

Examining the Mental Health of Early Childhood Professionals and Children Early in the Pandemic

Cinthia Palomino, PhD The Children's Equity Project

Ayse Cobanoglu, PhD Yale University Jennifer Oppenheim, PsyD Oppenheim Consulting

Evandra Catherine, PhD The Children's Equity Project

Shantel Meek, PhD The Children's Equity Project Walter Gilliam, PhD Buffett Early Childhood Institute, University of Nebraska

Eric Bucher, EdD The Children's Equity Project

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CHILDREN'S EQUITY PROJECT

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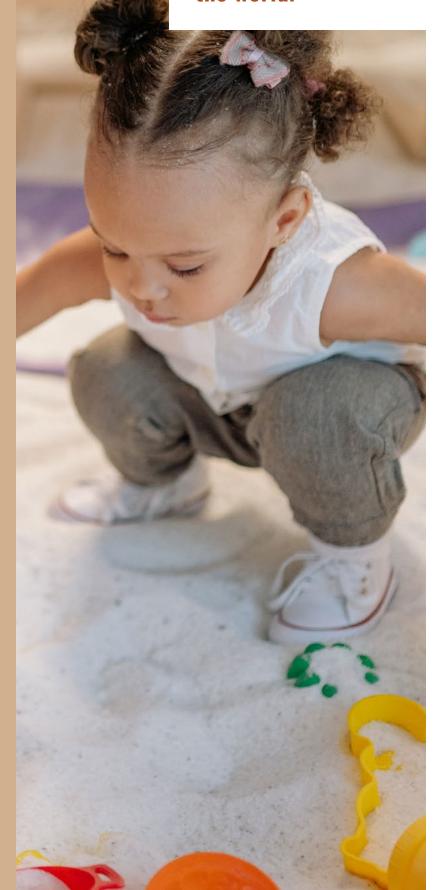
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Executive Summary

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The COVID-19 pandemic has impacted and continues to impact the lives of people around the world.



Millions of lives were lost, increasing levels of grief, fear, and psychological distress within the general population. In addition, especially during the first year of the pandemic, massive job losses resulted in high rates of financial, housing, and food insecurity, especially in low-paid industries and communities of color. Many people around the world experienced social isolation and an increase in mental health symptoms. While lockdowns have ceased and many jobs have been recovered, the health, social, and economic fallout from the COVID-19 pandemic will remain for many years to come.

The COVID-19 pandemic can be considered a social determinant of mental health due to its implications for people's psychological well-being. Data demonstrate that the pandemic has taken an especially high toll on the mental health of vulnerable populations, including early childhood education (ECE) professionals. Even prior to the pandemic, research documented concerning rates of depression and general stress in ECE professionals. It appears that in many cases, these mental health symptoms were exacerbated by COVID-19.

Another population of concern is young children, many of whom have lived for the majority of their lives in conditions resulting from the pandemic. A significant number of young children were experiencing mental health symptoms that required clinical care before the pandemic, and those numbers have only increased since the pandemic's onset. Early childhood is the period with the most rapid brain development, when the foundation for lifelong mental health is set. Furthermore, young children's development is largely shaped by their interactions and relationships with adult primary caregivers. The toll of the pandemic on these adults is likely to impact not only their own mental health, but also the health and development of the young children in their care.

THE YALE-CARES SURVEY

This report examines data from two administrations of a national survey given to ECE professionals in 2020 and 2021. The Yale-CARES survey was launched in May–June 2020 and more than 82,000 ECE professionals across the country responded to questions about their mental, physical, and financial well-being. A second round of data collection in June – August 2021 had just under 50,000 respondents.

The Yale-CARES study has some unique characteristics:

- Data was collected not only from staff in center-based and home-based child care programs, but also informal child care providers — a group often excluded from the ECE workforce research literature.
- 2. The survey included three distinct indicators of psychological well-being: depression, general stress, and racialized stress or aggression. Experiences of racism or racialized stress in ECE professionals are not well documented. Inclusion of this indicator provides insights into ECE professionals' experiences, including psychological effects of events co-occurring with COVID-19, such as discrimination and verbal and physical aggression towards the Asian and Asian-American community at the onset of the pandemic and racial trauma experienced by African Americans amplified by police murders and widespread public protests over institutional and structural racism, racial discrimination, and violence.
- 3. In 2021 (only), the Yale-CARES survey asked ECE professionals not only about their own well-being, but also about the functioning of the children (ages birth to five years) in their care. Respondents were asked whether children were displaying more externalizing behaviors, internalizing behaviors, and/or somatic symptoms since the onset of the pandemic. These data, though limited to one time point, still provide some important information about the well-being of an age group that is frequently overlooked in the children's mental health research literature.

One limitation of the Yale-CARES survey, however, is the fact that it represents two distinct samples of ECE professionals (in 2020 and 2021); therefore, analyses in this report are purely observational and descriptive. Results cannot not be used to determine cause-and-effect relationships or trends over time. Nevertheless, results from these analyses can help draw inferences about possible relationships or highlight important variables to consider for future research.

SURVEY FINDINGS ON ECE PROFESSIONALS' MENTAL HEALTH

Depressive Symptoms

- Around 45% of ECE professionals in 2020 and 2021 reported experiencing depression, which is substantially higher than the depression rate observed in a nationally representative sample (31.7%).
- ECE professionals with certain socio-demographic characteristics seemed to be more likely to struggle with depression. Specifically:
 - The highest rates of depression were among younger ECE professionals between the ages of 18 and 34.
 - Multiracial ECE professionals were more likely to report depression symptoms compared to ECE professionals from White and other minority backgrounds. (However, at least 40% of ECE professionals across every racial and ethnicity group, including ECE professionals who identified as White, reported depression symptoms during 2020 and 2021).
 - ECE professionals with lower annual incomes (\$50K or less) were more likely to report symptoms of depression.
 - ECE professionals in center-based and informal child care settings were more likely to report symptoms of depression than those providing home-based child care.

Elevated Stress

- Yale-CARES survey findings show that 26.67% of ECE professionals in 2020, and 22.84% of ECE professionals in 2021, reported elevated levels of stress.
- As was found with depression, younger ECE professionals (18 to 34 years old) reported the highest rates of stress.
- ECE professionals who identified as Asian reported the highest stress levels of any racial/ethnic group in 2020, followed by multiracial individuals. ECE professionals identifying as multiracial reported the highest stress rates in 2021.
- As was found with depressive symptoms, ECE professionals working in center-based programs and in informal childcare settings had higher stress levels those working in home based settings.

Racialized Stress

Racialized stress is a specific type of stress that can be defined as physiological and emotional stress reactions that result from experiencing discrimination; racialized aggression refers to experiences of verbal or physical aggression based on someone's race.

- The highest rates of direct experiences of racialized aggression were reported by multiracial and American Indian or Alaska Native ECE professionals.
- Multiracial ECE professionals were the most likely to report having someone close who had experienced racialized aggression, followed by African Americans.

SURVEY FINDINGS ON CHILDREN'S MENTAL HEALTH

- Around 60% of ECE professionals reported observing increases in children's externalizing and internalizing behaviors during the pandemic. Reports of somatic symptoms were lower but still considerable, with 45% of ECE professionals reporting having children in their care displaying increased somatic symptoms.
- ECE professionals with depression symptoms were more likely to report increases in externalizing, internalizing, and somatic symptoms among children in their care compared to ECE professionals without depression symptoms.

Access to Infant and Early Childhood Mental Health Consultation (IECMHC)

Infant and Early Childhood Mental Health Consultation (IECMHC) is a preventative strategy for promoting the social and emotional competence and mental health of both children and their caregivers. Given that IECMHC can have a positive impact on a number of child, staff, and program outcomes, the Yale-CARES team was interested in knowing whether ECE professionals surveyed during the pandemic had access to IECMHC supports. Although IECMHC can positively impact early childhood settings, accessing IECMHC services can be challenging. Unfortunately, this was born out by survey results, which indicated that:

 More than half (around 60%) of ECE professionals reported not knowing of or having access to IECMHC services. • On average, only 2-5% of ECE professionals reported being in contact with a mental health consultant on a regular basis (either weekly or monthly).

STATE DATA AND PROFILES

In addition to national findings, this report includes state by state profiles that summarize the Yale-CARES survey results and some limited additional data-points. Survey data includes state breakdowns of rates of depression and elevated stress among ECE professionals, and rates of externalizing, internalizing, and somatic symptoms for children. Other data points in the state profiles include ECE professionals' (average) hourly wages, insurance status of ECE professionals, and access to IECMHC services. Contextual factors also include information on ARPA funds, including how funds were mostly used by ECE professionals across types of ECE programs within the state.

RECOMMENDATIONS

The report includes recommendations for policymakers and funders at the national/federal and state levels, which attempt to address both economic and mental healthfocused remedies. The complexity of the causes of this crisis necessitates solutions that occur at multiple levels and through coordinated and collaborative efforts.

Congress

Congress should address the underlying economic inequities that plague the ECE field, including disparities in pay, benefits, and opportunity.

For example:

- Put ECE professional compensation in line with K-12 teachers.
- Ensure that ECE professionals have access to health insurance, paid leave, child care and retirement benefits.

Federal Agencies

The Offices of Early Childhood Development, Head Start, and Child Care in the Administration for Children and Families should:

 Provide guidance and funding to state lead to create both short and long term remedies for ECE professional recruitment and retention, including a targeted focus on 1) compensation, 2) workplace conditions, and 3) training and educational opportunities. Offer guidance and technical assistance to grantees to help them make mental health supports (including IECMHC and access to therapeutic services) more accessible to ECE providers and the families they serve.

Health Resources Services Administration should:

 Offer workforce development support to behavioral health agencies (or behavioral health teams within Federally Qualified Health Centers and other health care facilities) to train staff in infant and early childhood mental health treatment models and infant and early childhood mental health consultation.

Substance Abuse and Mental Health Services Administration should:

- Issue Mental Health Block Grant program guidance that allows funds to be spent on young children who are at risk for serious emotional disturbance (SED).
- Encourage Project LAUNCH and Infant and Early Childhood Mental Health (IECMH) grantees to prioritize mental health consultation to ECE settings (both centerbased and home-based) in communities that do not currently have access or have very low access.
- Engage institutions of higher education to encourage undergraduate and graduate training courses in infant and early childhood mental health and mental health consultation and increase the number of practicum and internship training sites offering experience working with infants and young children in ECE settings.

State Legislatures

State legislatures should:

• Ensure that mental health funding bills designate (e.g. set aside) resources to support ECE programs and the families they serve, including attending to the mental health needs of ECE professionals.

State Agencies that Implement Children's Services

State agencies that fund children's services should:

- Invest in supporting access to community-based mental health services for ECE staff.
- Invest in ECE provider mental health screening and referrals to community based supports.
- Fund and expand access to IECMHC for more ECE professionals and programs.

- Embed ECE staff mental health initiatives in state training and technical assistance systems.
- Launch a new ECE grant program where programs are offered funds to engage in targeted activities to improve provider mental health.
- Invest in improving ECE working conditions (including ratios and groups sizes, opportunities for professional growth, wage parity, and benefits).
- Ensure ECE provider mental health is included in states' conceptualizations of quality.
- Offer funding and technical assistance to ECE programs (center-based and home-based) to promote children's and families' mental health.
- Build collaborative partnerships across ECE state agencies and partner with state Offices of Medicaid, managed care organizations and other health insurers to align funding and mental health promotion efforts.

This report highlights the toll that the pandemic has taken on ECE professionals and the children in their care, and underscores the importance of supporting both children's and caregivers' mental health. Caregivers who are experiencing high levels of stress and other mental health challenges will find it harder to provide the nurturing and responsive supports to children that are so key to helping them to thrive. Children who are experiencing high levels of stress and exhibiting behavioral and somatic symptoms will similarly create more challenges and stress for the ECE professionals charged with their care. Supporting children's mental health and overall well-being goes hand in hand with supporting their caregivers, and this includes the ECE professionals who play such an important role in their development.

At the same time that the pandemic has wreaked havoc socially and economically, opportunities for improving well-being have also emerged during COVID-19. It has raised general awareness of mental health and an openness to public discourse about promoting well-being. Federal relief funding allowed for some innovative programs to increase ECE professionals' well-being — from bonuses and wage increases to improved professional development and emotional support. Now that we have both data on threats to well-being and innovations to build on, it is the optimal time to make significant systemic changes that will help improve the economic and mental wellness of the ECE workforce, help young children to recover, and improve mental health outcomes for generations to come.

REPORT: Examining the Mental Health of Early Childhood **Professionals and Children Early in** the Pandemic

Even prior to the pandemic, research documented concerning rates of depression and general stress in ECE professionals.



The COVID-19 pandemic is a historical event that has impacted and continues to impact the lives of people around the world. Millions of lives were lost, increasing levels of grief, fear, and psychological distress within the general population.¹ In addition, especially during the first year of the pandemic, massive job losses resulted in high rates of financial, housing, and food insecurity, especially in low-paid industries and communities of color.² Lockdowns helped mitigate the spread of the virus, but also affected the working and living conditions of many people around the world, leading to social isolation and an increase in mental health symptoms.³ While lockdowns have ceased and many jobs have been recovered, the health, social, and economic fallout from the COVID-19 pandemic will remain for many years to come.4

The COVID-19 pandemic can be considered a social determinant of mental health due to its implications for people's psychological well-being.⁵ Data demonstrate that the pandemic has taken an especially high toll on the mental health of vulnerable populations,⁶ including early childhood education (ECE) professionals, who are considered "essential workers," and young children.⁷ Even prior to the pandemic, research documented concerning rates of depression and general stress in ECE professionals.⁸ It appears that in many cases, these mental health symptoms were exacerbated by COVID-19. Similarly, a significant number of young children were experiencing mental health symptoms that required clinical care before the pandemic,⁹ and those numbers have only increased since the pandemic's onset.¹⁰

These findings highlight the importance of examining the mental health and well-being of vulnerable populations (such as ECE professionals and young children) during times of collective stress and trauma. This report describes two nationally representative samples of ECE professionals who were surveyed in 2020 and 2021, and their depiction of their own mental health and that of the children in their care. These data build on other studies and reports published on the well-being of the ECE workforce during the pandemic in a few important ways. First, this report presents data for informal child care providers, who are often excluded from the ECE workforce research literature. Additionally, this report presents data on the mental health of young children attending ECE programs, as reported by ECE professionals. Young children's experiences are frequently overlooked in the children's mental health research literature. In this report, we also examine data across demographic groups and across states to better understand the factors at play surrounding this mental health crisis. We conclude with policy recommendations to support the mental health and wellness of children, families, and the ECE workforce that cares for them.

DEFINITION OF KEY TERMS

The following key terms will be used throughout this report:

ECE Professionals

In this report, "ECE professionals" refers to early childhood education workers who provide care and educational support for children between the ages of zero to five, either directly or indirectly. These ECE professionals work in center-based programs, home-based programs, or informal child care settings. This group is comprised of but not limited to teachers, assistant teachers, program administrators, and/or childcare directors.

Mental Health

In this report, when referring to the mental health of ECE professionals, we are referring to three indicators of psychological well-being that are captured in the Yale-CARES surveys: depression, general stress, and racialized stress or aggression. At times, the term "psychological well-being" will be used interchangeably with "mental health." For young children, "mental health" will focus primarily on externalizing and internalizing behaviors, and somatic symptoms.

ECE Programs and Settings

In this report, we will be presenting results for ECE professionals from center-based programs, homebased programs, and from informal child care settings. Center-based programs are defined as providing child care in public or private early learning settings, such as not-for-profit agencies, schools, Head Start or Early Head Start sites, and other communal, and non-home-based learning environments. Homebased programs are defined as providing child care in an ECE professionals' own home. Lastly, informal childcare is defined as providing child care in children's homes.



DATA

The Yale-CARES survey collects information on the mental, physical and financial wellbeing of the workforce as well as a wide range of background and program level characteristics. Surveys were distributed through the contact lists of the National Workforce Registry Alliance and its member state child care registries, the National Association for the Education of Young Children, and Child Care Aware of America, as described in other studies.¹¹

Cohort 1

Data collection occurred between May 22 and June 8, 2020 and the survey was completed by 82,613 ECE professionals. Among child care providers who participated in Cohort 1 of the YALE-CARES survey, 25.96% were working as directors. The weighted racial composition of the sample was 64% (N=51.907) White, 1.91% (N=1,545) American Indian or Alaskan Native, 3.62% (N=2,934) Asian, 14.53% (N=11,785) Black or African American, 0.59% (N=475) Native Hawaiian or Other Pacific Islander, 3.60% (N=2923) Multiracial, and 11.76% (N=9,539) of the sample chose not to identify their race. Among ECE professionals in Cohort 1, 19.46% (N=15,860) of them identified as Hispanic, Latino or of Spanish origin.

Cohort 2

Survey links were distributed from June 2021 to August 2021, 49,245 responded to the survey. In Cohort 2, 31.75% were teachers, 18.37% were assistant teachers, and 39.97% were directors or administrators in child care programs.

This survey included the same set of questions and was distributed through the same listservs as the Cohort 1 survey. The weighted racial composition of the Cohort 2 sample was 71.33% (N=34,957) White, 1.49% (N=730) American Indian or Alaskan Native, 3.43% (N=1679) Asian, 17.20% (N=8,431) Black or African American, 0.31% (N=150) Native Hawaiian or Other Pacific Islander, 1.80% (N=882) Multiracial, and 4.45% (N=2182) of the sample chose not to identify their race. Also, 22.37% (N=10,967) identified as Hispanic, Latino or of Spanish origin.

MEASURES

Perceived Stress Scale (PSS-10)

Using a five-point scale from (0) Never to (4) Very Often, participants rate the items asking about their feelings and thoughts about life events or situations during the last month. Four positively worded items were reverse coded before calculating total scores. Total scores for PSS-10 range from 0 to 40. Higher scores correspond to higher perceived stress, and PSS-10 score of 21 and above represent elevated stress, which is defined as 1.5-SD above average based on US normative data.

Center for Epidemiological Studies – Depression Scale (CES-D-10)

ECE professionals were asked frequency of depressionrelated symptoms in the past week, with the response scale being 0 = Rarely or none of the time; 1 = Some or a little of the time; 2 = Occasionally or a moderate amount of the time; 3 = All of the time. Prior studies confirmed the CES-D-10's reliability, validity, and factor structure across diverse demographic characteristics (Cosco et al., 2017). Two positively worded items, such as "I felt hopeful about the future," were reverse coded. All ten items were summed, with a higher score indicating more symptoms. CES-D-10 scores ranged from 0 to 30. The cut off score for depressive symptoms was 10.

DATA ANALYSIS INTERPRETATION NOTE

It is important to note that the current report uses a crosssectional analysis where data collected in 2020 and 2021 represents two different samples of ECE professionals; therefore, the nature of this analysis is purely observational and descriptive. Results from this analysis should not be used to determine cause-and-effect relationships or trends over time. Results from this analysis should be solely interpreted within the context of the single time point in which the data was collected. Nevertheless, results from this analysis can help us make inferences about possible relationships or highlight important variables to consider for future research and experimentation.

Also, national and state samples presented in this report are weighted samples. Weighting is typically used in survey data to account for non-response and increase representativeness of the sample.¹² For ease of interpretation, we have rounded weighted samples to the nearest whole number.

In the following sections, we will be presenting *national* rates of mental health symptoms for ECE professionals and children attending ECE programs based on Cohorts 1 and 2 survey responses. Please note that rates of reported mental health symptoms in each state are also provided in this report and can be found in the appendix.



Before the COVID-19 pandemic, research documented that a considerable percentage of ECE professionals in the U.S. (both center- and home-based), reported having poor mental health, especially but not limited to depression and anxiety symptoms, general stress, and emotional exhaustion.¹³ Several risk factors have been linked with poor mental health in ECE professionals, including but not limited to work environment characteristics, such as low pay, poor benefits, excessive work hours, and conflictual relationships with children, as well as socio-demographic characteristics such as age, gender, and education levels.¹⁴ These research findings predating the pandemic illustrate the vulnerability of the ECE workforce and suggest that even before the onset of a major global crisis there was a need for attention to ECE professionals' well-being.

The COVID-19 pandemic has added even more stressors to ECE professionals' daily lives and work.¹⁵ For instance, according to the Early Childhood Workforce Index,¹⁶ 166,000 jobs in the childcare industry were lost during the first eight months of the COVID-19 pandemic. For the ECE centers that remained open, professionals faced many challenges, including shortages in staff, enrollment disruptions, increased costs to follow health and safety procedures to keep programs running, and a decrease in work hours and the ability to make ends meet.¹⁷ ECE professionals also reported concerns about contracting COVID-19 from children, families, and co-workers. These fears were not unfounded, as 7% of ECE professionals reported testing positive for COVID-19, 9% reported experiencing symptoms but not having been tested, and 72% reported having a child or adult in their center test positive for COVID-19 in 2021.18 Furthermore, many ECE professionals reported having a family or household member feeling sick or exhibiting COVID-19 Based on survey results, among ECE professionals, 45.7% (2020) and 45.8% (2021) screened positive for depression, far exceeding the rate of depression in the general population in the US in 2020 (31.7%).

symptoms, which in most cases resulted in having to miss work.¹⁹ Not surprisingly, many ECE professionals reported lower levels of perceived overall health status after the start of the COVID-19 pandemic,²⁰ which is even more consequential for the 10% to 20% of ECE teachers who reported not having health insurance.²¹

A recent report published by the Center for Law and Social Policy (CLASP) stated that in 2019, 16% of home-based ECE professionals under age 65 were uninsured, as compared to 13.3% of adults in the general population in this age group.²²

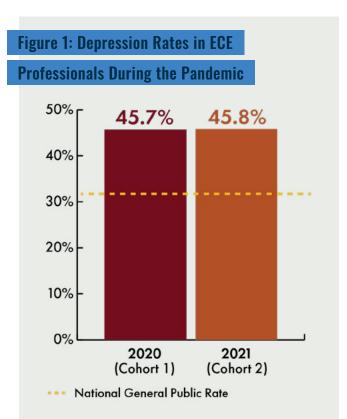
Taken together, the challenges experienced by ECE professionals during the pandemic lead to the hypothesis that data is likely to show increased rates of stress and mental health symptoms within this population. Further, it is hypothesized that decreases in ECE professional well-being may also affect the children in their care, just as the mental health of children affects the providers who care for them.²³

In the following sections, we describe rates of mental health symptoms in the ECE workforce that were documented in the literature even prior to the pandemic, such as depression and general stress. We then share new data that illuminate rates of these mental health symptoms for ECE professionals during the COVID-19 pandemic, as well as sharing findings on ECE reports of racialized stress, which has not been formally documented in the research literature on ECE professionals to date.

DEPRESSION

Depression is characterized by feelings of sadness, irritability, hopelessness, or loss of interest or pleasure in daily activities, which can have severe implications for an individual's daily functioning.²⁴ Studies conducted before the COVID-19 pandemic showed that between 20% to 40% of the ECE workforce population exhibited depression symptoms.²⁵ What is concerning is that the rates of depression found in ECE providers before the pandemic were substantially higher than the rates of depression symptoms reported for several other populations, including a national workforce sample (8.6%),²⁶ a non-clinical sample of women in the general population (10.4%),²⁷ and a sample of women who lived in poverty in the US (20%).²⁸ In other words, compared to the general population in the US, ECE providers seemed to be experiencing significantly higher rates of depression.

Further, after the start of the COVID-19 pandemic, evidence suggests that rates of depression in the ECE workforce spiked. For example, in a sample of ECE teachers in Louisiana,²⁹ 38% reported clinically significant levels of depression after pandemic onset, compared to 22% of ECE teachers before the pandemic. Furthermore, in the same study, laid-off ECE teachers were more likely to report symptoms of depression compared to non-laid off ECE teachers.³⁰ This study's findings on depression during the first year of the pandemic are mirrored in a study of ECE providers in Virginia (from 31% to 33%).³¹



Note. Cohort 1 N = 81,699; Cohort 2 N = 49,245. Data was weighted (Cohort 1 and Cohort 2 weights) based on age, race, ethnicity, and state to match employed child care providers (occupation code: 4600) who were 18 years of age or older in the U.S. based on the 2015-2019 American Community Survey.³² Proportions based on 20 multiply imputed datasets. National General Public Rate.³³

The increased reporting of depression symptoms in these studies is consistent with results from the Yale-CARES surveys administered in 2020 and 2021. Specifically, 45.7% of ECE professionals in 2020 (Cohort 1) and 45.8% of ECE professionals in 2021 (Cohort 2) screened positive for depression (Figure 1). These rates are highly concerning since the rate of depression in the general population in the US in 2020 was 31.7%.³⁴ These results highlight that ECE professionals experienced symptoms of depression at substantially higher rates than the general population, which is concerning given the critically important and demanding role that ECE professionals play in caring for young children.

When looking at depression symptoms by socio-demographic characteristics, such as age, we find that across both cohorts (2020 and 2021), the rates of depression are highest among younger ECE professionals (ages 18 and 34) (see Figure 2). These results are consistent with findings from studies conducted before the pandemic on the ECE workforce.³⁵ They are also consistent with a study conducted in 2020 using a nationally representative sample, which also found higher rates of depression among younger people.³⁶

One hypothesis for understanding the higher rates of depression symptoms among younger ECE professionals before and during COVID-19, is that financial stresses and employment insecurities are more prevalent in this age group. For example, young adults report more financial challenges related to paying off student debt, saving for the future, and buying a house compared to older adults.³⁷ The pandemic may have exacerbated these challenges since, during the onset of the pandemic, younger adults were more likely to have difficulty retaining a job.³⁸

Another plausible explanation is that ECE professionals in this age group (18–34 years) were more likely to be juggling both challenging work conditions and managing the impacts of the pandemic on their own children, whose school and life routines were also disrupted by COVID-19. Finally, younger ECE professionals generally have less work (and life) experience compared to older ECE professionals, and less work experience has been associated with lower rates of self-efficacy and work satisfaction.³⁹ Taken together, these stressors and risk factors experienced by younger individuals might help to explain, to some degree, the high rates of depression symptoms found in this group of ECE professionals.

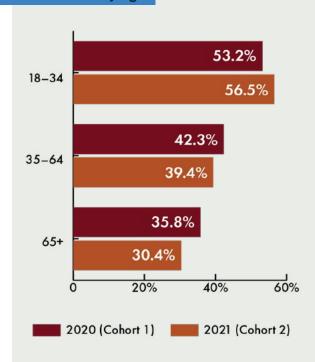
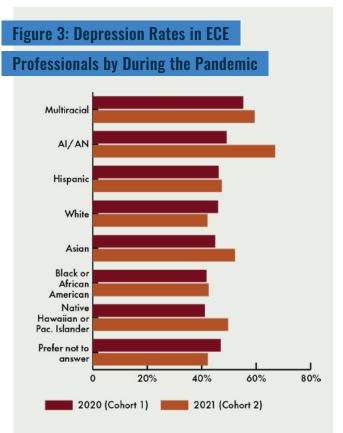


Figure 2: Depression Rates in ECE Professionals by Age

Note. Cohort 1 N = 81,699; Cohort 2 N = 49,245. Data was weighted with previously described Cohort 1 and Cohort 2 weights. Proportions based on 20 multiply imputed datasets.



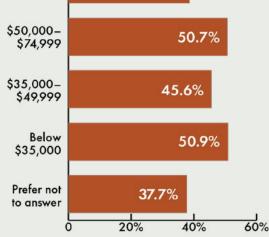
Note. Cohort 1 N = 81,699; Cohort 2 N = 49,245. Data was weighted with previously described Cohort 1 and Cohort 2 weights. Proportions based on 20 multiply imputed datasets.

When looking at depression rates by race and ethnicity (Figure 3), it is observed that at least 40% of ECE professionals across each racial and ethnicity group, including ECE professionals who identified as White, reported depression symptoms during 2020 and 2021. However, multiracial ECE professionals were more likely to report depression symptoms compared to ECE professionals from White and other minority backgrounds (55.3% in 2020, and 59.5% in 2021, respectively). These elevated rates of mental health symptoms among multiracial individuals are consistent with rates found in the general population in the US even prior to COVID-19. For example, a survey from the American Psychiatric Association in 2017, found that multiracial individuals (24.9%) were more likely to report any mental illness within the past year, followed by American Indian/Alaska Natives (22.7%), White (19%), and Black (16.8%) respondents.⁴⁰ Research has also suggested that multiracial individuals are more likely to experience different types of discrimination in their everyday lives, such as family discrimination and racial identity invalidation, which could partly explain these high rates.⁴¹ It is also important to note that while the depression rates for American Indian or Alaska Native ECE professionals were high in 2020 and in 2021, the confidence intervals for this population were very large, and therefore, caution should be used when interpreting this data.

The Yale-CARES surveys also collected income data for ECE professionals, but only for Cohort 2 (2021). When looking at depression rates by income, it is observed that ECE professionals with annual incomes above \$75,000 per year, and those who did not answer this question, were less likely to report depression symptoms compared to ECE professionals with lower annual incomes. These results are not surprising since research has consistently documented the relationship between financial insecurity and depression symptoms among ECE professionals.⁴²

Struggling to make ends meet and affording basic necessities can certainly pose a risk for an individual's mental health, especially for ECE professionals, who have been historically underpaid. Specifically, the Early Childhood Workforce Index-2020 stated that the median hourly compensation for ECE providers in 2019 was \$11.64 for those working in home-based programs with infants and toddlers, \$14.67 for ECE preschool teachers across center-based or homebased programs, and \$26.95 for ECE preschool teachers working in schools.⁴³ According to the Massachusetts Institute of Technology (MIT) Living Wage Calculator, the wages for home-based ECE professionals are not considered "livable" wages.⁴⁴ ECE professionals' median hourly wages are considerably lower than the median hourly wage for teachers in kindergarten (\$32.80), and elementary school

Figure 4: Depression Rates in ECE Professionals by Income \$75,000 or above 38.6%



Note. Cohort 2 N = 49,245. Data was weighted with previously described Cohort 2 weight. Proportions based on 20 multiply imputed datasets.

teachers (\$34.43).⁴⁵ The current survey findings highlight the importance of providing ECE professionals with livable wages not only as a way to support their financial well-being, but also their mental health.

Results also illuminate some notable differences in depression rates based on work environment characteristics, such as type of ECE program or setting (Figure 5). These data show that ECE professionals working in home-based programs were less likely to experience symptoms of depression compared to ECE professionals in center-based programs and informal child care settings. These results are interesting since it has been documented that home-based programs were more likely to shut down during the early phase of the pandemic compared to center-based programs.⁴⁶ It has also been documented that center-based programs were more likely to have higher child attendance rates and staff shortages compared to homebased programs.⁴⁷ Finally, it is well-known that in most states, licensing requirements and policies for center-based and home-based programs are different. Therefore, it is possible that the demands experienced by ECE professionals in center-based programs might have been different and higher than those experienced by ECE professionals in home-based programs, especially during the early phase of the pandemic.

Although there is no formal documentation of this yet, ECE professionals in informal child care settings might have also experienced higher child care demands, including having to work in home settings where they were subject to another family's COVID safety practices and health-related choices in response to the pandemic. Informal providers might have also experienced more social isolation during the early phases of the pandemic, as compared to those in larger or center-based programs. Finally, informal child care providers might have limited resources and support when working with children with challenging behaviors. More research is needed to understand the discrepancy between depression rates among ECE professionals in these diverse ECE programs and settings.

In summary, ECE professionals have reported concerning rates of depression during the pandemic, which are even higher than the depression rates reported by a nationally representative sample. More specifically, ECE professionals who are younger, who identify as multiracial, with lower annual incomes, and/or who work in center-based programs and informal childcare settings are more likely to struggle with depression compared to ECE professionals who do not have these characteristics. These results highlight the

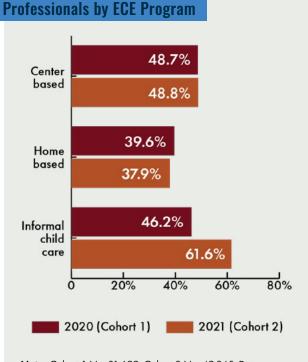


Figure 5: Depression Rates in ECE

Note. Cohort 1 N = 81,699; Cohort 2 N = 49,245. Data was weighted with previously described Cohort 1 and Cohort 2 weights. Proportions based on 20 multiply imputed datasets.

need to implement systems of support focused on the mental health and well-being of the ECE workforce as a whole; they also call attention to some specific subpopulations of ECE professionals that might need priority consideration and/or additional mental health resources.

GENERAL STRESS

General stress can be defined as the extent to which individuals see their everyday experiences as stressful, and involves physical and mental reactions.⁴⁸ Experiencing stress from time to time is common and can even be adaptive, but experiencing high amounts of stress or chronic stress can have negative effects on an individual's well-being.⁴⁹ For the ECE workforce, concerning rates of stress have been documented since before the pandemic. For example, one study found that ECE professionals in Colorado had moderate stress levels, and these stress scores were higher than those found in a national workforce sample.⁵⁰ Using the same measure, another study found that 60% of ECE professionals based in Austin and Seattle had moderate general stress levels, and 7% had high general stress levels, which was higher than a national sample of college students.⁵¹ Another study showed similar findings with ECE professionals in Oklahoma reporting moderate stress levels as measured by the PSS-10.52

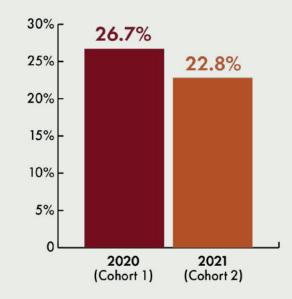
Similar to findings on depression rates, levels of stress also spiked for ECE professionals during the first year of the COVID-19 pandemic. For instance, 46% of ECE professionals in Indiana reported moderate levels of emotional stress, and 17.5% of them reported severe levels of emotional stress during 2020, compared to 32.8% and 4% respectively before the pandemic started.⁵³

Yale-CARES survey findings show that 26.67% of ECE professionals in 2020, and 22.84% of ECE professionals in 2021, reported elevated levels of stress (scores of 21 and above; Figure 6). While these rates are lower than the rates of depression reported by ECE professionals in this study, it is important to note that scores between 14 and 26 are considered moderate levels of stress according to the PSS-10 scale.⁵⁴ Therefore, the stress rates described in this report only capture participants with scores that are at the higher end of the moderate stress range or within the severe stress range. When looking at mean scores, we find that the mean scores reported by ECE professionals were 16.80 and 17.44 for 2020 and 2021, respectively. These mean scores are a little lower compared to the mean score of 18.99 reported by a national sample back in 2020;⁵⁵ however, these mean scores still fall within the moderate stress range.

When looking at elevated stress rates by socio-demographic characteristics, we can observe that, similar to depression rates, ECE professionals who are younger (18 to 34 years old) are more likely to report elevated stress rates compared to ECE professionals who are older. These results are also generally consistent with a study conducted during the pandemic on stress rates across several countries, with younger individuals reporting higher levels of stress.⁵⁶ Again, this pattern might be partly explained by the fact that young adults are more likely to experience financial insecurity compared to older adults.⁵⁷ Further, and as mentioned earlier, younger ECE professionals may have less work experience and may still be learning how to meet and navigate the high demands of their jobs.⁵⁸ Finally, it is possible that younger people have less accumulated life experience (and long-term perspective) that equips them to cope with, adapt to, and recover from national or global catastrophic events, which may also contribute to higher stress rates among this age group compared to older individuals.

When looking at specific race and ethnicity groups (Figure 8), ECE professionals who identified as Asian reported the highest percentage of stress (29.5%) of any racial/ethnic group in 2020, followed by ECE professionals who identified as multiracial (28.7%). In 2021, ECE professionals identifying as multiracial reported the highest stress rates (24.8%). This trend might be partly explained by factors specific to the pandemic. For instance, a report from the CDC based on data collected during April and May of 2020, found that multiracial and non-Hispanic adults of other races/ ethnicities were more likely to report stress and worry about stigma or discrimination associated with being blamed for spreading COVID-19 (13%) compared to African Americans (around 9%), White (2.4%) or Hispanic (3.7%)⁵⁹ adults. It was also observed that multiracial and non-Hispanic adults of other races/ethnicities were the most likely to report stress and worry about losing their jobs and income, along with Hispanic individuals (over 30%).⁶⁰ At the same time, findings from the National Survey of Early Care and Education found high rates of psychological distress among Asian individuals before the pandemic, which suggests that this particular minority group was already vulnerable even before COVID-19-related challenges were added.⁶¹ Thus, while it was well-known and documented that minority groups tended to experience more stressors in their everyday lives even before the pandemic, the adverse impacts of COVID-19 appear to have been compounded for these individuals and influenced even higher rates of stress than for non-minority individuals, including among ECE professionals. That said, it is also important to note that elevated stress levels were reported by ECE professionals who identified as White.

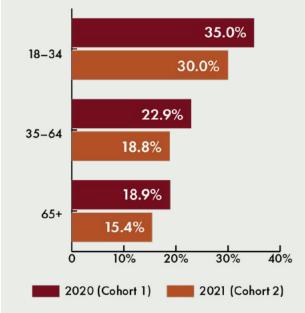
Figure 6: Elevated Stress in ECE Professionals During the Pandemic



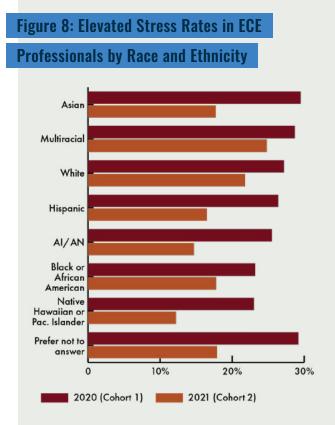
Note. Cohort 1 N = 81,698; Cohort 2 N = 49,245. Data was weighted with previously described Cohort 1 and Cohort 2 weights. Proportions based on 20 multiply imputed datasets.

Figure 7: Elevated Stress Rates

in ECE Professionals by Age



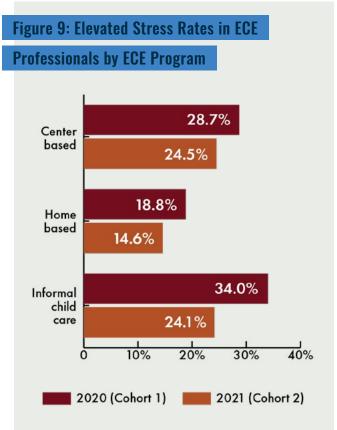
Note. Cohort 1 N = 81,698; Cohort 2 N = 49,245. Data was weighted with previously described Cohort 1 and Cohort 2 weights. Proportions based on 20 multiply imputed datasets.



Note. Cohort 1 N = 81,698; Cohort 2 N = 49,245. Data was weighted with previously described Cohort 1 and Cohort 2 weights. Proportions based on 20 multiply imputed datasets.

In terms of elevated stress rates by income, stress scores are generally consistent across SES groups, with the exception of ECE professionals with annual incomes between \$50,000 and \$74,999, who reported the highest stress rates of all groups (28.1%). This finding is unexpected and differs from depression results and findings from other studies. For instance, in a study conducted with ECE teachers in Colorado, it was found that lower hourly wages were associated with higher ECE teacher reports of emotional exhaustion from work, which in turn predicted ECE teachers' intentions to leave their jobs.⁶² These results suggest that low wages tend to be associated with more psychological distress. While our descriptive analysis yielded mixed results, further analysis showed that each annual salary category below \$75,000 was associated with higher stress levels compared to ECE professionals with annual salaries above \$75,000. However, more research is needed to understand the relationship between stress and SES while accounting for other potential risk factors.

Last but not least, results based on elevated stress rates by type of ECE program or setting show that, similar to depression symptom findings, ECE professionals in homebased settings are less likely to report elevated stress rates compared to ECE professionals who work in center-based programs or in informal childcare settings. As mentioned earlier, ECE professionals in center-based and in informal child care might have experienced higher childcare demands during the early phase of the pandemic compared to ECE professionals in home-based programs (which were more likely to shut down temporarily), which might partly explain this trend.⁶³ However, more research is needed to understand the differences found across ECE programs and settings in relation to ECE professional stress and depression rates.



Note. Cohort 1 N = 81,698; Cohort 2 N = 49,245. Data was weighted with previously described Cohort 1 and Cohort 2 weights. Proportions based on 20 multiply imputed datasets.

In summary, while elevated stress rates in ECE professionals were lower compared to depression levels during the first two years of the pandemic, they are still quite notable, as roughly one third of the national ECE workforce sample reported experiencing elevated stress (in the moderate to severe range). Similar to depression rates among ECE professionals, ECE professionals who are younger, who are multiracial (and Asian in this case), and who work in either center-based programs or in informal child care settings are more likely to report elevated stress compared to ECE professionals who do not have these characteristics.

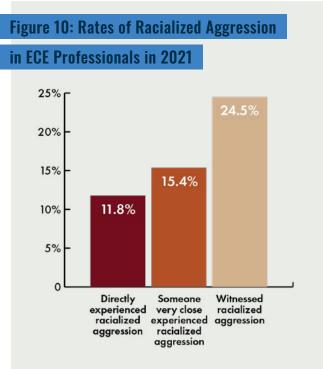
RACIALIZED STRESS

Racialized stress is a specific type of stress that can be defined as physiological and emotional stress reactions that result from experiencing discrimination, and verbal or physical aggression based on someone's race.⁶⁴ While not typically assessed as part of mental health, racialized stress can negatively impact an individual's psychological well-being, especially for people of color.⁶⁵ For example, a systematic review conducted in 2020 found that children's and adolescents' experiences of racism were associated with behavioral problems, such as delinquency and risk-taking behaviors; physical health effects, such as higher cortisol levels; and mental health outcomes, such as depression.⁶⁶ Given these findings, it has been suggested that racism should be considered an Adverse Childhood Experience (ACE), particularly for people of color, given its harmful short and long-term effects on well-being.⁶⁷

While experiences of racism or racialized stress in ECE professionals are not well documented in the research literature, attempts to understand the psychological impacts of the COVID-19 pandemic should include consideration of this phenomenon, given the ways that racism was interwoven with narratives about and responses to COVID-19. For example, acts of discrimination and verbal and physical aggression towards the Asian and Asian-American community were especially prevalent at the onset of the pandemic.68 Furthermore, racial trauma experienced by African Americans was amplified by the police murders of George Floyd, Breonna Taylor, Dreasjon "Sean" Reed, Ahmad Arbery and others, compounding the effects of centuries of racism, discrimination, and violence.⁶⁹ Thus, it is not surprising that rates of depression among African Americans and Asian Americans worsened during the first year of the COVID-19 pandemic.⁷⁰

While experiences of racialized stress in ECE professionals have not previously been documented in research, the YALE CARES Surveys measured rates of racialized stress in the 2021 sample (Cohort 2). In the survey, racialized stress was operationalized as (1) direct experiences of physical or verbal aggression or exclusion due to race or ethnicity (referred to as "racialized aggression" from this point on for ease of reading), (2) having someone very close directly experience this, and/or (3) witnessing someone experience this. Based on the 2021 survey results, 11.77% of ECE professionals reported directly experiencing racialized aggression, 15.38% reported having someone close who directly experienced racialized aggression, and 24.49% reported witnessing someone experience racialized aggression. These results suggest that indirect experiences of racialized aggression rather than direct experiences were more common among ECE professionals in 2021.

In order to understand how socio-demographic characteristics are related to experiences of racialized aggression, we present rates for each type of racialized aggression stratified by race and ethnicity.



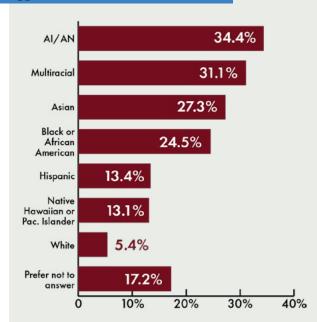
Note. Cohort 2 N = 38,808. Complete-case analysis. Data was weighted based on age, race, ethnicity, and state to match employed child care providers (occupation code: 4600) who were 18 years of age or older in the U.S. based on the 2015-2019 American Community Survey.⁷¹

Survey results suggest that indirect experiences of racialized aggression rather than direct experiences were more common among ECE professionals in 2021.

Direct Experiences of Racialized Aggression

As described earlier, racialized aggression refers to experiences of physical or verbal aggression or exclusion due to race or ethnicity. Based on the survey results, at least 13% of ECE professionals from minority groups reported direct experiences of racialized aggression, with ECE professionals who identified themselves as multiracial (31.1%) and American Indian or Alaska Native (34.4%) reporting the highest percentages. ECE professionals who identified as White were the least likely to report direct experiences of racialized aggression (5.4%). These results are consistent with other research findings. Specifically, rates of racism experienced by minority populations have increased since the onset of the pandemic, especially among African Americans, Asian Americans, and Multiracial individuals, as described earlier.⁷²

Figure 11: Direct Experiences of Racialized Aggression by Race and Ethnicity

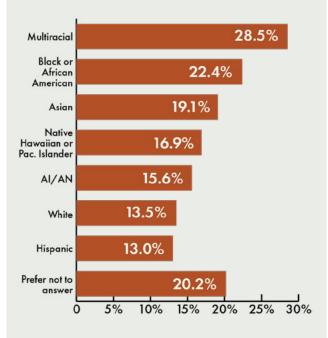


Note. Cohort 2 N = 38,808. Complete case analysis. Data was weighted with previously described Cohort 2 weight.

Having Someone Very Close Who Experienced Racialized Aggression

Based on the survey results, ECE professionals who identified as multiracial (28.5%) were the most likely to report having someone close who had experienced racialized aggression, followed by African Americans (22.4%), as compared to ECE professionals from other racial or ethnic groups. Interestingly, ECE professionals who identified as Hispanic (13%) or White (13.5%) were less likely to report having someone close experience racialized aggression compared to other groups.

Figure 12: Having Someone Close Experience Racialized Aggression, by Race and Ethnicity (2021)



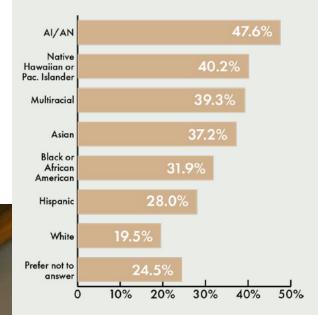
Note. Cohort 2 N = 38,808. Complete case analysis. Data was weighted with previously described Cohort 2 weight.

Witnessing Racialized Aggression

Last but not least, based on the survey results, ECE professionals who identified as American Indian or Alaska Native (47.6%) were the most likely to report that they had witnessed racialized aggression, followed by Native Hawaiian and other Pacific Islander (40.2%) and Multiracial ECE professionals (39.3%). Again, ECE professionals who identified as White had the lowest rates of witnessing racialized aggression; this percentage was lower but still considerable (19.5%).

Figure 13: Witnessing Racialized

Aggression, by Race and Ethnicity (2021)



Note. Cohort 2 N = 38,808. Complete case analysis. Data was weighted with previously described Cohort 2 weight.

Taken together, in this national sample of ECE professionals in 2021, indirect experiences of racialized aggression were more frequent than direct experiences of racialized aggression. For ECE professionals who reported direct experiences of racialized aggression, these rates were substantially higher for ECE professionals from minority backgrounds, especially African Americans, Asian Americans, and Multiracial individuals. Direct experiences of racialized aggression were lowest among White ECE professionals. Indirect experiences also tended to be higher for minority populations, especially for some specific groups, although this did not seem to be consistent across types of indirect experiences.

While data documenting both direct and indirect experiences of racialized aggression are limited, these findings suggest that on top of other stressors and mental health challenges experienced by ECE professionals during the pandemic, racialized aggression is an additional burden for ECE professionals of color, warranting particular attention and continued investigation. Understanding how racialized stress compounds other stressors and mental health symptoms for ECE professionals is important, and needs to be incorporated into approaches to supporting the mental health and wellbeing of this population as well.

Examining the Mental Health of Early Childhood Professionals and Children Early in the Pandemic THE CHILDREN'S EQUITY PROJECT

The increase in mental health challenges experienced by the ECE workforce has arisen in parallel with a mental health crisis in young children and families.



Prior to the pandemic, national data showed that one in five U.S. children between six and 17 years of age experienced a mental health disorder in a given year.⁷³ The most commonly reported diagnoses in schoolage children were attention-deficit and hyperactivity disorder (ADHD), anxiety, and behavior problems: accounting for roughly 30% of all diagnoses.⁷⁴ In terms of young children, prior to the arrival of COVID-19, the American Academy of Pediatrics reported that approximately 16% of children under six years old had clinically significant mental health problems requiring clinical intervention early in life.⁷⁵

As was noted with regard to the ECE workforce, the COVID-19 pandemic has clearly added more stress to families' lives, resulting in negative effects on children's mental health. More than 140,000 children in the United States have experienced the death of a parent or grandparent caregiver from COVID.⁷⁶ The pandemic has also led to children experiencing separation anxiety from their parents and caregivers, and augmented fears about their own and family members' vulnerability to infection.⁷⁷ Other stressors experienced by children and families during the pandemic included school closures and disruptions, limited outdoor activities due to lockdowns. limited access to health care and community services, sickness and hospitalization, parental job losses and reduced hours, among others.⁷⁸ All of these stressors can negatively affect children's mental health.

In addition to emotional stressors, grief and isolation, many families have and continue to suffer economic hardships during the pandemic (like ECE professionals).⁷⁹ These financial struggles, in turn, have been found to be associated with mental health distress in families.⁸⁰ We know from the research literature that parental distress impacts child well-being and that this can negatively influence child mental health outcomes.⁸¹ Given that economic hardships that families experienced before the pandemic have been amplified since the onset of COVID-19,⁸² it is imperative to continue efforts in understanding the effect of financial instability in young children's mental health.

Findings from early in the pandemic included a significant number of parents of school-aged children reporting that their children's mental or emotional health had worsened.⁸³ Specifically, parents reported that their children showed elevated symptoms of depression (4%), anxiety (6%), and psychological stress, such as feelings of loneliness, anger and worry (9%).⁸⁴ Other mental health issues among school-aged children during the COVID-19 pandemic included unusually high rates of sleep disorders, suicidal behavior, and attentiondeficit/ hyperactivity disorder.⁸⁵

When it comes to young children, data on mental health symptoms and exacerbation of symptoms during the pandemic is very limited, especially when compared to data on school-aged children's mental health. One of the few large-scale surveys that was conducted was a national survey on early childhood mental health and family well-being that was launched in April 2020, called the RAPID-EC Survey.⁸⁶ Parents responding to this survey were asked if they observed their children as "fussy or defiant" (externalizing behaviors) and/or "too fearful or anxious" (internalizing symptoms). They found that parent reports of both internalizing and externalizing behaviors increased greatly in the first month of the pandemic and remained consistently above pre-pandemic rates over time, with ratings for externalizing symptoms being higher than internalizing symptoms.⁸⁷

This report provides an important additional source of information about internalizing and externalizing behaviors, as well as somatic symptoms in young children during COVID-19, particularly from the perspective of ECE professionals. We begin with definitions of the child mental health symptoms and behaviors reported on by ECE professionals in the survey, followed by findings. Lastly, we offer some consideration of a few mitigating factors that may also play a role in ECE professionals' perceptions of children's behaviors and symptoms, including ECE professionals' own mental health.

EXTERNALIZING BEHAVIORS

"Externalizing behaviors"⁸⁸ includes the following: aggressive, oppositional, hyperactive, inattentive, difficulty listening, inability to stay on task, easily distracted, talking excessively, often has trouble waiting his/her turn, often interrupting or intruding on others, and showing a lack of engagement.⁸⁹ More serious or concerning externalizing behaviors include often losing one's temper, being frequently angry, being actively defiant and non-compliant with rules, and often blaming others for one's own mistakes or misbehavior.⁹⁰ These behaviors are associated with ADHD, oppositional defiant and conduct disorders, and manifest differently across age groups.⁹¹ It is important to note that the perception of externalizing behaviors can be highly subjective, influenced by an individual's observation and context, and attitudes towards the child engaging in the behavior. Indeed, research has shown racial bias in the perceptions of externalizing behavior.⁹²

Externalizing behaviors in the early years have been found to predict later challenging behaviors in the elementary school years,⁹³ clinically significant levels of later disruptive behavior problems,⁹⁴ school failure,⁹⁵ and placements in special education.⁹⁶ For some children, early-onset externalizing behaviors remain stable and lead to more serious, maladaptive outcomes.⁹⁷ Research also shows that children who exhibit high levels of externalizing behaviors in classroom settings have increased relational conflict as perceived by the teacher.⁹⁸ Data also indicate that boys may be more likely to exhibit externalizing behavior problems than girls.⁹⁹ Findings from a number of studies suggest that boys with multiple risk factors that include high levels of early hyperactivity and aggression, and high levels of family stress are most likely to exhibit externalizing behaviors at school.¹⁰⁰

INTERNALIZING BEHAVIORS

Internalizing behaviors¹⁰¹ involve thoughts and feelings, including: feeling afraid, shy, withdrawn, anxious, clingy, worried, sad, irritable, angry, depressed mood, diminished interest or pleasure in almost all activities most of the day, diminished ability to think or concentrate, irritable, low energy, inattention, restlessness.¹⁰² Research suggests that family stressors including maternal depression, and domestic violence, along with early health complications, including prematurity and low birth weight, contribute to internalizing behaviors in children.¹⁰³ Other factors that contribute to internalizing symptoms are gender, socioeconomic background, developmental patterns and delays in language and communication.¹⁰⁴ Early researchers noted that exposure to trauma may lead to feelings of anxiety, helplessness, dissociation (detachment of the mind from emotion), and behaviors, including hypervigilance (watchfulness or awareness of one's surroundings over and above what is normal), efforts to avoid re-experiencing the traumatic event, and even self-inflicted injury.¹⁰⁵ Importantly, little work has focused on studying internalizing problems in children as young as preschool-aged.

SOMATIC SYMPTOMS

Somatic symptoms,¹⁰⁶ sometimes defined as physical symptoms of unknown pathology,¹⁰⁷ refer to symptoms such as headaches, abdominal pain, dizziness, and changes in eating and sleeping patterns.¹⁰⁸ Somatic symptoms are associated with high levels of psychiatric symptoms, particularly anxiety and depression. These symptoms are similar to those related to mental health stressors. Importantly, these symptoms are highly prevalent in childhood, affecting 10–30% of children in the United States, with younger children primarily reporting abdominal pain.¹⁰⁹ Childhood somatic symptoms have been associated with difficult temperaments, emotional and behavioral problems, excessive school absences, and increased risk for internalizing disorders.¹¹⁰

Additionally, in a recent systematic review of somatic symptoms in children who have a parent with a chronic illness, researchers found that parental illness was related to increased somatic symptoms in children.¹¹¹ The researchers posit that based on social learning theory, children may exhibit somatic symptoms in response to how family members model physical symptoms, especially if the symptoms are reinforced in the child.

FINDINGS

The Yale-CARES surveys measured rates of increased child externalizing and internalizing behaviors and somatic symptoms based on ECE professionals' perspectives. This data was collected in 2021 only; therefore, the results that follow only apply to Cohort 2. Specifically, ECE professionals were asked how many of the *children in their care* appeared more:

- "aggressive, oppositional, or hyperactive" (externalizing);
- "shy, withdrawn, sad, anxious, worried, or clingy" (internalizing); and/or
- with "increased wetting and/or soiling accidents, or complain more about not feeling well or other unexplained aches/pains" (somatic)

as compared to prior to the pandemic. For the purposes of this analysis, participants' responses were categorized in three groups: "Don't Know," "Increase" (meaning ECE professionals felt that at least a few or more children were displaying increased behaviors or symptoms), and "No Increase."

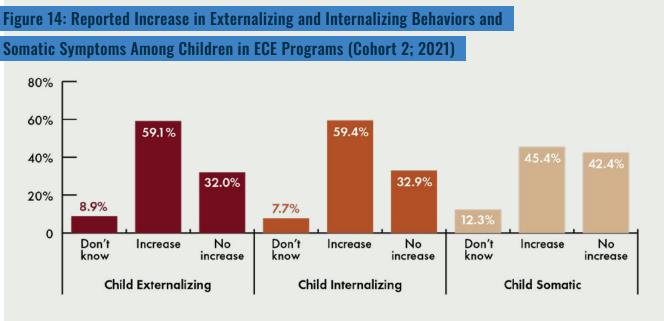
Based on the survey results, **59% of ECE professionals** reported that they had children with increased externalizing and internalizing behaviors in their classrooms or programs. When it came to somatic symptoms, the percentage was lower, but still considerable, with 45.35% of ECE professionals reporting having children with increased somatic

symptoms. These results are concerning yet not surprising. Like ECE professionals, children also experienced major stressors during the pandemic. For instance, in the current survey, 29.32% of ECE professionals in 2021 (Cohort 2) reported that they had children in their programs with family and friends who had been hospitalized due to COVID-19. Further, 13.99% of ECE professionals reported that they had children in their programs who had lost friends and family members due to COVID-19. Considering the full dependency - emotional and physical - that young children have on their primary caregivers, the impact of the death of a caregiver or other loved ones can severely impact children's health and mental health, which can manifest in internalizing, externalizing, somatic and other behaviors. This web of complex emotions and behaviors can undoubtedly show up in early care and education settings.

In addition to reporting aggregate results of ECE professionals' ratings of children's behavior during the pandemic, we also wanted to examine whether ECE professionals reported different rates of behavioral concerns in center-based programs, home-based programs, and informal care settings. The Survey data reveals that ECE professionals in homebased programs were less likely to report having children with increased externalizing, internalizing, or somatic symptoms compared to ECE professionals in center-based programs and informal child care.

These results are interesting since home-based programs tend to have less access to behavioral supports and resources,¹¹² such as infant and early childhood mental health consultation services, compared to center-based programs. Therefore, one might hypothesize that home-based providers might struggle more with getting the help they need to address child behavioral challenges, which could have an effect on their stress levels. At the same time, fewer children were attending home-based programs compared to center-based programs during the first couple of years of the pandemic,¹¹³ so it is possible that home-based ECE professionals were in environments with fewer children, and fewer behavioral issues. In general, home-based programs also have fewer demands related to licensing requirements, and it is possible that they also had less stringent health and safety protocols during the pandemic compared to ECE professionals in center-based programs.¹¹⁴ This finding is also consistent with reported rates of elevated stress being lowest among home-based providers compared to the other settings. More thorough research, including qualitative research, is needed to better understand the differences between settings as it relates to children's behavioral issues, as well as ECE professional well-being.

Next, we look at ECE professionals' ratings of increases in externalizing and internalizing behaviors and somatic symptoms in relation to the mental health status of ECE

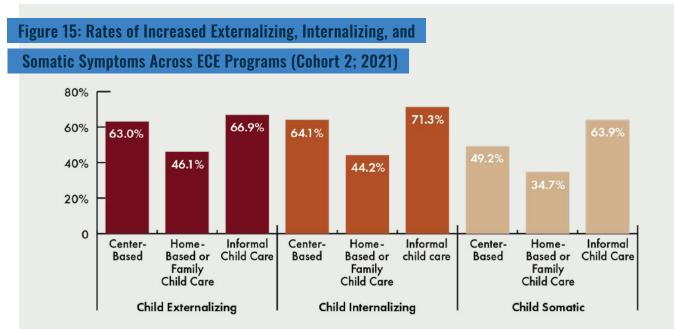


Note. Cohort 2 N = 32,340. Complete case analysis. Data was weighted with previously described Cohort 2 weight.

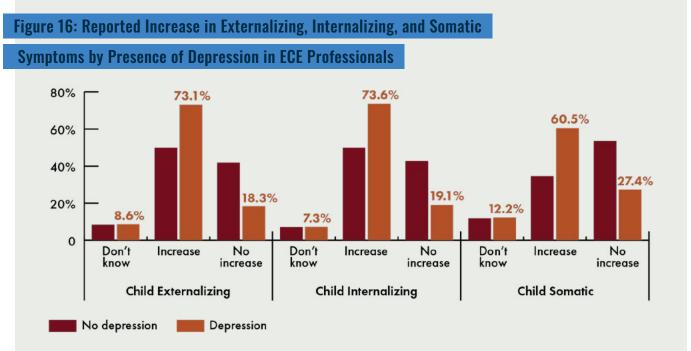
professionals. This analysis is prompted by earlier research documenting a relationship between ECE professionals' mental health and teacher-child relationships.¹¹⁵ For instance, research has documented that ECE professionals who exhibit symptoms of depression are more likely to report having conflicting teacher-child relationships and working with children with behavioral challenges.¹¹⁶ Based on the survey results, ECE professionals who reported depression symptoms were more likely to report having children with increased externalizing, internalizing, and somatic symptoms compared to ECE professionals who did report depression symptoms. Specifically, 73.1% of ECE professionals with depression symptoms reported having observed an increase in externalizing symptoms compared to 49.9.% of ECE professionals without depression symptoms. Similarly, 73.6% of ECE professionals with depression symptoms reported having children with increased internalizing symptoms compared to 49.9% of ECE professionals without depression symptoms. Last but not least, 60.5% of ECE professionals with depression symptoms reported having children with increased somatic symptoms compared to 34.6% of ECE professionals without depression symptoms.

The results based on the presence of depression and children's externalizing symptoms are consistent with other studies that have found that ECE professionals are more likely to report children as having behavioral challenges when they are experiencing depressive symptoms.¹¹⁷ While research on the relationship between teacher mental health and children's internalizing behaviors is limited, one study conducted in 2014 using a sample from the Fragile Families and Child Well-being Study, found that ECE professionals with depression were also more likely to report internalizing symptoms in children.¹¹⁸ These findings are consistent with studies that have focused on parents and found a relationship between maternal depression and children's externalizing and internalizing behaviors.¹¹⁹ Potential explanations include the possibility that ECE professionals who are experiencing more depressive symptoms and general stress are inclined to rate children's behaviors more "problematically." At the same time, it is also plausible that when children are displaying more behavioral and somatic issues, teacher levels of depression and general stress may increase. These findings reiterate the need to provide mental health support for ECE professionals as an important mechanism to promote positive and nurturing teacher-child relationships and as an additional indirect support for children's mental health.

Taken together, ECE professionals have reported concerning rates of increased externalizing and internalizing behaviors and somatic symptoms for children in their care during the pandemic, which are likely due to stressors such as the loss of loved ones, increased isolation, and parental stress. At the same time, results from this survey have also pointed out that ECE professionals who struggle with depression are more likely to perceive children as having more of these behavioral challenges or changes compared to ECE professionals who did not screen positive for depression. These results highlight the importance of supporting both children's and caregivers' mental health. Children develop and thrive in the context of relationships. Caregivers who are experiencing high levels of stress and other mental health challenges will find it harder to provide the nurturing and responsive supports to children that are so key to helping them to thrive. Children who are experiencing high levels of stress and exhibiting behavioral and somatic symptoms will similarly create more challenges and stress for the ECE professionals charged with their care. Supporting children's mental health and overall well-being goes hand in hand with supporting their caregivers, and this includes the ECE professionals who play such an important role in their development.

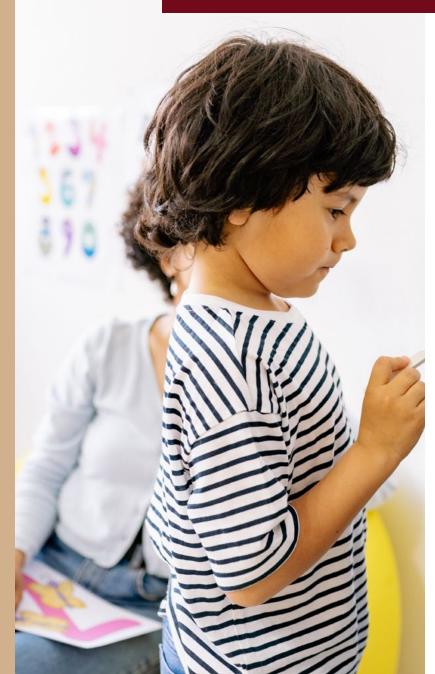


Note. Cohort 2 N = 32,340. Complete case analysis. Data was weighted with previously described Cohort 2 weight.



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In March 2021, the American Rescue Plan Act (ARPA) awarded funds to states, territories and tribes to provide relief from the economic and health impacts of COVID-19. Federal agencies identified mental health concerns as among the most pressing priorities, and identified infant and early childhood mental health consultation (IECMHC) as a key strategy for addressing child and provider well-being in ECE programs.¹²⁰ One of the main ARPA funding streams was Child Care Stabilization Grants, which were intended to provide relief through supplemental funds to local child care programs. Lead agencies were encouraged to offer ECE professionals avenues to use funds for IECMHC, including through opting in to a state administered IECMHC network, or regionally-or locally-coordinated IECMHC services that states could help arrange.¹²¹ CCDF Supplemental Discretionary Funds were also made available to a range of child care providers, including family child care programs, with encouragement to augment mental health supports (such as IECMHC, trainings on trauma informed care, and on-site services) especially for vulnerable populations such as children with disabilities, families in rural communities, and infants and toddlers.¹²² While one of the goals of ARPA was to provide funds to address mental health challenges, it has been documented that very few states allocated funds for this purpose.¹²³



Infant and Early Childhood Mental Health Consultation (IECMHC) is a preventative strategy for promoting the social and emotional competence and mental health of both children and their caregivers.

IECMHC is currently implemented in a wide range of child and family serving programs, such as child care, pediatric settings, home visiting, and early intervention, among others.¹²⁴ Infant and early childhood mental health consultants work in collaboration with families and early childhood providers to promote children's optimal social and emotional development and strengthen provider-child and parent-provider relationships.¹²⁵

The body of evidence to date suggests that IECMHC has a positive impact on a number of child, staff, and program outcomes.¹²⁶ IECMHC has been associated with positive outcomes for ECE providers, such as increased self-efficacy in managing challenging behavior, increased sensitivity and responsiveness to children, and increased knowledge about children's social and emotional development.¹²⁷ The IECMHC theory of change suggests that when mental health consultants build strong relationships with ECE teachers, teachers report less conflict and more closeness with young children; improvements are particularly notable with regard to Black children and Black boys.¹²⁸ Additionally, after participating in IEMCHC, teachers' classroom climates have been shown to become more positive.¹²⁹ Evaluations of statewide IECMHC programs have found improvements in children's socialemotional skills and reductions in challenging behaviors. A handful of studies also demonstrate that access to IECMHC is associated with lower rates of harsh discipline, including suspension and expulsion.¹³⁰

Although IECMHC can positively impact early childhood settings, accessing IECMHC services can be challenging. Impediments include limited IECMHC workforce capacity, lack of funding to support more widespread implementation, and lack of knowledge from ECE providers about these services, especially home-based ECE providers.¹³¹ Further, the onset of the COVID-19 pandemic added even more challenges to the implementation of IECMHC services since demand increased, especially program and child-focused consultation,¹³² and existing mental health consultants and

Figure 17: Access to Mental Health

Consultation, by Year

A mental health consultant is in at least 3.2% weekly contact with me 3.7% 2.2% A mental health consultant is in at least monthly contact with me 4.9% 23.6% I can request a mental health consultant, and it would happen quickly 18.3% 11.9% I can request a mental health consultant, but it might take a long while 12.7% 59.2% I don't know or I don't have access to a mental health consultant 60.5% 10% 50% 0 20% 30% 40% 60% 2020 (Cohort 1) 2021 (Cohort 2)

Note. Cohort 2 N = 32,340. Complete case analysis. Data was weighted with previously described Cohort 2 weight.

the providers and families they work with had to adjust from in-person to virtual consultation sessions.¹³³

These issues are reflected in results from the Yale-CARES surveys. Around 60% of ECE professionals surveyed during 2020 and 2021 reported that they did not know about or have access to IECMHC services. On average, across both cohorts, rates of ECE professionals who reported being in contact with a mental health consultant either weekly or monthly only ranged from 2% to 5%. For those who reported that they could request IECMHC services, ECE professionals were more likely to report that requesting a mental health consultant would happen quickly during 2021 compared to 2020.

These results are consistent with what has been documented in other research. Specifically, the Urban Institute reported that ECE professionals, especially home-based ECE professionals, are unaware of IECMHC services, and a significant number of them do not have access to IECMHC services, in spite of the fact that approximately 35 states currently have at least some mental health consultation being offered.¹³⁴ These findings highlight the need to not only increase access to these services, but also to raise awareness about these services and their benefits for children, families, and ECE professionals.

Around 60% of ECE professionals during 2020 and 2021 reported that they did not know about or did not have access to IECMHC services.

70%

Recommendations

PAGE 30

COVID-19 has inflicted trauma, loss, and economic and social challenges for people around the world.



ECE professionals, as a whole, were economically and emotionally vulnerable before the pandemic and have suffered increased rates of stress and depression since the pandemic started. Coupled with the fact that young children have also experienced increases in anxiety, trauma, and grief (including hundreds of thousands of children who lost primary caregivers as a result of COVID-19), it is clear that strategically targeted supports are needed both to promote the mental health of children and to support the well-being of the adults who care for them.

This report highlights the toll that the pandemic has taken on ECE professionals and the children in their care. At the same time, COVID-19 has also created opportunities for improving well-being. In general there is increased understanding of the importance of mental health, and greater awareness of the plight of ECE professionals. Pandemic relief funding has also led to the piloting of some systemic and programmatic changes that can improve ECE professional and child well-being.

What follows are recommendations for policymakers and funders at the national/ federal and state levels, which offer both economic and mental health-focused remedies. The complexity of the causes of this crisis necessitates solutions that occur at multiple levels and through coordinated and collaborative efforts. It is also important that all these efforts should be equally accessible, to the extent possible, to centerbased programs, home-based programs, and informal childcare.

CONGRESS

Congress has a major role to play in increasing funding for and access to mental health supports for children, families, and the early educators who serve them. Mental health is at the foundation of well-being and affects every other domain of functioning.

This support can take many forms, but should begin with infusing sustained federal resources to state and community level systems that serve our youngest children. This could and should include significantly increasing funding to the Project LAUNCH, Indigenous Project LAUNCH, and Infant and Early Childhood Mental Health grant programs funded through the Substance Abuse and Mental Health Services Administration so that every community, starting with historically marginalized and under resourced communities, have access to evidence-based infant and early childhood mental health consultation and IECMH treatment services, including supports embedded within ECE settings. These grant programs directly address IECMH workforce shortages in underserved communities and increase access to care with attention to reducing mental health disparities.

Investments in infant and early childhood mental health consultation are critical. Considering the research supporting the impact of IECMHC on child, family, and teacher wellness, it should be a core part of all early care and learning programs (both center- and family-based), particularly considering pandemic related stressors endured by children and adults. To move in this direction, Congress can fund and include IECMHC as a core part of any early childhood bill that seeks to expand slots or increase quality of early care and learning systems. Funding for IECMHC can similarly be included in bills that sustain or expand the Maternal, Infant, and Early Childhood Home Visiting Program, child welfare services, and Part C/Early Intervention services - all of which can benefit from access to mental health consultation as a means to promote the mental health of young families and children and offer support to providers experiencing stress and burnout.

Further action to ensure that mental health care is covered in basic health insurance plans is also critical, as well as efforts to further expand access to Medicaid and health insurance vouchers for adults, and in particular, those who are serving young children.

Finally, addressing the underlying conditions that affect the mental health and well-being of the ECE workforce are critical. This includes reforms to the ECE system that address workplace conditions (e.g. ratios/group size limitations, adequate breaks and access to substitute teachers, adequate, safe, clean, enriching facilities with space for adults, professional mentoring and ongoing support). It also includes major investments to address the current state of ECE workforce economic conditions. Compensation, including higher wages and benefits — specifically insurance and paid family and medical leave, must be addressed.

FEDERAL AGENCIES

Multiple divisions within the U.S. Department of Health and Human Services have a stake in ensuring the healthy development of young children and the well-being of the ECE workforce. The Administration for Children and Families (ACF) provides guidance, funding, training and technical assistance to a vast network of child care, Head Start/Early Head Start, and Early Head Start-Child Care Partnership programs across the country. The Substance Abuse and Mental Health Services Administration (SAMHSA) and the Health Resources and Services Administration (HRSA) provide funding, guidance, and leadership to the behavioral health and community health workforces, and can be instrumental in building capacity and dedicating funding to meet the needs of young children, families, and ECE professionals. The Centers for Medicare and Medicaid Services (CMS) plays a critical role in encouraging states to develop policies and plans that make it possible to deliver mental health supports and services in ECE settings. Together, these agencies are equipped to develop solutions that address the multiple facets of this complex challenge. Independently and together, they can contribute significant leadership and guidance.

Administration for Children and Families

The Offices of Early Childhood Development, Head Start, and Child Care should:

- Continue to provide guidance and funding to state lead agencies to create both short and long term remedies for ECE professional recruitment and retention, including a targeted focus on improving 1) compensation and benefits, 2) workplace conditions, 3) access to mental health and well-being supports; and 4) training and educational opportunities.
- Provide guidance and technical assistance to grantees to help them make mental health supports (including IECMHC and access to therapeutic services) more accessible to ECE providers and the families they serve.

The Office of Planning Research and Evaluation (OPRE) should:

 Ensure that the mental health and well-being of the ECE workforce, including disparities among groups (e.g., racial/ethnic, geographic, age and setting-specific disparities) are captured and tracked in the National Survey of Early Care and Education in the 2024 and subsequent data collection cycles.

Substance Abuse and Mental Health Services Administration

- Work with state mental health directors and the National Association of State Mental Health Program Directors to raise awareness of the mental health needs of young children and families.
- Issue Mental Health Block Grant program guidance that expands allowable uses of funds to go beyond children with serious emotional disturbance (SED) to include those at risk so that families and ECE programs do not have to wait for problems to escalate to diagnosable mental disorders before behavioral health interventions (including preventive interventions) can be offered.
- Encourage Project LAUNCH and Infant and Early Childhood Mental Health (IECMH) grantees to prioritize mental health consultation to ECE settings (both center and home based) in communities that do not currently have access or have very low access. Grantees should be encouraged to use funds to provide additional training to mental health clinicians interested in specializing in IECMH treatment, and to invest in the infrastructure, training, and workforce development needed to make mental health consultation available to more communities and child care providers.
- Support Children's Mental Health Initiative grantees to focus on prevention of SED in early childhood settings, including ECE programs.
- Partner with the American Psychological Association (APA), American Psychiatric Association, and the National Association of Social Workers (NASW) to raise awareness of and access to pre- and post-graduate training in infant and early childhood mental health treatment and consultation and increase the workforce with this specialized expertise.
- Engage institutions of higher education to encourage undergraduate and graduate training courses in infant and early childhood mental health and mental health consultation and increase the number of practicum and internship training sites offering experience working with infants and young children in ECE settings.

 Expand the scope of the Minority Fellowship Program to include support for the development of behavioral health practitioners with the knowledge and skills needed to serve infants, young children, and families, particularly in communities with IECMH behavioral health workforce shortages.

Health Resources Services Administration

- Increase the focus on early childhood and family mental health in the Maternal, Infant, and Early Childhood Home Visiting (MIECHV) grant program. Use program guidance and training and technical assistance resources to promote the integration of mental health consultation into more MIECHV programs, which increases capacity to address families' mental health needs, support home visitor wellbeing, and access community-based mental health services. Offer resources to grantees that increase knowledge and awareness of child and family mental health issues such as depression, trauma, and early relational health.
- Provide technical assistance and guidance to Title V (Maternal and Child Block Grant) and Healthy Start grantees to ensure that they are connected to center-based, homebased, and family child care programs in their communities as part of efforts to reduce service fragmentation and increase care coordination, particularly for children with special health care needs. Grantees should include ECE programs in Community Action Networks and explore other avenues to support them in connecting families with health and social supports.
- Leverage the recently launched Community Health Worker Training Program to establish training and apprenticeship opportunities for community health workers to be located within and accessible to center and home-based ECE professionals and the families they serve. Community Health Workers (particularly family navigators with lived experience) can help address economic and social stresses experienced by families and ECE professionals, and can facilitate greater access to community-based behavioral health services.
- Ensure that health and behavioral health workforce initiatives include specialized training required to work with young children and their caregivers, such as foundational infant and early childhood mental health and early relational health training, evidence-based dyadic therapeutic treatment approaches, and infant and early childhood mental health consultation.
- Offer workforce development support to behavioral health agencies (or behavioral health teams within Federally Qualified Health Centers and other health care facilities) to train staff in infant and early childhood mental health treatment models and infant and early childhood mental health consultation.

PROMOTING ECONOMIC STABILITY

Although not an explicit facet of the Yale CARES Surveys, many have drawn a connection between the poor compensation and benefits provided to ECE professionals, their economic instability, and poor mental health outcomes and high levels of stress. Data show that a lack of economic stability is associated with housing and food insecurity and can have negative effects on ECE professionals' physical and mental health.¹³⁵

Benefits like affordable health care, dental care, mental health services for staff, and paid leave should be considered an integral part of the overall compensation package for early childhood educators. Access to health care benefits is also crucial to support the well-being and mental health of ECE professionals. For instance, research has suggested that ECE teachers with poor work benefits, such as not having health insurance or paid leave, were more likely to report negative mental health outcomes, including greater emotional exhaustion from their jobs.¹³⁶

While ensuring fair compensation and economic stability is imperative for all ECE professionals, this is particularly important for young ECE professionals, ECE professionals of color, home based ECE professionals, and ECE professionals who work with infants and toddlers as they are more likely to be more financially vulnerable compared to ECE professionals without these characteristics.¹³⁷

Some states are working to address improved compensation directly. For example:

- The District of Columbia distributed payments through an Early Childhood Educator Pay Equity Fund to support compensation and pay parity. Wealth taxes are used as the funding source, although ARPA funds were partly used for the initial bonuses.¹³⁸ For 2023, funds are distributed in four quarterly payments or bonuses of \$3,500 (totaling \$14,000) until September of 2023. Starting in the 2024 fiscal year, the Office of the State Superintendent of Education (OSSE) will shift to distributing funds to child development facilities. Facilities that receive funds will be required to pay eligible ECE providers wages that reflect the recommendations of the Early Childhood Educator Equitable Compensation Task Force.¹³⁹
- Illinois is developing a statewide ECE salary scale that will account for years of experience and have parity with K-12 school system, including wages and benefits (i.e., health coverage, paid time off, retirement). The governor also signed HB 2878 creating the Early Childhood Access Consortium for Equity to help strengthen childcare workers' career trajectory.
- New Mexico launched the Pre-K Pay Parity Program in 2021, which pays the difference between base salary amount found in K-12 teachers and Pre-K teachers' yearly salary, taking into account education levels and work experience.¹⁴⁰ Funds are divided into equal payments and paid each month from the time a Pre-K teacher applies through the end of the school year. New Mexico has also developed and implemented the New Mexico Cost Estimation Model, which sets rates at the actual cost of care. The new wage floor was set at \$12.10 and included \$5,000 per employee for benefits.¹⁴¹
- Rhode Island state legislators have introduced multiple bills that seek to address ECE provider compensation and retention. The Child Care is Essential Act proposed weekly \$20 infant care bonuses for every infant under 18 months in a provider's care, in recognition of the additional complexity and demands of this age group. Rhode Island's Moving the Needle on Compensation Task Force recommended the adoption of a statewide, tiered target wage scale for infant/toddler educators that offers wage parity with kindergarten teachers with similar levels of education. While the infant care bonuses were not adopted in 2023, the FY2023 budget did include rate increases for providers serving children of all ages in licensed child care centers.
- The T.E.A.C.H. Early Childhood Initiative, which is implemented in several states, provides scholarship support for eligible ECE teachers who would like to further their education. ECE teachers who complete a minimum amount of credit hours are required to receive increased compensation, either through a bonus or wage raise.¹⁴²

States can replicate some of these approaches, as well as:

- Conduct studies to examine pay gap disparities in their states by race, setting type, and age of child served; develop an action plan to close gaps; and monitor progress transparently to ensure accountability. They can also work in partnership with tribal communities to track similar information.
- Establish pay scales and make investments that build toward pay parity with kindergarten teachers.
- Ensure that benefits for ECE professionals include at the minimum affordable health and dental insurance, mental health services, paid leave, and retirement benefits as part of the overall compensation package.
- Utilize more grants and contracts in CCDBG, balancing the current heavy usage of subsidies, and building higher compensation into contracts with providers and programs.

Congress can also act by addressing the underlying economic inequities that plague the ECE field, including disparities in pay and opportunity.

They have a major role to play in ensuring sufficient funding and providing clear directives to increase wages and benefits for ECE providers. Sustained funding is necessary and critical. Other actions include:

- Requiring pay parity among teachers (whether child care, Head Start, Pre-K, or kindergarten) with similar credentials and experience across ages taught and types of settings in any new child care legislation;
- Funding a new grant program that provides pathways for paraprofessionals and others in non-lead teacher roles, especially bilingual staff and staff of color, to attain higher education credentials and degrees, to become lead teachers.
- Requiring higher levels of reimbursement, that reflect the actual cost of quality early care and education, for providers serving children who use CCDF subsidies; and
- In partnership with HHS, requiring states to dedicate a section of CCDF state plans and Quality Progress Reports to compensation, including wages and benefits, with clear and actionable details about how they plan to achieve pay parity; require states to submit biannual data on the current state of compensation in their states, disaggregated by race, language, setting type, and ages taught; and implement accountability measures to ensure progress.

STATES

State Legislatures

 State legislatures should ensure that mental health funding bills designate (e.g. set aside) resources to support ECE programs and the families they serve, including attending to the mental health needs of ECE professionals. Many state legislatures have passed bills to address the mental health needs of children in the wake of COVID-19. However, relatively few of these bills have included specific attention to the needs of young children and their caregivers.

State Agencies

As is the case at the federal level, leaders at the state level need to work collaboratively across agencies to address the well-being of young children, families, and ECE professionals. Building the capacity of the behavioral health workforce to meet the needs of young children and their caregivers, bringing these supports into ECE settings, and setting up sustainable funding mechanisms for these services takes cooperation and collaboration of leaders from across multiple agencies, including children's mental health, child care, Head Start, home visiting, Medicaid, health, education, and child welfare. States can utilize funding from a variety of federal grants (such as Child Care Development Block Grant, Preschool Development Grant, Project LAUNCH, and Head Start), along with COVID relief funds, state funds (such as general revenue, tobacco or liquor tax funds), and Medicaid to support some or all of the following strategies:

- Fund and expand access to infant and early childhood mental health consultation (IECMHC) for more ECE professionals and programs, working to ensure that those with the greatest needs have priority in getting access to IECMHC supports. This includes ECE professionals from historically and contemporarily marginalized communities and minority backgrounds (who experienced the most indirect and direct racialized aggression during the pandemic), younger and multiracial providers, those in rural communities or communities with major gaps in mental health infrastructure, and those in center based or informal care settings, who also had higher rates of depression and stress. Teachers who have access to IECMHC report less conflict, more closeness, and increased self-efficacy with children, and use less harsh discipline practices.¹⁴³
- Invest in ECE provider mental health screening and referrals to community based supports. This could include partnering with a community behavioral health agency to pilot on-site screening (e.g. depression screening), and brief mental health therapeutic services for ECE professionals that can be accessed at the beginning or end of the work day, with linkages to longer term care as needed and desired.
- Invest in supporting better access to communitybased mental health services for ECE staff by issuing guidance and rules, especially for medium and large child care centers and public pre-K programs, including:
 1) healthcare benefits and paid leave for staff, including part time staff; 2) directly funding co-pays for staff seeking mental health services; 3) providing funding for substitutes to enable staff to take time off for mental health appointments; and 4) partnering with state health agencies to ensure that ECE providers who qualify for Medicaid services are enrolled.
- Embed initiatives that address ECE provider wellbeing in state training and technical assistance systems. This could include:
 - Training child care supervisors in reflective supervision and provide ongoing support for supervisors in this practice (e.g. through state-led virtual communities of practice);
 - Establishing provider level peer learning teams and group reflective supervision to reduce isolation and increase positive work climate;¹⁴⁴

- Establishing a formal ECE provider mentorship program, where seasoned ECE providers are offered stipends to build relationships with, mentor, and coach younger and newer staff who have been most severely impacted by the pandemic in terms of stress and mental health symptoms, as shown in this report.
- Offering resources and supports that empower providers to focus on their own mental wellness, for example, creating venues for shared dialogue about mental health or launching virtual or live mindfulness training workshops, with follow up opportunities for ongoing mindfulness practice and support. Researchers have found that mindfulness is associated with less conflict and greater closeness between Head Start teachers and children.¹⁴⁵
- Creating a teleconsultation line that child care professionals can use to get support in managing children's challenging behaviors, their own stress, or other mental health related concerns. This can build upon state efforts around ECE shared resources web platforms and shared services alliances among community partners and child care providers.
- Launch a new ECE grant program where programs are offered funds to engage in targeted activities to improve provider mental health. This could include investing in and conducting a program wellness assessment, developing program wide and individualized program wellness plans for staff, as well as collaborative and reflective group consultation. Careful evaluation should be tied to these efforts to determine effectiveness of programs and replication.
- Invest in improving ECE working conditions. This should include:
 - Improving ratios and group sizes (aligned with the Head Start model or with Caring for Our Children Basics). High adult-to-child ratios can have negative effects on the quality of teacher-child interactions,¹⁴⁶ which can in turn influence ECE professionals' mental health and children's well-being.
 - Establishing staffing schedules with adequate breaks and ensuring access to substitute teachers. States should encourage partnerships between ECE programs and undergraduate early education or related programs as a potential source of volunteers who can provide classroom support on a regular basis. States can also create a publicly available ECE professional database using the child care workforce registry or other similar source to make it easier for ECE professionals to find substitute teachers when needed.

Some states are working to address health care benefits and access to mental health services directly. For example:

- Kansas developed and launched an early childhood shared resources web platform that provides child care programs with access to pooled resources and services such as human resources, financial and budgeting, training, and curriculum tools. This shared services network reduces direct costs to educators and providers and maximizes funding to improve access to telehealth and tele-therapy services for individuals and their families, affordable medical coverage, and mental health supports.¹⁴⁷
- Washington prioritized health coverage for child care workers through the Washington Health Benefit Exchange which leveraged federal relief funds to implement a new premium assistance sponsorship program for employees of licensed child care facilities. As of September 2022, nearly half of the state's estimated 35,000 child care employees were connected to healthcare coverage including Medicaid and qualified health plans, 18% of whom pay \$0 in monthly premiums. On average, these sponsored employees save \$246 per month.¹⁴⁸
- Utah is using ARPA funds to pay for outpatient counseling services for ECE providers through local mental health agencies. Funds are distributed through a subcontract from the state's lead CCDF agency to the state health and human services agency. Qualified ECE providers are able to receive up to four mental health sessions a month that can be renewed quarterly, as long as they remain employed in a child care setting.¹⁴⁹
- Arkansas will soon begin using Preschool Development Grant (Birth to Five) funds to offer a range of mental-health related supports for the ECE workforce. They will help ECE providers access mental health treatment services through partnering with AR ConnectNow (a comprehensive, telehealth-based behavioral health treatment program developed during COVID-19), as well as offering support and stress management skill-building groups, and assistance accessing treatment and other services.

- Investing in facility improvements that include access to sunlight and fresh air, as well as dedicated space for adults to take breaks; and
- Expanding opportunities for professional growth through training, coaching, collaborative teaming, and promotions.
- Addressing wage parity issues through revised pay scales, bonuses and access to health care benefits including paid leave.
- Ensure ECE provider mental health is included in states' conceptualizations of quality. This includes building supports for teacher well-being into state QRIS standards through practices such as peer mentoring, opportunities for collaborative decision-making, peer support and career advancement, reflective supervision, mental health consultation, and participation in wellnessfocused trainings, as well as competitive wages and access to benefits — including health insurance, paid sick leave, and retirement benefits.
- Offer funding and technical assistance to ECE programs (center and home-based) to promote children's and families' mental health through:
 - Providing child and family-focused IECMHC to address concerns about children's social and emotional development and behavior, and to help support families through linkages with communitybased therapeutic services.
 - Creating partnerships with behavioral health agencies to offer on-site therapeutic services for children and families in ECE programs.
 - Embedding community health workers or peer navigators to support providers and families in accessing services and supports to address basic needs (housing, employment) and navigate systems (health care, mental health, and child welfare).
 - Co-locating opportunities to engage in parent peer learning and education in ECE settings (such as Incredible Years, Triple P, or Circle of Security) that provide both peer support and skill-building to strengthen parent-child relationships and children's mental health.
 - Offering trauma-informed care training to ECE staff so they will be equipped to recognize the effects of trauma in the children and families in their programs, and can create learning environments that meet the needs of traumatized children and enable them to thrive.

- Implementing social emotional learning curricula (such as Conscious Discipline, Promoting Alternative Thinking Strategies, and Pyramid Model) to promote adult capacity to foster children's development. Pair SEL curricula with ongoing mental health consultation and technical assistance to ensure effective implementation.
- Build collaborative partnerships across ECE state agencies and partner with state Offices of Medicaid, managed care organizations and other health insurers to align funding and mental health promotion efforts. This should include:
 - Ensuring Medicaid staff have data on the mental health needs of young children and their families in the wake of COVID-19 and the evidence-based approaches effective with this population.
 - Working with Medicaid managed care organizations so that they are also aware of the specific billing and regulations regarding IECMH services in order to reduce the likelihood of rejecting claims for allowable services.
 - Revising allowability of service delivery in school settings as a means to deliver needed services to children, families and ECE professionals with efficacy in ECE settings. This is particularly applicable to schoolbased pre-K and Head Start programs. Similarly, ensure that services that are delivered in home or child care settings are eligible for reimbursement.

- Identifying IECMH services for young children that are covered through EPSDT, including specific billing codes for allowable services such as dyadic therapies (a form of family therapy) and parenting groups (group counseling) and work to expand allowability to include child care settings. This may include more specific definitions of medically necessary services in state Medicaid plans that include mental health prevention, assessment and therapeutic services for young children and their families.
- As needed, expanding eligible providers in Medicaid to include professionals who are equipped to deliver IECMH services (including in child care settings), such as social workers and licensed mental health counselors. Create resources and trainings for providers on how to bill and be reimbursed for these services. This education must also extend to billing professionals within agencies.



State Mental Health Profiles

PAGE 39

In the following pages, we present individualized state data for some of the variables included in this report.

This data includes rates of depression and elevated stress for ECE professionals, and ECE professional- reported rates of externalizing, internalizing, and somatic symptoms for children.

We also reviewed contextual policy factors that are relevant for our understanding of mental health in adults and children, including ECE professionals' hourly wages, uninsured rates in ECE professionals, and access to IECMHC services. It is important to note that the contextual factors provided in the profiles are not exhaustive. There are many other factors that could affect mental health. It is critical to consider community and state contexts in understanding state data, including and beyond the factors we reviewed.

These data are descriptive and the associations between variables were not examined. As described in our methods section, a national sample of ECE professionals was sampled from various contacts lists of national early childhood organizations in 2020 and 2021. It is particularly important to note that although survey data represents all fifty states, state samples are not representative of the universe of providers in that state; instead, state findings are representative of the participants who completed the surveys living in those states. Findings from states are based on weighted samples. Weighted samples below 250 should be interpreted with strong caution due to the small sample size. We do not include data with weighted samples below 100 in the state profiles because of the small sample size.

Given the variability in sample sizes and response rates across states, data was weighted based on age, race, ethnicity, and state to match employed child care providers who were 18 years of age or older in the U.S. based on the 2015-2019 American Community Survey.¹⁵⁰ Proportions per state were calculated based on complete-case analysis. Weighting is typically used in survey data to account for non-response and increase representativeness of the sample.¹⁵¹ National and state samples presented in this report are weighted samples. For ease of interpretation, we have rounded weighted samples to the nearest whole number. For each state, each mental health rate was calculated based on the weighted number of participants that responded to that particular mental health survey question (e.g. stress, depression). Therefore, weighted sample sizes vary by state and by outcome variable.

• 28 states have weighted sample sizes above 250 across years and mental health rates.

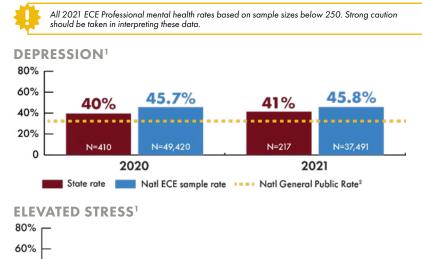
- 13 states have a mix of weighted sample sizes that are above and below 250 across years and outcomes: AL, AR, DC, HI, KA, KS, KY, ME, MT, UT, NE, NV, NH, and WV.
- Seven states have weighted sample sizes below 250 for 2020 across all mental health categories, and sample sizes below 100 for 2021 across all mental health categories: DE, MS, NM, NM, ND, RI, VT, and WY.
- Two states have a mix of weighted sample sizes below 250 and below 100 across years and mental health categories: AK and ID.
- SD has a mix of weighted sample sizes below 100 for the 2020 year and across mental health categories and below 250 for 2021 and across mental health categories.

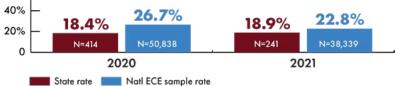
STATE FINDINGS AND PATTERNS

Across states, and across 2020 and 2021, the child mental health rates are higher than the rates of ECE professional mental health.

- OR was consistently found to be in the top 10 states with the highest ECE professional mental health rates: depression rates were above 50% and elevated stress were above 25% for 2020 and 2021, respectively. Although not the highest, concerning rates were also found for child externalizing behaviors (61.6%), internalizing symptoms (66.3%), and somatic symptoms (41.3%).
- HI* was consistently found to be in the 10 states with the lowest ECE professional mental health rates: depression rates were below 36% and elevated stress rates were below 18% for 2020 and 2021, respectively. Rates of increased child somatic symptoms were also lower than many other states (36.7%).
- In 2021, five out of the ten states with the highest rates of depression were also found to report the highest rates of one or more child mental health rate: CA, KS, * NV, OR, and WA.
- In 2021, three out of the ten states with the highest rates of stress were also found to report the highest rates of either one or more child mental health rates: KS,* KY,* and OR.

Mental Health in ECE Professionals





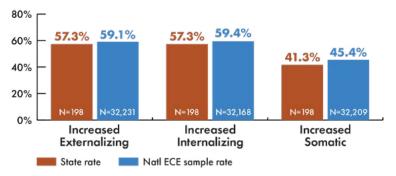
CONTEXTUAL FACTORS

Home-based ECE provider average yearly salary (2021) ³ \$19,353.60	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$23,251.20	SNAP eligible⁴
ECE professionals who tested positive for COVID-19 ECE professionals without	27.1%
health insurance	14.4%

Mental Health in Children

All child mental health rates based on sample sizes below 250. Strong caution should be taken in interpreting these data.

EXTERNALIZING, INTERNALIZING, AND SOMATIC SYMPTOMS¹

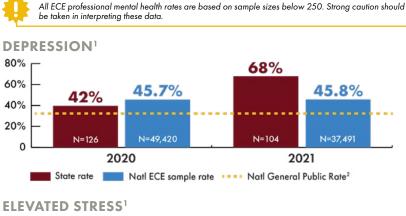


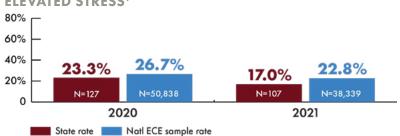
CONTEXTUAL FACTORS

Child poverty rate⁵	22.2%
Children under age three not coping well (as reported by parent) ⁶	25.4%
ECE professionals not aware of or without access to IEMHC	50.3%

- All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- 2. Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://csce.berkeley.edu/workforce-index-2020/report-pdf/
- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; https://api.census.gov/data/2021/acs/acs1/subject (1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

Mental Health in ECE Professionals

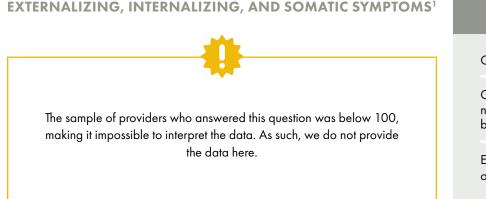




CONTEXTUAL FACTORS

SNAP eligible⁴
X SNAP eligible⁴
7.8%
13.2%

Mental Health in Children



CONTEXTUAL FACTORS

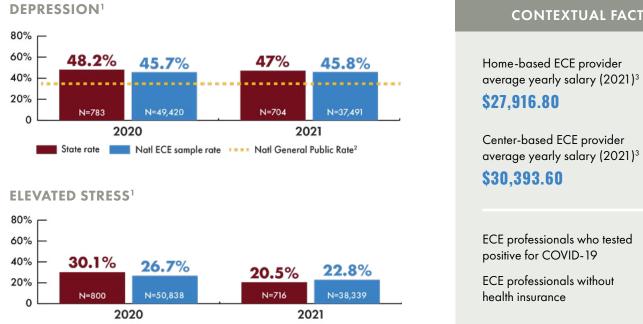
Child poverty rate⁵	12.4%
Children under age three not coping well (as reported by parent) ⁶	26.6%
ECE professionals not aware of or without access to IEMHC	51.3%

CHILDREN'S EQUITY Project

- All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://cscce.berkeley.edu/workforce-index-2020/report-pdf/
- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; < https://api.census.gov/data/2021/acs/acs1/subject (1 November, 2022)
- 6. Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. https://pn3policy.org/pn3-state-policy-roadmap-2022. Vanderbilt University Peabody, College of Education & Human Development. https://pn3policy.org/ pn-3-state-policy-roadmap-2022/

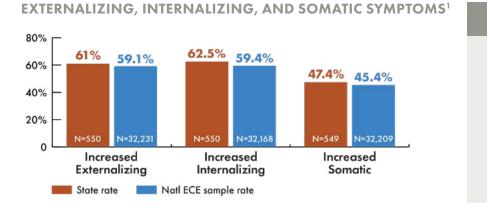
STATE MENTAL HEALTH PROFILE Arizona

Mental Health in ECE Professionals



Mental Health in Children

State rate Natl ECE sample rate



CONTEXTUAL FACTORS

Child poverty rate⁵	17.3%
Children under age three not coping well (as reported by parent) ⁶	34%
ECE professionals not aware of or without access to IEMHC	56.8%

CHILDREN'S EQUITY

PROJECT

- 1. All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://cscce.berkeley.edu/workforce-index-2020/report-pdf/
- The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00). 4.
- U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; <<u>https://api.census.gov/data/2021/acs/acs1/subject</u>>(1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. https://pn3policy.org/

CONTEXTUAL FACTORS

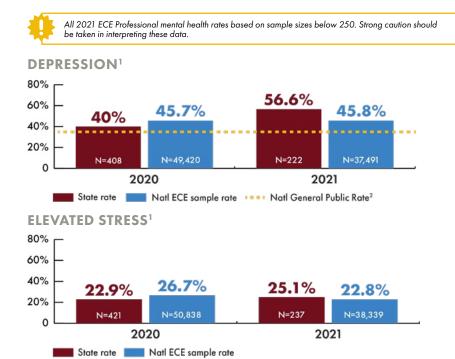
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SNAP

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	eligible⁴
enter-based ECE provider verage yearly salary (2021) ³ 30,393.60	SNAP eligible⁴
CE professionals who tested ositive for COVID-19	23.3%
CE professionals without alth insurance	9.8%

Mental Health in ECE Professionals



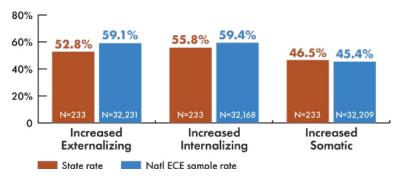
CONTEXTUAL FACTORS

Home-based ECE provider average yearly salary (2021) ³ \$22,368.00	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$29,664.00	SNAP eligible⁴
ECE professionals who tested positive for COVID-19	29.5 %
ECE professionals without health insurance	13.7%

Mental Health in Children

All child mental health rates based on sample sizes below 250. Strong caution should be taken in interpreting these data.

EXTERNALIZING, INTERNALIZING, AND SOMATIC SYMPTOMS¹



CONTEXTUAL FACTORS

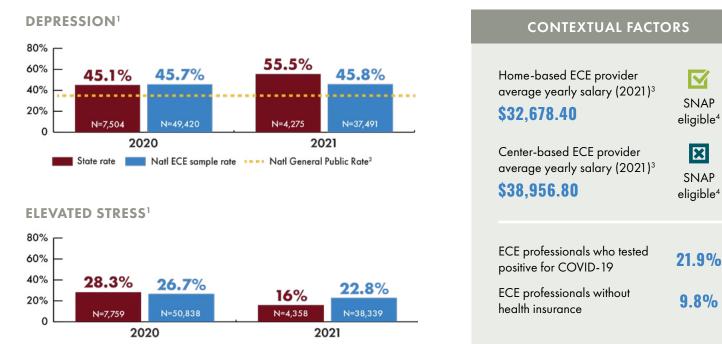
Child poverty rate ⁵	22.4%
Children under age three not coping well (as reported by parent) ⁶	36.4%
ECE professionals not aware of or without access to IEMHC	56.4%

CHILDREN'S EQUITY Project

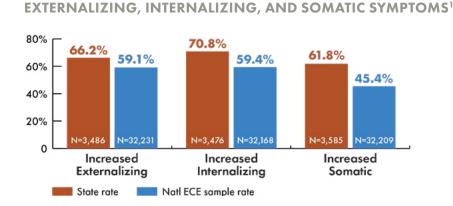
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- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from <u>https://cscce.berkeley.edu/workforce-index-2020/report-pdf/</u>
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- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; https://api.census.gov/data/2021/acs/acs1/subject (1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

STATE MENTAL HEALTH PROFILE California

Mental Health in ECE Professionals



Mental Health in Children



State rate 📃 Natl ECE sample rate

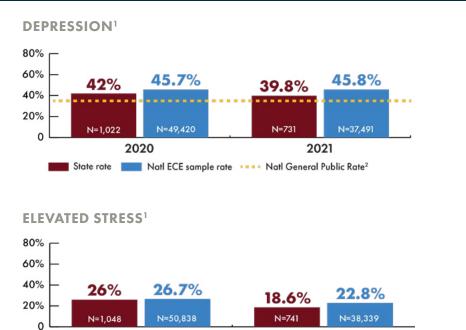
Child poverty rate ⁵	15.8%
Children under age three not coping well (as reported by parent) ⁶	33.1%
ECE professionals not aware of or without access to IEMHC	38.5%

CONTEXTUAL FACTORS

sponses for that CHIL PRO	DREN'S EQUITY IECT
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- All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for the
 particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
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- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; <<u>https://api.census.gov/data/2021/acs/acs1/subject</u>>(1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

Mental Health in **ECE Professionals**

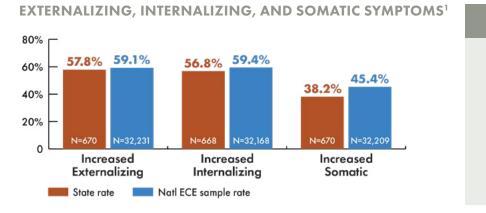


CONTEXTUAL FACTORS

Home-based ECE provider average yearly salary (2021) ³ \$30,777.60	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$34,848.00	SNAP eligible⁴
ECE professionals who tested positive for COVID-19 ECE professionals without health insurance	20.8% 8.9%

Mental Health in Children

2020
State rate Natl ECE sample rate



CONTEXTUAL FACTORS

Child poverty rate⁵	11.8%
Children under age three not coping well (as reported by parent) ⁶	34.8%
ECE professionals not aware of or without access to IEMHC	45.7%

CHILDREN'S EQUITY

PROJECT

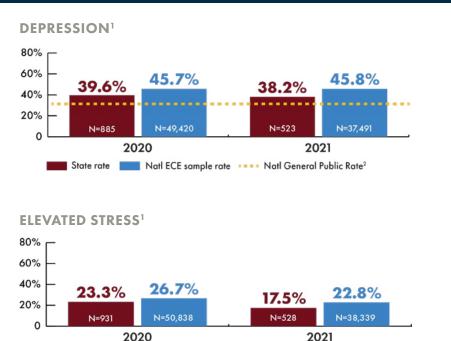
- All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- 2. Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.

2021

- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://csce.berkeley.edu/workforce-index-2020/report-pdf/
- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
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- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

state mental health profile Connecticut

Mental Health in ECE Professionals

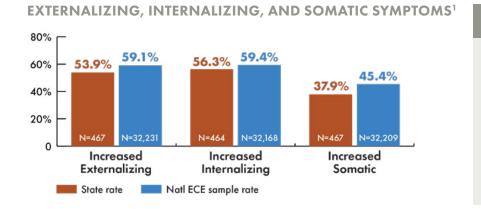


CONTEXTUAL FACTORS

Home-based ECE provider average yearly salary (2021) ³ \$28,339.20	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$34,137.60	SNAP eligible⁴
ECE professionals who tested positive for COVID-19 ECE professionals without health insurance	16.4% 7.5%

Mental Health in Children

State rate 📃 Natl ECE sample rate



CONTEXTUAL FACTORS

Child poverty rate⁵	12.7%
Children under age three not coping well (as reported by parent) ⁶	32%
ECE professionals not aware of or without access to IEMHC	48.3%

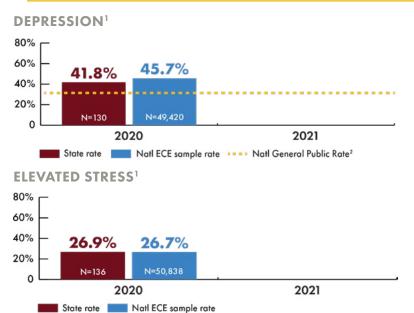
- All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that
 particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- 2. Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://cscce.berkeley.edu/workforce-index-2020/report-pdf/
- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; < https://api.census.gov/data/2021/acs/acs1/subject (1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

STATE MENTAL HEALTH PROFILE Delaware

Mental Health in ECE Professionals



2020 ECE professional mental health rates based on sample sizes below 250. Strong caution should be taken in interpreting these data. 2021 ECE professional mental health rates based on sample sizes below 100; therefore, data is not provided.



CONTEXTUAL FACTORS

SNAP eligible⁴
SNAP eligible ⁴
0% 10.6%

Mental Health in Children

EXTERNALIZING, INTERNALIZING, AND SOMATIC SYMPTOMS¹ CONTEXTUAL FACTORS Child poverty rate⁵ 16 Children under age three not coping well (as reported by parent)⁶ ECE professionals not aware of or without access to IEMHC 37

CHILDREN'S EQUITY PROJECT

16.8%

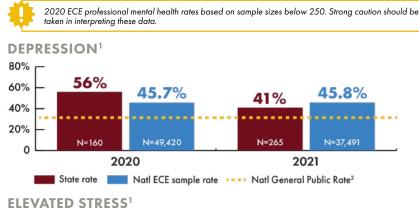
29.5%

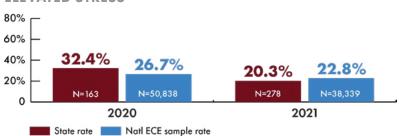
37.5%

- 1. All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://csce.berkeley.edu/workforce-index-2020/report-pdf/
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- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; <<u>https://api.census.gov/data/2021/acs/acs1/subject</u>>(1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

state mental health profile District of Columbia

Mental Health in ECE Professionals





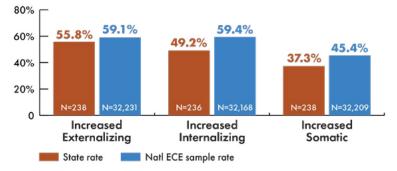
CONTEXTUAL FACTORS

Home-based ECE provider average yearly salary (2021) ³ \$34,425.60	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$51,648.00	SNAP eligible⁴
ECE professionals who tested positive for COVID-19 ECE professionals without health insurance	16.9% 11.5%

Mental Health in Children

 All child mental health rates based on sample sizes below 250. Strong caution should be taken in interpreting these data.

EXTERNALIZING, INTERNALIZING, AND SOMATIC SYMPTOMS¹



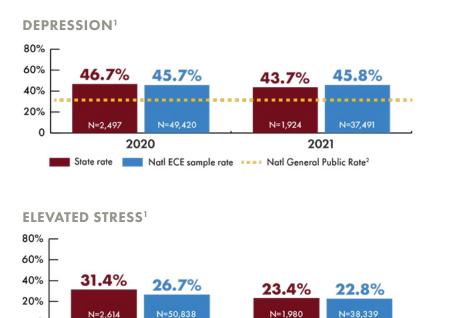
CONTEXTUAL FACTORS

Child poverty rate⁵	23.9%
Children under age three not coping well (as reported by parent) ⁶	41%
ECE professionals not aware of or without access to IEMHC	66.4%

CHILDREN'S EQUITY Project

- 1. All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- 3. Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce
- Index 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from <u>https://cscce.berkeley.edu/workforce-index-2020/report-pdf/</u> 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
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- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

Mental Health in **ECE Professionals**



CONTEXTUAL FACTORS

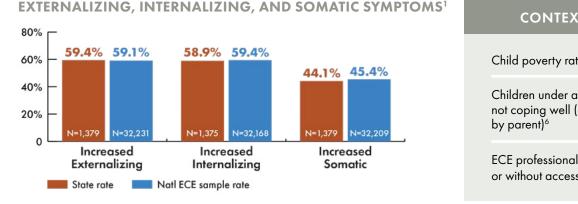
Home-based ECE provider average yearly salary (2021) ³ \$25,440.00	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$27,590.40	SNAP eligible⁴
ECE professionals who tested positive for COVID-19 ECE professionals without health insurance	26.6% 15.7%

Mental Health in Children

2020

State rate Natl ECE sample rate

0



2021

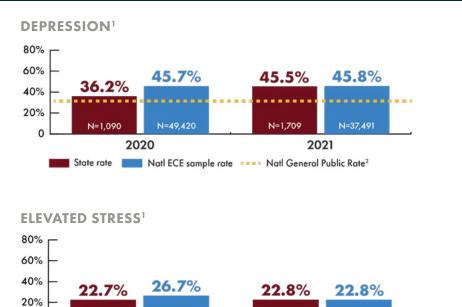
CONTEXTUAL FACTORS

Child poverty rate ⁵	17.8%
Children under age three not coping well (as reported by parent) ⁶	33%
ECE professionals not aware of or without access to IEMHC	74.6%

- CHILDREN'S EQUITY Project
- 1. All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- 2. Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
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- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; < https://api.census.gov/data/2021/acs/acs1/subject> (1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

Mental Health in **ECE Professionals**

N=50,838



CONTEXTUAL FACTORS

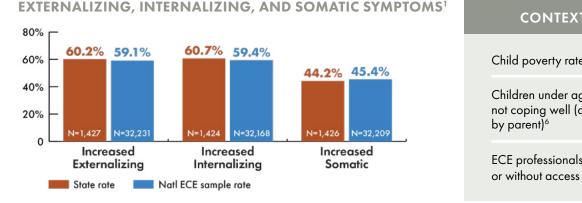
Home-based ECE provider average yearly salary (2021) ³ \$22,041.60	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$35,212.80	SNAP eligible⁴
ECE professionals who tested positive for COVID-19 ECE professionals without health insurance	24.5% 16.5%

Mental Health in Children

2020
State rate Natl ECE sample rate

N=1,101

0



N=1,741

N=38.339

2021

CONTEXTUAL FACTORS

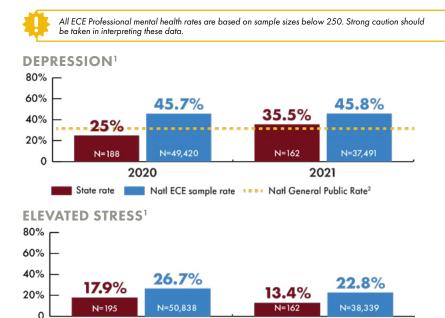
Child poverty rate ⁵	20.2%
Children under age three not coping well (as reported by parent) ⁶	28.8%
ECE professionals not aware of or without access to IEMHC	67.4%

CHILDREN'S EQUITY

PROJECT

- 1. All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- 2. Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://cscce.berkeley.edu/workforce-index-2020/report-pdf/
- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; < https://api.census.gov/data/2021/acs/acs1/subject (1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

Mental Health in ECE Professionals



CONTEXTUAL FACTORS

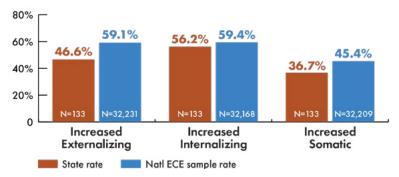
Home-based ECE provider average yearly salary (2021) ³ \$27,014.40	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$37,363.20	X SNAP eligible⁴
ECE professionals who tested positive for COVID-19	11.1%
ECE professionals without health insurance	4.2%

Mental Health in Children

2020
State rate Matl ECE sample rate

All child mental health rates are based on sample sizes below 250. Strong caution should be taken in interpreting these data.

EXTERNALIZING, INTERNALIZING, AND SOMATIC SYMPTOMS¹



CONTEXTUAL FACTORS

Child poverty rate⁵	13.6%
Children under age three not coping well (as reported by parent) ⁶	45%
ECE professionals not aware of or without access to IEMHC	45.3%

CHILDREN'S EQUITY

PROJECT

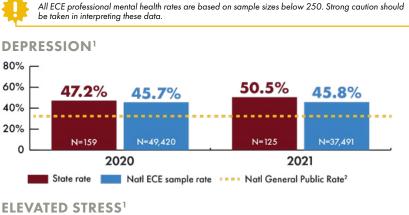
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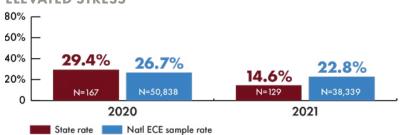
2021

- 2. Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
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- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; https://api.census.gov/data/2021/acs/acs1/subject (1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

state MENTAL HEALTH PROFILE

Mental Health in **ECE Professionals**

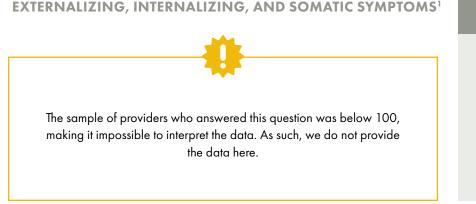




CONTEXTUAL FACTORS

Home-based ECE provider average yearly salary (2021) ³ \$21,216.00	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$25,344.00	SNAP eligible⁴
ECE professionals who tested positive for COVID-19	11.4%
ECE professionals without health insurance	7.3%

Mental Health in Children



CONTEXTUAL FACTORS

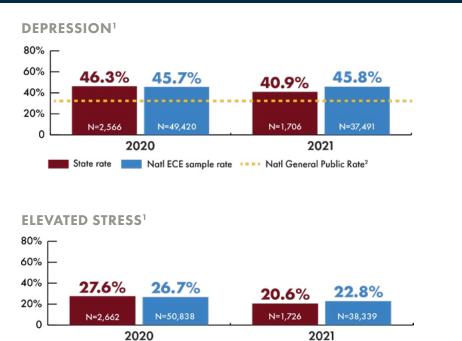
Child poverty rate⁵	13.1%
Children under age three not coping well (as reported by parent) ⁶	33.1%
ECE professionals not aware of or without access to IEMHC	45%

CHILDREN'S EQUITY

PROJECT

- All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that
 particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://csce.berkeley.edu/workforce-index-2020/report-pdf/
- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; < https://api.census.gov/data/2021/acs/acs1/subject (1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

Mental Health in **ECE Professionals**

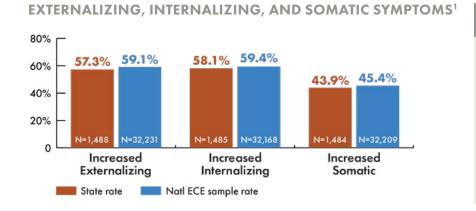


CONTEXTUAL FACTORS

Home-based ECE provider average yearly salary (2021) ³ \$26,515.20	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$33,081.60	SNAP eligible⁴
ECE professionals who tested positive for COVID-19 ECE professionals without health insurance	21% 10.7%

Mental Health in Children

State rate Natl ECE sample rate

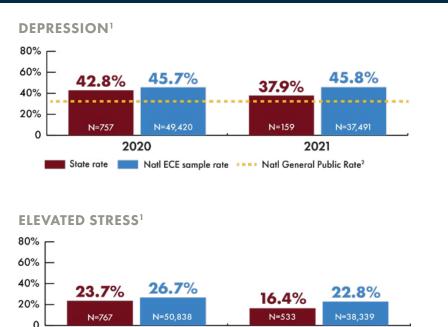


CONTEXTUAL FACTORS

Child poverty rate⁵	16%
Children under age three not coping well (as reported by parent) ⁶	28.4%
ECE professionals not aware of or without access to IEMHC	59.7%

- CHILDREN'S EQUITY PROJECT
- 1. All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- 2. Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
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- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; < https://api.census.gov/data/2021/acs/acs1/subject> (1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

Mental Health in **ECE Professionals**



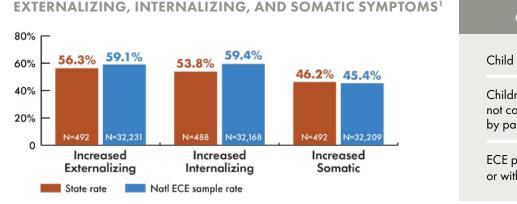
CONTEXTUAL FACTORS

Home-based ECE provider average yearly salary (2021) ³ \$22,348.80	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$28,492.80	SNAP eligible⁴
ECE professionals who tested positive for COVID-19 ECE professionals without health insurance	26.1% 11.8%

Mental Health in Children

2020

State rate 📃 Natl ECE sample rate



CONTEXTUAL FACTORS

Child poverty rate⁵	16%
Children under age three not coping well (as reported by parent) ⁶	30.9%
ECE professionals not aware of or without access to IEMHC	60.9%

CHILDREN'S EQUITY PROJECT

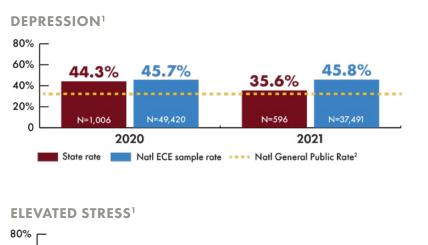
- All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that
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- 2. Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.

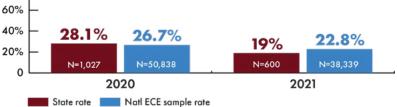
2021

- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://cscce.berkeley.edu/workforce-index-2020/report-pdf/
- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; < https://api.census.gov/data/2021/acs/acs1/subject (1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

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Mental Health in ECE Professionals

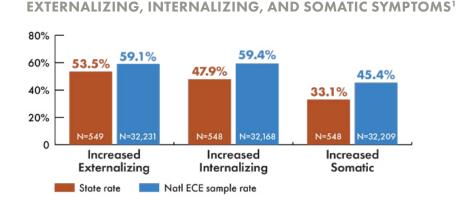




CONTEXTUAL FACTORS

Home-based ECE provider average yearly salary (2021) ³ \$20,601.60	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$29,952.00	SNAP eligible⁴
ECE professionals who tested positive for COVID-19	21.8%
ECE professionals without health insurance	6.2%

Mental Health in Children



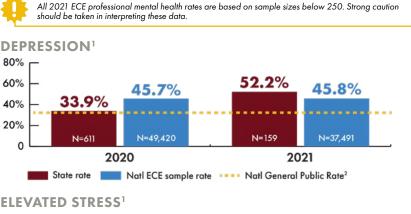
CONTEXTUAL FACTORS

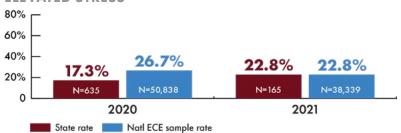
Child poverty rate⁵	12.5%
Children under age three not coping well (as reported by parent) ⁶	26.6%
ECE professionals not aware of or without access to IEMHC	71.5%

- All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that
 particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
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- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; < https://api.census.gov/data/2021/acs/acs1/subject> (1 November, 2022)
- 6. Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. https://pn3policy.org/pn3-state-policy-roadmap-2022. Vanderbilt University Peabody, College of Education & Human Development. https://pn3policy.org/ pn-3-state-policy-roadmap-2022/

STATE MENTAL HEALTH PROFILE Kansas

Mental Health in **ECE Professionals**





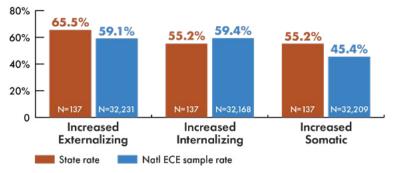
CONTEXTUAL FACTORS

Home-based ECE provider average yearly salary (2021) ³ \$21,638.40	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$37,478.40	X SNAP eligible⁴
ECE professionals who tested positive for COVID-19 ECE professionals without	25.3% 12.7%
health insurance	12.7%

Mental Health in Children

All child mental health rates are based on sample sizes below 250. Strong caution should be taken in interpreting these data.

EXTERNALIZING, INTERNALIZING, AND SOMATIC SYMPTOMS¹



CONTEXTUAL FACTORS

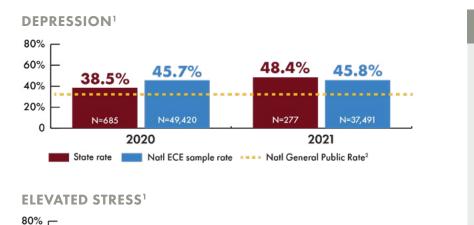
Child poverty rate ⁵	13.4%
Children under age three not coping well (as reported by parent) ⁶	29.1%
ECE professionals not aware of or without access to IEMHC	53.2%

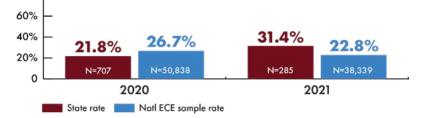
CHILDREN'S EQUITY Project

- 1. All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
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- Annual study Calculated based on hourly wages provided in the 2020 carry childrated workforce index. Microark, c., Adsini, C. S. K., Winebook, M., & Osoni, K. E. (2021). Carry childrated workforce index. Microark and a construction of the study of child Care Employment, University of California, Berkeley. Retrieved from https://cscce.berkeley.edu/workforce-index-2020/report-pdf/

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Mental Health in **ECE Professionals**





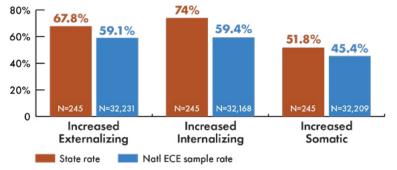
CONTEXTUAL FACTORS

Home-based ECE provider average yearly salary (2021) ³ \$22,310.40	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$37,036.80	SNAP eligible⁴
ECE professionals who tested positive for COVID-19	18.8%
ECE professionals without health insurance	5%

Mental Health in Children

All child mental health rates based on sample sizes below 250. Strong caution should be taken in interpreting these data.

EXTERNALIZING, INTERNALIZING, AND SOMATIC SYMPTOMS¹



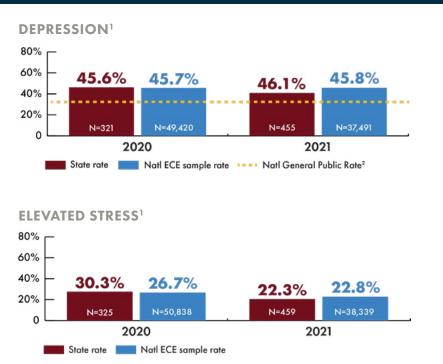
CONTEXTUAL FACTORS

Child poverty rate⁵	22.1%
Children under age three not coping well (as reported by parent) ⁶	27%
ECE professionals not aware of or without access to IEMHC	60.9%

CHILDREN'S EQUITY

- 1. All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
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- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

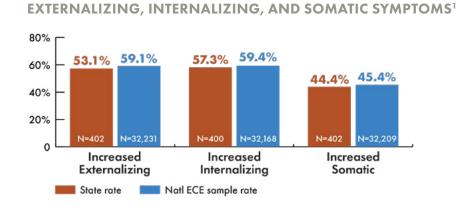
Mental Health in ECE Professionals



CONTEXTUAL FACTORS

Home-based ECE provider average yearly salary (2021) ³ \$19,296.00	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$28,876.80	SNAP eligible⁴
ECE professionals who tested positive for COVID-19 ECE professionals without health insurance	21% 9.5%

Mental Health in Children



CONTEXTUAL FACTORS

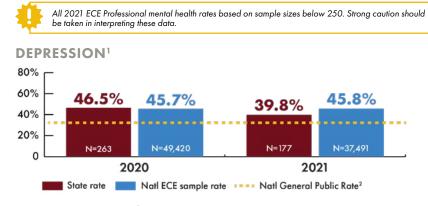
Child poverty rate⁵	26.9%
Children under age three not coping well (as reported by parent) ⁶	28.8%
ECE professionals not aware of or without access to IEMHC	57.4%

CHILDREN'S EQUITY

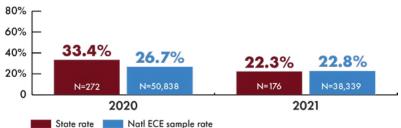
PROJECT

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Mental Health in **ECE Professionals**



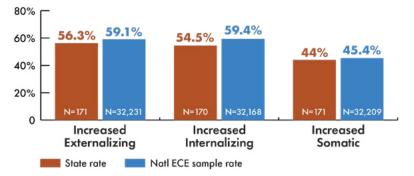
ELEVATED STRESS¹



Mental Health in Children

All child mental health rates based on sample sizes below 250. Strong caution should be taken in interpreting these data.

EXTERNALIZING, INTERNALIZING, AND SOMATIC SYMPTOMS¹



CONTEXTUAL FACTORS

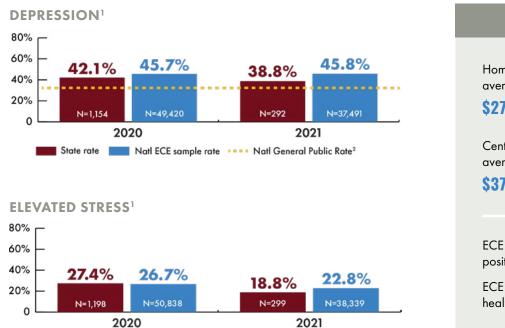
Home-based ECE provider average yearly salary (2021) ³ \$28,608.00	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$34,694.40	X SNAP eligible⁴
ECE professionals who tested positive for COVID-19 ECE professionals without health insurance	13.7% 9.7%

CONTEXTUAL FACTORS

Child poverty rate ⁵	15.1%
Children under age three not coping well (as reported by parent) ⁶	24.8%
ECE professionals not aware of or without access to IEMHC	71.7%

- All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- 2. Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the
- United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
 Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce
- Annual salary calculated based of moury wages provided in the 2020 Early Chilanood Workforce index. McLearly C., Ausini, E.J. E., Whitebook, M., & Olson, K. L. (2021). Early Chilanood Workforce index. McLearly C., Ausini, E.J. E., Whitebook, M., & Olson, K. L. (2021). Early Chilanood Workforce index. McLearly C., Ausini, E.J. E., Whitebook, M., & Olson, K. L. (2021). Early Chilanood Workforce index. McLearly C., Ausini, E.J. E., Whitebook, M., & Olson, K. L. (2021). Early Chilanood Workforce index. McLearly C., Ausini, E.J. E., Whitebook, M., & Olson, K. L. (2021). Early Chilanood Workforce index. McLearly C., Ausini, E.J. E., Whitebook, M., & Olson, K. L. (2021). Early Chilanood Workforce index. McLearly C., Ausini, E.J. E., Whitebook, M., & Olson, K. L. (2021). Early Chilanood Workforce index. McLearly C., Ausini, E.J. E., Whitebook, M., & Olson, K. L. (2021). Early Chilanood Workforce index. McLearly C., Ausini, E.J. E., Whitebook, M., & Olson, K. L. (2021). Early Chilanood Workforce index. McLearly C., Ausini, E.J. E., Whitebook, W., & Olson, K. L. (2021). Early Chilanood Workforce index. McLearly C., Ausini, E.J. E., Whitebook, W., & Olson, K. L. (2021). Early Chilanood Workforce index. McLearly C., Ausini, E.J. E., Whitebook, W., & Olson, K. L. (2021). Early Chilanood Workforce index. McLearly C., Ausini, E.J. E., Whitebook, W., & Olson, K. L. (2021). Early Chilanood Workforce index. McLearly C., Ausini, E.J. E., Whitebook, W., & Olson, K. L. (2021). Early Chilanood Workforce index. McLearly C., Ausini, E.J. E., Whitebook, W., & Olson, K. E. (2021). Early Chilanood Workforce index. McLearly C., Ausini, E.J. E., Whitebook, W., & Olson, K. E. (2021). Early Chilanood Workforce index. McLearly C., Ausini, E.J. E., Whitebook, W., & Olson, K. E. (2021). Early Chilanood Workforce index. McLearly C., Ausini, E.J. E., Whitebook, W., & Olson, K. E. (2021). Early Chilanood Workforce index. McLearly C., Ausini, E.J. E., Whitebook, W., & Olson, K. E. (2021). Early Chilanood Workforce index. McLearly C., A
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; <<u>https://api.census.gov/data/2021/acs/acs1/subject</u>>(1 November, 2022)
- 6. Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. https://pn3policy.org/pn-3-state-policy-roadmap-2022. Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. https://pn3policy.org/ pn-3-state-policy-roadmap-2022/

Mental Health in **ECE Professionals**

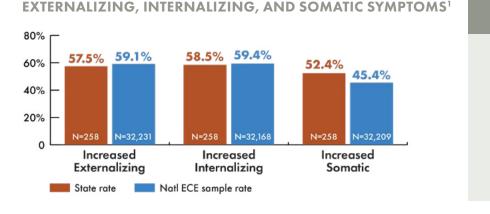


CONTEXTUAL FACTORS

Home-based ECE provider average yearly salary (2021) ³ \$27,628.80	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$37,920.00	SNAP eligible⁴
ECE professionals who tested positive for COVID-19 ECE professionals without health insurance	16.9% 10.1%

Mental Health in Children

State rate Natl ECE sample rate



CONTEXTUAL FACTORS

Child poverty rate⁵	14%
Children under age three not coping well (as reported by parent) ⁶	31.4%
ECE professionals not aware of or without access to IEMHC	62.1%

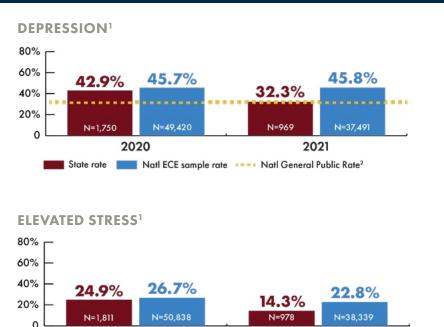
CHILDREN'S EQUITY

PROJECT

- 1. All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://csce.berkeley.edu/workforce-index-2020/report-pdf/
- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; < https://api.census.gov/data/2021/acs/acs1/subject (1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

Massachusetts

Mental Health in ECE Professionals



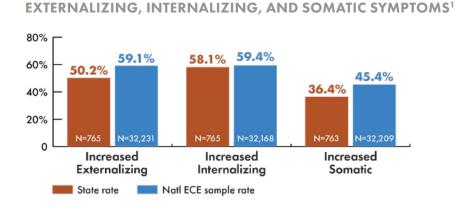
CONTEXTUAL FACTORS

Home-based ECE provider average yearly salary (2021) ³ \$32,236.80	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$40,339.20	SNAP eligible⁴
ECE professionals who tested positive for COVID-19 ECE professionals without	19.6%
health insurance	5.3%

Mental Health in Children

2020

State rate Natl ECE sample rate



CONTEXTUAL FACTORS

Child poverty rate⁵	12.6%
Children under age three not coping well (as reported by parent) ⁶	29.7%
ECE professionals not aware of or without access to IEMHC	59.3%

CHILDREN'S EQUITY PROJECT

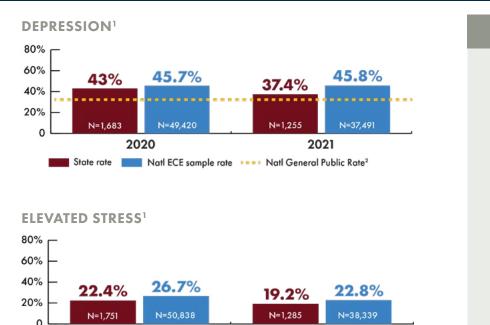
- 1. All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.

2021

- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://cscce.berkeley.edu/workforce-index-2020/report-pdf/
- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; <<u>https://api.census.gov/data/2021/acs/acs1/subject</u>>(1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

state MENTAL HEALTH PROFILE

Mental Health in **ECE Professionals**



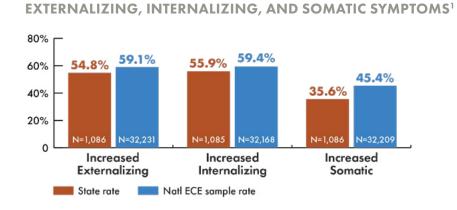
CONTEXTUAL FACTORS

Home-based ECE provider average yearly salary (2021) ³ \$24,633.60	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$33,177.60	SNAP eligible⁴
ECE professionals who tested positive for COVID-19 ECE professionals without health insurance	18.7% 7.5%

Mental Health in Children

2020

State rate Natl ECE sample rate



CONTEXTUAL FACTORS

Child poverty rate⁵	17.8%
Children under age three not coping well (as reported by parent) ⁶	30.3%
ECE professionals not aware of or without access to IEMHC	71.9%

CHILDREN'S EQUITY PROJECT

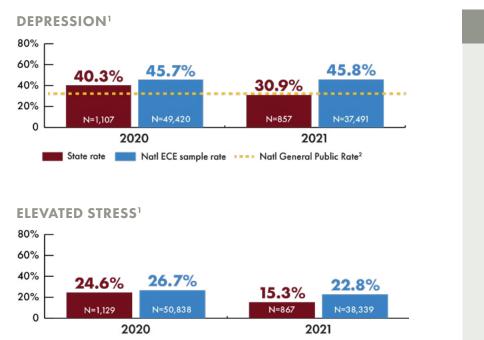
- All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that
 particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.

2021

- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://cscce.berkeley.edu/workforce-index-2020/report-pdf/
- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; < https://api.census.gov/data/2021/acs/acs1/subject (1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

STATE MENTAL HEALTH PROFILE Minnesota

Mental Health in ECE Professionals

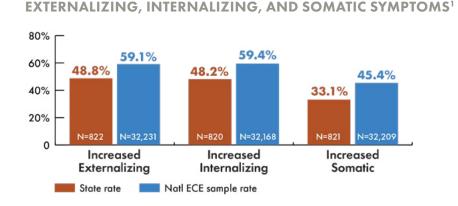


CONTEXTUAL FACTORS

Home-based ECE provider average yearly salary (2021) ³ \$27,321.60	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$34,963.20	SNAP eligible⁴
ECE professionals who tested positive for COVID-19 ECE professionals without health insurance	20.6% 7.4%

Mental Health in Children

State rate Natl ECE sample rate



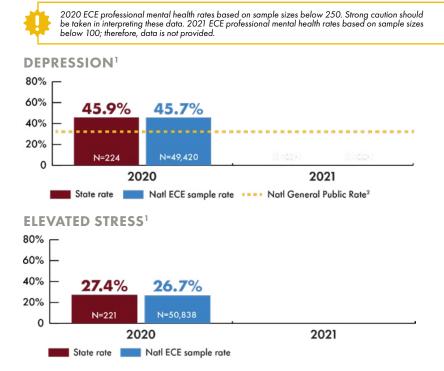
CONTEXTUAL FACTORS

Child poverty rate⁵	10.8%
Children under age three not coping well (as reported by parent) ⁶	32.3%
ECE professionals not aware of or without access to IEMHC	67.9%

- All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that
 particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- 2. Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://cscce.berkeley.edu/workforce-index-2020/report-pdf/
- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; <<u>https://api.census.gov/data/2021/acs/acs1/subject</u>>(1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

STATE MENTAL HEALTH PROFILE Mississippi

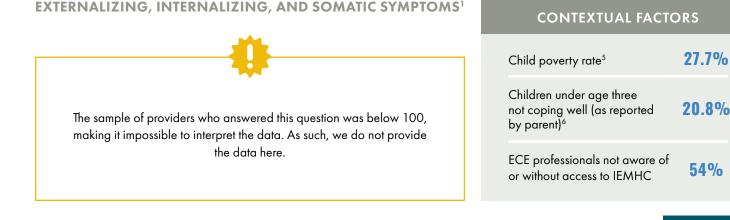
Mental Health in ECE Professionals



CONTEXTUAL FACTORS

Home-based ECE provider average yearly salary (2021) ³ \$17,990.40	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$24,787.20	SNAP eligible⁴
ECE professionals who tested positive for COVID-19 ECE professionals without health insurance	15% 21.1%

Mental Health in Children



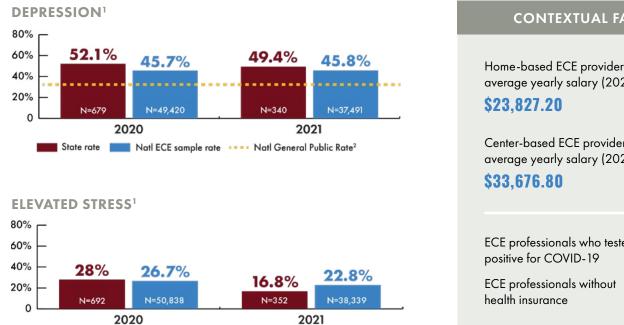
CHILDREN'S EQUITY PROJECT

54%

- All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley, Retrieved from https://cscce.berkeley.edu/workforce-index-2020/report-pdf/
- The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00). 4.
- U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; https://api.census.gov/data/2021/acs/acs/acs1/subject (1 November, 2022) 5.
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. https://pn3policy.org/ 6.

STATE MENTAL HEALTH PROFILE Missouri

Mental Health in ECE Professionals

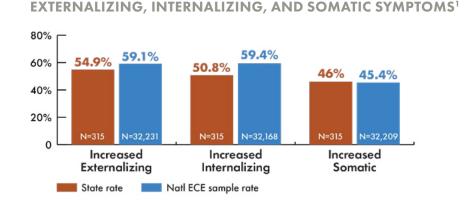


CONTEXTUAL FACTORS

average yearly salary (2021) ³	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$33,676.80	SNAP eligible⁴
ECE professionals who tested positive for COVID-19	28.7%
ECE professionals without health insurance	8.5%

Mental Health in Children

State rate 📃 Natl ECE sample rate

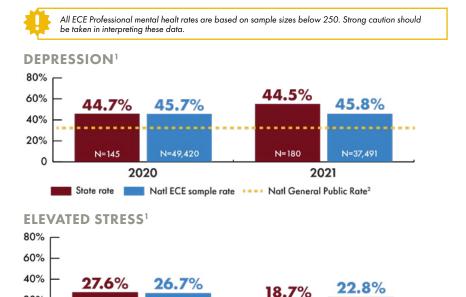


CONTEXTUAL FACTORS

Child poverty rate⁵	16.2%
Children under age three not coping well (as reported by parent) ⁶	30.9%
ECE professionals not aware of or without access to IEMHC	54.4%

- 1. All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://cscce.berkeley.edu/workforce-index-2020/report-pdf/
- The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00). 4.
- U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; https://api.census.gov/data/2021/acs/acs/acs1/subject (1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. https://pn3policy.org/

Mental Health in ECE Professionals



CONTEXTUAL FACTORS

Home-based ECE provider average yearly salary (2021) ³ \$23,059.20	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$29,203.20	SNAP eligible⁴
ECE professionals who tested positive for COVID-19	20.7%
ECE professionals without health insurance	9.9%

Mental Health in **Children**

2020

State rate Natl ECE sample rate

N=144

N=50,838

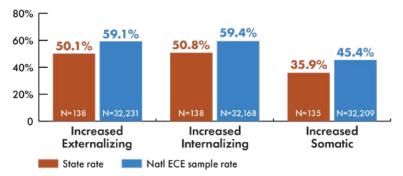
20%

0

All child mental health rates are based on sample sizes below 250. Strong caution should be taken in interpreting these data.

N=179

EXTERNALIZING, INTERNALIZING, AND SOMATIC SYMPTOMS¹



CONTEXTUAL FACTORS

Child poverty rate ⁵	14.1%
Children under age three not coping well (as reported by parent) ⁶	38.3%
ECE professionals not aware of or without access to IEMHC	62.1%

CHILDREN'S EQUITY

PROJECT

- All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
 - 2. Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
 - Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://csce.berkeley.edu/workforce-index-2020/report-pdf/
 - 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
 - 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; <<u>https://api.census.gov/data/2021/acs/acs1/subject</u>>(1 November, 2022)

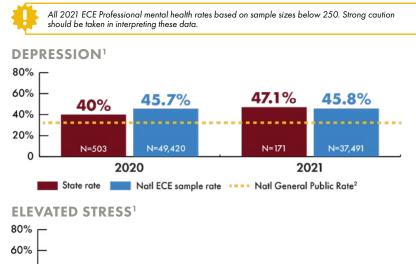
N=38,339

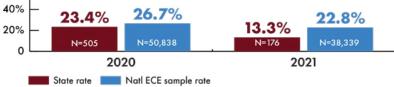
2021

Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

STATE MENTAL HEALTH PROFILE Nebraska

Mental Health in ECE Professionals

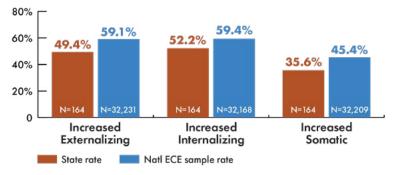




Mental Health in Children

All child mental health rates based on sample sizes below 250. Strong caution should be taken in interpreting these data.

EXTERNALIZING, INTERNALIZING, AND SOMATIC SYMPTOMS¹



CONTEXTORETACTORS	
Home-based ECE provider average yearly salary (2021) ³ \$23,635.20	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$38,937.60	SNAP eligible⁴
ECE professionals who tested positive for COVID-19	25.8%
ECE professionals without health insurance	10.3%

CONTEXTUAL FACTORS

CONTEXTUAL FACTORS

Child poverty rate ⁵	12.5%
Children under age three not coping well (as reported by parent) ⁶	30.1%
ECE professionals not aware of or without access to IEMHC	59.1%

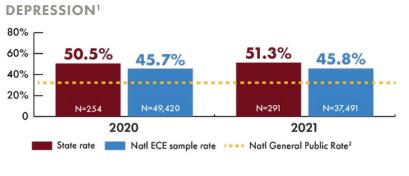
CHILDREN'S EQUITY

PROJECT

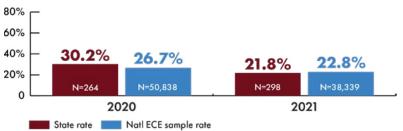
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 - 2. Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
 - Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://csce.berkeley.edu/workforce-index-2020/report-pdf/
 - 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
 - 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; <<u>https://api.census.gov/data/2021/acs/acs1/subject</u>>(1 November, 2022)
 - Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

STATE MENTAL HEALTH PROFILE NGVADA

Mental Health in **ECE Professionals**



ELEVATED STRESS¹



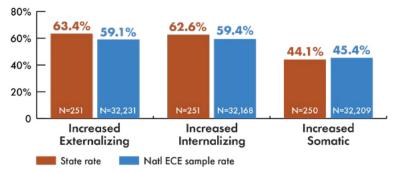
CONTEXTUAL FACTORS

Home-based ECE provider average yearly salary (2021) ³ \$25,497.60	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$30,950.40	SNAP eligible⁴
ECE professionals who tested positive for COVID-19 ECE professionals without health insurance	17% 12.5%

Mental Health in Children

2021 Child Somatic Symptom rate based on sample sizes below 250. Strong caution should be taken in interpreting these data.

EXTERNALIZING, INTERNALIZING, AND SOMATIC SYMPTOMS¹



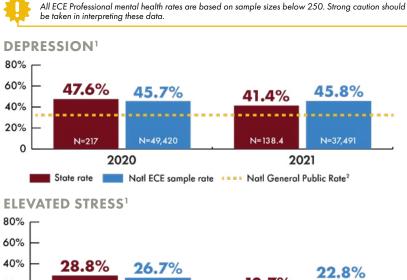
CONTEXTUAL FACTORS

Child poverty rate ⁵	18.8%
Children under age three not coping well (as reported by parent) ⁶	33.4%
ECE professionals not aware of or without access to IEMHC	67.4%

- CHILDREN'S EQUITY PROJECT
- 1. All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L.J. E., Whitebook, M., & Olson, K. L (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from <u>https://cscce.berkeley.edu/workforce-index-2020/report-pdf/</u>
- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; https://api.census.gov/data/2021/acs/acs1/subject (1 November, 2022)
- 6. Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. https://pn3policy.org/pn-3-state-policy-roadmap-2022. Vanderbilt University Peabody, College of Education & Human Development. https://pn3policy.org/ pn-3-state-policy-roadmap-2022/

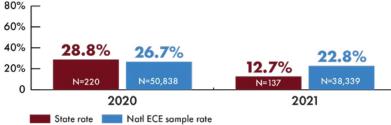
STATE MENTAL HEALTH PROFILE New Hampshire

Mental Health in ECE Professionals



CONTEXTUAL FACTORS

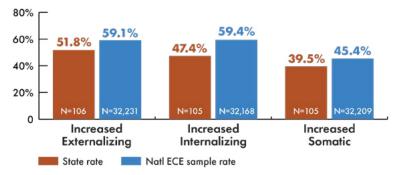
Home-based ECE provider average yearly salary (2021) ³ \$22,598.40	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$30,662.40	SNAP eligible⁴
ECE professionals who tested positive for COVID-19	23.1%
ECE professionals without health insurance	5.4%



Mental Health in Children

All child mental health rates are based on sample sizes below 250. Strong caution should be taken in interpreting these data

EXTERNALIZING, INTERNALIZING, AND SOMATIC SYMPTOMS¹



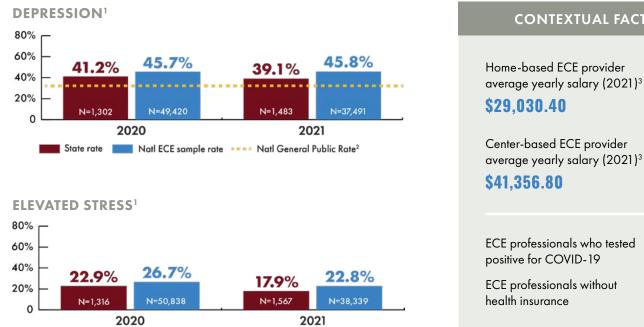
CONTEXTUAL FACTORS

Child poverty rate ⁵	9.2%
Children under age three not coping well (as reported by parent) ⁶	29.1%
ECE professionals not aware of or without access to IEMHC	73.1%

- All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index - 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://cscce.berkeley.edu/workforce-index-2020/report-pdf/
- The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00). 4.
- U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; https://api.census.gov/data/2021/acs/acs1/subject (1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. https://pn3policy.org/ 6. pn-3-state-policy-roadmap-2022/

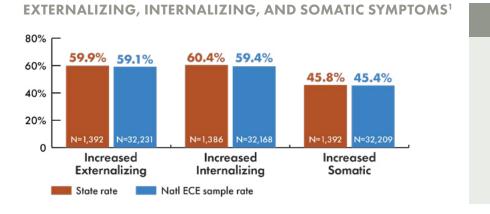
STATE MENTAL HEALTH PROFILE New Jersey

Mental Health in ECE Professionals



Mental Health in Children

State rate 🛛 🔜 Natl ECE sample rate



CONTEXTUAL FACTORS

Child poverty rate⁵	14.2%
Children under age three not coping well (as reported by parent) ⁶	38.8%
ECE professionals not aware of or without access to IEMHC	55.6%

CHILDREN'S EQUITY

PROJECT

- 1. All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://cscce.berkeley.edu/workforce-index-2020/report-pdf/
- The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00). 4.
- U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; <<u>https://api.census.gov/data/2021/acs/acs1/subject</u>>(1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. https://pn3policy.org/ 6.

CONTEXTUAL FACTORS

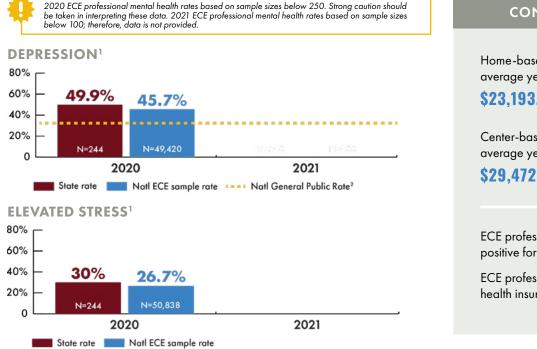
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SNAP

29,030.40	eligible⁴
enter-based ECE provider verage yearly salary (2021) ³ 41,356.80	SNAP eligible⁴
CE professionals who tested ositive for COVID-19	20.1%
CE professionals without ealth insurance	10.1%

STATE MENTAL HEALTH PROFILE New Mexico

Mental Health in ECE Professionals

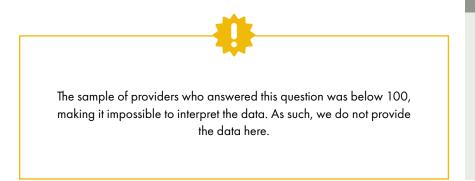


CONTEXTUAL FACTORS

Home-based ECE provider average yearly salary (2021) ³ \$23,193.60	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$29,472.00	SNAP eligible⁴
ECE professionals who tested positive for COVID-19 ECE professionals without health insurance	17.2% 21.6%

Mental Health in Children

EXTERNALIZING, INTERNALIZING, AND SOMATIC SYMPTOMS¹



CONTEXTUAL FACTORS

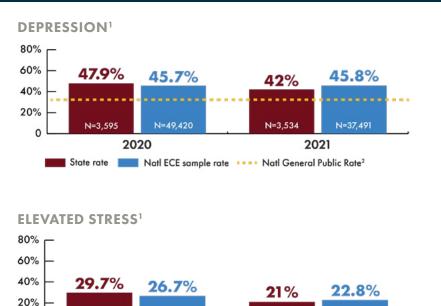
Child poverty rate⁵	23.9%
Children under age three not coping well (as reported by parent) ⁶	37.1%
ECE professionals not aware of or without access to IEMHC	62.4%

- 1. All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://csce.berkeley.edu/workforce-index-2020/report-pdf/
- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; < https://api.census.gov/data/2021/acs/acs1/subject (1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

STATE MENTAL HEALTH PROFILE New York

Mental Health in **ECE Professionals**

N=50,838



CONTEXTUAL FACTORS

Home-based ECE provider average yearly salary (2021) ³ \$30,508.80	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$40,512.00	SNAP eligible⁴
ECE professionals who tested positive for COVID-19 ECE professionals without health insurance	20.9% 10.2%

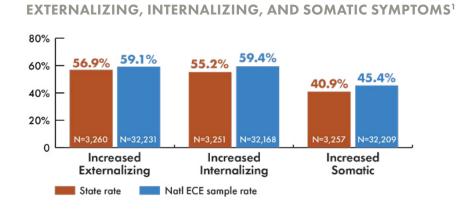
Mental Health in Children

2020

State rate Natl ECE sample rate

N=3,689

0



CONTEXTUAL FACTORS

Child poverty rate⁵	18.5%
Children under age three not coping well (as reported by parent) ⁶	33.4%
ECE professionals not aware of or without access to IEMHC	66.2%

- All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression. 2. Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and Ioneliness during April 2020 COVID-19 restrictions in the
- United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://csce.berkeley.edu/workforce-index-2020/report-pdf/
- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; < https://api.census.gov/data/2021/acs/acs1/subject> (1 November, 2022)

N=38,339

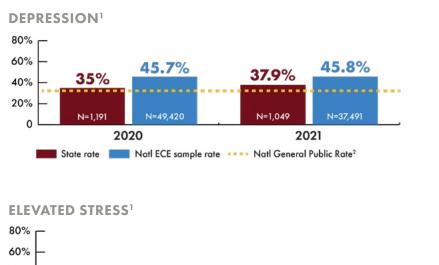
2021

N=3,672

6. Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. https://pn3policy.org/pn3-state-policy-roadmap-2022. Vanderbilt University Peabody, College of Education & Human Development. https://pn3policy.org/ pn-3-state-policy-roadmap-2022/

state mental health profile North Carolina

Mental Health in ECE Professionals

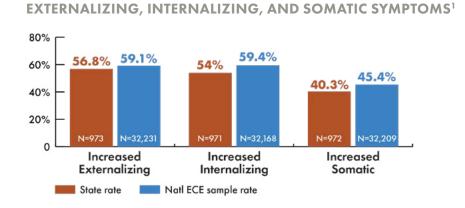


40% 20% 0 19.8% N=1,219 2020 2020 2020 2021 State rate Natl ECE sample rate

CONTEXTUAL FACTORS

Home-based ECE provider average yearly salary (2021) ³ \$22,905.60	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$27,264.00	SNAP eligible⁴
ECE professionals who tested positive for COVID-19 ECE professionals without health insurance	19.9% 15.4%

Mental Health in Children



CONTEXTUAL FACTORS

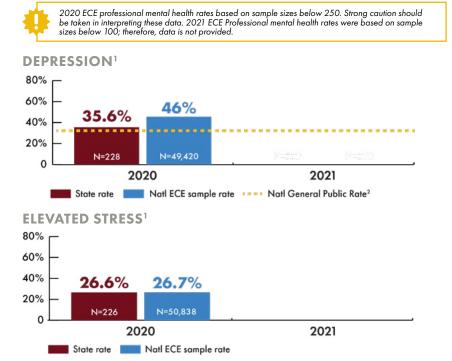
Child poverty rate⁵	18.1%
Children under age three not coping well (as reported by parent) ⁶	32.8%
ECE professionals not aware of or without access to IEMHC	61.8%

CHILDREN'S EQUITY PROJECT

- 1. All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://cscce.berkeley.edu/workforce-index-2020/report-pdf/
- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; <<u>https://api.census.gov/data/2021/acs/acs1/subject</u>>(1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

state mental health profile North Dakota

Mental Health in ECE Professionals

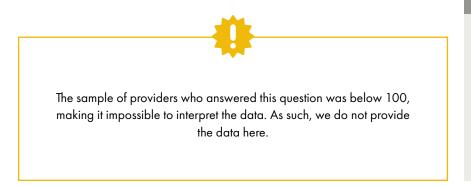


CONTEXTUAL FACTORS

Home-based ECE provider average yearly salary (2021) ³ \$23,462.40	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$31,968.00	SNAP eligible⁴
ECE professionals who tested positive for COVID-19	11.4%
ECE professionals without health insurance	12.8%

Mental Health in Children

EXTERNALIZING, INTERNALIZING, AND SOMATIC SYMPTOMS¹



CONTEXTUAL FACTORS

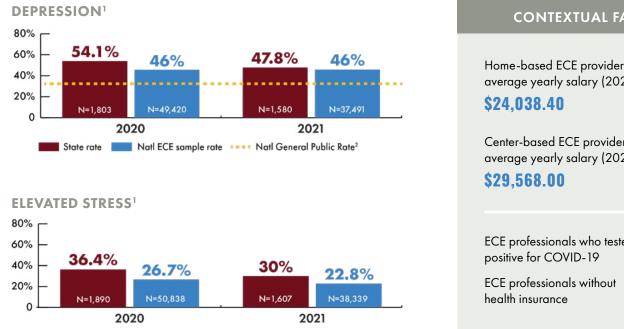
Child poverty rate ⁵	10.5%
Children under age three not coping well (as reported by parent) ⁶	27.4%
ECE professionals not aware of or without access to IEMHC	82.8%

CHILDREN'S EQUITY PROJECT

- 1. All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://csce.berkeley.edu/workforce-index-2020/report-pdf/
- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; < https://api.census.gov/data/2021/acs/acs1/subject (1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

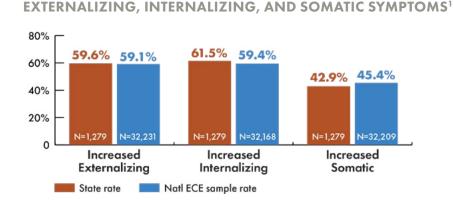
STATE MENTAL HEALTH PROFILE

Mental Health in ECE Professionals



Mental Health in Children

State rate Natl ECE sample rate



CONTEXTUAL FACTORS

Child poverty rate⁵	18.6%
Children under age three not coping well (as reported by parent) ⁶	26.5%
ECE professionals not aware of or without access to IEMHC	73.2%

CHILDREN'S EQUITY

PROJECT

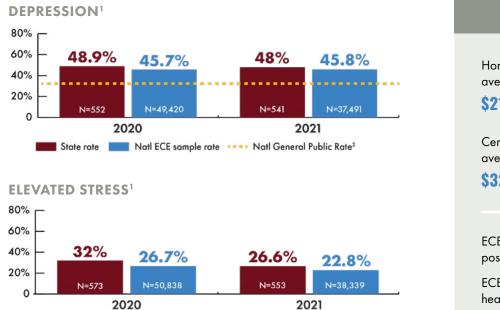
- 1. All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index - 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley, Retrieved from https://cscce.berkeley.edu/workforce-index-2020/report-pdf/
- The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00). 4.
- U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; <<u>https://api.census.gov/data/2021/acs/acs1/subject</u>>(1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. https://pn3policy.org/

CONTEXTUAL FACTORS

average yearly salary (2021) ³	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$29,568.00	SNAP eligible⁴
ECE professionals who tested positive for COVID-19 ECE professionals without health insurance	18.7% 9.6%

STATE MENTAL HEALTH PROFILE Oklahoma

Mental Health in ECE Professionals

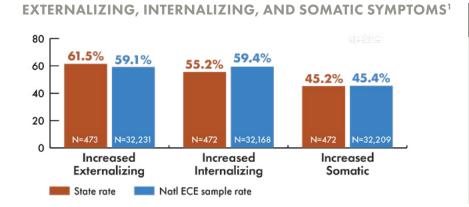


CONTEXTUAL FACTORS

Home-based ECE provider average yearly salary (2021) ³ \$21,043.20	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$32,064.00	SNAP eligible⁴
ECE professionals who tested positive for COVID-19	27.3%
ECE professionals without health insurance	16.1%

Mental Health in Children

State rate Natl ECE sample rate



CONTEXTUAL FACTORS

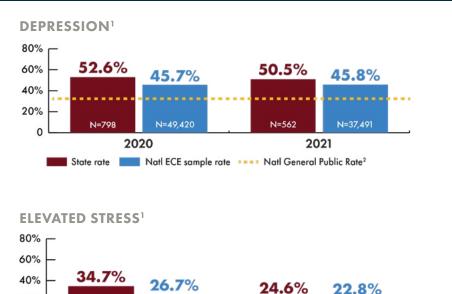
Child poverty rate⁵	21.2%
Children under age three not coping well (as reported by parent) ⁶	23.8%
ECE professionals not aware of or without access to IEMHC	66%

- All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://csce.berkeley.edu/workforce-index-2020/report-pdf/
- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; https://api.census.gov/data/2021/acs/acs1/subject (1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

STATE MENTAL HEALTH PROFILE

Mental Health in ECE Professionals

N=50,838



CONTEXTUAL FACTORS

Home-based ECE provider average yearly salary (2021) ³ \$30,355.20	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$33,273.60	SNAP eligible⁴
ECE professionals who tested positive for COVID-19 ECE professionals without health insurance	12% 9.9%

Mental Health in Children

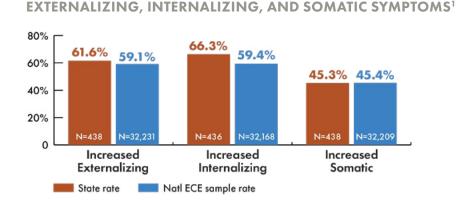
2020

State rate 📃 Natl ECE sample rate

N=833

20%

0



CONTEXTUAL FACTORS

Child poverty rate⁵	13.5%
Children under age three not coping well (as reported by parent) ⁶	41%
ECE professionals not aware of or without access to IEMHC	65.2%

CHILDREN'S EQUITY

PROJECT

- All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- 2. Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://cscce.berkeley.edu/workforce-index-2020/report-pdf/
- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; < https://api.census.gov/data/2021/acs/acs1/subject (1 November, 2022)

N=38,339

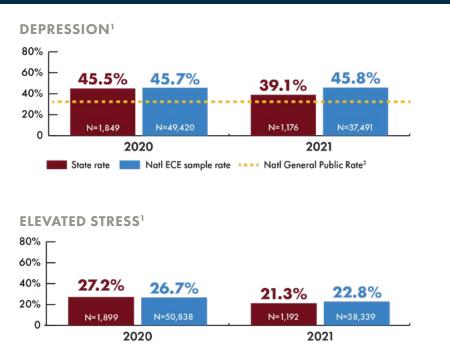
N=569

2021

6. Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. https://pn3policy.org/pn-3-state-policy-roadmap-2022. Vanderbilt University Peabody, College of Education & Human Development. https://pn3policy.org/ pn-3-state-policy-roadmap-2022/

STATE MENTAL HEALTH PROFILE Pennsylvania

Mental Health in ECE Professionals

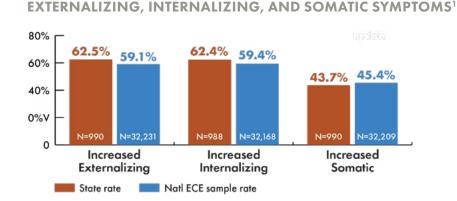


CONTEXTUAL FACTORS

Home-based ECE provider average yearly salary (2021) ³ \$23,500.80	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$29,932.80	SNAP eligible⁴
ECE professionals who tested positive for COVID-19 ECE professionals without	19.4% 7.6%
health insurance	7.0 /0

Mental Health in Children

State rate Natl ECE sample rate



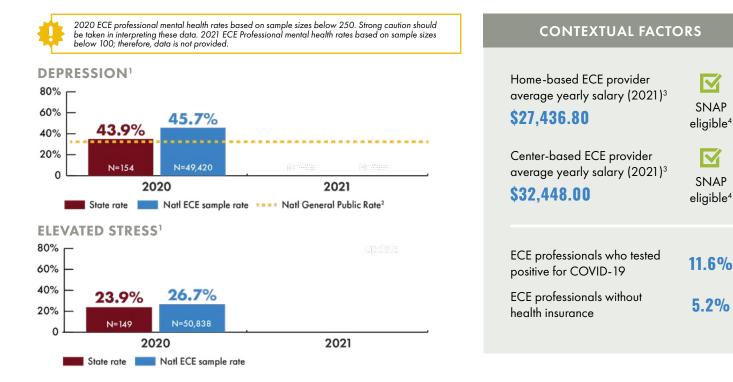
CONTEXTUAL FACTORS

Child poverty rate⁵	16.9%
Children under age three not coping well (as reported by parent) ⁶	31.9%
ECE professionals not aware of or without access to IEMHC	62.5%

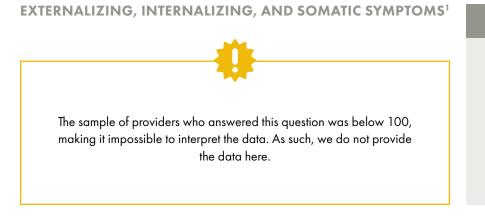
- CHILDREN'S EQUITY PROJECT
- 1. All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- 2. Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://cscce.berkeley.edu/workforce-index-2020/report-pdf/
- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; https://api.census.gov/data/2021/acs/acs1/subject (1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

STATE MENTAL HEALTH PROFILE Rhode Sand

Mental Health in ECE Professionals



Mental Health in Children



CONTEXTUAL FACTORS

Child poverty rate⁵	15%
Children under age three not coping well (as reported by parent) ⁶	26.2%
ECE professionals not aware of or without access to IEMHC	56.7%

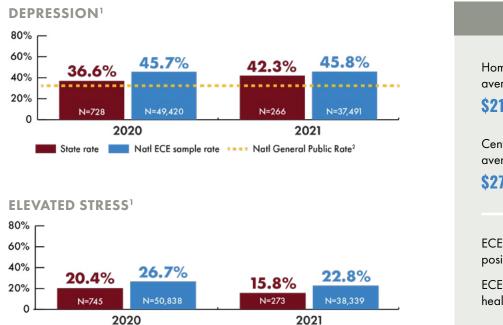
CHILDREN'S EQUITY

PROJECT

- All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that
 particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://csce.berkeley.edu/workforce-index-2020/report-pdf/
- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; <<u>https://api.census.gov/data/2021/acs/acs1/subject</u>>(1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

state mental health profile South Carolina

Mental Health in ECE Professionals

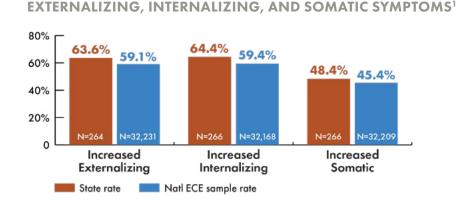


CONTEXTUAL FACTORS

SNAP eligible⁴
SNAP eligible⁴
22.3% 15.3%

Mental Health in Children

State rate 📃 Natl ECE sample rate



CONTEXTUAL FACTORS

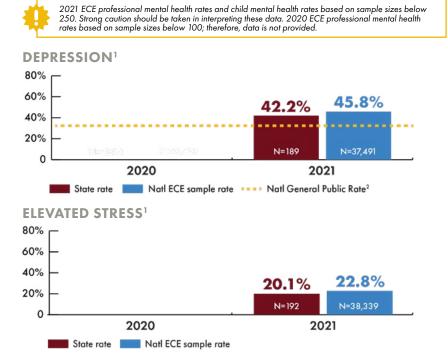
Child poverty rate⁵	20.1%
Children under age three not coping well (as reported by parent) ⁶	31.2%
ECE professionals not aware of or without access to IEMHC	65.3%

CHILDREN'S EQUITY PROJECT

- All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that
 particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://cscce.berkeley.edu/workforce-index-2020/report-pdf/
- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; https://api.census.gov/data/2021/acs/acs1/subject (1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

state MENTAL HEALTH PROFILE SOUTH DAKOTA

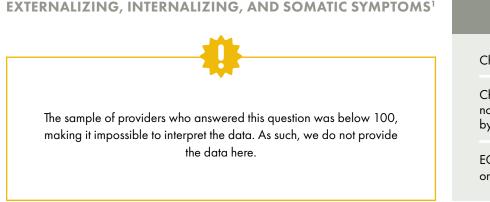
Mental Health in ECE Professionals



CONTEXTUAL FACTORS

Home-based ECE provider average yearly salary (2021) ³ \$21,907.20	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$29,568.00	SNAP eligible⁴
ECE professionals who tested positive for COVID-19 ECE professionals without health insurance	27.3% 18.4%

Mental Health in Children



CONTEXTUAL FACTORS

Child poverty rate⁵	14.6%
Children under age three not coping well (as reported by parent) ⁶	30.1%
ECE professionals not aware of or without access to IEMHC	70.7%

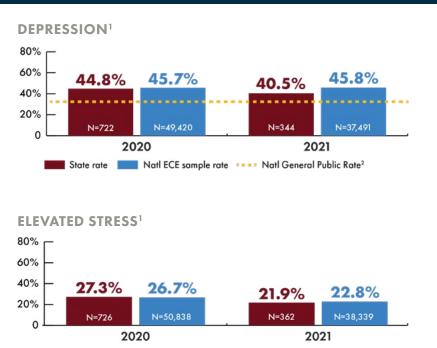
CHILDREN'S EQUITY Project

- 1. All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
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- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; <<u>https://api.census.gov/data/2021/acs/acs1/subject</u>>(1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

STATE MENTAL HEALTH PROFILE

Tennessee

Mental Health in ECE Professionals

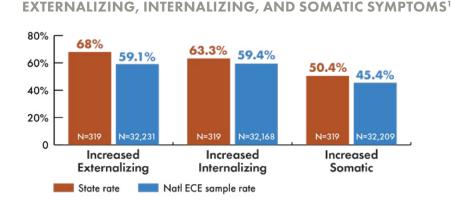


CONTEXTUAL FACTORS

SNAP eligible⁴
SNAP eligible⁴
24.7% 11.7%

Mental Health in Children

State rate Natl ECE sample rate



CONTEXTUAL FACTORS

Child poverty rate⁵	18.1%
Children under age three not coping well (as reported by parent) ⁶	32.4%
ECE professionals not aware of or without access to IEMHC	56.4%

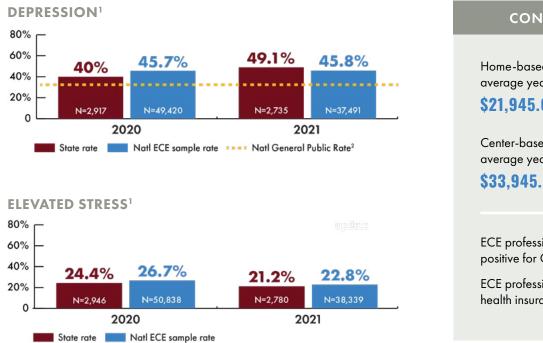
CHILDREN'S EQUITY PROJECT

- 1. All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://csce.berkeley.edu/workforce-index-2020/report-pdf/
- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; https://api.census.gov/data/2021/acs/acs1/subject (1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

STATE MENTAL HEALTH PROFILE

Texas

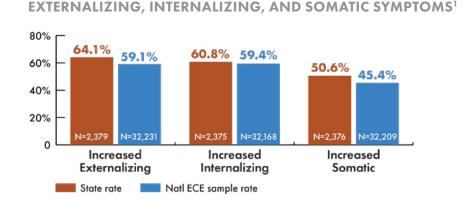
Mental Health in **ECE Professionals**



CONTEXTUAL FACTORS

Home-based ECE provider average yearly salary (2021) ³ \$21,945.60	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$33,945.60	SNAP eligible⁴
ECE professionals who tested positive for COVID-19	23.9%
ECE professionals without health insurance	20.6%

Mental Health in Children



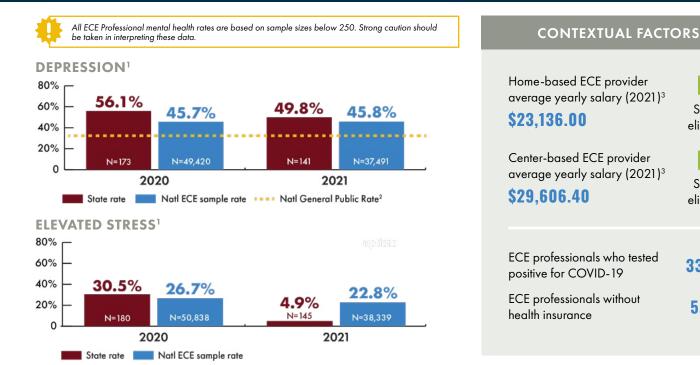
CONTEXTUAL FACTORS

Child poverty rate⁵	19.6%
Children under age three not coping well (as reported by parent) ⁶	30.5%
ECE professionals not aware of or without access to IEMHC	63.6%

CHILDREN'S EQUITY PROJECT

- All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://cscce.berkeley.edu/workforce-index-2020/report-pdf/
- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; < https://api.census.gov/data/2021/acs/acs1/subject (1 November, 2022)
- 6. Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. https://pn3policy.org/pn3-state-policy-roadmap-2022. Vanderbilt University Peabody, College of Education & Human Development. https://pn3policy.org/ pn-3-state-policy-roadmap-2022/

state MENTAL HEALTH PROFILE

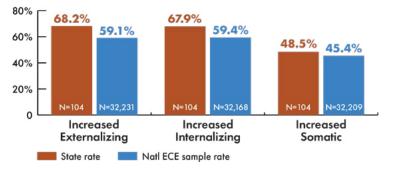


Mental Health in ECE Professionals

Mental Health in Children

All child mental health rates are based on sample sizes below 250. Strong caution should be taken in interpreting these data.

EXTERNALIZING, INTERNALIZING, AND SOMATIC SYMPTOMS¹



Child poverty rate⁵8.1%Children under age three
not coping well (as reported
by parent)⁶44.6%ECE professionals not aware of
or without access to IEMHC41.8%

CONTEXTUAL FACTORS

SNAP

eligible⁴

SNAP

eligible⁴

33.7%

5.7%

CHILDREN'S EQUITY

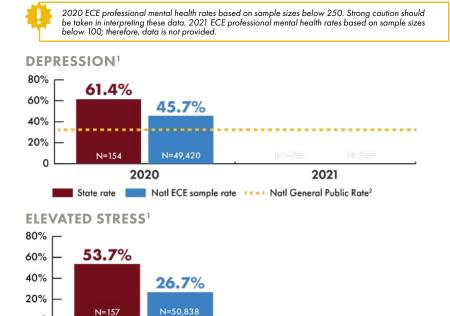
PROJECT

- 1. All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- 2. Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
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- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; <<u>https://api.census.gov/data/2021/acs/acs1/subject</u>>(1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

STATE MENTAL HEALTH PROFILE

Vermont

Mental Health in ECE Professionals



CONTEXTUAL FACTORS

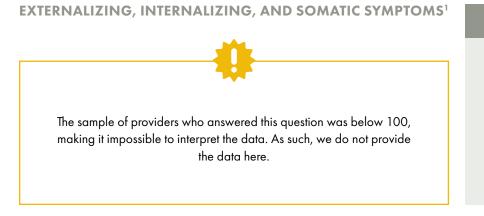
Home-based ECE provider average yearly salary (2021) ³ \$30,412.80	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$36,172.80	X SNAP eligible⁴
ECE professionals who tested positive for COVID-19	6.2%
ECE professionals without health insurance	6.6%

Mental Health in Children

2020

State rate Natl ECE sample rate

0



CONTEXTUAL FACTORS

Child poverty rate⁵	10.4%
Children under age three not coping well (as reported by parent) ⁶	35.5%
ECE professionals not aware of or without access to IEMHC	41.1%

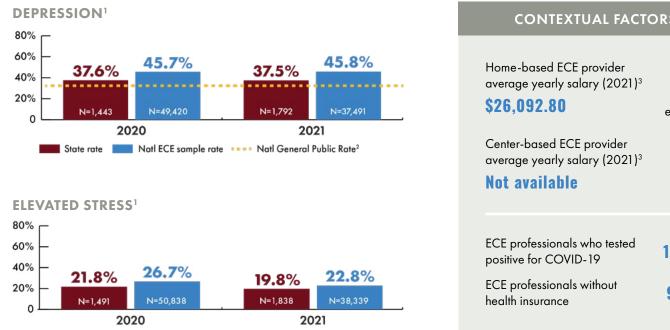
- al number of weighted responses for that PROJECT
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 particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.

2021

- Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
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- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; <<u>https://api.census.gov/data/2021/acs/acs1/subject</u>>(1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

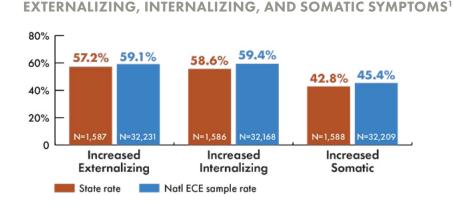
STATE MENTAL HEALTH PROFILE Virginia

Mental Health in ECE Professionals



Mental Health in Children

State rate Natl ECE sample rate



CONTEXTUAL FACTORS

Child poverty rate⁵	13.1%
Children under age three not coping well (as reported by parent) ⁶	38.3%
ECE professionals not aware of or without access to IEMHC	62.4%

CHILDREN'S EQUITY

PROJECT

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- Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
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- The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00). 4.
- U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; https://api.census.gov/data/2021/acs/acs/acs1/subject (1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. https://pn3policy.org/ 6.

CONTEXTUAL FACTORS

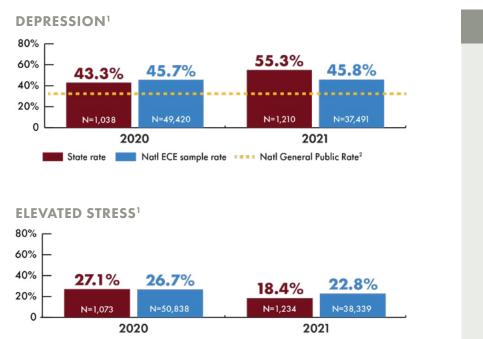
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SNAP eligible⁴ 19.3%

9.3%

STATE MENTAL HEALTH PROFILE Washington

Mental Health in ECE Professionals

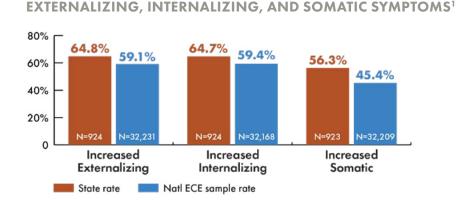


CONTEXTUAL FACTORS

SNAP eligible⁴
SNAP eligible⁴
20.8% 8.8%

Mental Health in Children

State rate 📃 Natl ECE sample rate



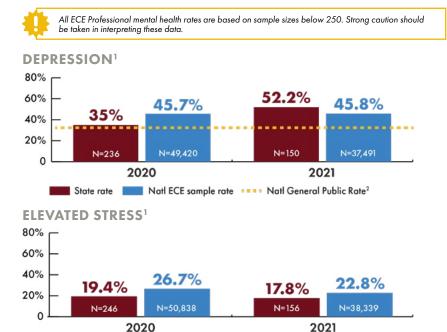
CONTEXTUAL FACTORS

Child poverty rate⁵	12%
Children under age three not coping well (as reported by parent) ⁶	36.5%
ECE professionals not aware of or without access to IEMHC	49.6%

- CHILDREN'S EQUITY PROJECT
- All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that
 particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- 2. Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
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- 6. Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. https://pn3policy.org/pn3-state-policy-roadmap-2022. Vanderbilt University Peabody, College of Education & Human Development. https://pn3policy.org/ pn-3-state-policy-roadmap-2022/

state MENTAL HEALTH PROFILE West Virginia

Mental Health in ECE Professionals



CONTEXTUAL FACTORS

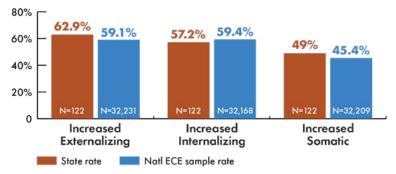
Home-based ECE provider average yearly salary (2021) ³ \$20,428.80	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$29,587.20	SNAP eligible⁴
ECE professionals who tested positive for COVID-19 ECE professionals without	18.6%
health insurance	15.1%

Mental Health in Children

State rate 📃 Natl ECE sample rate

All child mental health rates are based on sample sizes below 250. Strong caution should be taken in interpreting these data.

EXTERNALIZING, INTERNALIZING, AND SOMATIC SYMPTOMS¹



CONTEXTUAL FACTORS

Child poverty rate ⁵	20.7%
Children under age three not coping well (as reported by parent) ⁶	24.6%
ECE professionals not aware of or without access to IEMHC	71.2%

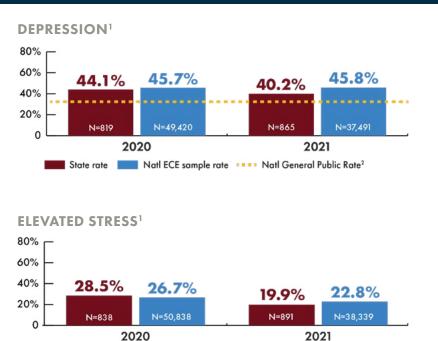
CHILDREN'S EQUITY

PROJECT

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STATE MENTAL HEALTH PROFILE

Mental Health in ECE Professionals

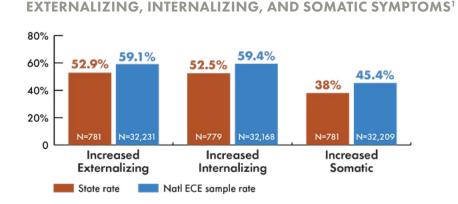


CONTEXTUAL FACTORS

Home-based ECE provider average yearly salary (2021) ³ \$23,750.40	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$29,049.60	SNAP eligible⁴
ECE professionals who tested positive for COVID-19	23%
ECE professionals without health insurance	10%

Mental Health in Children

State rate 📃 Natl ECE sample rate



CONTEXTUAL FACTORS

Child poverty rate⁵	13.4%
Children under age three not coping well (as reported by parent) ⁶	32.1%
ECE professionals not aware of or without access to IEMHC	75.4%

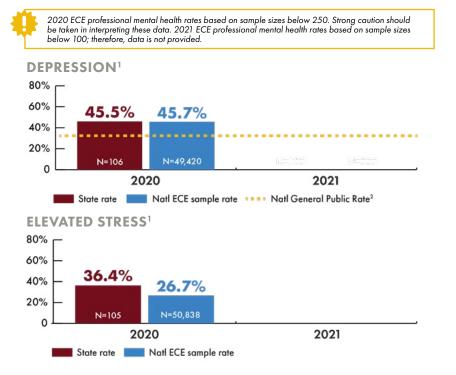
CHILDREN'S EQUITY

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- 2. Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://cscce.berkeley.edu/workforce-index-2020/report-pdf/
- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; <<u>https://api.census.gov/data/2021/acs/acs1/subject</u>>(1 November, 2022)
- Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. <u>https://pn3policy.org/pn-3-state-policy-roadmap-2022/</u>

STATE MENTAL HEALTH PROFILE Wyoming

Mental Health in ECE Professionals

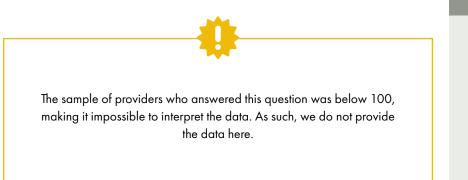


CONTEXTUAL FACTORS

Home-based ECE provider average yearly salary (2021) ³ \$25,382.40	SNAP eligible⁴
Center-based ECE provider average yearly salary (2021) ³ \$27,936.00	SNAP eligible⁴
ECE professionals who tested positive for COVID-19	12.3%
ECE professionals without health insurance	10.2%

Mental Health in Children

EXTERNALIZING, INTERNALIZING, AND SOMATIC SYMPTOMS¹



CONTEXTUAL FACTORS

Child poverty rate⁵	13.4%
Children under age three not coping well (as reported by parent) ⁶	32.2%
ECE professionals not aware of or without access to IEMHC	48.4%

CHILDREN'S EQUITY PROJECT

- 1. All samples presented in these profiles are weighted samples. The N's presented in each bar graph represent the total number of weighted responses for that particular mental health question. e.g. N = weighted number of participants who answered the question/s about depression.
- Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- Annual salary calculated based on hourly wages provided in the 2020 Early Childhood Workforce Index: McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://csce.berkeley.edu/workforce-index-2020/report-pdf/
- 4. The following SNAP 2021 eligibility criteria was used: 130% below the poverty line for a family of 4 (at or below \$34,450.00).
- 5. U.S. Census Bureau; 2021 American Community Survey 1-Year Estimates Subject Tables, Table S1703; < https://api.census.gov/data/2021/acs/acs1/subject (1 November, 2022)
- 6. Prenatal-to-3 State Policy Impact Center. (2022). Prenatal-to-3 state policy roadmap 2022. Vanderbilt University Peabody, College of Education & Human Development. https://pn3policy.org/ pn-3-state-policy-roadmap-2022/



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NATIONAL PROFILE TABLES

Table 1: ECE Professional Mental Health by State

Note. Data was weighted (Cohort 1 and Cohort 2 weights) based on age, race, ethnicity, and state to match employed child care providers (occupation code: 4600) who were 18 years of age or older in the U.S. based on the 2015-2019 American Community Survey.¹⁵²

States	Depression Rate (2020; Cohort 1)	Weighted Sample Size	Depression Rate (2021; Cohort 2)	Weighted Sample Size	Elevated Stress (2020; Cohort 1)	Weighted Sample Size	Elevated Stress (2021; Cohort 2)	Weighted Sample Size
Alabama	39.6	409	41.3**	217	18.4	414	18.9**	241
Alaska**	42.1 * *	126	67.9**	104	23.3**	127	17**	107
Arizona	48.2	783	47.1	704	30.1	800	20.5	716
Arkansas	40	408	56.6**	222	22.9	421	25.1 * *	237
California	45.1	7,504	55.5	4,275	28.3	7,759	16	4,358
Colorado	42	1,022	39.8	731	26	1,048	18.6	741
Connecticut	39.6	885	38.2	523	23.3	931	17.5	528
Delaware	41.8**	130	N/A*	41	26.9**	136	N/A*	40
District of Columbia**	56	160	41	265	32.4	163	20.3	278
Florida	46.7	2,497	43.7	1,924	31.4	2,614	23.4	1.980
Georgia	36.2	1,090	45.5	1,709	22.7	1,101	22.8	1,741
Hawaii	25**	188	35.5**	162	17.9((195	13.4**	162
Idaho	47.2**	159	50.5**	125	29.4**	167	14.6**	129
Illinois	46.3	2,566	40.9	1,706	27.8	2,662	20.6	1,726
Indiana	42.8	757	37.9	527	23.7	767	16.4	533
lowa	44.3	1,006	35.6	596	28.1	1,027	19	600
Kansas	33.9	611	52.2**	159	17.3	635	22.8**	165
Kentucky	38.5	685	48.4	277	21.8	707	31.4	285
Louisiana	45.6	321	46.1	455	30.3	325	22.3	459
Maine	46.5	263	39.8**	177	33.4	272	22.3**	176
Maryland	42.1	1,154	38.8	292	27.4	1,198	18.8	299
Massachusetts	42.9	1,750	32.3	969	24.9	1,811	14.3	978

* Weighted sample is under 100. Proportions not calculated due to insufficient data.

**Proportion based on weighted sample under 250. Use strong caution when interpreting data.

Michigan	43	1,683	37.4	1,255	22.4	1,751	19.2	1,285
Minnesota	40.3	1,107	30.9	857	24.6	1,129	15.3	867
Mississippi	45.9	224	N/A*	94	27.4	221	N/A*	95
Missouri	52.1	679	49.4	340	28	692	16.8	352
Montana	44.7**	145	44.5**	180	27.6**	144	18.7**	179
Nebraska	40	503	47.1 * *	171	23.4	505	13.3**	176
Nevada	50.5	254	51.3	291	30.2	264	21.8	298
New Hampshire	47.6**	217	41.4**	138	28.8**	220	12.7**	137
New Jersey	41.2	1,302	39.1	1,483	22.9	1,316	17.9	1,567
New Mexico	49.9**	244	N/A*	76	30**	244	N/A*	76
New York	47.9	3,595	42	3,534	29.7	3,689	21	3,672
North Carolina	35	1,191	37.9	1,049	19.8	1,219	19.7	1,056
North Dakota	35.6**	228	N/A*	70	26.6	226	N/A*	67
Ohio	54.1	1,803	47.8	1,580	36.4	1,890	30	1,607
Oklahoma	48.9	552	48	541	32	573	26.6	553
Oregon	52.6	798	50.5	562	34.7	833	24.6	569
Pennsylvania	45.4	1,849	39.1	1,176	27.2	1,899	21.3	1,192
Rhode Island	43.9**	154	N/A*	72	23.9**	149	N/A	72
South Carolina	36.6	728	42.3	266	20.4	745	15.8	273
South Dakota	N/A*	82	42.2**	189	N/A*	82	20.1 * *	192
Tennessee	44.8	722	40.5	344	27.3	726	21.9	362
Texas	40	2,917	49.1	2,735	24.4	2,946	21.2	2,780
Utah	56.1**	173	49.8**	141	30.5**	180	4.9**	145
Vermont	61.4**	154	N/A*	73	53.7**	157	NA*	73
Virginia	37.6	1,443	37,5	1,792	21.8	1,491	19.8	1,838
Washington	43.3	1,038	55.3	1,210	27.1	1,073	18.4	1,234
West Virginia	35**	236	52.2**	150	19.4**	246	17.8**	156
Wisconsin	44.1	819	40.2	865	28.5	838	19.9	891
Wyoming	45.5**	106	N/A*	75	36.4**	106	N/A*	76

* Weighted sample is under 100. Proportions not calculated due to insufficient data.

** Proportion based on weighted sample under 250. Use strong caution when interpreting data.

Table 2: Child Mental Health by State

Note. Data was weighted (Cohort 2 weight) based on age, race, ethnicity, and state to match employed child care providers (occupation code: 4600) who were 18 years of age or older in the U.S. based on the 2015-2019 American Community Survey.¹⁵³

States	Teacher- Reported Child Externalizing Behaviors (%)	Weighted Sample Size	Teacher- Reported Child Internalizing Behaviors (%)	Weighted Sample Size	Teacher- Reported Increased Child Somatic Symptoms (%)	Weighted Sample Size
Alabama**	57.3	198	57.3	198	41.6	198
Alaska*	N/A	98	N/A	98	N/A	98
Arizona	61	550	62.5	550	47.4	549
Arkansas**	528	233	55.8	233	46.5	233
California	66.2	3,486	70.8	3,476	61.8	3,485
Colorado	57.8	670	56.8	668	38.2	670
Connecticut	53.9	467	56.3	464	37.9	467
Delaware*	N/A	35	N/A	35	N/A	35
District of Columbia	55.8	238	49.2	236	37.3	238
Florida	59.4	1,379	58.9	1,375	44.1	1,379
Georgia	60.2	1,427	60.7	1,424	44.2	1,426
Hawaii**	46.6	133	56.2	133	36.7	133
Idaho*	N/A	93	N/A	93	N/A	93
Illinois	57.3	1,488	58.1	1,485	43.9	1,484
Indiana	56.3	492	53.8	490	46.2	492
lowa	53.5	549	47.9	548	33.1	548
Kansas**	65.5	137	55.2	137	55.2	137
Kentucky**	67.8	245	74	245	51.8	245
Louisiana	53.1	402	57.3	401	44.4	403
Maine ^{* *}	56.3	171	54.5	170	44	171
Maryland	57.5	258	58.5	258	52.4	258
Massachusetts	50.2	765	58.1	765	36.4	763
Michigan	54.8	1,086	55.9	1,085	35.6	1,086
Minnesota	48.8	822	48.2	820	33.1	821
Mississippi*	N/A	69	N/A	69	N/A	69

* Weighted sample is under 100. Proportions not calculated due to insufficient data.

** Proportion based on weighted sample under 250. Use strong caution when interpreting data.

Missouri	54.9	315	50.8	315	46	315
Montana**	50.1	138	50.8	138	35.9	135
Nebraska**	49.4	164	52.2	164	35.6	164
Nevada	63.4	251	62.6	250	44.1	250
New Hampshire**	51.8	106	47.4	105	39.5	105
New Jersey	59.9	1,392	60.4	1,386	45.8	1,392
New Mexico	46.7	53	55.6	53	46.5	53
New York	56.9	3,260	55.2	3,251	40.9	3,257
North Carolina	56.8	973	54	971	40.3	972
North Dakota*	N/A	66	N/A	66	N/A	65
Ohio	59.6	1,279	61.5	1,279	42.9	1,279
Oklahoma	61.5	473	55.2	472	45.2	472
Oregon	61.6	438	66.3	436	45.3	438
Pennsylvania	62.5	990	62.4	988	43.7	989
Rhone Island*	N/A	60	N/A	60	N/A	60
South Carolina	63.6	264	64.4	266	48.4	266
South Dakota**	54.2	168	51.8	168	36	168
Tennessee	68	319	63.3	319	50.4	319
Texas	64.1	2,379	60.8	2,375	50.6	2,376
Utah**	68.2	104	67.9	104	48.5	104
Vermont*	N/A	56	N/A	56	N/A	56
Virginia	57.2	1,587	58.6	1,586	42.8	1,588
Washington	64.8	924	64.7	924	56.3	923
West Virginia**	62.9	122	57.2	122	49	122
Wisconsin	52.9	781	52.5	779	38	781
Wyoming*	N/A	63	N/A	63	N/A	63

* Weighted sample is under 100. Proportions not calculated due to insufficient data.

** Proportion based on weighted sample under 250. Use strong caution when interpreting data.



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1 Quadros, S., Garg, S., Ranjan, R., Vijayasarathi, G., & Mamun, M. A. (2021). Fear of COVID 19 infection across different cohorts: a scoping review. Frontiers in Psychiatry, 1289.

Joaquim, R. M., Pinto, A. L., Guatimosim, R. F., de Paula, J. J., Costa, D. S., Diaz, A. P., ... & Malloy-Diniz, L. F. (2021). Bereavement and psychological distress during COVID-19 pandemics: The impact of death experience on mental health. *Current Research in Behavioral Sciences*, *2*, 100019.

- 2 Center on Budget and Policy Priorities. (2021). Tracking the COVID-19 recession's effects on food, housing, and employment hardships. Retrieved from <u>https://www.cbpp.org/research/poverty-and-inequality/tracking-the-covid-19-economys-effects-on-food-housing-and</u>
- 3 Panchal, N., Kamal, R., Orgera, K., Cox, C., Garfield, R., Hamel, L., & Chidambaram, P. (2021b). The implications of COVID-19 for mental health and substance use. Kaiser Family Foundation. Retrieved from https://www.kff.org/coronavirus-covid-19/ issue-brief/the-implications-of-covid-19-for-mental-health-and-substance-use/
- 4 Yeyati, E. L., & Filippini, F. (2021). Social and economic impact of COVID-19. Global Economy and Development at Brookings.
- 5 Panchal, N., Kamal, R., Orgera, K., Cox, C., Garfield, R., Hamel, L., & Chidambaram, P. (2021b). The implications of COVID-19 for mental health and substance use. Kaiser Family Foundation. Retrieved from https://www.kff.org/coronavirus-covid-19/ issue-brief/the-implications-of-covid-19-for-mental-health-and-substance-use/
- 6 Fitzpatrick, O., Carson, A., & Weisz, J. R. (2021). Using mixed methods to identify the primary mental health problems and needs of children, adolescents, and their caregivers during the coronavirus (COVID-19) pandemic. *Child Psychiatry & Human Development, 52*(6), 1082-1093.

Quinn, E. L., Stover, B., Otten, J. J., & Seixas, N. (2022). Early care and education workers' experience and stress during the COVID-19 pandemic. International Journal of Environmental Research and Public Health, 19(5), 2670.

7 Fitzpatrick, O., Carson, A., & Weisz, J. R. (2021). Using mixed methods to identify the primary mental health problems and needs of children, adolescents, and their caregivers during the coronavirus (COVID-19) pandemic. Child Psychiatry & Human Development, 52(6), 1082-1093.

Quinn, E. L., Stover, B., Otten, J. J., & Seixas, N. (2022). Early care and education workers' experience and stress during the COVID-19 pandemic. International Journal of Environmental Research and Public Health, 19(5), 2670.

8 Farewell, C. V., Melnick, E., & Leiferman, J. (2021). Maternal mental health and early childhood development: Exploring critical periods and unique sources of support. Infant Mental Health Journal, 42, 603–615. https://doi.org/10.1002/imhj.21925

Hindman, A. H., & Bustamante, A. S. (2019). Teacher depression as a dynamic variable: Exploring the nature and predictors of change over the head start year. *Journal of Applied Developmental Psychology*, *61*, 43-55.

Jeon, L., & Ardeleanu, K. (2020). Work climate in early care and education and teachers' stress: Indirect associations through emotion regulation. Early Education and Development, 31(7), 1031-1051.

Otten, J. J., Bradford, V. A., Stover, B., Hill, H. D., Osborne, C., Getts, K., & Seixas, N. (2019). The culture of health in early care and education: Worker wages, health, and job characteristics. *Health Affairs*, 38(5), 709–720.

- 9 American Academy of Pediatrics. (2020). Mental Health in Infants and Young Children: Pediatric Mental Health Minute Series. https://www.aap.org/en/patient-care/mental-health-minute/mental-health-in-infants-and-young-children/
- 10 Panchal, N., Kamal, R., Cox, C., Garfield, R., & Chidambaram, P. (2021a). Mental health and substance use considerations among children during the COVID-19 pandemic. San Francisco: Kaiser Family Foundation.
- 11 Gilliam, W. S., Malik, A. A., Shafiq, M., Klotz, M., Reyes, C., Humphries, J. E., Murray, T., Elharake, J. A., Wilkinson, D., & Omer, S. B. (2021). COVID-19 transmission in US child care programs. Pediatrics, 147(1), e2020031971. <u>https://doi.org/10.1542/ peds.2020-031971</u>

Elharake, J. A., Shafiq, M., Cobanoglu, A., Malik, A. A., Klotz, M., Humphries, J. E., Murray, T., Patel, K. M., Wilkinson, D., Yildirim, I., Diaz, R., Rojas, R., Kuperwajs Cohen, A., Lee, A., Omer, S. B., & Gilliam, W. S. (2022). Prevalence of Chronic Diseases, Depression, and Stress Among US Childcare Professionals During the COVID-19 Pandemic. Preventing Chronic Disease, 19, E61. <u>https://doi.org/10.5888/pcd19.220132</u>.

Murray, T. S., Malik, A. A., Shafiq, M., Lee, A., Harris, C., Klotz, M., Humphries, J. E., Patel, K. M., Wilkinson, D., Yildirim, I., Elharake, J. A., Diaz, R., Reyes, C., Omer, S. B., & Gilliam, W. S. (2022). Association of child masking with COVID-19– related closures in US childcare programs. JAMA Network Open, 5(1), e2141227–e2141227. <u>https://doi.org/10.1001/jamanetworkopen.2021.41227</u> Patel, K. M., Malik, A. A., Lee, A., Klotz, M., Humphries, J. E., Murray, T., Wilkinson, D., Shafiq, M., Yildirim, I., Elharake, J. A., Diaz, R., Reyes, C., Omer, S. B., & Gilliam, W. S. (2021). COVID-19 vaccine uptake among US child care providers. Pediatrics, 148(5). <u>https://doi.org/10.1542/peds.2021-053813</u>

Patel, K. M., Shafiq, M., Malik, A. A., Cobanoglu, A., Klotz, M., Eric Humphries, J., Lee, A., Murray, T., Wilkinson, D., Yildirim, I., Elharake, J. A., Diaz, R., Rojas, R., Kuperwajs Cohen, A., Omer, S. B., & Gilliam, W. S. (2022). Relationship between the use of nonpharmaceutical interventions and COVID-19 vaccination among U.S. child care providers: A prospective cohort study. *Vaccine*. <u>https://doi.org/10.1016/j.vaccine.2022.05.064</u>

- 12 Lavallée, P. & Beaumont, J.-F. (2015), Why We Should Put Some Weight on Weights. Survey Insights: Methods from the Field, Weighting: Practical Issues and 'How to' Approach, Invited article, Retrieved from <u>https://surveyinsights.org/?p=6255</u>
- 13 Linnan, L., Arandia, G., Bateman, L. A., Vaughn, A., Smith, N., & Ward, D. (2017). The health and working conditions of women employed in childcare. International Journal of Environmental Research and Public Health, 14(3), 283.

Peele, M. & Wolf, S. (2021). Depressive and anxiety symptoms in early childhood education teachers: Relations to professional well-being and absenteeism. Early Childhood Research Quarterly, 55, 275-283.

Schaack, D. D., Le, V. N., & Stedron, J. (2020). When fulfillment is not enough: Early childhood teacher occupational burnout and turnover intentions from a job demands and resources perspective. *Early Education & Development*, 31(7), 1011–1030.

- Hindman, A. H., & Bustamante, A. S. (2019). Teacher depression as a dynamic variable: Exploring the nature and predictors of change over the head start year. Journal of Applied Developmental Psychology, 61, 43-55.
 Kwon, K. A., Ford, T. G., Jeon, L., Malek-Lasater, A., Ellis, N., Randall, K., ... & Salvatore, A. L. (2021). Testing a holistic conceptual framework for early childhood teacher well-being. Journal of School Psychology, 86, 178-197.
 Linnan, L., Arandia, G., Bateman, L. A., Vaughn, A., Smith, N., & Ward, D. (2017). The health and working conditions of women employed in childcare. International Journal of Environmental Research and Public Health, 14(3), 283.
 Roberts, A. M., Gallagher, K. C., Daro, A. M., Iruka, I. U., & Sarver, S. L. (2019). Workforce well-being: Personal and workplace contributions to early educators' depression across settings. Journal of Applied Developmental Psychology, 61, 4-12.
 Schaack, D. D., Le, V.-N., & Stedron, J. (2020). When fulfillment is not enough: Early childhood teacher occupational burnout and turnover intentions from a job demands and resources perspective. Early Education & Development, 31(7), 1011–1030.
- 15 Quinn, E. L., Stover, B., Otten, J. J., & Seixas, N. (2022). Early care and education workers' experience and stress during the COVID-19 pandemic. International Journal of Environmental Research and Public Health, 19(5), 2670.
- 16 McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. <u>Retrieved from https://cscce.berkeley.edu/workforce-index-2020/</u> report-pdf/
- Bassok, D., Michie, M., Cubides-Mateus, D. M., Doromal, J. B., & Kiscaden, S. (2020). The divergent experiences of early educators in schools and child care centers during COVID-19: Findings from Virginia. EdPolicyWorks at the University of Virginia. Delap, S., Franko, M., Hasan, N., McGee, A., & Thornton, C. (2020). Impact of COVID-19 on early childhood care and education providers. Early Milestones Colorado.
 Kim, Y., Montoya, E., Doocy, S., Austin, L. J., & Whitebook, M. (2022). Impacts of COVID-19 on the early care and education sector in California: Variations across program types. Early Childhood Research Quarterly, 60, 348-362.

Swigonski, N. L., James, B., Wynns, W., & Casavan, K. (2021). Physical, mental, and financial stress impacts of COVID-19 on early childhood educators. *Early Childhood Education Journal*, 49(5), 799–806. <u>https://doi.org/10.1007/s10643-021-01223-z</u>

- 18 Quinn, E. L., Stover, B., Otten, J. J., & Seixas, N. (2022). Early care and education workers' experience and stress during the COVID-19 pandemic. International Journal of Environmental Research and Public Health, 19(5), 2670.
- 19 Bassok, D., Michie, M., Cubides-Mateus, D. M., Doromal, J. B., & Kiscaden, S. (2020). The divergent experiences of early educators in schools and child care centers during COVID-19: Findings from Virginia. EdPolicyWorks at the University of Virginia.
- 20 Swigonski, N. L., James, B., Wynns, W., & Casavan, K. (2021). Physical, mental, and financial stress impacts of COVID-19 on early childhood educators. Early Childhood Education Journal, 49(5), 799–806. <u>https://doi.org/10.1007/s10643-021-01223-z</u>
- 21 Bassok, D., Michie, M., Cubides-Mateus, D. M., Doromal, J. B., & Kiscaden, S. (2020). The divergent experiences of early educators in schools and child care centers during COVID-19: Findings from Virginia. EdPolicyWorks at the University of Virginia.

Markowitz, A. J., Bassok, D., Smith, A., & Kiscaden, S. (2020). Childcare teachers' experiences with COVID-19: Findings from the Study of Early Education in Louisiana. EdPolicyWorks at the University of Virginia; UCLA Graduate School of Education and Information Studies.

- 22 Wikle, S. & Wright Burak, E. (2022). State opportunities to improve health care coverage for child care professionals. Georgetown University Health Policy Institute, The Center for Law and Social Policy, and Build Initiative.
- 23 Jeon, L., & Ardeleanu, K. (2020). Work climate in early care and education and teachers' stress: Indirect associations through emotion regulation. Early Education and Development, 31(7), 1031-1051.

Silver, H. C., & Zinsser, K. M. (2020). The interplay among early childhood teachers' social and emotional well-being, mental health consultation, and preschool expulsion. *Early Education and Development*, 31(7), 1133-1150.

- 24 National Institute of Mental Health. (2022). Depression. Retrieved October 3rd, 2022 from https://www.nimh.nih.gov/health/topics/depression depression
- 25 Hindman, A. H., & Bustamante, A. S. (2019). Teacher depression as a dynamic variable: Exploring the nature and predictors of change over the head start year. Journal of Applied Developmental Psychology, 61, 43-55.

Kwon, K.-A., Ford, T. G., Salvatore, A. L., Randall, K., Jeon, L., Malek-Lasater, A., Ellis, N., Kile, M. S., Horm, D. M., Kim, S. G., & Han, M. (2022). Neglected elements of a high-quality early childhood workforce: Whole teacher well-being and working conditions. *Early Childhood Education Journal*, *50*(1), 157–168.

Linnan, L., Arandia, G., Bateman, L. A., Vaughn, A., Smith, N., & Ward, D. (2017). The health and working conditions of women employed in childcare. International Journal of Environmental Research and Public Health, 14(3), 283.

Otten, J. J., Bradford, V. A., Stover, B., Hill, H. D., Osborne, C., Getts, K., & Seixas, N. (2019). The culture of health in early care and education: Worker wages, health, and job characteristics. *Health Affairs*, 38(5), 709–720.

Whitaker, R. C., Becker, B. D., Herman, A. N., & Gooze, R. A. (2013). The physical and mental health of Head Start staff: The Pennsylvania Head Start Staff Wellness Survey, 2012. Preventing Chronic Disease, 10, E181.

- 26 Farewell, C. V., Quinlan, J., Melnick, E., Powers, J., & Puma, J. (2022). Job demands and resources experienced by the early childhood education workforce serving high-need populations. Early Childhood Education Journal, 50(2), 197-206.
- 27 Brody, D. J., Pratt, L. A., & Hughes, J. P. (2018). Prevalence of depression among adults aged 20 and over: United States, 2013–2016. NCHS Data Brief, 303, 1–8.
- 28 Brody, D. J., Pratt, L. A., & Hughes, J. P. (2018). Prevalence of depression among adults aged 20 and over: United States, 2013–2016. NCHS Data Brief, 303, 1–8.
- 29 Markowitz, A. J., Bassok, D., Smith, A., & Kiscaden, S. (2020). Childcare teachers' experiences with COVID-19: Findings from the Study of Early Education in Louisiana. EdPolicyWorks at the University of Virginia; UCLA Graduate School of Education and Information Studies.
- 30 Markowitz, A. J., Bassok, D., Smith, A., & Kiscaden, S. (2020). Childcare teachers' experiences with COVID-19: Findings from the Study of Early Education in Louisiana. EdPolicyWorks at the University of Virginia; UCLA Graduate School of Education and Information Studies.
- 31 Bassok, D., Michie, M., Cubides-Mateus, D. M., Doromal, J. B., & Kiscaden, S. (2020). The divergent experiences of early educators in schools and child care centers during COVID-19: Findings from Virginia. EdPolicyWorks at the University of Virginia.
- 32 Steven Ruggles, Sarah Flood, Ronald Goeken, Josiah Grover, Erin Meyer, Jose Pacas and Matthew Sobek. IPUMS USA: Version 10.0 [dataset]. Minneapolis, MN: IPUMS, 2020. <u>https://doi.org/10.18128/D010.V10.0</u>
- 33 Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- 34 Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- 35 Hamre, B.K. & Pianta, R.C. (2004). Self-reported depression in nonfamilial caregivers: Prevalence and associations with caregiver behavior in child care settings. Early Childhood Research Quarterly, 19, 297-318.

Roberts, A. M., Gallagher, K. C., Daro, A. M., Iruka, I. U., & Sarver, S. L. (2019). Workforce well-being: Personal and workplace contributions to early educators' depression across settings. *Journal of Applied Developmental Psychology*, 61, 4-12.

- 36 Rosenberg, M., Luetke, M., Hensel, D., Kianersi, S., Fu, T. C., & Herbenick, D. (2021). Depression and loneliness during April 2020 COVID-19 restrictions in the United States, and their associations with frequency of social and sexual connections. Social Psychiatry and Psychiatric Epidemiology, 56(7), 1221-1232.
- 37 Cilluffo, A. (2019). 5 facts about student loans. Pew Research Center. <u>https://www.pewresearch.org/fact-tank/2019/08/13/facts-about-student-loans/</u>

Sechopoulos, S. (2022). Most in the U.S. say young adults today face more challenges than their parents' generation in some key areas. Pew Research Center. <u>https://www.pewresearch.org/fact-tank/2022/02/28/most-in-the-u-s-say-young-adults-today-face-more-challenges-than-their-parents-generation-in-some-key-areas/</u>

- 38 Kochhar, R. (2020). Hispanic women, immigrants, young adults, those with less education hit hardest by COVID-19 job losses. Pew Research Center. <u>https://www.pewresearch.org/fact-tank/2020/06/09/hispanic-women-immigrants-young-adults-those-with-less-education-hit-hardest-by-covid-19-job-losses/</u>
- 39 Kim, Y. H. & Kim, Y. E. (2010). Korean early childhood educators' multi-dimensional teacher self-efficacy and ECE center climate and depression severity in teachers as contributing factors. *Teaching and Teacher Education*, 26(5), 1117-1123.

Park, C. E., Zinsser, K. M., & Jeon, L. (2022). Committed to caring: Cluster-analysis of appraisals and feelings of family childcare work. Child & Youth Care Forum., 51(2), 237–265. <u>https://doi.org/10.1007/s10566-021-09625-1</u>

- 40 American Psychiatric Association. (2017). Mental health disparities: Diverse populations. Retrieved from https://www.psychiatry.org/File%20Library/Psychiatrists/Cultural-Competency/Mental-Health-Disparities/Mental-Health-Facts-for-Diverse-Populations.pdf
- 41 Franco, M., Durkee, M., & McElroy-Heltzel, S. (2021). Discrimination comes in layers: Dimensions of discrimination and mental health for multiracial people. Cultural Diversity and Ethnic Minority Psychology, 27(3), 343.
- 42 Fináncz, J., Nyitrai, Á., Podráczky, J., & Csima, M. (2020). Connections between professional well-being and mental health of early childhood educators. International Journal of Instruction, 13(4), 731-746. <u>https://doi.org/10.29333/iji.2020.13445a</u>

Linnan, L., Arandia, G., Bateman, L. A., Vaughn, A., Smith, N., & Ward, D. (2017). The health and working conditions of women employed in childcare. International Journal of Environmental Research and Public Health, 14(3), 283.

Roberts, A. M., Gallagher, K. C., Daro, A. M., Iruka, I. U., & Sarver, S. L. (2019). Workforce well-being: Personal and workplace contributions to early educators' depression across settings. *Journal of Applied Developmental Psychology*, 61, 4-12.

- 43 McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from <u>https://cscce.berkeley.edu/workforce-index-2020/</u> report-pdf/
- 44 Glasmeier, A. (2020). About the Living Wage Calculator. Massachusetts Institute of Technology. Retrieved from http://livingwage.mit.edu/pages/about.
- 45 McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from <u>https://cscce.berkeley.edu/workforce-index-2020/</u> report-pdf/
- 46 ChildCare Aware of America. (2022). Demanding change: Repairing our child care system. Retrieved from https://www.childcareaware.org/demanding-change-repairing-our-child-care-system/
- 47 Frank, G., Hogan, L., Kim, M., Peyton, J., & Recio, L. (2021). Progress and peril: Child care at a crossroads. National Association for the Education of Young Children. Retrieved from <u>https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/</u> resources/blog/naeyc_july_2021_survey_progressperil_final.pdf
- 48 MedlinePlus. (June, 2022). Stress and your health. National Library of Medicine. Available from https://medlineplus.gov/ency/article/003211.htm
- 49 MedlinePlus. (June, 2022). Stress and your health. National Library of Medicine. Available from https://medlineplus.gov/ency/article/003211.htm
- 50 Farewell, C. V., Quinlan, J., Melnick, E., Powers, J., & Puma, J. (2022). Job demands and resources experienced by the early childhood education workforce serving high-need populations. *Early Childhood Education Journal, 50*(2), 197-206.

- 51 Pierceall, E.A. & Keim, M.C. (2007) Stress and coping strategies among community college students. Community College Journal of Research and Practice, 31, 703712.
- 52 Kwon, K.-A., Ford, T. G., Salvatore, A. L., Randall, K., Jeon, L., Malek-Lasater, A., Ellis, N., Kile, M. S., Horm, D. M., Kim, S. G., & Han, M. (2022). Neglected elements of a high-quality early childhood workforce: Whole teacher well-being and working conditions. *Early Childhood Education Journal*, 50(1), 157–168.
- 53 Swigonski, N. L., James, B., Wynns, W., & Casavan, K. (2021). Physical, mental, and financial stress impacts of COVID-19 on early childhood educators. Early Childhood Education Journal, 49(5), 799–806.
- 54 Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. Journal of Health and Social Behavior, 24, 385–396.
- 55 Adamson, M. M., Phillips, A., Seenivasan, S., Martinez, J., Grewal, H., Kang, X., Coetzee, J., Luttenbacher, I., Jester, A., Harris, O. A., & Spiegel, D. (2020). International prevalence and correlates of psychological stress during the global COVID-19 pandemic. International Journal of Environmental Research and Public Health, 17(24), 9248. https://doi.org/10.3390/ijerph17249248
- 56 Adamson, M. M., Phillips, A., Seenivasan, S., Martinez, J., Grewal, H., Kang, X., Coetzee, J., Luttenbacher, I., Jester, A., Harris, O. A., & Spiegel, D. (2020). International prevalence and correlates of psychological stress during the global COVID-19 pandemic. International Journal of Environmental Research and Public Health, 17(24), 9248. https://doi.org/10.3390/ijerph17249248
- 57 Sechopoulos, S. (2022). Most in the U.S. say young adults today face more challenges than their parents' generation in some key areas. Pew Research Center.

Graupensperger, S., Fleming, C. B., Jaffe, A. E., Rhew, I. C., Patrick, M. E., & Lee, C. M. (2021). Changes in young adults' alcohol and marijuana use, norms, and motives from before to during the COVID-19 pandemic. *Journal of Adolescent Health*, 68(4), 658-665.

- 58 Park, C. E., Zinsser, K. M., & Jeon, L. (2022). Committed to caring: Cluster-analysis of appraisals and feelings of family childcare work. Child & Youth Care Forum., 51(2), 237–265. <u>https://doi.org/10.1007/s10566-021-09625-1</u>
- 59 McKnight-Eily, L. R., Okoro, C. A., Strine, T. W., Verlenden, J., Hollis, N. D., Njai, R., ... & Thomas, C. (2021). Racial and ethnic disparities in the prevalence of stress and worry, mental health conditions, and increased substance use among adults during the COVID-19 pandemic— United States, April and May 2020. Morbidity and Mortality Weekly Report, 70(5), 162.
- 60 McKnight-Eily, L. R., Okoro, C. A., Strine, T. W., Verlenden, J., Hollis, N. D., Njai, R., ... & Thomas, C. (2021). Racial and ethnic disparities in the prevalence of stress and worry, mental health conditions, and increased substance use among adults during the COVID-19 pandemic— United States, April and May 2020. Morbidity and Mortality Weekly Report, 70(5), 162.
- 61 Madill, R., Halle, T., Gebhart, T., & Shuey, E. (2018). Supporting the psychological well-being of the early care and education workforce: Findings from the National Survey of Early Care and Education. OPRE Report #2018-49. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- 62 Schaack, D. D., Le, V.-N., & Stedron, J. (2020). When fulfillment is not enough: Early childhood teacher occupational burnout and turnover intentions from a job demands and resources perspective. *Early Education & Development*, 31(7), 1011–1030.
- 63 ChildCare Aware of America. (2022). Demanding change: Repairing our child care system. Retrieved from https://www.childcareaware.org/demanding-change-repairing-our-child-care-system/

Frank, G., Hogan, L., Kim, M., Peyton, J., & Recio, L. (2021). Progress and peril: Child care at a crossroads. National Association for the Education of Young Children. Retrieved from https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/ resources/blog/naeyc_july_2021_survey_progressperil_final.pdf

- 64 Saleem, F. T., Howard, T. C., & Langley, A. K. (2021). Understanding and addressing racial stress and trauma in schools: A pathway toward resistance and healing. *Psychology in the Schools*.
- 65 Franklin, A., Boyd-Franklin, N., & Kelly, S. (2006). Racism and invisibility: Race-related stress, emotional abuse and psychological trauma for people of color. Journal of Emotional Abuse, 6(2/3), 9-30.
- 66 Cave, L., Cooper, M. N., Zubrick, S. R., & Shepherd, C. C. (2020). Racial discrimination and child and adolescent health in longitudinal studies: A systematic review. Social Science & Medicine, 250, 112864.

- 67 Bernard, D. L., Calhoun, C. D., Banks, D. E., Halliday, C. A., Hughes-Halbert, C., & Danielson, C. K. (2021). Making the "C-ACE" for a culturally-informed adverse childhood experiences framework to understand the pervasive mental health impact of racism on Black youth. Journal of Child & Adolescent Trauma, 14(2), 233-247.
- 68 Lu, Y., & Wang, C. (2021). Asian Americans' racial discrimination experiences during COVID-19: Social support and locus of control as moderators. Asian American Journal of Psychology. Advance online publication. <u>https://doi.org/10.1037/aap0000247</u>
- 69 Schwartz, S. A. (2020). Police brutality and racism in America. Explore, 16(5), 280.
- 70 Eichstaedt, J. C., Sherman, G. T., Giorgi, S., Roberts, S. O., Reynolds, M. E., Ungar, L. H., & Guntuku, S. C. (2021). The emotional and mental health impact of the murder of George Floyd on the US population. Proceedings of the National Academy of Sciences, 118(39), e2109139118.

Lee, S., & Waters, S. F. (2021). Asians and Asian Americans' experiences of racial discrimination during the COVID-19 pandedmic: Impacts on health outcomes and the buffering role of social support. Stigma and Health, 6(1), 70.

- 71 Steven Ruggles, Sarah Flood, Ronald Goeken, Josiah Grover, Erin Meyer, Jose Pacas and Matthew Sobek. IPUMS USA: Version 10.0 [dataset]. Minneapolis, MN: IPUMS, 2020. <u>https://doi.org/10.18128/D010.V10.0</u>
- 72 McKnight-Eily, L. R., Okoro, C. A., Strine, T. W., Verlenden, J., Hollis, N. D., Njai, R., ... & Thomas, C. (2021). Racial and ethnic disparities in the prevalence of stress and worry, mental health conditions, and increased substance use among adults during the COVID-19 pandemic— United States, April and May 2020. Morbidity and Mortality Weekly Report, 70(5), 162.

Ruiz, N. G., Menasce Horowitz, J., & Tamir, C. (2020). Many Black and Asian Americans say they have experienced discrimination amid the COVID-19 outbreak. Pew Research Center. Retrieved from https://www.pewresearch.org/social-trends/2020/07/01/many-black-and-asian-americans-say-they-have-experienced-discrimination-amid-the-covid-19-outbreak/

- 73 Whitney, D. G., & Peterson, M. D. US national and state-level prevalence of mental health disorders and disparities of mental health care use in children [published online February 11, 2019]. JAMA Pediatr.
- 74 Danielson, M. L., Bitsko, R. H., Holbrook, J. R., Charania, S. N., Claussen, A. H., PhD; McKeown, R. E., Cuffe, S. P., Owens, J. S., Evans, S. W., Kubicek, L., & Flory, K. (2020). Community-based prevalence of externalizing and internalizing disorders among school-aged children and adolescents in four geographically dispersed school districts in the United States. Child Psychiatry & Human Development.
- 75 American Academy of Pediatrics. (2020). Mental Health in Infants and Young Children: Pediatric Mental Health Minute Series. https://www.aap.org/en/patient-care/mental-health-minute/mental-health-in-infants-and-young-children/
- 76 HealthyChildren.Org. (2021). Mental health during COVID-19: Signs your child may need more support. Retrieved from https://www.healthychildren.org/English/health-issues/conditions/COVID-19/Pages/Signs-your-Teen-May-Need-More-Support. aspx
- 77 Panchal, N., Kamal, R., Cox, C., Garfield, R., & Chidambaram, P. (2021). Mental health and substance use considerations among children during the COVID-19 pandemic. San Francisco: Kaiser Family Foundation.
- 78 Theberath, M., Bauer, D., Chen, W., Salinas, M., Mohabbat, A. B., Yang, J., ... & Wahner-Roedler, D. L. (2022). Effects of COVID-19 pandemic on mental health of children and adolescents: A systematic review of survey studies. SAGE Open Medicine, 10, 20503121221086712.

Panchal, N., Kamal, R., Cox, C., Garfield, R., & Chidambaram, P. (2021). Mental health and substance use considerations among children during the COVID-19 pandemic. San Francisco: Kaiser Family Foundation.

RAPID Project. (2022). Parents on struggles with well-being and emotional distress during the pandemic. www.rapidprojectsurvey.com

- 79 RAPID Project. (2023). High material hardship persists for families with young children. <u>https://static1.squarespace.com/static/5e7cf2f62c45da32f3c6065e/t/6430194d926e6a5e602cebfc/1680873806026/material_hardship_factsheet_apr2023.pdf</u>
- 80 Rizeq, J., Korczak, D. J., Cost, K. T., Anagnostou, E., Charach, A., Monga, S., Birken, C. S., Kelley, E., Nicolson, R., Burton, C. L., & Crosbie, J. (2023). Vulnerability pathways to mental health outcomes in children and parents during COVID-19. *Current Psychology*, Preprints, 1–11

Zalewski, M., Liu, S., Gunnar, M., Lengua, L. J., & Fisher, P. A. (2023). Mental-health trajectories of U.S. parents with young children during the COVID-19 pandemic: A universal introduction of risk. *Clinical Psychological Science*, 11(1), 183–196.

- 81 Vukojević, M., Zovko, A., Talić, I., Tanović, M., Rešić, B., Vrdoljak, I., & Splavski, B. (2017). Parental socioeconomic status as a predictor of physical and mental health outcomes in children - Literature review. Acta Clinica Croatica, 56(4), 742–748. <u>https://doi.org/10.20471/acc.2017.56.04.23</u>
- 82 RAPID Project. (2023). High material hardship persists for families with young children. <u>https://static1.squarespace.com/</u> static/5e7cf2f62c45da32f3c6065e/t/6430194d926e6a5e602cebfc/1680873806026/material_hardship_factsheet_apr2023.pdf
- 83 Panchal, N., Kamal, R., Cox, C., Garfield, R., & Chidambaram, P. (2021a). Mental health and substance use considerations among children during the COVID-19 pandemic. San Francisco: Kaiser Family Foundation.

Abramson, A. (2022). Children's mental health is in crisis: As pandemic stressors continue, kids' mental health needs to be addressed in schools. <u>https://www.apa.org/monitor/2022/01/special-childrens-mental-health; https://www.luriechildrens.org/en/blog/childrens-mental-health-pandemic-statistics/</u>

Theberath, M., Bauer, D., Chen, W., Salinas, M., Mohabbat, A. B., Yang, J., ... & Wahner-Roedler, D. L. (2022). Effects of COVID-19 pandemic on mental health of children and adolescents: A systematic review of survey studies. SAGE open medicine, 10, 20503121221086712.

- 84 Panchal, N., Kamal, R., Cox, C., Garfield, R., & Chidambaram, P. (2021). Mental health and substance use considerations among children during the COVID-19 pandemic. San Francisco: Kaiser Family Foundation.
- 85 Hossain, M. M., Nesa, F., Das, J., Aggad, R., Tasnim, S., Bairwa, M., Ma, P., & Ramirez, G. (2022). Global burden of mental health problems among children and adolescents during COVID-19 pandemic: An umbrella review. Psychiatry research, 317, 114814. https://doi. org/10.1016/j.psychres.2022.114814
- 86 RAPID Project. (2023). RAPID. https://rapidsurveyproject.com
- 87 RAPID Project. (2022). Latest data and trends. https://rapidsurveyproject.com/latest-data-and-trends
- 88 The descriptions of behaviors/symptoms were summarized from the empirical literature, Substance Abuse and Mental Health Services Administration (SAMHSA), and the Diagnostic and Statistical Manual of Mental Disorders (DSM-V; 2013).
- 89 American Psychiatric Association, D., & American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders: DSM-5 (Vol. 5, No. 5). Washington, DC: American psychiatric association.; Johns Hopkins. (2022). Attention-Deficit / Hyperactivity Disorder (ADHD) in Children. <u>https://www.hopkinsmedicine.org/health/conditions-and-diseases/adhdadd</u>
- 90 Substance Abuse and Mental Health Services Administration. (2016). DSM-5 Changes: Implications for Child Serious Emotional Disturbance. CBHSQ Methodology Report. Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Rockville, MD.
- 91 Substance Abuse and Mental Health Services Administration. (2016). DSM-5 Changes: Implications for Child Serious Emotional Disturbance. CBHSQ Methodology Report. Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Rockville, MD.
- 92 Fadus, M. C., Ginsburg, K. R., Sobowale, K., Halliday-Boykins, C. A., Bryant, B. E., Gray, K. M., & Squeglia, L. M. (2020). Unconscious bias and the diagnosis of disruptive behavior disorders and ADHD in African American and Hispanic youth. Academic Psychiatry, 44(1), 95-102.

Halberstadt, A. G., Cooke, A. N., Garner, P. W., Hughes, S. A., Oertwig, D., & Neupert, S. D. (2022). Racialized emotion recognition accuracy and anger bias of children's faces. *Emotion*, 22(3), 403.

- 93 Angold, A., & Egger, H. L. (2007). Preschool psychopathology: lessons for the lifespan. Journal of Child Psychology and Psychiatry.
- 94 Campbell, S. B., & Ewing, L. J. (1990). Follow-up of hard to manage preschoolers: Adjustment at age 9 and predictors of continuing symptoms. Journal of child psychology and psychiatry, 31(6), 871-889.
- 95 Massetti, G. M., Lahey, B. B., Pelham, W. E., Loney, J., Ehrhardt, A., Lee, S. S., & Kipp, H. (2008). Academic achievement over 8 years among children who met modified criteria for attention-deficit/hyperactivity disorder at 4–6 years of age. Journal of abnormal child psychology, 36(3), 399-410.

- 96 Redden, S. C., Ramey, S. L., Ramey, C. T., Forness, S. R., & Brezausek, C. M. (2003). Special education placements among former Head Start children in kindergarten: A descriptive multi-site study. *Education and Treatment of Children*, 128-148.
- 97 Campbell, S. B., Shaw, D. S., & Gilliom, M. (2000). Early externalizing behavior problems: Toddlers and preschoolers at risk for later maladjustment. Development and psychopathology, 12(3), 467-488.
- 98 Alamos, P., & Williford, A. P. (2020). Teacher-child emotion talk in preschool children displaying elevated externalizing behaviors. Journal of Applied Developmental Psychology, 67, 101107.
- 99 Kupersmidt, J. B., Bryant, D., & Willoughby, M. T. (2000). Prevalence of aggressive behaviors among preschoolers in Head Start and community child care programs. *Behavioral Disorders*, 26(1), 42-52.
- 100 Gartstein, M. A., Putnam, S. P., & Rothbart, M. K. (2012). Etiology of preschool behavior problems: Contributions of temperament attributes in early childhood. Infant Mental Health Journal, 33(2), 197–211
- 101 The following descriptions of behaviors/symptoms were summarized from the empirical literature, Substance Abuse and Mental Health Services Administration (SAMHSA), and the Diagnostic and Statistical Manual of Mental Disorders (DSM-V; 2013).
- 102 American Psychiatric Association, D., & American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders: DSM-5 (Vol. 5, No. 5). Washington, DC: American psychiatric association
- 103 Carter, B., Paranjothy, S., Davies, A., & Kemp, A. (2022). Mediators and effect modifiers of the causal pathway between child exposure to domestic violence and internalizing behaviors among children and adolescents: a systematic literature review. *Trauma, Violence, & Abuse,* 23(2), 594-604.

Quistberg, K. A., & Mueller, U. (2020). Prospective relations between kindergarteners' executive function skills and their externalizing and internalizing behaviors. The Clinical Neuropsychologist, 34(4), 845-862

Gamliel, K. H., Dollberg, D. G., & Levy, S. (2018). Relations between parents' anxiety symptoms, marital quality, and preschoolers' externalizing and internalizing behaviors. Journal of Child and Family Studies, 27(12), 3952-3963.

Ramey, D. M., & Harrington, N. (2019). Early exposure to neighborhood crime and child internalizing and externalizing behaviors. *Health* & *Place, 57,* 228-237.

Helle, N., Barkmann, C., Ehrhardt, S., von der Wense, A., Nestoriuc, Y., & Bindt, C. (2019). Internalizing symptoms in very low birth weight preschoolers: Symptom level and risk factors from four rating perspectives in a controlled multicenter study. *Journal of Affective Disorders, 246,* 74-81.

- 104 Troye, A. I., Torres, P. V., Domínguez, B., & Triñanes, E. R. (2021). Behavioral profiles related with distinct developmental patterns of negative emotionality from preschool to school ages. Revista de Psicología Clínica con Niños y Adolescentes, 8(2), 6.
- 105 Thomas, P. (2003). Protection, dissociation, and internal roles: Modeling and treating the effects of child abuse. Review of General Psychology, 7(4), 364-380.

Yates, T. (2004). The developmental psychopathology of self-injurious behavior: Compensatory regulation in posttraumatic adaptation. *Clinical Psychology Review, 24*(1), 35-74.

- 106 The following descriptions of behaviors/symptoms were summarized from the empirical literature, Substance Abuse and Mental Health Services Administration (SAMHSA), and the Diagnostic and Statistical Manual of Mental Disorders (DSM-V; 2013)
- 107 Engel, M. L., Winiarski, D. A., Reidy, B. L., & Brennan, P. A. (2018). Early-Life Somatic Complaints: Longitudinal Associations with Maternal and Child Psychopathology. Journal of developmental and behavioral pediatrics: JDBP, 39(7), 573–579.
- 108 American Psychiatric Association, D., & American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders: DSM-5 (Vol. 5, No. 5). Washington, DC: American psychiatric association; Centers for Disease Control and Prevention. (2022). Anxiety and Depression in Children. <u>https://www.cdc.gov/childrensmentalhealth/depression.html</u>
- 109 Beck JE. A developmental perspective on functional somatic symptoms. J Pediatric Psychol. 2008; 33(5): 547–582.

Masi, G., Favilla, L., Millepiedi, S., & Mucci, M. (2000). Somatic symptoms in children and adolescents referred for emotional and behavioral disorders. *Psychiatry*, 63(2), 140–149.

- 110 Eminson DM. Medically unexplained symptoms in children and adolescents. Clin Psychol Rev. 2007;27:855–871; Shelby GD, Shirkey KC, Sherman AL, et al. Functional abdominal pain in childhood and long-term vulnerability to anxiety disorders. Pediatrics. 2013; 132(3): 475–482.
- 111 Elliott, L., Thompson, K. A., & Fobian, A. D. (2020). A Systematic Review of Somatic Symptoms in Children With a Chronically III Family Member. Psychosomatic medicine, 82(4), 366–376.
- 112 Sandstrom, H. & Dwyer, K. (2021). Mental health consultation and home-based child care providers. Expanding participation. Urban Institute. <u>https://www.urban.org/sites/default/files/publication/104989/mental-health-consultation-and-home-based-child-care-providers_0.pdf</u>
- 113 ChildCare Aware of America. (2022). Demanding change: Repairing our child care system. Retrieved from https://www.childcareaware.org/demanding-change-repairing-our-child-care-system/
- 114 Office of Child Care. (n.d.). What is child care licensing? Administration of Children and Families. <u>https://childcare.gov/consumer-education/child-care-licensing-and-regulations</u>
- 115 Hindman, A. H., & Bustamante, A. S. (2019). Teacher depression as a dynamic variable: Exploring the nature and predictors of change over the head start year. Journal of Applied Developmental Psychology, 61, 43-55.

Kwon, K. A., Jeon, S., Jeon, L., & Castle, S. (2019). The role of teachers' depressive symptoms in classroom quality and child developmental outcomes in Early Head Start programs. Learning and Individual Differences, 74, 101748.

Roberts, A., LoCasale-Crouch, J., Hamre, B., & DeCoster, J. (2016). Exploring teachers' depressive symptoms, interaction quality, and children's social-emotional development in Head Start. Early Education and Development, 27(5), 642-654.

116 Koles, B., O'Connor, E. E., & Collins, B. A. (2013). Associations between child and teacher characteristics and quality of teacher-child relationships: The case of Hungary. European Early Childhood Education Research Journal, 21(1), 53-76.

Kwon, K. A., Jeon, S., Jeon, L., & Castle, S. (2019). The role of teachers' depressive symptoms in classroom quality and child developmental outcomes in Early Head Start programs. *Learning and Individual Differences, 74*, 101748.

117 Hindman, A. H., & Bustamante, A. S. (2019). Teacher depression as a dynamic variable: Exploring the nature and predictors of change over the head start year. Journal of Applied Developmental Psychology, 61, 43-55.

Kwon, K. A., Jeon, S., Jeon, L., & Castle, S. (2019). The role of teachers' depressive symptoms in classroom quality and child developmental outcomes in Early Head Start programs. *Learning and Individual Differences*, *74*, 101748.

Roberts, A., LoCasale-Crouch, J., Hamre, B., & DeCoster, J. (2016). Exploring teachers' depressive symptoms, interaction quality, and children's social-emotional development in Head Start. Early Education and Development, 27(5), 642-654.

- 118 Jeon, L., Buettner, C. K., & Snyder, A. R. (2014). Pathways from teacher depression and child-care quality to child behavioral problems. Journal of Consulting and Clinical Psychology, 82(2), 225.
- 119 Avan, B., Richter, L. M., Ramchandani, P. G., Norris, S. A., & Stein, A. (2010). Maternal postnatal depression and children's growth and behaviour during the early years of life: exploring the interaction between physical and mental health. Archives of Disease in Childhood, 95(9), 690-695.

Farewell, C. V., Melnick, E., & Leiferman, J. (2021). Maternal mental health and early childhood development: Exploring critical periods and unique sources of support. Infant Mental Health Journal, 42, 603–615. <u>https://doi.org/10.1002/imhj.21925</u>

- 120 Oppenheim, J., Meek, S., Bartlett, J. D., Horen, N. (2022). Using ARPA to grow infant and early childhood mental health consultation systems. A state, tribe, and territory decision-maker's guide. Children's Equity Project at Arizona State University. <u>https:// childandfamilysuccess.asu.edu/sites/default/files/2022-08/ARPA%20brief-082222.pdf</u>
- 121 Oppenheim, J., Meek, S., Bartlett, J. D., Horen, N. (2022). Using ARPA to grow infant and early childhood mental health consultation systems. A state, tribe, and territory decision-maker's guide. Children's Equity Project at Arizona State University. <u>https:// childandfamilysuccess.asu.edu/sites/default/files/2022-08/ARPA%20brief-082222.pdf</u>
- 122 Oppenheim, J., Meek, S., Bartlett, J. D., Horen, N. (2022). Using ARPA to grow infant and early childhood mental health consultation systems. A state, tribe, and territory decision-maker's guide. Children's Equity Project at Arizona State University. https://childandfamilysuccess.asu.edu/sites/default/files/2022-08/ARPA%20brief-082222.pdf

- 123 Child Care Aware of America. (2023). American Rescue Plan (ARP). American Rescue Plan implementation tracker. <u>https://infogram.com/1pw0r2v9enjpy6uvljv6j9jynjb97k936e6?live</u>
- 124 Center of Excellence for Infant and Early Childhood Mental Health Consultation (2020). Status of the evidence for infant and early childhood mental health consultation (IECMHC).
- 125 Hepburn, K. S., Perry, D. F., Shivers, E. M., & Gilliam, W. S. (2013). Early childhood mental health consultation as an evidence-based practice. Zero to Three, 33, 10–17.
- 126 Center of Excellence for Infant and Early Childhood Mental Health Consultation (2020). Status of the evidence for infant and early childhood mental health consultation (IECMHC). <u>https://www.iecmhc.org/wp-content/uploads/2020/12/CoE-Evidence-Synthesis.pdf</u>.

Hepburn, K., Perry, D., Shivers, E. M., & Gilliam, W. (2013). Early childhood mental health consultation as an evidence-based practice: Where does it stand? Zero to Three, 33(5), 10–18.

Brennan, E. M., Bradley, J. R., Allen, M. D., & Perry, D. F. (2008). The evidence base for mental health consultation in early childhood settings: Research synthesis addressing staff and program outcomes. *Early Education and Development*, 19(6), 982–1022.

Gilliam, W. S., Maupin, A. N., & Reyes, C. R. (2016). Early childhood mental health consultation: Results of a statewide random-controlled evaluation. Journal of the American Academy of Child & Adolescent Psychiatry, 55, 754–761. doi:10.1016/j.jaac.2016.06.006

127 Crusto, C. A., Whitson, M. L., Feinn, R., Gargiulo, J., Holt, C., Paulicin, B., Simmons, W., & Lowell, D. I. (2013). Evaluation of a mental health consultation intervention in preschool settings. Best Practices in Mental Health, 9(2), 1–21.

Heller, S. S., Boothe, A., Keyes, A., Nagle, G., Sidell, M., & Rice, J. (2011). Implementation of a mental health consultation model and its impact on early childhood teachers' efficacy and competence. Infant Mental Health Journal, 32(2), 143-164.

128 Davis, A. E., Shivers, E. M., & Perry, D. F. (2018). Exploring culture, race, and ethnicity in early childhood mental health consultation: The role of the consultative alliance. *Perspectives*, 3(2), 24.

Shivers, E. M., Faragó, F., & Gal-Szabo, D. E. (2022). The role of infant and early childhood mental health consultation in reducing racial and gender relational and discipline disparities between Black and white preschoolers. *Psychology in the Schools, 59*(10), 1965-1983.

Davis, A. E., Shivers, E. M., & Perry, D. F. (2018). Exploring culture, race, and ethnicity in early childhood mental health consultation: The role of the consultative alliance. *Perspectives*, 3(2), 24.

129 Beardslee, W. R., Ayoub, C., Avery, M. W., Watts, C. L., & O'Carroll, K. L. (2010). Family connections: An approach for strengthening early care systems in facing depression and adversity. American Journal of Orthopsychiatry, 80(4), 482–495.

Hepburn, K., Perry, D., Shivers, E. M., & Gilliam, W. (2013). Early childhood mental health consultation as an evidence-based practice: Where does it stand? Zero to Three, 33(5), 10–18.

Raver, C. C., Jones, S. M., Li-Grining, C. P., Metzger, M., Smallwood, K., & Sardin, L. (2008). Improving preschool classroom processes: Preliminary findings from a randomized trial implemented in Head Start settings. *Early Childhood Research Quarterly*, 23(1), 10–26.

Shivers, E. M. (2016). Arizona's Smart Support evaluation: The first four years. Prepared for Southwest Human Development, with support from First Things First

- 130 Silver, H. C., & Zinsser, K. M. (2020). The interplay among early childhood teachers' social and emotional well-being, mental health consultation, and preschool expulsion. *Early Education and Development*, 31(7), 1133-1150.
- 131 Sandstrom, H. & Dwyer, K. (2021). Mental health consultation and home-based child care providers. Expanding participation. Urban Institute.
- 132 Colorado Office of Early Childhood. (March 2022). Early childhood mental health consultation. COVID-19 Responsiveness: Use of CARES Act Federal Stimulus Funds.
- 133 Traube, D., Gozalians, S., & Duan, L. (2022). Transitions to virtual early childhood home visitation during COVID-19. Infant Mental Health Journal, 43(1), 69-81.
- 134 Sandstrom, H. & Dwyer, K. (2021). Mental health consultation and home-based child care providers. Expanding participation. Urban Institute.
- 135 Linnan, L., Arandia, G., Bateman, L. A., Vaughn, A., Smith, N., & Ward, D. (2017). The health and working conditions of women employed in childcare. International Journal of Environmental Research and Public Health, 14(3), 283.

RAPID Survey. (2021). Who is providing for child care providers? Stanford Center on Early Childhood, Stanford University. Retrieved from https://rapidsurveyproject.com/who-is-providing-for-child-care-providers.

McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). *Early Childhood Workforce Index – 2020*. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://cscce.berkeley.edu/workforce-index-2020/ report-pdf.

136 Roberts, A. M., Gallagher, K. C., Daro, A. M., Iruka, I. U., & Sarver, S. L. (2019). Workforce well-being: Personal and workplace contributions to early educators' depression across settings. *Journal of Applied Developmental Psychology*, 61, 4-12.

Schaack, D. D., Le, V.-N., & Stedron, J. (2020). When fulfillment is not enough: Early childhood teacher occupational burnout and turnover intentions from a job demands and resources perspective. *Early Education & Development*, 31(7), 1011–1030.

137 Cilluffo, A. (2019). 5 facts about student loans. Pew Research Center. <u>https://www.pewresearch.org/fact-tank/2019/08/13/facts-about-student-loans/</u>

Kochhar, R. (2020). Hispanic women, immigrants, young adults, those with less education hit hardest by COVID-19 job losses. Pew Research Center. https://www.pewresearch.org/fact-tank/2020/06/09/hispanic-women-immigrants-young-adults-those-with-less-education-hit-hardest-by-covid-19-job-losses/

Sechopoulos, S. (2022). Most in the U.S. say young adults today face more challenges than their parents' generation in some key areas. Pew Research Center. <u>https://www.pewresearch.org/fact-tank/2022/02/28/most-in-the-u-s-say-young-adults-today-face-more-challenges-than-their-parents-generation-in-some-key-areas/</u>

McLean, C., Austin, L. J. E., Whitebook, M., & Olson, K. L. (2021). Early Childhood Workforce Index – 2020. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from https://cscce.berkeley.edu/workforce-index-2020/ report-pdf/

Schlieber, M., Austin, L.J.E., & Valencia López, E. (2020). Marin County Center-Based Early Care & Education Workforce Study 2019. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from <u>https://cscce.berkeley.</u> <u>edu/marin-county-center-based-early-care-education-workforce-study-2019/</u>.

- 138 Office of the State Superintendent of Education. (OSSE) (2023). State and municipal innovations and emerging research. FCD Young Scholars Convening, Washington, D.C., United States.
- 139 Office of the State Superintendent of Education. (OSSE). (n.d.). Early childhood educator pay equity fund. Retrieved from https://osse.dc.gov/ecepayequity
- 140 New Mexico Early Childhood Education & Care Department. (ECECD). (2022). Pre-K pay parity information. Retrieved from https://ececdscholarship.org/wage-parity-information/#:~:text=Pre%2DK%20Pay%20Parity%20Award%20Information,-Applications%20for%20Pre&text=The%20Pre%2DK%20Pay%20Parity%20Program%20will%20pay%20the%20difference,you%20 apply%20through%20June%202023
- 141 New Mexico Early Childhood Education & Care Department. (ECECD). (2022). Increasing early care and education compensation in New Mexico [conference presentation]. ACF's National Research Conference on Early Childhood, Washington, D.C., United States.
- 142 T.E.A.C.H. Early Childhood National Center. (n.d.). T.E.A.C.H. Early Childhood, Retrieved from https://www.teachecnationalcenter.org/ teach-early-childhood/
- 143 Albritton, K., Mathews, R. E., & Anhalt, K. (2019). Systematic review of early childhood mental health consultation: Implications for improving preschool discipline disproportionality. *Journal of Educational and Psychological Consultation, 29*(4), 444-472.
- 144 Hur, E., Jeon, L. & Buettner, C.K. (2016). Preschool teachers' child-centered beliefs: Direct and indirect associations with work climate and job-related well-being. Child & Youth Care Forum, 45(3), 451-465.
- 145 Becker, B. D., Gallagher, K., & Whitaker, R. C. (2017). Teachers' dispositional mindfulness and the quality of their relationships with children in Head Start classrooms. *Journal of School Psychology*, 65, 40-53.
- 146 Skalická, V., Belsky, J., Stenseng, F., & Wichstrøm, L. (2015). Reciprocal relations between student–teacher relationship and children's behavioral problems: Moderation by child-care group size. *Child Development*, 86(5), 1557-1570.
- 147 Kansas Department for Children and Families. (2023). ECE Resources Kansas. Retrieved from https://childcareinkansas.com/for-providers.

- 148 Washington Health Benefit Exchange. (2022). Health care premium assistance for employees of child care facilities. Retrieved from https://www.wahbexchange.org/content/dam/wahbe-assets/legislation/Exchange%20Legislative%20Report-2022-Employees%20of%20Licensed%20Child%20Care%20Facilities.pdf.
- 149 Utah Department of Health and Human Services. (n.d.) Mental health for child care providers. Retrieved from https://sumh.utah.gov/services/treatment/mental-health-for-child-care-providers
- 150 Steven Ruggles, Sarah Flood, Ronald Goeken, Josiah Grover, Erin Meyer, Jose Pacas and Matthew Sobek. IPUMS USA: Version 10.0 [dataset]. Minneapolis, MN: IPUMS, 2020. https://doi.org/10.18128/D010.V10.0
- 151 Lavallée, P. & Beaumont, J.-F. (2015), Why We Should Put Some Weight on Weights. Survey Insights: Methods from the Field, Weighting: Practical Issues and 'How to' Approach, Invited article, Retrieved from <u>https://surveyinsights.org/?p=6255</u>
- 152 Steven Ruggles, Sarah Flood, Ronald Goeken, Josiah Grover, Erin Meyer, Jose Pacas and Matthew Sobek. IPUMS USA: Version 10.0 [dataset]. Minneapolis, MN: IPUMS, 2020. https://doi.org/10.18128/D010.V10.0
- 153 Steven Ruggles, Sarah Flood, Ronald Goeken, Josiah Grover, Erin Meyer, Jose Pacas and Matthew Sobek. IPUMS USA: Version 10.0 [dataset]. Minneapolis, MN: IPUMS, 2020. https://doi.org/10.18128/D010.V10.0