the amount the depression score decreased for teachers, controlling for all the other variables (depression scale score ranges from 0 to 21).

Figure 3. Variables Associated with Lower Teacher Depression



↑ Racial concordance between teachers and their students: ↓ depression rates

Our study is the first to examine whether racial concordance between ECE teachers and their students is associated with depression, and we did find a relationship between these variables. The higher the racial concordance, the lower the teachers' reported depression rates. Although we do not know why this relationship exists, other studies suggest various factors that may help explain this finding. For example, racial and ethnic concordance is one way that teachers and children in their classrooms can have shared cultural understanding (Townsend, 2000). Teachers, children, and families from the same racial or ethnic group may communicate more effectively because of shared cultural styles (Pigott & Cowen, 2000) and may be better equipped to develop trusting relationships and serve as advocates, mentors, and cultural brokers (Achinstein et al., 2010; Villegas & Irvine, 2010). In addition to the literature on this topic, our expert panel suggested possible explanations for why concordance and lower depression might be related. They echoed the idea that sharing racial, ethnic, or cultural identities with the families of the students in their classrooms may facilitate positive and authentic communication, affecting teacher well-being. Another idea shared by the expert panel was that concordance may increase a sense of efficacy for teachers; this may be because of "seeing" themselves in their students or because they feel trusted and safe, leading to a sense of empowerment.

↓ Center staff turnover rate: ↓ depression rates

It is intuitive that turnover affects teacher well-being, and we found that teachers working in centers with lower staff turnover had lower depression rates. There is evidence from other research that teacher turnover creates stress for the remaining teachers (Cassidy et al., 2011), but there is little research on its effect on workforce depression.

Asian and Hispanic teachers: ↓ depression rates

Similar to our finding that Hispanic teachers reported lower stress levels, Asian and Hispanic teachers reported lower depression rates compared to White teachers. Unfortunately, we could not find research exploring depression in Asian ECE teachers. One previous study found that Hispanic adults in the U.S. (not only teachers) reported lower depression than White adults when financial and social assets were controlled (see Ettman et al., 2020); however, other studies have found the opposite (see Cordaro et al., 2023, and Gonzalez et al., 2010).

NEXT STEPS

Our study is exploratory—it is a first step in understanding how these factors interact with teacher stress and depression. It does not answer many critical questions, such as:

We believe that our study calls for two action steps: additional research to better understand our findings and an authentic conversation about race and ethnicity in ECE classrooms.

- Why and how is racial concordance associated with workforce well-being?
- How does the community in which an educational facility is located affect children, family, and teacher well-being?
- Why do teachers with higher wages report higher stress?
- How do teacher relationships with families affect their well-being? What role does trust, communication, and familiarity or understanding play in these relationships?
- Why do Asian and Hispanic teachers report lower levels of depression and Hispanic teachers report lower stress levels?
- How do classroom diversity, teacher household income, and stress interact with one another?
- How do structural factors (such as teacher education, tenure in the center and classroom, teaching teams, administration) interact with teacher well-being and concordance with children?

Our findings highlight the paramount need for qualitative studies that ask teachers about their experiences so we can understand **why** and **how** these variables are associated with one another.

We believe that this study is a critical and urgent call for respectful, thoughtful, and honest conversations about race and ethnicity in ECE classrooms. Our study joins many others in pointing out that race and ethnicity of teachers and students matter in classrooms—it is yet another variable in a complex web of associations within educational settings that needs to be acknowledged and grappled with. We are absolutely not calling for teachers to only teach students of the same race or ethnicity. Rather, we are calling for brave discussions about how and why race matters in the early childhood setting and how we can learn to model living and thriving in a multiracial and multicultural society. ECE workers are the cornerstone of the ECE classroom and their well-being is critical—not only because their well-being directly affects the young children in their care, but because the well-being of every individual is important.

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