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Early Care and Education Teacher Well-being

Associations with Children's Experience, Outcomes, and Workplace Conditions: A Research-to-Policy Brief

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Identifying features of early care and education (ECE) settings that positively affect children's early learning and development is a critical challenge for the field. Most research related to this challenge has focused on *structural features* of ECE quality, such as teacher-child ratios and teacher credentials, and on *process quality*, which refers to aspects of teacher-child interactions.[1] Another dimension of ECE settings that is receiving increased attention is teacher well-being and staff wellness.[2] Research relevant to this topic has mainly focused on the degree to which ECE teachers show stress and other negative psychological states, such as worry, depression and emotional exhaustion, especially in response to workplace conditions.

This brief examines research on ECE teachers' experience of various forms of stress and their associations with teaching practices, children's learning, and workplace conditions. The brief concludes with a set of policy recommendations informed by this research. For convenience, the term "stress" is used in summary statements and questions to reflect the broader range of negative states examined in the research. The following questions are addressed in this brief:

1. How prevalent is ECE teachers' experience of stress?

2. How does ECE teachers' work-related stress contribute to the quality of teaching practices and child outcomes?

3. What workplace factors contribute to ECE teacher stress?

4. What interventions and workplace supports promote teacher well-being?

5. What key policy recommendations are suggested by the research?

Most of the studies reviewed for this brief were conducted in the past ten years and were identified through a search of the Child Care and Early Education *Research Connections* collection (www.researchconnections.org) using the terms, "teacher stress," "teacher well-being," "stress reduction," and "workplace conditions." Topically relevant studies included in two recent reviews of teacher well-being were examined.[3] This brief extends the results of these reviews by reviewing several newer studies, discussing tools for measuring workplace conditions related to teacher well-being, and offering recommendations for ECE policies that are suggested by the research.

How much stress do ECE teachers experience?

Reported estimates of the percentage of ECE teachers who experience stress, including depression and more general psychological distress, are quite varied in terms of measurement and results. For example, Whitaker and colleagues report that 24 percent of Head Start and Early Head Start teachers in Pennsylvania programs showed clinically significant depression symptoms on the 20-item Center for Epidemiologic Studies Depression Scale (CES-D).[4] Among teachers in California Head Start and prekindergarten programs, 17 percent were found to be depressed based on scores from the 10-item Center for Epidemiologic Studies Short Depression Scale (CESD 10).[5] In the Head Start Family and Child Experiences Survey (FACES) 2006 study's national sample of Head Start teachers, 16 percent reported that they experienced moderate or severe depressive symptoms, and another 21 percent reported mild depressive symptoms. [6] This study measured teacher depression by including items from the short (12-item) form of the Center for Epidemiologic Studies Short Depression Scale (CES-D).[7]

Among family child care providers participating in North Carolina's quality rating and improvement system (QRIS), 62 percent of caregivers were found to have a high level of stress, measured with a 10-item perceived stress scale that "captures how unpredictable, uncontrollable, and overloaded respondents find their lives to be."[8] In a national study of Early Head Start that focused explicitly on work-related stress, one fourth of the teachers reported that their job was usually or always stressful,

although there was high variation across program sites in teachers' report of work-related stress.[9] The National Survey of Early Care and Education (NSECE), using the Kessler-6 Psychological Distress Scale, which assesses symptoms associated with anxiety and mood disorders, found comparatively low rates of psychological distress in the ECE workforce: fewer than 10 percent had moderate distress and fewer than 1 percent had serious distress.[10]

Summarizing these findings regarding ECE teacher stress, the three studies using versions of the CES-D assessment report rates of teacher depression that range from 16 to 24 percent. Two studies assessing general stress and work-related stress show rates that range from 25 to 61 percent. A low incidence of psychological distress, based on a measure assessing symptoms of anxiety and mood disorders, was found in the NSECE. Variation in documented rates of stress may be related to many factors, including the use of different measures, and differences in the locations and types of ECE programs. Further, the level of anonymity varies across these studies (e.g., anonymous one-time survey versus assessment that is part of a longer study or associated with a state rating system).[11] This brief goes on to explore how a variety of workplace conditions may also contribute to variations in teachers' experience of stress.

How does teacher stress contribute to teaching practices and children's behavior?

Nurturing teacher-child relationships and intentional teaching strategies can promote young children's social-emotional competence, which predicts early learning and later academic success.[12] Teachers can help young children develop their emotion knowledge (e.g., emotion vocabulary and recognition of emotions), social-skills, and capacity for self-regulation. The strategies teachers use to help children acquire social-emotional competence include modelling how to cope with frustration and other negative feelings, responding with sensitivity to children's emotions, and teaching about emotions.[13]

The evidence suggests that teacher stress can interfere with positive teacher-child relationships and effective social-emotional teaching. In one study of Head Start classrooms, both lead and assistant teachers who reported higher levels of workplace stress and depressive symptoms also reported more conflictual relationships with children in the classroom.[14] Another study found that lead and assistant teachers in ECE classrooms who reported higher levels of personal stress perceived children as displaying more anger and aggression. Lead teachers' job-related emotional exhaustion was related to their perceptions of greater anxiety and withdrawal in children, and assistant teachers' emotional exhaustion was associated with their perceptions of lower social competence in children.[15] Using measures of both stress and coping strategies, researchers found that preschool teachers' "psychological load," which included depression, stress, and emotional exhaustion, was associated with their responsiveness to children in classrooms, as measured in an assessment that elicited teachers' reactions to vignettes.[16] Teachers with higher psychological load were more likely to

react punitively to children's negative emotions, while teachers who used more coping strategies (e.g., asking for support from others) were more likely to offer positive support when children expressed negative emotions.

Not all research in center-based settings has found clear relationships between teacher stress and less optimal teaching and child behavior. One study examined teacher stress in Head Start and private ECE programs. There were no significant associations between teacher stress and teacher behavior in Head Start programs, and overall lower levels of teacher stress were found in the Head Start classrooms. Teachers experiencing greater stress in private ECE classrooms were less supportive towards children, who in turn displayed less prosocial behavior compared to children with teachers reporting lower stress. However, children with less stressed teachers who showed overall high levels of support toward children, but also inconsistency in providing support, displayed more aggression and negative emotion.[17]

A few studies have examined child care providers' stress in home-based settings or included these settings in their studies. Rusby and colleagues found that home-based providers reporting more stress also reported more child behavior problems and less tolerance for problem behaviors. However, observed negative child behavior was not related to provider stress. Additionally, there was an association between higher stress and less observed positive teacher attention toward children.[18] A study that examined provider stress in family child care and center care found that higher levels of provider stress were associated with lower levels of observed child engagement in the classroom and home-based child care settings

during free play.[19] However, when providers had more training (as measured by completed training hours) children were observed to be more engaged. This was true even when provider stress levels were high. The authors suggest that provider training may be helpful in moderating the effects of stress on teaching practices. They also suggest that, especially for home-based providers, training may reduce feelings of isolation while offering social and professional support.

What workplace factors are related to ECE teacher stress, teaching practices, and child behavior?

Given the research that points to a relationship between teacher stress and both teaching practices and child behavior, it is important to identify workplace conditions that contribute to or alleviate ECE teachers' stress. Recent reviews of research on ECE teacher well-being have highlighted several workplace conditions associated with teacher stress.[20] Not surprisingly, teachers appear to benefit from the availability of support from other staff. ECE center-based teachers and home-based providers who experience supportive relationships with co-workers and supervisors report less stress and depression.[21] Working in a setting that encourages teamwork was also found to be associated with lower psychological distress in the Early Care and Education Workforce Study.[22] At the same time, teachers' experience of greater autonomy in the workplace is also related to lower stress.[23] Teachers in settings with high turnover report more stress. High turnover is not only likely to increase workloads for teachers, but may interrupt supportive relationships they had with peers who leave the setting.[24] Interestingly, stress is not always a predictor of outcomes that imply harm to children. One study found that while teachers who perceive that they have more influence on decisions in their work settings experience less stress, teachers with higher levels of stress had more child-centered beliefs.[25] These beliefs have been associated in other studies with effective teaching.[26]

Given the generally low salaries of ECE teachers, and the contribution of low wages to teacher turnover, researchers have been interested in the relationship between financial well-being and teacher stress.[27] Two studies measured aspects of financial well-being that suggest a relationship with teacher stress, but do not directly measure stress. In a study of center-based child care programs serving toddlers, teachers who felt that their salary was unfair compared to others in the profession were found to be in classrooms that were rated as being less emotionally supportive. Actual wages of teachers were found to be associated with toddlers' positive behaviors (e.g., smiling and being attentive).[28] Another study found an association between preschool teachers' wages and children's positive emotional expressions and behaviors in the classroom. Additionally, children in classrooms where teachers reported being able to meet their basic expenses were observed to display more positive emotions and behaviors compared to children in classrooms where teachers felt unable to afford basic expenses. However, teachers' other work supports (vacation days, sick time, and paid planning time) were not related to children's emotions and behaviors. The researchers suggest that additional work supports might not contribute to positive teaching and child outcomes if wages are at low levels.[29]

Other researchers have examined personal traits and workplace conditions that might contribute to teacher depression including financial status, degree of child-centered beliefs about children's development, and work resources. They found that indicators of financial insecurity, including lower wages, working multiple jobs, and lacking health insurance, predicted teacher depression.[30] In their national survey of child care teachers, Jeon and colleagues found that teachers' annual salary was related to emotional exhaustion, while family income (but not salary) was related to depression. Perceived working conditions, which included pay and promotion opportunities as well as relationships with coworkers and supervisors, predicted depression, stress, and emotional exhaustion.[31] The NSECE found that teachers' psychological distress was highest among teachers with the lowest salaries.[32]

Child behavior problems have been identified as a major source of stress for ECE teachers. Researchers found that preschool classrooms' average level of child externalizing behavior problems, measured in the fall, predicts teachers' levels of stress in the spring.[33] Children's challenging behavior was associated with emotional exhaustion but not stress or depression in another study.[34] In their national study of teacher depression and social emotional supports in Head Start programs, Zinsser and colleagues did not find an association between teachers' perceptions of children's behavior and teacher depression, but did find that teachers in centers with more social-emotional learning supports were less depressed than teachers in centers with fewer supports. The researchers speculated that classroom supports for social-emotional learning may have helped teachers experience more positive relationships with children, which in turn helped reduce depression.[35]

While resources that help teachers address child behavior problems, including infant-early childhood mental health (IECMH) consultants, have been found to reduce teacher stress,[36] some researchers have failed to find a relationship between teacher psychological distress and access to IECMH consultants who help teachers learn to use strategies that can reduce challenging behavior.[37] Features related to the timeliness and quality of IECMH consultation may be important factors beyond the general availability of the supports. An interview study of Head Start teachers found that a key source of stress was ineffective or limited supports for children with behavior problems. Even when IECMH consultants were available to help address children's challenging behavior, teachers reported stress that was related to the specialists' failure to make a difference, which teachers attributed to overly brief visits and a lack of follow-up.**[38]** A later discussion of research on IECMH consultation as an intervention elaborates on conditions that might play a role in its impacts on teachers and children.

Tools for measuring workplace supports

To date, studies have used both surveys and more in-depth interviews to examine a relatively limited number of potential sources of stress and well-being for teachers within single studies. A small number of tools that measure features of the early childhood work environment can be used to assess multiple conditions that have been found in past research to be related to teacher well-being.[39] Three tools that have been designed for use in studies of ECE settings and include items that describe workplace

conditions associated with teacher wellbeing are highlighted here.

The SEQUAL (Supportive Environmental Quality Underlying Adult Learning) is described by its developer as "a multi-purpose tool for examining and improving environments in which early childhood teaching staff work and learn." While not designed solely as a tool to measure supports for teacher well-being, the SEQUAL includes items in several domains that characterize workplace conditions that research suggests are sources of stress and well-being. These include items on level of staffing and professional responsibilities in "Teaching Supports," collaboration in "Learning Community," teacher input into their work in "Job Crafting," policies related to economic well-being and work relationships in "Adult Well-being," and supervisor support for teachers in "Program Leadership." In one study that administered the SEQUAL to teachers of Head Start and other subsidized programs participating in a county-level QRIS, two common concerns of teachers were worry about pay and meeting their bills, and a lack of paid time for planning and doing required paperwork. Higher scores in the adult well-being, teaching supports, and job crafting domains were related to teachers' use of effective instructional supports.[40] Several other studies using the SEQUAL are being conducted and will add to a growing body of research about ECE program workplace supports for adult well-being that contribute to effective teaching.[41]

Another tool is the Early Childhood Work Environment Survey (ECWES).[42] Administered as a teacher survey, the ECWES allows teachers to provide their personal rating of the importance of 10 dimensions of the work environment and then to rate items in each dimension. They include several conditions that have been linked to teacher well-being in

several studies, including collegial worker relations, equitable pay, support from the supervisor, and involvement in decision-making. Two studies found relationships between ECWES scores and global classroom quality in samples of ECE programs in two different states, but did not measure teacher well-being.[43] Another study with a sample comprised of both child care and kindergarten teachers found significant negative relationships between teachers' emotional exhaustion as measured by a separate survey, and ECWES indicators that reflect warm, supportive interactions among staff and fair sharing of work responsibilities.[44]

A third tool, Early Education Essentials--Teacher Survey, is primarily focused on organizational features and workplace conditions that support effective teaching and preschoolers' learning.[45] However, some of the items in this tool describe conditions that have been found in previous research to have associations with teacher-wellbeing. The Early Education Essentials--Teach Survey measures conditions related to "Five Essentials" in a framework explaining organizational conditions that promote effective teaching and learning. Within two of these, "Effective Instructional Leaders" and "Collaborative Teachers," items describe conditions related to teacher-leader trust, teacher-teacher trust, and collaboration among teachers. A validity study completed by the measure developers found that scores on the teacher survey indicating positive features of the workplace were linked to higher child attendance and more positive ratings of teacher-child interactions.[46] While teacher well-being was not measured directly in the validity study, it is possible that these workplace conditions promoted teacher well-being, which in turn contributed to positive teacher-child interactions. The study's qualitative data characterized programs with more positive scores on workplace items as having leaders

who "built emotionally-encouraging relationships with staff, set up structures that protected time for cross classroom collaboration, and used these relationships and routine discussions of practice to build a unity of purpose."

What interventions and strategies show promise for reducing teacher stress and promoting teacher well-being?

Research on interventions and workplace supports that can reduce teacher stress and promote teacher well-being is still limited. This research currently includes studies that examine IECMH consultation and professional development that help teachers address children's challenging behavior and research on coping and well-being strategies that teachers naturally use or could learn to use to reduce stress.

IECMH consultation is a multi-faceted preventive intervention that has core components, but also varies in design and implementation in different states.[47] Currently implemented in over a third of the states, IECMH consultation offers assistance from mental health professionals who work with ECE teachers, program leaders, and families to improve children's social, emotional, and behavioral health and development. The approach includes observations, guidance about the use of individualized and whole-classroom strategies, and early identification of children with and at risk for behavioral and mental health challenges.[48] Gilliam's national study of preschool expulsion, which found rates of preschool expulsion that were three times the rates found in K-12 classrooms, drew attention to the need for this support in ECE settings. While expulsion rates were positively related to ECE teacher job stress and depressive symptoms, teachers with access to a mental health consultant reported lower rates of expulsion. In a study using the 2009 cohort of

Head Start FACES, Zinsser and colleagues found that teachers reported less depression when more social-emotional learning and behavioral supports were available in their programs; these supports included a classroom curriculum that promotes social-emotional learning (SEL), SEL-related resources from the Center for Social Emotional Foundations of Early Learning, and mental health consultants.[49]

However, in a study of preschool teachers in community-based programs in Chicago, Zinsser and colleagues did not find an association between teachers' report of *access* to several social-emotional supports, including IECMH consultants and SEL-focused professional development, and both teacher stress and expulsion of children. The researchers point out that the system of IECMH consultation in the state where their study was conducted was weakly developed. The lack of timely access to consultants trained to high levels of proficiency might have reduced the benefits of IECMH consultation to ECE programs.[50]

In a synthesis of studies examining mental health consultation in early childhood settings, researchers found that consultation can be an effective way to improve the skills and ability of early childhood providers to address children's challenging behaviors and promote children's social and emotional development.[51] Several of the studies examined in the synthesis also found that consultation led to an increase in provider

confidence and a decrease in provider stress and turnover.[52]

The Chicago School Readiness Project (CSRP), one of the studies examined in the synthesis, used a combination of professional development combined with IECMH consultation in Head Start sites. The professional development, consisting of five six-hour monthly trainings, was combined with weekly IECMH consultation, along with stress-reduction workshops for teachers. The study found that there was a high level of participation in both the monthly trainings and the classroom consultations, and teachers who reported a greater number of work-related stressors were more likely to attend the trainings.[53] While the intervention led to improvement in teachers' perceptions of job resources and job control, it also resulted in a decrease in teachers' confidence related to behavior management. The researchers suggest teachers might have developed self-doubt as part of the "learning process" (p. 450). Additionally, they suggest that some teachers may have felt reliant on the mental health consultants and therefore experienced less confidence as the visits came to an end.[54]

Another study examined impacts of a 14-week professional development course focused on teacher-child relationships in preschool classrooms. The course included analyzing videos of teacher-child interactions. Intervention teachers showed significant improvement in their provision of emotional and instructional support to children and in classroom organization. Among teachers who did not participate in the course, higher levels of "professional investment" stress at the start of the year (including feeling a lack of control over decision-making on the job and limited professional development opportunities), was related to less growth in teachers' provision of instructional and emotional support over the

course of the year. "Professional investment" stress for intervention teachers was not related to their provision of emotional support, but was associated with growth in instructional support. The researchers suggest that the intervention served as a buffer between stress and teachers' emotional support in the classroom, and that this stress possibly reflected a readiness to learn, helping them acquire skills in providing instructional support.[55]

Research on factors related to job stress examined earlier suggest a range of potential targets for additional interventions and supports. These potential targets include increasing teachers' wages and health benefits to levels that promote a sense of financial security; creating work environments in which teachers feel supported by peers and supervisors, while also experiencing opportunities for autonomy and being part of decision-making in the workplace; and providing multiple resources that help teachers' promote positive child behavior.

A few studies also suggest that efforts to enhance ECE teachers' coping skills are promising targets of interventions that should be tested. Researchers examined Head Start teachers' "dispositional mindfulness, or the tendency to be mindful in daily life" (p. 43) in programs in Pennsylvania. Teachers who reported higher workplace stress but were more mindful reported fewer depressive symptoms. Stronger "dispositional mindfulness" in teachers was also related to less conflict and greater closeness with children. The researchers suggest that mindfulness training might serve as a way to improve teacher well-being and enhance teacher-child relationships.[56] Another study examined the types of strategies that child care teachers used to relieve stress and the extent to which they used these strategies throughout the day. The most common were physical strategies (e.g., spending time outside, physical exercise,

playing with children) and cognitive strategies (e.g., meditation or prayer, reading, listening to music, and "putting things in perspective"). Strategies such as professional development or communicating with a supervisor or colleague were less common. The researchers recommend evaluation of new interventions that help teachers use both physical and cognitive strategies for stress reduction.[57]

Together, the currently limited research on interventions and research on factors associated with teacher stress can inform new interventions aimed at promoting teacher well-being. The most promising ones to test may be approaches that strengthen multiple supports for well-being. These might not only address different dimensions of distress (e.g., emotional exhaustion, depression) but also work in synergy to increase the magnitude of benefits. In addition, new interventions may need to target sources of stress, especially financial insecurity, that may make it difficult for teachers to respond fully to other workplace well-being supports.[58]

Summary of research findings

The research reviewed here suggests trends, as well as some inconsistencies, in the prevalence of teacher stress, workforce conditions associated with stress, relationships between stress and both teaching practices and child outcomes, and promising approaches for reducing teacher stress. The following are key takeaways from the research:

- Although prevalence estimates are highly variable, elevated stress appears to be a fairly common experience among ECE teachers. In studies of Head Start teachers, reports of depression and work-related stress have ranged from 16 to 25 percent, while a study of family child care providers in one state showed that 61 reported a high level of stress. Fewer than 10 percent of ECE teachers were found to have moderate psychological distress in a national study.

- Teacher stress is related to unfavorable teaching practices (e.g., less positive attention to children, punitive responses to children's challenging behavior, less social-emotional teaching), more conflictual teacher-child relationships, and less optimal child outcomes (e.g., less positive behavior, lower engagement in classroom activities).

- Several workplace conditions are associated with lower levels of teacher stress. These include higher compensation, supportive and collegial relationships with other teachers and the supervisor, autonomy and opportunities to contribute to decision-making in the workplace, and a lower incidence of children's challenging behavior.

- Infant-early childhood mental health consultation, which helps teachers gain skills in addressing children's challenging behavior, appears to be one of the most promising approaches to reducing ECE teacher stress. Other promising approaches that need additional study include professional development that reduces isolation and promotes positive teacher-child interactions, and initiatives that directly reduce sources of stress suggested by research (e.g., inadequate compensation, lack of opportunities for teamwork among teachers).

It is important to note that except for a few intervention studies, most of the research is correlational, and does not definitively identify causes of teacher stress or well-being, or the effects of teacher stress. Also, there may be bidirectional effects between factors associated with stress, and other patterns of influence. For example, children's challenging behavior may be both a source of stress for teachers, and an

effect of stressed teachers responses' to this behavior. As another example, adequate levels of compensation may be needed before other supports, such as health benefits, appear as significant predictors of well-being.

What policies could strengthen supports for teacher well-being in ECE settings?

Despite the need for additional research, current findings can inform recommendations for policies aimed at promoting ECE teacher well-being. The following recommendations focus on reducing various sources of work-related stress suggested by the research examined in this brief.

1. **Raise ECE teacher wages and provide health insurance and other benefits to achieve parity across ECE programs serving children birth to five and K-12 teachers.** Wage and benefit increases are likely to create significant and broad improvements in workplace conditions that contribute to ECE teacher well-being. Adequate pay and healthcare benefits could help reduce ECE teacher stress by increasing financial security and access to health and mental health care. It would also likely reduce turnover, which increases the workload for teachers and interferes with potentially supportive peer relationships. A number of strategies for financing higher wages have been proposed and tried by some states and localities (e.g., using savings from shared services, using state general revenues for wage increases tied to education).[59]

2. **Invest in statewide, research-informed IECHM consultation that provides timely and effective consultation to teachers who**

need assistance to address children's challenging behavior and to use practices that promote young children's positive behavior. Strong models and examples of financing IECHM exist in several states.[60] In addition, the National Center for Excellence in IECMH Consultation works with states to develop and expand high quality IECMH models that have wide reach.[61]

3. **Increase teachers' and directors' access to professional development and on-site peer-to-peer learning in areas relevant to teacher well-being.** Areas of professional development that have demonstrated associations with teacher well-being include: a) practices that promote children's social-emotional competencies; b) supervisors' ability to provide effective, positive support to teachers; and c) collaboration among teachers in their work activities and planning. For family child care providers, on-site and network-based professional development may help reduce the isolation of family child care providers.

4. **Encourage program leaders to learn about mental health and to provide information to staff about depression and other mental health conditions and resources to address these conditions.** Programs should be encouraged to provide

this information in multiple ways, through written materials, as part of wellness information offered at staff meetings, by invited mental health speakers at the program site, and at professional development sessions.

5. **Build supports for teacher well-being into QRIS standards.** Options for incorporating supports for teacher well-being into QRIS include: a) creating a specific domain for research-informed "positive workplace" standards, which could include supports highlighted in this brief (e.g., adequate wages and benefits, practices that promote teamwork and staff input into decision-making, access to IECMH consultants to help teachers address challenging behavior), and b) building these conditions into other standards (e.g., professional development that helps directors support teachers and teachers to collaborate).

6. **Address key gaps in research in future studies of ECE programs.** While several ECE workplace conditions (e.g., child behavior problems, compensation) have shown associations with teacher stress in studies examined in this brief, additional research is needed to more definitively show how particular conditions and sets of conditions influence teacher well-being. Research that systematically varies work conditions in specific settings such as family child care homes or Head Start centers, would be especially helpful in suggesting policies that could promote teacher well-being (e.g., increases in compensation to certain levels, along with investments in other supports to reduce child behavior problems). Future studies should also include child outcome measures that can show whether changes in teacher well-being mediate improvements in child behavior and learning.

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