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About CSCCE

Established in 1999, the Center for the Study of Child Care Employment (CSCCE) is focused on achieving comprehensive public investments that enable the early childhood workforce to deliver high-quality care and education for all children. To achieve this goal, CSCCE conducts research and policy analysis about the characteristics of those who care for and educate young children and examines policy solutions aimed at improving how our nation prepares, supports, and rewards these early educators to ensure young children's optimal development. CSCCE provides research and expert analysis on topics that include: compensation and economic insecurity among early educators; early childhood teacher preparation; access to educational opportunities and work environments; and early childhood workforce data sources and systems. CSCCE also works directly with policymakers and a range of national, state, and local organizations to assess policy proposals and provide technical assistance on implementing sound early care and education workforce policy.

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Table of Contents

Main Findings	1
I. Introduction	2
II. About the Study	6
III. Results	8
IV. Conclusion and Recommendations	20
Appendices	
Appendix A	23
Appendix B	24
Appendix C	26
References	27

Main Findings

Human Toll on Early Educators

- <u>Serious health concerns</u>. Both family child care (FCC) and center-based providers expressed strong concerns that they were putting their health and the health of their families at risk by keeping their programs open. These health concerns also took an emotional toll on educators.
- <u>Unclear and unrealistic guidance</u>. Lack of clarity regarding new regulations (for staff-to-child ratios, group size, health and safety, public assistance, and more) compounded the difficulties of running a child care program and staying safe.
- <u>Profound financial challenges</u>. To keep their programs afloat, and thereby prop up the early care and education (ECE) system as a whole, individual providers shouldered massive financial burdens, such as taking on personal credit card debt to cover program expenses.
- <u>Being undervalued and unseen</u>. Though committed to their work and resilient in the face of health and financial risks, early educators felt overlooked and undervalued, with no recognition for their contributions as essential workers.

Impacts of COVID-19 on the ECE System

- <u>Reduced capacity and enrollment</u>. Guidelines limiting capacity, coupled with reticent parents who were not ready to send their children back to child care, drove a decrease in capacity and enrollment.
- <u>Additional COVID-related costs</u>. Providers found it difficult to access essential supplies such as personal protective equipment (PPE) and cleaning/sanitation supplies, and the added costs hurt their bottom line.
- <u>New economic calculus</u>. Decreased enrollment and increased costs combined to upend the already fragile economics of running a child care business in California.
- <u>Ripple effects for the state economy</u>. Programs across the state permanently closed or were at risk of closing, exacerbating the existing child care shortage and delivering a blow to working families and the broader economy.

Recommendations for Policymakers

- <u>Support educators working in emergency conditions</u>. As long as educators continue to work in emergency conditions in which they are risking their lives, ECE programs must immediately receive support in the form of essential supplies, testing, vaccines, and health policies.
- <u>Stabilize California's ECE system</u>. Distribute the state's \$3.8 billion from the American Rescue Plan quickly and equitably, prioritizing ECE workforce needs, including appropriate compensation and benefits for all sectors of the workforce.
- <u>Undertake foundational systemic reform</u>. Invest public dollars to rebuild the early care and education system into a comprehensive and high-quality system that works for families, children, and early educators.

I. Introduction

"Being a child care provider is essential. Without our work and support, those people that need to work (essential frontline workers) would not be able to provide the level of service that they do."

—FCC Provider

"I don't have health insurance. I worry about myself. I really thought I would have more help financially from our government or our state or from somewhere."

—FCC Provider

The Consequences of Invisibility

During the COVID-19 pandemic, an image has emerged of essential workers bravely carrying out their critical jobs while risking their own health and safety, yet early educators have been left out of this picture. As a result of the pandemic, parents, policymakers, and the general public have finally recognized the critical role that early care and education plays within the California economy. Nonetheless, while early educators were faced with an ever-evolving crisis that demanded urgent action, they remained invisible and unheard. This report is our effort to recognize their experiences.

In spring and summer 2020, during the first six months of the COVID-19 pandemic, the Center for the Study of Child Care Employment (CSCCE) reached out firsthand to directors of center-based programs and home-based family child care providers, via online surveys, to understand the impact of the pandemic on their programs and on the providers themselves. We did not directly survey teaching staff as part of this study, but the forthcoming results from another study, the California ECE Workforce Study, will include perspectives from teachers.

The initial survey findings were released as a brief <u>data snapshot</u> in July 2020. This report greatly expands upon that initial data snapshot and provides a comprehensive look at the survey findings as a whole. Here, we also introduce analysis of qualitative data, along with extensive open-ended survey responses from providers in their own words in sections titled "Ask an Early Educator."

Respondents were eager to share their experiences of what it has been like to be an early educator during the pandemic. We heard stories of perseverance, commitment, and dedication. As one family child care provider noted, "[W]e do our work with love and dedication, and we follow all regulatory requirements to keep our children safe and to prevent the spread of this pandemic." A center-based provider said, "[O]ur primary focus is keeping the children and families in our care safe and healthy, just as it always has been. We do this by going above and beyond the guidance and mandates that have been set for us, while still planning and implementing curriculum that is enriching and fun for the children in our care."

These experiences align with the public notions of early educators working beyond the call of duty for the "good of the child." Yet what about the unseen costs of operating throughout the pandemic, with little-

to-no support? The survey responses raised a more complicated picture of early educators fearing for their own health and the health of their families, of providers taking on personal credit card debt to cover program expenses, of a constant scramble to both find and afford essential cleaning supplies in order to meet new health and safety regulations. The results of this study show the tremendous impact of the pandemic on the California ECE system, but even more importantly, its devastating toll on the individuals who make up the ECE workforce.

Types of Child Care Programs in California

The early care and education sector in California, as in the United States, relies on a mixed-delivery, marketbased structure with a combination of federal, state, and local funding and depends primarily on what parents can afford to pay. In California, approximately 1.2 million children age birth through five years are cared for in one or more nonparental arrangements, including various types of state-licensed center-based programs and home-based family child care (FCC) programs (Stipek, 2018). This study focuses specifically on licensed centers and FCCs in California.

There are key differences between these two types of programs. Family child care providers offer noncustodial care in their own homes, often caring for children across a range of ages in mixed-age settings. Child care centers, in contrast, are usually located in commercial buildings, schools, or churches; they are larger in size and care for more children than family child care homes. Compared to centers, licensed FCCs are faced with fewer and less-stringent regulations. Perhaps partly for this reason, FCCs are typically more affordable than centers and are more likely to serve children from lower-income families (Blasberg et al., 2019).

According to the most recent pre-pandemic administrative data, there were approximately 9,500 licensed child care centers operating in the state in 2019, serving more than 550,000 children, and nearly 25,000 family child care homes serving about 270,000 children (California Child Care Resource & Referral Network, 2019a).

An Already Shaky Foundation

ECE programs were already widely known to be under-resourced and undervalued, even before the pandemic, with the majority of programs receiving scant, if any, public funding and relying heavily on family fees/tuition (Whitebook et al., 2018). The value of early education for children and families has been well established and the work of early educators recognized as difficult and complex (Institute of Medicine & National Research Council, 2015). Yet, even in the best of times, early educators work in conditions that undermine their well-being and their ability to implement effective practices. The ECE workforce is one of the most underpaid workforces in the country with a national median hourly rate of \$11.65 (McLean et

al., 2021). In every state, early educators are among the lowest-paid workers (McLean et al., 2021). They experience poverty at rates four to fourteen times higher than K-12 teachers (Gould et al., 2020).

Evidence from national and state reports has shown that the pandemic has stressed this already shaky foundation to near collapse (Daro & Gallagher, 2020; Iowa Child Care Resource & Referral, 2020; National Association for the Education of Young Children, 2020; Oregon Department of Education: Early Learning Division, 2020). While child care has been hailed as essential, policy responses to COVID-19 — layered atop these entrenched conditions — have forced most early educators to choose between their livelihood and their own health. Whereas K-12 schools uniformly closed to in-person instruction at the outset of the pandemic, all but one state (Rhode Island) kept child care open. Child care programs were forced to weigh health risk for themselves, their families, and the children and families they serve against their financial livelihood. In states across the nation, programs had to figure out, largely on their own, how to remain financially viable while facing decreased income (due to declining enrollment and social distancing guidelines) and increased costs to meet health and safety requirements (National Association for the Education for the Education of Young Children, 2020).

The Urgent Need for Action: Using This Study to Inform Stabilization Funding

The ECE sector received minimal public financial support during the first six months of the pandemic. Most public support for child care programs came through the Coronavirus Aid, Relief, and Economic Security (CARES) Act. The first round of the CARES Act included \$3.5 billion in new Child Care and Development Block Grant (CCDBG) funds that could be used to provide continued payments to child care programs in the case of decreased enrollment or closures, funding for cleaning and sanitation supplies, and child care assistance to essential workers. Although every state utilized these funds to support child care programs, the funds were one time or time limited and were made available by most states to only certain segments of the ECE sector (e.g., only programs that remained open, only programs already receiving state funding). Of note, only a handful of states chose to require that programs receiving increased payments earmark any of the funds to go directly to staff wages. While the funds in many cases helped to stabilize some programs in the short term, they did not provide the permanent public investment needed for these programs to withstand the pandemic and obtain needed ongoing health and safety supplies. Further federal funding was passed in December 2020: an additional \$10 billion in CCDBG funding to provide immediate assistance to child care providers, with nearly \$1 billion going to California specifically.

The results of this study are being released just as the ECE field is turning its attention to the recently passed American Rescue Plan Act and its \$39 billion in funding for the nation's child care system, including \$3.8 billion for California alone. This stimulus package is a massive public investment in child care, which many stakeholders in the ECE field have called for throughout the pandemic. However, this funding arrives a *full year* into the pandemic, and the challenges we document in this paper have not magically abated during the eight months between our data collection and the passage of this stimulus bill. Indeed, this period included the largest, most sustained spike in COVID-19 cases and deaths across the country, from November 2020 through February 2021.

Child care businesses and the individuals providing care have been devastated during this crisis. California lost 4,873 licensed child care centers from January 2020 to January 2021, a 33-percent decrease in the number of center-based programs (Network, 2021). During that same period, the state lost 3,635 licensed family child care programs, which represents a loss of 14 percent of the state's home-based programs (Network, 2021). In California, the pandemic wiped out approximately 22,500 child care jobs from February 2020 through the end of the year (BLS, 2021), a staggering 29 percent of all jobs in the sector.

The large-scale loss of programs and jobs has persisted throughout the pandemic and will continue, even as the state works to administer new funding. The need for support is urgent. As policymakers turn their attention towards the incoming stimulus funds and start to chart a path forward beyond the pandemic, it is important to first understand and reckon with the devastation of the past year. The key findings from this study should inform the strategic, equitable, and urgent allocation of stabilization funds over the coming months. To that end, we offer clear, actionable recommendations for policymakers.

II. About the Study

The California ECE COVID-19 Impact Study included two phases of data collection from online surveys through Qualtrics. An initial survey in April 2020, sent to center directors and family child care providers across the state, received 2,176 responses. A follow-up survey was sent only to respondents who had participated in the first survey and indicated they wanted to participate in additional research. That second survey, distributed from June to July 2020, received 953 responses from child care providers. This paper reports data from the phase-two survey. (See **Appendix A** for full study methodology and procedures.)

The study included 377 responses from center directors and 576 responses from family child care (FCC) providers, which overrepresented centers when compared to the population distribution of program types. All analyses were weighted to reflect population-level distribution of program types and regional locations. In the weighted analysis, 28 percent of respondents were center directors, and 72 percent were FCC providers.

Child care providers in the study were overwhelmingly women (98 percent). Among center directors, 70 percent identified as White, 14 percent as Latina, 3 percent as Black, and 7 percent as Asian (**Table 1**). FCC providers were less likely to be White (42 percent) and more likely to be Latina (28 percent) or Black (14 percent). Compared to past reports on the racial/ethnic makeup of California ECE providers, White providers are overrepresented, and Latina and Black providers are underrepresented in our director sample (Whitebook et al., 2006). For the FCC sample, White and Black providers are overrepresented, while Latina providers are underrepresented, compared to the most recent representative sample in California (Austin, Edwards, & Whitebook, 2018).

	Center	FCC	Total
Unweighted N	358	544	902
White	69.3%	41.7%	49.4%
Black or of African descent	2.6%	14.2%	11.0%
Hispanic, Latino/a, or Latinx	13.7%	28.2%	24.1%
Asian	6.6%	5.4%	5.7%
Other	7.8%	10.6%	9.8%
Total	100.0%	100.0%	100.0%

Table 1. Race/Ethnicity of Study Respondents

There are two possible explanations for this difference between our sample and past state representative data. First, because these demographic benchmark data are from 2006 and 2012 statewide studies, it is possible that the current ECE provider population has changed since then. Second, it is also possible that this finding reflects some bias in our sample. We will be able to sort out these possibilities once more up-to-date statewide representative data become available in early 2021, including the California data from the 2019 National Survey of Early Care and Education (NSECE) as well as the California Early Care and Education Workforce Study, forthcoming from CSCCE.

The study participants span a wide age range (**Table 2**). The vast majority of center directors and FCC providers were between the ages of 30 and 64. In terms of the age distribution, older providers tend to have higher representation among closed programs. While those 65 and older make up about 11 percent of both center directors and FCC providers, close to one-fifth of the providers of closed programs in both center-based programs and FCCs reported themselves as members of the oldest group.

		Center			FCC	
	Closed	Open	Total	Closed	Open	Total
Unweighted N	126	234	360	96	443	539
29 and under	0.6%	1.3%	1.1%	1.8%	1.6%	1.6%
30 to 49	26.4%	44.3%	37.4%	38.2%	41.5%	41.0%
50 to 64	56.6%	47.6%	51.1%	42.1%	47.1%	46.2%
65 and above	16.4%	6.8%	10.5%	17.9%	9.8%	11.2%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 2. Age Distribution of Study Respondents

III. Results

Program Status

"Our field is scary, and much uncertainty exists on how we will be able to safely open and operate without extra support."

-Center-Based Provider

Among the study respondents, about 61 percent of centers and 83 percent of FCCs reported that they were open for in-person education and care (**Table 3**). About 35 percent of centers and 17 percent of FCCs reported that they had temporarily closed but then reopened. This finding represents a considerable shift compared to the program status we reported in our initial survey in April 2020, when only 31 percent of centers and 71 percent of FCCs were open.

Table 3. Operational Status of ECE Providers

	Center	FCC	Total
Unweighted N	377	576	953
Open: Remained opened throughout the pandemic	26.8%	66.2%	55.2%
Open: Temporarily closed but then reopened	34.7%	16.6%	21.6%
Closed	38.6%	17.2%	23.2%
Total	100.0%	100.0%	100.0%

When asked why they decided to stay open or reopen, 71 percent of center directors and 83 percent of FCC providers responded that they did not have the financial resources to survive a closure (**Table 4**). For both centers and FCCs, federal and state funding played an important role in programs' decision to stay open or reopen. About 66 percent of center directors and 40 percent of FCC providers reported that the Payroll Protection Program (PPP) loan was an important factor in their decision to open/reopen. More than 40 percent of ECE providers responded that state and local funding were important decision factors.

Table 4. Decision Factors to Stay Open or Reopen

	Center	FCC	Total
Unweighted N	225	407	632
No financial resources to survive revenue loss from a closure	71.0%	82.8%	80.1%
Received Payroll Protection Program (PPP) loan	66.0%	39.5%	45.8%
Received state/local funding	44.8%	48.1%	47.3%

Reduced Attendance and Business Challenges Among Open Programs

"The guidelines are too hard to maintain. I have to have more staff, but I can only take in half of my kids."

—Center-Based Provider

"We need to raise fees because it's more expensive to run a family daycare because of the extra expenses for protective equipment and cleaning and sanitizing supplies."

—FCC Provider

Among programs that were open, a vast majority (99 percent of centers and 79 percent of FCCs) were experiencing a significant reduction in attendance (**Table 5**). On average, centers were operating at 45 percent of their pre-pandemic attendance, and FCCs were operating at 55 percent of their pre-pandemic attendance.

Table 5. Changes in Attendance During the Pandemic for Open Programs

	Center	FCC	Total
Unweighted N	244	470	714
Fewer children	98.9%	78.5%	83.1%
Same number of children	0.4%	13.2%	10.3%
More children	0.7%	8.3%	6.6%
Total	100.0%	100.0%	100.0%

Ask an Early Educator: Changes in Attendance

Respondents to the open-ended questions (N=643) attributed the reduction in attendance to two sources: new regulations limiting class size and decreased interest from parents concerned about the health risks of group care. Some respondents to the open-ended questions (8 percent) attributed their financial difficulties to the regulations limiting class size. Having to limit the size of their classes directly impacted their income and revenue. Seven percent of the respondents stated that a drop in their student enrollment contributed to their financial troubles, a function of families' decisions to keep their children home.

"Financially, we have one more month with these group size requirements. After that, the center will probably have to close."

-Center-Based Provider

"The expenses of converting our spaces are very high. The legal enrollment ratio is now decreased, therefore it is very difficult to try to reopen and remain fiscally solvent."

—FCC Provider

"My class size went from twelve to two, then back to five. Still not enough money to cover my bills and supplies."

—FCC Provider

"Even though the economy has reopened, we are still struggling to get families to come back to school because of their own worries of having their children in group care."

-Center-Based Provider

When asked about the business challenges faced by open programs, 85 percent of centers and 71 percent of FCCs cited loss of income from families (**Table 6**). At the state and county levels, restrictions in group size and social distancing regulations were enforced to help providers operate safely. For many providers, these changes meant significant reduction in capacity, especially for centers. Open centers identified the changes to program operation due to health and safety requirements (87 percent) and decreased program capacity (80 percent) as business challenges. Increased staffing costs to meet the new health and safety requirements (67 percent) and staff-to-child ratios (68 percent) were also reported as business challenges for open centers.

Table 6. Business Challen	es Faced by Op	en Programs
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	Center	FCC	Total
Unweighted N	245	473	718
Loss of income from families	84.7%	71.1%	74.1%
Higher costs for cleaning/sanitation and personal protective equipment (PPE) supplies	86.6%	77.1%	79.2%
Inability to find or access the PPE my program needs	33.7%	41.0%	39.3%
Inability to find cleaning/sanitation supplies my program needs	42.9%	56.1%	53.1%
Changes to facility/physical space to meet health/safety requirements	74.1%	46.5%	52.6%
Changes to program operations to meet health/safety requirements	86.5%	56.6%	63.3%
Decreased program capacity due to health/safety requirements	80.4%	37.1%	46.8%
Higher staffing cost to meet health/safety requirements*	66.5%	39.2%	47.5%
Higher staffing cost to meet new ratios*	68.0%	21.6%	35.6%

*Only a portion of FCCs had paid staff. Unweighted sample size is 307 for these measures.

Ask an Early Educator: Accessing and Paying for Essential Supplies

Some respondents to the open-ended questions (6 percent) highlighted the regulations regarding sanitation as incredibly cumbersome. The health and safety regulations added to the respondents' workloads, making their work harder to carry out. Part of what made implementing the sanitation regulations difficult was the challenge of accessing personal protective equipment (PPE) and cleaning supplies. Nine percent of the respondents shared that acquiring PPE and cleaning supplies was difficult. Disaggregating the data by center type shows that respondents in FCC settings were more likely than those in center-based settings to make this observation (13 percent versus 5 percent). Essential supplies were not only difficult to find or access, they also proved expensive enough to make a significant difference in respondents' income and profit.

"Given [that] we have to implement extra cleaning and sanitation time, we will need to decrease the operating hours for our students to be able to comply with the health and safety requirements." "We spent an unexpected amount of our free time and funds trying to track down cleaning supplies. Many of us still don't have access to Lysol spray."

—FCC Provider

-Center-Based Provider

Financial Challenges and Support

"I have been in business for 35 years. I built my business from scratch, and now it feels like I am starting over. It is scary at my age." "This is very hard work when we are scared and losing money trying to keep our business afloat." —FCC Provider

—FCC Provider

The survey asked all center directors and FCC providers about the financial challenges they experienced and the kind of financial support they received during the pandemic. As shown in **Table 7**, child care providers experienced profound economic hardships during the pandemic, regardless of program type. About 25 percent of center directors and 50 percent of FCC providers reported that they have been unable to pay themselves at some point. About one-quarter of both center directors and FCC providers reported having been unable to pay one or more of their teaching staff.

For both center directors and FCC providers, about one-fifth reported that they have missed a rent or mortgage payment for their program. For all of the measures, higher shares of FCC providers reported having experienced financial challenges compared to center directors. Among FCC providers, more than one-third stated that they have taken on credit card debt to cover expenses.

	Center				FCC	
	Closed	Open	Total	Closed	Open	Total
Unweighted N	129	227	356	99	458	557
Unable to pay myself	18.7%	29.6%	25.2%	64.1%	46.9%	49.8%
Taken out a second mortgage	0.6%	0.4%	0.5%	1.9%	2.0%	2.0%
Taken on credit card debt	6.0%	13.7%	10.6%	34.1%	34.8%	34.7%
Missed a rent/mortgage payment	11.0%	20.0%	16.4%	22.4%	22.6%	22.6%
Missed a utility payment	3.2%	8.5%	6.4%	18.3%	21.5%	20.9%
Unable to pay one or more vendors	5.9%	12.1%	9.6%	23.5%	21.0%	21.5%
Unable to pay one or more non-teaching staff*	9.9%	13.5%	12.1%	20.2%	17.2%	17.5%
Unable to pay one or more teaching staff*	22.5%	23.0%	22.8%	40.4%	23.7%	25.8%

Table 7. Financial Challenges Faced by ECE Providers

*Only a portion of FCCs had paid staff. Unweighted sample sizes for FCCs are 43, 295, and 338, for closed, open, and total FCCs, respectively.

Ask an Early Educator: Financial Precarity

A significant portion (21 percent) of the respondents to the open-ended questions shared that they were struggling to keep their child care spaces open. Center-based and FCC-based respondents alike mentioned that reduced income or profit because of the COVID-19 pandemic was the primary reason for feeling uncertain about the future of their businesses. Eight percent of the respondents identified a need for financial assistance. When disaggregating the data by program type, a greater share of respondents in family child care settings identified this need, compared to respondents in center-based settings (12 percent versus 6 percent). Many of the responses stressed the need for financial assistance as urgent and critical to the future of their businesses.

"I have lost 80 percent of my income. I pray I don't lose my house."

—FCC Provider

("It is financially difficult [to] keep your business open."

—FCC Provider

"The future is dismal. I can't imagine how we are going to financially stay afloat for August and on."

-Center-Based Provider

"It is incredibly difficult to be profitable during this time."

-Center-Based Provider

Providers indicated that they were facing severe financial challenges, both to their businesses and in their personal lives. In this regard, it was important to understand the extent to which programs were able to access financial support during the pandemic. **Table 8** shows the list of stimulus funding or financial support that ECE providers received. About 58 percent of center directors applied for and were supported by the Payroll Protection Program (PPP) loan, while only 20 percent of FCC providers applied and benefited from this loan. About 14 percent of center directors and 18 percent of FCC providers reported that they received the Small Business Administration (SBA) loan.

ECE providers from both center and FCC settings reported on financial support from the state. About one-third of both center directors and FCC providers reported that they received state funds for essential supplies, such as cleaning, health, and PPE supplies. About one-quarter of open ECE programs, regardless of program type, reported that they received state subsidies for essential workers.

About one-fifth of center directors reported that they were supported through donations or private fundraising. More than one-half of providers among closed FCCs reported receiving unemployment assistance.

Table 8. Financial Support Received by ECE Providers

	Center			FCC		
	Closed	Open	Total	Closed	Open	Total
Unweighted N	127	241	368	100	462	562
Payroll Protection Plan (PPP) Ioan	41.1%	67.6%	57.6%	12.9%	20.9%	19.5%
Small Business Administration (SBA) loan	8.7%	16.5%	13.6%	16.3%	18.1%	17.8%
Employee retention credit under the CARES Act	7.6%	3.9%	5.3%	0.0%	3.4%	2.8%
State funds for cleaning/health supplies, PPE	12.5%	41.4%	30.5%	9.1%	41.2%	35.6%
State subsidies for essential workers	0.0%	27.2%	17.0%	3.1%	24.3%	20.6%
Pandemic unemployment assistance	9.5%	13.4%	12.0%	55.6%	20.2%	26.3%
Donation or private fundraising	14.0%	27.4%	22.4%	6.8%	9.1%	8.7%

Spotlight: Paycheck Protection Program (PPP) Allocation

In an open-ended question, we asked respondents who received PPP funding to share how they had allocated that funding. **Table 9** summarizes the total responses (N=315) regarding how PPP funding was allocated. Paying staff was the most frequently cited expense, with 88 percent of respondents sharing this answer. Paying for utilities and paying the rent or mortgage were the second and third most frequently cited expenses, respectively, with 30 percent of respondents sharing both of these answers. In all, respondents reported spending PPP funding on the most basic necessities of ECE operations: teachers and a working physical space.

Analysis of the qualitative data disaggregated by center type ("Center" [N=217] versus "FCC" [N=98]) reveals the highest levels of disparities in how the PPP funding was spent (**Table 10**). First, a higher share of FCC respondents (31 percent) reported spending PPP funding on food, supplies, and repairs, compared to center respondents (6 percent). In contrast, a higher share of center respondents (95 percent) reported spending PPP funding on paying staff, compared to FCC respondents (72 percent). Also, a higher share of center respondents (10 percent) reported spending PPP funding on covering staff benefits, compared to FCC respondents (1 percent). These latter two gaps between center and FCC responses can largely be attributed to the fact that centers have much larger staff on average, and therefore, staff pay and benefits are more pressing issues for center than for FCCs.

Table 9. Programs' Allocation of PPP Funding

Expense	Number of Respondents	Percentage of Respondents
Staff Pay	278	88%
Utilities	96	30%
Rent/Mortgage	93	30%
Food/Supplies/Repairs	44	14%
Staff Benefits	22	7%
Hiring Staff	8	3%
Self-Pay	7	2%
Insurance & Licensing	3	1%
Vendors	1	0%

Table 10. Programs' Allocation of PPP Funding, by Program Type

Expense	Center N	Center %	FCC N	FCC %	% Difference
Staff Pay	206	95%	71	72%	23%
Utilities	62	29%	34	35%	6%
Rent/Mortgage	63	29%	30	31%	2%
Food/Supplies/Repairs	14	6%	30	31%	25%
Staff Benefits	21	10%	1	1%	9%
Hiring Staff	7	3%	1	1%	2%
Self-Pay	1	0%	6	6%	6%
Insurance & Licensing	1	0%	2	2%	2%
Vendors	1	0%	0	0%	0%

Health Concerns Related to COVID-19

"I am not sure that I want to continue to do this work during the pandemic. I feel that I am putting myself and my family at risk."

—FCC Provider

"It's been a challenge to navigate our own mental health and well-being, while also being a big support system for colleagues, peers, children, families, and our own family."

-Center-Based Provider

We asked all ECE providers about health concerns related to COVID-19. A majority of ECE providers expressed very high concerns about contracting and spreading the virus (**Table 11**). More than 60 percent of all center directors and FCC providers reported that they were worried that they would be exposed. Providers of closed programs were more likely to express these worries, which may be the reason why they decided to stay closed. Concerns about exposing the children they serve to the virus were higher among center directors. This finding is understandable, as centers operate with larger group sizes than FCCs. FCC providers (65 percent) were more likely than center directors (57 percent) to worry about their own families being exposed to COVID-19 by keeping their programs open. The greater level of concern among FCC providers is due to the fact that they operate their businesses in their homes.

		Center			FCC	
	Closed	Open	Total	Closed	Open	Total
Unweighted N	132	244	376	97	460	557
I am worried that children will be exposed to COVID-19 while attending my program	71.0%	53.6%	60.3%	70.5%	44.2%	48.7%
I am worried that I will be exposed to COVID-19 by the children and families I serve	69.9%	54.4%	60.4%	84.3%	58.6%	63.0%
I am worried that I will expose my own family to COVID-19 by keeping my program open	66.9%	50.3%	56.7%	82.6%	60.8%	64.5%
I am worried that my staff will be exposed to COVID-19 by the children and families we serve*	76.5%	61.9%	67.6%	83.0%	57.9%	61.0%

Table 11. Health Concerns Related to COVID-19

*Only a portion of FCCs had staff. Unweighted sample sizes for FCCs are 43, 304, and 347, for closed, open, and total FCCs, respectively.

Ask an Early Educator: Health and Safety

Among respondents to the open-ended questions, a significant portion (15 percent) expressed concern for their own physical health in continuing to work as child care providers during the COVID-19 pandemic. Respondents in family child care settings were much more likely than those in center-based settings (21 percent versus 8 percent) to express concern for their health. Respondents working in FCC settings shared that their families also directly face the health risk entailed in keeping their programs open. For older respondents who work in FCC settings, the risk of contracting COVID-19 was even more concerning. Some respondents (3 percent) expressed being scared of COVID-19, largely because of the responsibility they have to keep their spaces safe. Others stated that they had to close their businesses, either permanently or temporarily, because of the risk.

"Being a child care provider in these times is very challenging because even though I love my job, it's still very hard knowing that you or your family can get sick because of the families [you] work with."

—FCC Provider

"Keeping your family safe, as well as the children you are entrusted with, is a daily challenge."

—FCC Provider

"The risk to my health is a real concern due to my age."

—FCC Provider

"I had to close my daycare in order to maintain isolation from children because of my age group (70 years old)."

—FCC Provider

"It is risky for me because of my age. Maintaining all of the protection for the children and me would require a very, very different kind of program. I don't want to end my 52-year career under these circumstances. I'll miss the toddlers and the families and the money, but it is time to retire."

—FCC Provider

Some respondents to the open-ended questions (7 percent) mentioned enduring unprecedented levels of stress because of the COVID-19 pandemic. The stress levels have been so high for some of the respondents (2 percent) that it has affected their mental health. They spoke about being unable to take care of their individual mental health needs and carry out their roles as needed. Additionally, some respondents worried about their lack of health coverage. Two percent of the respondents identified medical benefits or insurance as an added stressor.

"This time has been difficult and stressful, trying to navigate and manage all the changes and risks."

—FCC Provider

"[Being a child care provider] is emotionally charged: balancing the fear of being infected and the grumpy tiredness with the need to be stable and cheerful to help to normalize the day for our children." "Staff members, including myself, have not been supported with hazard pay nor any type of health benefits."

-Center-Based Provider

—FCC Provider

Regulations and Guidelines

"We are doing the best we can with all the conflicting guidelines, mandates, and regulations. Too much is left to interpretation. The line between the state and local directives is blurred and confusing." *"It is very tough to practice social distancing with children under five."*

—FCC Provider

Some respondents to the open-ended questions (10 percent) mentioned that the COVID-19 regulations concerning child care were confusing. Analysis of these responses disaggregated by center type revealed that center-based respondents were more likely to mention this concern (16 percent), compared to FCC respondents (6 percent). Disaggregating the responses by funding type, respondents from Head Start, Title 5, and state preschool programs disproportionately shared this issue (23 percent). In particular, respondents viewed the regulations as unclear, which contributed to the difficulties they faced in operating their businesses.

—FCC Provider

For some of the respondents, the regulations were confusing because there were too many of them, from too many sources. The regulations also changed frequently. All of this contributed to the respondents' confusion and difficulties in implementing the regulations.

"It is very stressful because of the constant changes we have to keep making to accommodate the newest guides of the day. At times, it's information overload and seems like we are gathering information that conflicts or is not clear."

-Center-Based Provider

"Entities (local and state) need to work together to give us the needed protocols/ guidelines, instead of having each preschool director gather information from different sources and hope we have it covered."

-Center-Based Provider

"We need support in reinforcing safety guidelines, such as the daily health screening, as well as better and well-defined universal guidelines."

—FCC Provider

Respondents to the open-ended questions also commented on the difficulty of implementing specific COVID-19 regulations. The most frequently cited regulations concerned the need to maintain social distancing in child care spaces (10 percent of respondents). For many respondents, the social distancing regulations were impossible to implement for children in child care settings. They viewed social distancing among young children (from birth to age five) as challenging and practically unrealistic.

"Due to the size of my family child care home, following social distancing guidelines is extremely hard."

—FCC Provider

"Six feet of social distancing in a preschool is just not doable, and we are trying so hard."

-Center-Based Provider

"'*i'm* stressed out about following the social distance rules. Young children are developmentally different from school-age children. Social distancing will be difficult for them, and I worry about trying to separate them; that they'll feel they're doing something wrong when they're not at all."

—FCC Provider

A significant portion of respondents to the open-ended questions (9 percent) reported that implementing regulations was damaging to the quality of their early childhood education environments. Some respondents focused on the appropriateness of such guidelines for young children. These respondents desired guidelines that considered the developmental needs (particularly, the social-emotional development) of the young children they serve in their programs.

"I wish that agencies would collaborate together in a more seamless fashion so that we in the trenches do not get conflicting information. It would also be nice if agencies would have consulted with an average director or very savvy group of directors. Some of the regulations coming out are obviously from folks who have never worked with young children!"

-Center-Based Provider

"Early learning and child care should not be an afterthought tagged on to the plans for K-12. Protocols and guidelines should reflect a knowledge and understanding of the nature and reality of the population we serve and be guided by developmentally appropriate practice."

-Center-Based Provider

"Preschool is about social development, and I worry about the impact of all the regulations on the children. This is not the teaching environment we want for the children and the teachers."

-Center-Based Provider

IV. Conclusion and Recommendations

Our study results paint a bleak picture of California ECE programs struggling with health and financial challenges during the COVID-19 pandemic. Child care providers and early educators were deeply concerned about the health risks of operating during the pandemic — not only the risks to themselves, but also the risks to their staff, the families they serve, and their own family members. The pandemic also introduced a new financial reality for programs. Decreased enrollment, due to a combination of decreased capacity from stricter group size regulations as well as families keeping their children at home, and increased costs to pay for new health and safety supplies (e.g., cleaning and sanitation supplies, PPE) combined to disrupt an industry that was already financially unstable. The pandemic forced individual providers to shoulder additional financial risk by taking on credit card debt, missing rent/mortgage or utility payments, or forgoing payment for themselves.

The study finds that the impact of COVID-19 on ECE programs varied depending on program type, highlighting preexisting inequities between home-based family child care programs and center-based programs (Whitebook et al., 2018). FCC providers already faced outsized challenges before the pandemic, such as lack of resources, lack of financial stability, and lack of a support system (Tonyan et al., 2017; Mimura et al., 2019). They were also more likely than center-based educators to face challenges such as work-related stress and isolation (Porter et al., 2010). The operational and financial hurdles to successfully operating a FCC program, functioning as both business owner and educator, were often overwhelming, even in the best of circumstances. The study findings indicate that FCCs were more likely to have concerns about health and safety compared to center-based respondents. FCCs also had worse outcomes on most measures of financial well-being. While the majority of all child care programs were open for in-person care, a greater proportion of FCCs remained open compared to centers, with many respondents indicating that they lacked the financial resources to survive a closure of any type.

Pre-pandemic, another source of systemic inequity was program funding type (Whitebook et al., 2018). The ECE sector in California relies on a mixed-delivery, market-based structure with a combination of public funding streams but a general reliance on what parents can afford to pay. During the pandemic, the state has primarily targeted assistance to publicly funded programs, while programs without public funding have had no guarantee of income or support. Furthermore, only about one-third of California child care programs receive public funding, and those programs serve only 10 percent of children in the state. The pandemic has thus exacerbated the long-standing inequities between programs that receive public funding and those that do not.

Disparities based on program type and funding source were well documented before the current crisis (Whitebook et al., 2018), so it comes as no great surprise that a seismic shock to the ECE system of the magnitude of the COVID-19 pandemic would lead to disparate impacts. While such discrepancies may not

be a surprise to those familiar with the sector, they are still cause for alarm. We should not be lulled into false memories of the system as it was "before" — it was a complex system rife with inequities, where Black early educators earned less on average compared to their White peers doing the same work and educators working with younger children suffered a pay penalty, as well. The California child care industry is in a precarious state due to the pandemic, but as we look ahead towards efforts to rebuild the industry, buoyed by federal stimulus funds and increased vaccinations, policymakers must remain cognizant of the faults within the system and, indeed, work to create something better, rather than building upon the shaky foundation of the existing system.

What our findings illustrate, above all, is the human toll of this virus. The California ECE sector suffered as a whole, but the sector is made up of thousands of individuals whose lives and livelihoods have been exposed to countless risks. These individual providers, many of whom are small business owners in addition to educators, have missed rent/mortgage payments or taken on credit card debt in order to keep their programs afloat; they have had to choose between risking their own health and risking the future of their businesses. Current conditions for the California ECE workforce are indeed bleak, as our findings make clear. Educators feel "invisible" and "undervalued," as survey respondents remarked. The longstanding silence of California policymakers in response to these conditions suggests that at the very least, they fail to see the health and financial needs of this essential workforce, or at worst, they are entirely willing to let these women shoulder so much of the state's longstanding care and education crisis, now intensified by the pandemic.

Recommendations

Looking ahead to the impending period of rebuilding, with much-needed public funding finally on the way, policymakers should look to the following set of recommendations to help anchor their policy priorities. The early education sector requires intentional policies and investments that protect the safety and wellbeing of staff who continue to work during the emergency; immediate efforts to stabilize the sector from further retrenchment with financial relief for programs and workers; and long-term foundational reforms that establish an effective and equitable system for children, families, and educators.

1. Provide ECE programs with the following resources, immediately and for as long as educators continue to work in emergency conditions in which they are risking their lives:

- PPE and sanitizing supplies that educators need for themselves and for the children in their care;
- Free access to COVID-19 testing and priority access to vaccines;
- Guaranteed paid sick leave if educators must quarantine because of a positive test or exposure to the virus or if they become symptomatic;
- Guaranteed health coverage for educators and family members in their household; and
- Guaranteed compensation no less than the locally assessed living wage.

2. Stabilize California's ECE system by distributing the <u>\$3.8 billion</u> from the <u>American Rescue</u> <u>Plan</u> quickly and equitably, in order to:

- Ensure that all programs receive assistance from federal relief funds, not just publicly funded programs or programs serving families receiving child care subsidies;
- Ensure that programs earmark some relief funds to <u>increase compensation</u> for the ECE workforce;
- Allow programs to utilize funds to offset decreased enrollment; and
- Simplify the distribution process and ensure that no onerous demands are placed on programs in order to receive financial assistance.

3. Invest public dollars to rebuild the early care and education system into a comprehensive and high-quality system that works for families, children, and early educators through the following measures:

- Utilize per-child funding formulas that account for the <u>true cost of care;</u>
- <u>Prioritize workforce needs</u>, including appropriate compensation and benefits for all sectors of the workforce; and
- Ensure that community-based organizations and family child care homes are supported, not just programs that currently receive state dollars.

Appendix A: Study Methodology

The full study included two phases of data collection from online surveys through Qualtrics. Starting from the full list of all licensed centers and family child care (FCC) providers obtained from the California Child Care Resource & Referral Network and the California Department of Social Services, we sent out the initial survey to providers for whom an email address was available. Given the urgency of the current crisis and to maximize the reach of the study, the survey was distributed as an open link so that any center director or FCC provider with the survey link could access the online survey, even if they were not in the initial email list. The first survey, which included about 20 questions, was distributed to more than 14,000 providers from April 13-30, 2020. About 2,176 providers completed the survey.

The follow-up survey was sent only to respondents who participated in the first survey and indicated they wanted to participate in future research. More than 80 percent of the first survey respondents agreed to participate in follow-up surveys. This second survey included about 30 questions: some of the same questions asked in the first survey, as well as additional questions about program impact and demographics. The survey was distributed to 1,793 providers from June 22 to July 1, 2020, and achieved a response rate of 61 percent. After data cleaning, 953 providers remained. This paper reports the data from the second-phase survey.

For quantitative analysis, this paper focuses on deriving point estimates for the key measures by program type and open/close status. Statistical tests of group differences are not included in this paper.

We used the population data from 2019, which are the most recent administrative data available, to make corrections for representativeness. Sample data were compared with the population based on two auxiliary variables (region and program type) and corrected using calibration adjustment. Additional variables in the 2019 population data, including age group, licensed capacity, or public funding, were considered but not used due to the possibility that these features may have changed during the pandemic and, thus, the population during the survey collection may have diverged from the 2019 population data for these characteristics.

The second-phase survey included two optional open-ended questions in which we asked respondents to share their experiences as child care providers during the pandemic. One question was directed at respondents who indicated that they had received Payroll Protection Program (PPP) funding: we asked them to describe how they were allocating the PPP funding they received. In all, 315 respondents wrote in a response to this PPP question. The other open-ended question came at the very end of the survey, where we invited respondents to share what they would like people to know about being a child care provider during the COVID-19 pandemic. We received 643 write-in responses to this question. For both of these sets of open-ended data, we developed a codebook, coded the responses, and then analyzed the data.

This paper presents qualitative data analysis in tandem with the quantitative analysis discussed above, as well as selected responses from providers in their own words.

Appendix B: Program Staffing

Survey respondents indicated that the pandemic had introduced additional challenges for staffing their programs. While staffing challenges have evolved over the past nine months since we collected data for the study, it is important to document and highlight the underlying concerns we heard from respondents in June/July 2020 that point to potential long-term challenges with the California ECE system as currently structured.

Respondents from open programs indicated that they had fewer paid teachers on staff compared to before the pandemic, due to a combination of staffing shortages, layoffs, and furloughs. Seventy-eight percent of open centers and 61 percent of open FCC programs reported that they had fewer paid teachers in June/July 2020 than prior to the pandemic.

Some respondents to the open-ended questions (6 percent) spoke about the staffing challenges that the COVID-19 pandemic had created for them. When disaggregating the data by program type, a higher share of respondents in center-based settings shared this theme compared to respondents in FCC settings (11 percent versus 2 percent). This difference may be due to the higher likelihood that center-based programs have staff. Respondents noted that they had a difficult time finding and keeping staff, an important challenge given regulations setting specific student-to-teacher ratios in the classrooms.

"In order to meet the staffing and cleaning guidelines, we have three times the staff in classrooms. This is not a financially sustainable model."

-Center-Based Provider

"I don't know how child care will be able to survive with the high amount of staff needed to run the center with a small number of children being able to attend." —Center-Based Provider

"I'm having trouble keeping staff due to the unemployment payments. Potential employees are making more staying home. No one wants a job." —Center-Based Provider

| "The most challenging aspect has been not being able to find or keep staff." —Center-Based Provider

At the other end of the staffing challenges spectrum was the challenge of cutting staff or staff hours. Class size limits and dropped enrollment were the main reasons why programs had to lay off staff.

"Stable groups of 12 are the most difficult aspect right now. We have had to cut 25 families due to stable group requirements and lay off four teachers and maybe more."

-Center-Based Provider

"We are all struggling, and next year looks bleak. I will probably be cutting staff dramatically, including myself."

-Center-Based Provider

"Our program is not sustainable in its previous form with the current group size requirements. Ratios will have to increase and staff hours [be] reduced."

-Center-Based Provider

Appendix C: Regional Variation

	Characteristic	Statewide	Northern California	Bay Area	Central California	Los Angeles	Southern California
Overview	Number of respondents	948	61	245	147	157	338
	Number of center-based respondents	377	15	99	65	67	131
	Centers that were open	61%	72%	62%	61%	52%	65%
	Number of family child care respondents	571	46	146	82	90	207
	Family child care programs that were open	83%	87%	72%	88%	84%	86%
Business Challenges	Open programs with fewer children attending than pre-pandemic	83%	69%	87%	80%	87%	83%
	Open programs that reported loss of income from families	74%	65%	81%	66%	79%	74%
	Open programs that reported higher costs due to cleaning/sanitation and PPE supplies	79%	87%	77%	79%	86%	74%
Personal Financial Challenges	Respondents who were unable to pay themselves at some point	43%	40%	46%	41%	45%	43%
	Respondents who had missed a rent or mortgage payment for their program	21%	14%	21%	17%	29%	19%
	Respondents who took on credit card debt to cover program expenses	28%	22%	27%	35%	26%	27%
Health and Safety Concerns	Respondents who were worried that children would be exposed to COVID-19 while attending their program	52%	47%	58%	51%	54%	47%
	Respondents who were worried that they would be exposed to COVID-19 by the children and families they serve	62%	55%	69%	59%	62%	61%
	Respondents who were worried that they would expose their own families to COVID-19 by keeping their program open	62%	52%	70%	60%	61%	62%
	Respondents who were worried that their staff would be exposed to COVID-19 by the children and families they serve	63%	54%	70%	66%	64%	59%

References

Austin, L.J.E., Edwards, B., & Whitebook, M. (2018). *California's ECE Workforce: What We Know Now and the Data Deficit That Remains*. Center for the Study of Child Care Employment, University of California, Berkeley.

Blasberg, A., Bromer, J., Nugent, C., Porter, T., Shivers, E.M., Tonyan, H., Tout, K., & Weber, B. (2019). *A Conceptual Model for Quality in Home-Based Child Care* (OPRE Report #2019-37). Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

California Child Care Resource & Referral Network (2021). COVID-19 Child Care Supply Graphs. https://rnetwork.org/research/covid-19-child-care-supply-graphs.

California Child Care Resource & Referral Network (2019a). 2019 California Child Care Portfolio: Tracking the Child Care Landscape in California. https://rrnetwork.org/research/child_care_portfolio.

California Child Care Resource & Referral Network (2019b). [Licensed Child Care Centers] [unpublished data set].

Community Care Licensing (2020). *Coronavirus (COVID-19) Cases in Child Care Facilities* (October 25, 2020) [Data set]. California Department of Social Services. https://www.cdss.ca.gov/Portals/9/Additional-Resources/Research-and-Data/DSSDS/ChildCare-10-25.pdf.

Daro, A., & Gallagher, K. (2020). *The Nebraska COVID-19 Early Care and Education Provider Survey II: Experiences, Economic Impact, and Ongoing Needs*. Buffet Early Childhood Institute. https://buffettinstitute. nebraska.edu/-/media/beci/docs/provider-survey-2-080420-final.pdf?la=en.

Doocy, S., Kim, Y., & Montoya, E. (2020). *California Child Care in Crisis: COVID-19 Impacts Escalate as California Reopens*. Center for the Study of Child Care Employment, University of California, Berkeley. https://cscce.berkeley.edu/files/2020/07/CSCCE_California-Child-Care-in-Crisis_COVID-19.pdf.

Gould, E., Whitebook, M., Mokhiber, Z., & Austin, L. (2020). *Financing Early Educator Quality: A Values-Based Budget for Every State*. Economic Policy Institute and Center for the Study of Child Care Employment, University of California, Berkeley. https://cscce.berkeley.edu/financing-early-educator-quality-a-values-based-budget-for-every-state/.

Institute of Medicine & National Research Council (2015). *Transforming the Workforce for Children Birth Through Age 8: A Unifying Foundation*. The National Academies Press. https://doi.org/10.17226/19401.

Iowa Child Care Resource & Referral (2020). *Results of the DHS Child Care Provider Survey*. https://iowaccrr. org/resources/files/news/DHS%20Survey%20Results%20Summary%20for%20Child%20Care%20Providers. pdf.

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

Mimura, Y., Cai, Y., Tonyan, H., & Koonce, J. (2019). Resource Well-Being among Family Child Care Business Owners. *Journal of Family and Economic Issues, 4*0(3), 408–422. https://doi.org/10.1007/s10834-019-09620-8.

National Association for the Education of Young Children (2020). *Holding On Until Help Comes: A Survey Reveals Child Care's Fight to Survive*. https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/our-work/public-policy-advocacy/holding_on_until_help_comes.survey_analysis_july_2020.pdf.

Oregon Department of Education: Early Learning Division (2020). *Oregon Child Care and COVID-19: Provider Perspectives through Reopening*. https://oregonearlylearning.com/wp-content/uploads/2020/05/ ProviderPerspectiveReopeningMay2020.FINAL_.pdf.

Porter, T., Paulsell, D., Nichols, T., Begnoche, C., & Del Grosso, P. (2010). *Supporting Quality in Home-Based Child Care: A Compendium of 23 Initiatives*. Mathematica Policy Research.

Sonnier, L., Cope, H., Oakey-Frost, R., & Lewis, R. (2020). *The Growing Adverse Impacts of COVID-19 on Louisiana Child Care Providers*. Louisiana Policy Institute for Children.

Stipek, D. (2018). *Early Childhood Education in California* (Getting Down to Facts II). Policy Analysis for California Education, Stanford University.

Tonyan, H.A., Paulsell, D., & Shivers, E.M. (2017). Understanding and Incorporating Home-Based Child Care Into Early Education and Development Systems. *Early Education and Development, 28*(6), 633–639. https:// doi.org/10.1080/10409289.2017.1324243.

U.S. Bureau of Labor Statistics (2021). *Current Employment Statistics (CES) Data, February 2021* [Data set]. U.S. Bureau of Labor Statistics, United States Department of Labor. https://beta.bls.gov/dataViewer/view/ eb924708e6ec4425aed4bca5c7c8e2a9.

Whitebook, M., McLean, C., Austin, L., & Edwards, B. (2018). *Early Childhood Workforce Index 2018*. Center for the Study of Child Care Employment, Uniersity of California, Berkeley. https://cscce.berkeley.edu/files/2018/06/3-Earnings-Economic-Security.pdf.

Whitebook, M., Sakai, L., Kipnis, F., Lee, Y., Bellm, D., Almaraz, M., & Tran, P. (2006). *California Early Care and Education Workforce Study: Licensed Child Care Centers*. Statewide 2006. Center for the Study of Child Care Employment, University of California, Berkeley.

