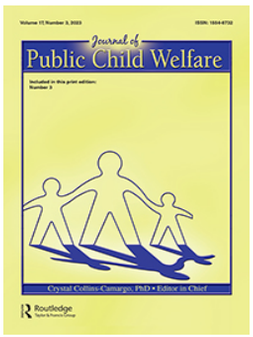

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US Child Welfare Practice During the COVID Pandemic: An Exploratory Study of Working Conditions, Practice Experiences, and Concerns

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ABSTRACT

This paper addresses the experiences of US child welfare professionals during the COVID pandemic. Using an online survey, we report on a convenience sample of 444 child welfare workers. The majority reported receiving adequate guidance on staying safe; 86.3% were given access to face masks. Workers reported 75.8% of clients used masks; 10.7% reported contracting COVID through work. About 80% worried that child clients were more at-risk. Workers who felt the most supported and least at-risk were those with stay-at-home orders. Results are discussed in terms of supporting child welfare professionals during periods of crisis.

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COVID; child welfare workforce; child safety; child maltreatment; pandemic

The Covid−19 pandemic has had a significant impact in the human services field, impacting both the profession and those who practice within. During the initial phases of COVID in 2020, in-person services at most human services agencies were suspended due to state, county, and city-level restrictions. Human service professionals, like everyone, had to adapt to a "new normal," including providing services through online platforms and digital means. The field is just beginning to report on the experiences of workers and families during this phase of the pandemic (Goldberg, Brodzinsky, Singer, & Crozier, 2021; Peinado & Anderson, 2020). The current paper explores the experiences of public child welfare professionals in the early months of the COVID pandemic, specifically focusing on guidance from their superiors, their use and client use of protective personal equipment (PPE), exposure to COVID-19 through work, and their practice concerns.

Challenges presented by COVID on child welfare practice

The pandemic has had multifaceted and multidimensional impact on the human service profession and that impact has been experienced by

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service workers internationally.[1] One issue for child welfare professionals for example, was the management of contact between children in out-of-home placement and their birth parents. Due to government-issued restrictions, in-person contact between children and parents was suspended in most places in the United States (Cabiati, 2021; Goldberg, Brodzinsky, Singer, & Crozier, 2021). This raised discussions on the rights of parents, relatives, and children involved in the child protection system. The onus of ensuring the right to visitation has always rested with the child welfare professional, with workers typically navigating multiple factors. The pandemic added a new layer of challenges with these new restrictions. Before the pandemic, contact between children in out-of-home placement and their birth parents might have revolved around transportation for children and/or their birth parents, lining up schedules, availability of space, and availability of supervisors (Nesmith, 2013; Salas Martínez, Fuentes, Bernedo, & García-Martín, 2016). During the pandemic, all of these same concerns remained, but now layered with lockdowns and restrictions on movement and person-to-person contact.

A main concern voiced by workers was that without regular access to schools, daycare centers, doctors and therapist offices, and extracurricular activities, child maltreatment may be occurring unbeknownst to authorities and potentially at greater rates, due to lack of visibility and because of an increase in stress encountered by families providing round-the-clock care for their children (Abrams & Dettlaff, 2020). We know that cases of maltreatment in the United States are chronically undercounted (Finkelhor, Ormrod, Turner, & Hamby, 2005; Goldman & Padayachi, 2000; Herman-Giddens et al., 1999; Klevens & Leeb, 2010; Palusci, Wirtz, & Covington, 2010), but the pandemic presented a whole new set of challenges regarding accurate reporting, assessment, and counting regarding the incidence of child abuse and neglect cases in the USA. Not only were cases likely under-counted, but it was becoming increasingly harder for workers to provide resources and connect clients and those in need with services due to the closure of social service organizations as a result of the pandemic (Harrikari, Romakkaniemi, Tiitinen, & Ovaskainen, 2021). Availability of voluntary and mandated services has always played an important role in the child protection system (Belanger & Stone, 2008; Freisthler, 2013; Scheeringa, Singer, Mai, & Miron, 2020), but the pandemic presented limitations on access to services that was unprecedented. The initial writings on the pandemic and child welfare have primarily been conceptual in nature. One recent study about child welfare services during the pandemic has primarily focused on clients, as opposed to the workforce (Goldberg, Brodzinsky, Singer, & Crozier, 2021). There is more work that has focused on human service professionals and non-child welfare professionals.

Impact of COVID on non-child welfare professionals

The early research which emerged from the field has utilized qualitative methods, mostly consisting of in-depth interviews; there have also been commentaries published, which were based on anecdotal evidence (Abrams & Dettlaff, 2020; Harrikari, Romakkaniemi, Tiitinen, & Ovaskainen, 2021; Nyashanu, Pfende, & Ekpenyong, 2020). The literature from the early months of the pandemic largely focuses on social worker practice concerns, the changing nature of their work circumstances, access to PPE, and how much guidance they received from their employers or supervisors.

Practice concerns and changing circumstances. The findings of this research highlighted several barriers and concerns related to the use of telecommunication for supervision and to conduct meetings and sessions with clients and families. The first concern was regarding confidentiality, including arranging for these communications, both on the client's and worker's ends, for a time and in a space where there would not be interruptions so that the session or visit was conducive to its goals (Harrikari, Romakkaniemi, Tiitinen, & Ovaskainen, 2021; Lăcătuș-Iakab & Lăcătuș-Iakab, 2020). Second, workers found it challenging to conduct emotional work from a distance (Lăcătuș-Iakab & Lăcătuș-Iakab, 2020; Nyashanu, Pfende, & Ekpenyong, 2020). Workers must assess each individual case, interpret each situation, and determine the family and individual needs individual needs; the limits of telecommunication made this process all the more challenging. Additionally, lack of technology on both ends, but particularly for children and families, was an arduous barrier (Harrikari, Romakkaniemi, Tiitinen, & Ovaskainen, 2021; Lăcătuș-Iakab & Lăcătuș-Iakab, 2020). If their client did not have access to the technology to do so, telecommunication was not possible and that individual or family could not receive services (Cabiati, 2021). It often fell upon the worker to obtain the necessary technology to conduct their work with clients virtually (Harrikari, Romakkaniemi, Tiitinen, & Ovaskainen, 2021). A mixed-methods study of child welfare-related professionals that was conducted one-two months after our study found that professionals worried that children were not visible enough in the community and as a result, fewer reports were being made to child protective services (Goldberg, Brodzinsky, Singer, & Crozier, 2021). We explore these same practice concerns in our study as well.

Personal and protective equipment. This same research also revealed that in addition to challenges concerning the lack of resources, a consistent barrier faced by human service professionals was the lack of available personal protective equipment (PPE) (Abrams & Dettlaff, 2020; Harrikari, Romakkaniemi, Tiitinen, & Ovaskainen, 2021; Nyashanu, Pfende, & Ekpenyong, 2020). Without the appropriate PPE to carry out their duties as social workers and to serve their clients, workers were faced with the task of obtaining PPE themselves or continuing to work without protection. Not only

was PPE scarce for workers, but this put them at a higher risk of contracting the virus. One limitation of the extant research is not knowing what proportion of workers had this experience. We will also be able to explore what percentage of workers believe that they were exposed to COVID through their professional responsibilities.

Lack of guidance. A collective concern across this early research was lack of guidance, information, and support (Abrams & Dettlaff, 2020; Harrikari, Romakkaniemi, Tiitinen, & Ovaskainen, 2021; Nyashanu, Pfende, & Ekpenyong, 2020). Workers expressed dissatisfaction with the amount and quality of information related to the pandemic provided by their employers to both workers and their clients (Harrikari, Romakkaniemi, Tiitinen, & Ovaskainen, 2021). This made it challenging to carry out work tasks in an efficient and productive manner, as information was often incomplete and inconsistent (Harrikari, Romakkaniemi, Tiitinen, & Ovaskainen, 2021; Nyashanu, Pfende, & Ekpenyong, 2020). This lack of communication and inadequate information and guidance led to confusion amongst workers, requiring them to engage in the additional task of seeking information and providing it to families (Harrikari, Romakkaniemi, Tiitinen, & Ovaskainen, 2021). Many human service professionals are tasked with helping to stabilize their clients, yet research shows that this workforce reported that their own organizations were failing to provide for them or protect them from the high risks in the early days of the pandemic (Abrams & Dettlaff, 2020), an area that we also explored with our sample of child welfare professionals. With decisions being left to workers, minimal communication and clarity about guidelines and tasks, and increased workloads, stress amongst social workers reportedly skyrocketed among those being studied. One area that hasn't been explored is the level of guidance human service professionals received from their managers and state officials with regard to their work expectations. We will address that in this paper.

Social work practice, theory, and COVID-19 pandemic

The literature on human service practice during the pandemic largely incorporated principles of systems theory (Abrams & Dettlaff, 2020; Goldberg, Brodzinsky, Singer, & Crozier, 2021), which has been used in social work practice for decades (Forder, 1976; Rubin, 1973; Vickery, 1974; Warren, Franklin, & Streeter, 1998), as well as in management and business fields to understand human organizations (Kast & Rosenzweig, 1972; Robb, 1985; Vautier, Dechy, Coye de Brunélis, Hernandez, & Launay, 2018). Systems theory generally explains that organizations (or families, groups, communities, or other entities) are collections of independent operators, which make-up the larger whole (Kast & Rosenzweig, 1972). Changes in one entity will ultimately lead to changes in other parts of the system or

organization. This paper assesses elements of change within the child welfare profession, using a systems approach as well. Within CPS, the agency represents the larger system, with each worker comprising a system, and the families with whom they work, as well as each individual within the family also comprising systems. Complicating this equation even further are the other systems (CPS management, the Court, ancillary service providers) with which a CPS worker must interact in order to adequately meet job expectations. Other professional occupations such as health, education, and hospitality have used systems theory to understand organizational changes during the COVID-19 pandemic (Brigandi, Spillane, Rambo-Hernandez, & Stone, 2022; Chigangaidze, 2021; Dollard & Bailey, 2021).

Current paper

The body of literature that emerged during the early weeks and months of the pandemic documented significant challenges faced by human service professionals, especially those working with higher-risk populations. The value of this research lies with the way in which it described, in-depth, the experiences, worries, and challenging circumstances of human service professionals. The existing body of research provides valuable insight, but the literature lacks data on the proportion of workers who faced these challenging work circumstances. Further, this research has not focused solely on child welfare professionals (Kerman, Ecker, Gaetz, Tiderington, & A Kidd, 2021; Martinez & Forgatch, 2001). This exploratory, quantitative study, which focuses on the experiences of child welfare workers employs a large-scale, national-based sample, with over 444 participants in the United States. The areas explored in this study are consistent with other research conducted during this time, that reflected the concerns that were prevalent in the media and human service workforce, and that are underpinned by systems theory. In this paper, we report on the proportion of workers facing challenges in their professional lives due to COVID19; additionally, we examine how their experiences may have varied according to their demographic characteristics. The research questions in this paper are:

(1) What level of professional guidance did child welfare workers receive in the early months of the COVID-19 pandemic?
(2) To what extent did workers and clients use PPE?
(3) What were workers' concerns about their own safety relative to the COVID-19 pandemic?
(4) What were workers' concerns about child risk during the COVID-19 pandemic?

(5) What proportion of workers were exposed to or contracted COVID-19 through their professional responsibilities? And, what was the source of their exposure?
(6) How did these experiences vary by demographic and professional characteristics?

Methods

Data for this paper is sourced from a larger study, *Child Welfare Practice During the COVID-19 Pandemic*, which was conducted online in the United States, between June-August, 2020. The purpose of the current study was to examine the contexts and experiences of Child welfare professionals during the COVID−19 pandemic. The methods for this study were approved by university institutional review boards of the first two authors.[2]

Procedures

Participants for this multi-state, online study, were recruited through the first two authors' professional networks, posts on relevant listservs, and direct e-mail appeals to state-level child welfare administrators. In making the direct appeals, we retrieved publicly available e-mail addresses for high-ranking child welfare administrators in each state with titles such as "commissioner," "deputy commissioner," "director," and the like. We have used these methods in two previous studies on child welfare practice (Douglas, 2011, 2012a, 2012b, 2013a, 2013b; Douglas & Gushwa, 2020a, 2020b). We did not encounter any barriers to using these methods during the pandemic. We disseminated a recruitment statement inviting child welfare professionals who met the following selection criteria to participate in the study: "(1) live and work in the United States and (2) work in the areas of investigation, assessment, ongoing services, or family reunification for a state or county child welfare agency or private agency that is contracted to provide these services." Individuals who were interested in participating were encouraged to click on a link, which brought them to our online survey which was set up using Google Forms.

On the front page of the survey, the purpose of the study was explained, as well as the rights of participants in the study. This included their right to skip questions or discontinue their participation at any time, with no negative consequences to them. We explained there were no direct benefits to participation, and their confidentiality would be maintained to the degree permitted by the technology being used. We did not ask for

participants' names, city or county locations, e-mail addresses, or phone numbers at any time during the survey. The survey was estimated to take 15–20 minutes to complete.

Participants

A total of 459 participants completed the study; 15 did not meet the study criteria of being a child welfare professional (e.g., attorney, pharmacist, guardian *ad litem*, etc.) and were removed from the sample, leaving a final sample size of 444 participants. Table 1 displays the characteristics of the sample. Participants overwhelmingly identified as female, 84.3%, their median age was 37 years, and with regard to education, 61.8% had a bachelor's degree and 29.8% had a master's degree. While outreach to potential participants was national, 57.2% were from Arizona (AZ). Due to the large proportion of respondents from AZ, we examined how AZ and non-AZ respondents might be different and found that respondents from AZ had lower levels of education (p=.015). About two-thirds of all participants had a social work degree; this was less likely to be true of AZ respondents ($p < .001$). About one-third of respondents, (35.2%) identified as black, indigenous, or as a person of color, with the category of Latinx being most frequently cited (17.9%). Respondents who were from AZ were more likely to identify as Latinx ($p < .001$) and less likely to identify as white/Caucasian (p=.003).

In terms of their professional experiences, respondents had been Child welfare professionals for a median number of 60 months, or 5 years; over three-quarters (77.6%) were frontline staff, 17.7% were supervisors, and the rest held higher-level positions. Respondents from AZ had less time in the profession ($p < .001$) and were both more likely to be a supervisor, but less likely to be a manager/administrator ($p. = 004$). About one-quarter of respondents made determinations of abuse or neglect and roughly half provided ongoing services (more likely in AZ, $p = .026$) and almost the entire sample worked for a public child welfare agency.

Respondents were also asked questions about their state/local response to COVID-19 and since it was the early days of the pandemic, were only allowed to select one option, even though many states/counties/cities have since experienced more than one response in their locality. Less than half of respondents (44.6%) reported a state-at-home order and a little over one-third of respondents (27.8%) indicated a stay-at-home advisory. Almost all respondents indicated that the state/local response had been controversial. Those from AZ had guidelines that were less restrictive ($p < .001$), but also reported more controversy than respondents from other states ($p = .015$).

Table 1. Socio-demographic Characteristics of Sample ($n = 426–444$).

Characteristic	Percent/Median
Demographic and Worker Characteristics	
Gender	
• Female	84.3
• Male	14.7
• Nonbinary	0.9
Age (years)	37
Education	*
• High school/GED	1.6
• Some college/Assoc degree	5.5
• BA/BS	61.8
• Masters	29.8
• Doctorate	1.4
Social work degree	67.2*
Race (all that apply)	
• Am. Indian/Alaska Native	2.6[+]
• Asian	3.3
• Black/African Am.	10.3
• Latinx	17.8*
• Native Hawaiian/Pacific Isl.	1.2[+]
• White/Caucasian	72.3*
• Other	4.3[+]
Number months in field	60
Work role	*
• Frontline staff	77.6
• Supervisor	17.7
• Case aid/Visit supervisor	2.0
• Manager/Administrator	2.5
• Other	0.2
Work specialization	*
• Make determinations of CA/N	26.6
• Ongoing services	53.8
• Post-reunification services	1.1
Agency Type	+
• Private agency	1.4
• Public agency	98.2
State/Region	0.9
• Northeast (MA, NY)	7.5
• South (AL, GA, MS, TX)	11.7
• Midwest (IN, IA, MN, MS, OH, WI)	79.9
• West (AK, AZ, CA, NV, OR, UT, WY)	
State/Local Response to COVID19	
State/local officials' response to COVID19	*
• Shelter-in-place order	11.1
• Stay-at-home order	44.6
• Stay-at-home advisory	27.8
• None	4.3
• Other	12.2
COVID response controversial	88.3*

[a]Cell count is too low to perform significance testing.
*Statistically significant difference between AZ and non-AZ respondents.

Instrument and analyses

This paper and set of analyses are part of a larger study that focused on being a child welfare professional during the COVID-19 pandemic. We focus on the following sections of the study in this paper: (1) guidance

and expectations related to the COVID-19 pandemic, (2) child welfare professionals use of PPE, (3) client use of PPE, (4) worker perception of safety, (5) practice concerns during the pandemic, (6) practice circumstances and behaviors, (7) state of local response to the COVID-19 pandemic, (8) exposure to COVID-19 through job, and (9) demographic/professional experiences questions. Most of the questions were developed based on anecdotal evidence from communicating with professionals in the field, our own professional understanding of concerns in the field, and were intended to systematically capture the experiences of child welfare professionals during the early months of the pandemic. Table 2 displays the number of questions asked in each section of the survey and the response set that was implemented. Our use of these variables in our analyses, along with our creation of summary scores to measure some constructs is further explained below. Please reference Table 2 for examples of questions asked.

We first present basic, descriptive statistics: mean/median, frequency distribution, about worker experiences during the pandemic. We also used *t*-tests and chi^2 to determine if AZ respondents differed from non-AZ respondents.

For the purposes of multivariable analyses, we used five dependent variables/groups: (1) guidance received – (a) sum of five guidance questions (range 5–20; M = 13.81; SD = 3.57) and (b) less contact with supervisor (one dichotomous variable); (2) PPE-related: (a) spent own money on PPE (dichotomous variable) and (b) amount of money spent (a continuous variable, range $5–$500; *M*=$57.66; SD = 56.89); (3) worker's own sense of safety during the pandemic – the use of a single question from that set (response set 1–4; M = 3.28; SD = .89); (4) worker's concerns about children's level of risk during the pandemic – sum of nine child risk questions (response set 1–4 × 9 items, range 12–36; M = 27.41; SD = 4.94); and (5) contracted COVID because of professional work (one dichotomous variable). Our independent variables were; age of participant (continuous variable), gender of participant (categorical variable), graduate degree (categorical variable), social work degree (categorical variable), work length (continuous variable, noted in months), frontline worker (categorical variable), race/ethnicity variables (categorical variables) – African American/Black, Caucasian/White, and Latinx, participant was from Arizona (categorical variable), COVID-19 government responses (categorical options): shelter-in-place, stay-at-home order, or stay-at-home advisory, and if the COVID-19 government response was controversial (categorical options).[3]

Before using multivariate analyses, we used Pearson's correlation to examine bivariate analyses between selected dependent variables and demographic characteristics/independent variables. (See Table 3) Variables that were significant at the $p \leq .10$ were included in the multivariate analyses – either OLS

Table 2. Survey Instrument.

Survey Area	# of Questions	Response Set	Sample Questions
Guidance and expectations	6	4-point response set of Strongly Disagree – Strongly Agree	My supervisor has given me adequate guidance about how to keep myself safe during the pandemic. My area manager has reasonable expectations of me as a child welfare professional during the pandemic.
Respondent Use of Personal Protective Equipment	6	4-point response set of Strongly Disagree – Strongly Agree; Fill in the blank; Check boxes for type of PPE; Yes/No	Please rate the extent to which you agree or disagree with the following statement: I have been given adequate personal protective equipment I need to safely carry out my job tasks during the pandemic. Have you spent your own money to obtain the supplies that you need in order to carry out your job?
Client Use of Personal Protective Equipment	3	Fill in the blank; Check boxes for type of PPE; Close-ended estimates for percent of clients using PPE	When you are doing home visits, roughly what percentage of your clients are using personal protective equipment (such as face masks or coverings, hand sanitizer, etc.). When you are doing home visits, which of the following types of personal protective equipment are you seeing clients commonly use? (select all that apply)
Worker Perception of Safety	4	4-point response set of Strongly Disagree – Strongly Agree; Fill in the blank; Check boxes for when feel safety is compromised	Please rate the extent to which you agree or disagree with the following statement: I feel more at-risk now than I usually do when carrying out my professional duties as a child welfare professional.
Practice Concerns During the Pandemic	9	4-point response set of Strongly Disagree – Strongly Agree; 3-point response set of Less/Same/More; 2-point response set Agree/Disagree	I believe or I know that our agency is responding to fewer reports right now. I am worried that more children will experience non-fatal abuse because of the pandemic.
State/Local Response to COVID-19 Pandemic	2	Close-ended options for type of stay-at-home order; open-ended; 2-point response set of Yes/No	Is it your sense that the officials' responses (stay-at-home, shelter-in-place, etc.) have been controversial in your state or city? How did your state or local officials respond to COVID19? What recommendations were issued by officials? Please select the option that best matches your understanding.
Exposure to COVID through Job	3	2 and 3-point response set of Yes/No or Yes/Maybe/No; Close-ended options for source of exposure	Were you exposed through a client, coworker, or other professional? (select all that apply) Did you contract COVID-19 because of your exposure through your job?
Demographic and Professional Questions	11	Close-ended response options	Questions pertained to age, gender, education, social work degree or not, race (select all that apply), state, length of time in job, title/role, nature of work, and private/public institution

Table 3. Bivariate Correlation Analyses Between Independent and Dependent Variables ($n = 288–440$).

	Dependent Variables						
Independent Variables	Guidance Received	Less Contact w/ Supervisor	Children More at Risk	Worker More at Risk	Spent Own Money on PPE?	Amount Spent	Contract COVID b/c of Work Exposure
Participant Age	.118*	−.06	−.221**	−.192**	−.024	.048	−.013
Gender: Female	−.043	.021	.037	−.053	.197**	−.058	.024
Graduate degree	.028	−.091^	.048	.013	.024	−.018	−.030
SW degree	−.007	−.076	.000	−.043	−.027	.005	−.075
Work length (in months)	.064	−.065	−.152**	−.127**	−.085^	.047	−.053
Frontline worker	−.106*	.084^	.005	.065	.033	−.055	−.002
Race: Black	−.058	−.027	−.167**	.079^	.035	.087	.099^
Race: Latinx	−.028	.015	−.06	.088	.026	.016	.090
Race: White	.082^	.036	.184**	−.121*	−.041	−.044	−.119*
From Arizona	−.062	.225**	−.02	.090^	.147**	−.013	.097^
C19 Gov't Resp: Shelter-in-place	.011	−.164**	.046	.002	.049	−.049	−.072
C19 Gov't Resp: Stay-home order	.102*	−.025	−.067	−.115*	−.116*	−.020	.035
C19 Gov't Resp: Stay-home advisory	−.033	.085^	.039	.108*	.045	.007	−.008
C19 Gov't Resp: Controversial	−.085	−.040	.058	.048	.076	−.005	.121*

Note: ^ Correlation is significant at the 0.10 level (2-tailed).
*Correlation is significant at the 0.05 level (2-tailed).
**Correlation is significant at the 0.01 level (2-tailed).

regression for continuous dependent variables or logistic regression for dichotomous dependent variables.

Results

Guidance for workers

Table 3 displays results regarding guidance, personal safety, and practice concerns among the participants, in descending rank order. About three-quarters of workers reported that their supervisors provided them with good guidance and set reasonable expectations for them during the pandemic. At the same time, over half (55.1%) of workers said that they were having less contact with their supervisors; 20.9% reported the same; and 24.0% reported having more contact with their supervisors. Workers reported less guidance and fewer reasonable expectations from their area managers and/or state officials. There were no differences in responses between Arizona and non-Arizona respondents.

Table 3 displays the correlation analyses between the dependent and independent variables in this paper. At the bivariate level, workers who were older, less likely to be frontline workers, and who had stay-at-home orders were more likely to report receiving more levels of

guidance from their superiors; and workers who were from Arizona were more likely to report less contact with their supervisors, but this was less true for those who were sheltering-in-place. Table 4 displays the multivariate analyses, which shows that in a full model, those who reported more guidance from superiors were older workers (p=.011) and those who had a stay-at-home order (p=.036), although the adjusted R^2 was only .01, p=.007. With regard to contact with their supervisors, the same relationships that existed at the bivariate level remained in logistic regression. Workers from Arizona were 2.32 times more likely to say that they were having less contact with their supervisors (OR = 2.32, p < .001), but those who were sheltering-in-place were about 40% as likely as to report less contact, (OR = .43, p=.011)

Personal and protective equipment

Table 5 displays both Child welfare professionals and client use of PPE. The majority of workers were provided with PPE by their employers. Child welfare professionals were most likely to be provided with face masks (86.3%) and gloves (83.1%). Still, almost three-quarters of respondents (74.3%) received hand sanitizer by their employers. Roughly half (56.3%) of workers received gloves. Worker use of PPE does not always correspond

Table 4. Summary statistics from OLS regression and logistic regression analyses predicting worker experiences and beliefs during the pandemic.

Independent Variable	B	SE	β	*t*			*p*
OLS REGRESSION							
Dependent Variable: Guidance Received, R^2=.019, p = .007							
Respondent Age			.04	.02	.12	2.57	.011
C19 Gov't Response: Stay at home order			.72	.34	.10	2.10	.036
Dependent Variable: Worker Feels More at-Risk During Pandemic, R^2=.09, p < .001							
Respondent Age			−.02	.00	−.20	−4.12	.000
C19 Gov't Response: Stay at home order			−.21	.08	−.12	−2.49	.013
Dependent Variable: Worker Beliefs re: Child Risk During Pandemic, R^2=.04, p < .001							
Respondent Age			−.10	.02	−.23	−4.63	.000
Race: Black			−1.83	.89	−.11	−2.07	.039
Race: White			1.51	.59	.14	2.53	.012
				Conf. Interval			
Independent Variable	B	SE	OR	Lower	Upper	Wald	*p*
LOGISTIC REGRESSION							
Dependent Variable: Spent Own Money on PPE							
Gender: Female	1.25	.31	3.49	1.90	6.41	16.27	.000
Respondent from Arizona	.83	.27	2.29	1.36	3.88	9.57	.002
C19 Gov't Response: Stay at home order	−.67	.27	.51	.30	.87	6.21	.013
Dependent Variable: Less Contact with Supervisor							
Respondent from Arizona	.84	.20	2.32	1.55	3.45	16.93	.000
C19 Gov't Response: Shelter in place	−.84	.33	.43	.23	.83	6.45	.011
Dependent Variable: Contracted COVID from Work							
Race: White	−.79	.41	.46	.61	1.01	3.79	.052

Table 5. Exposure to COVID – 19 through employment (n = 419–444).

COVID–19 Exposure	%
Exposed through job	*
• No	33.4
• Yes	36.5
• Maybe	30.1
Source of exposure	*
• Client	63.7
• Co-worker	69.4
• Other professional	18.0
Contract COVID-19 because of your exposure through job	10.7

*Statistically significant difference between AZ and non-AZ respondents.

with provisions from their employers. Over 80% of workers used hand sanitizer, sanitizing wipes, and face masks, regardless of whether these PPE were provided by their employers. Client use of PPE was reportedly lower than worker use. Child welfare professionals reported higher use of face masks, marginal use of hand sanitizer, and very low level of use of wipes and gloves. Significance testing showed very little difference between Arizona and non-Arizona respondents.

In addition to this, 82.4% of workers said that they spent their own money on PPE for their professional duties. At the time that this survey was conducted, which was several months into the pandemic, workers reported spending a mean amount of $57.69. A higher percentage of workers in Arizona spent their own money (p = .002), but there was no difference in the mean dollar amount spent.

At the bivariate level, workers were more likely to spend money on their own PPE if they were female, had less work experience (months on the job), were less likely to have a stay-at-home order, but who were from Arizona. In a logistic regression with a dichotomous dependent variable, most of those relationships held. Workers who were female were 3.49 times more likely to use their own money to purchase PPE (OR = 3.49, p < .001), those who were from Arizona were 2.29 times more likely than participants from other states to purchase their own PPE (OR = 2.29, p = .002, used as a control only), and those who had a stay-at-home order were half as likely as those without stay-at-home orders to use their own money to purchase their own PPE (OR = .51, p = .013). There were no statistically significant bivariate relationships between the amount of money spent and the demographic variables, thus, we did not conduct a multivariate analysis.

Workers' sense of safety during the pandemic

Table 6 also displays workers' sense of safety carrying out their professional duties during the pandemic. The vast majority (83.5%) reported feeling more at-risk carrying out their professional duties because of the pandemic. They

Table 6. Distribution and use of PPE by workers and clients ($n = 260–444$).

	Worker		
Type of PPE	Provided %	Use %	Clients Use %
Hand sanitizer	74.3	85.9	41.9
Sanitizing wipes	56.3*	81.7	8.0
Face masks	86.3	81.3	75.8
Gloves	83.1	48.5	4.7

*Statistically significant difference between AZ and non-AZ respondents.

felt most at-risk while doing home visits (86.7%), followed respectively by seeing clients in the office, while supervising family visits, and while being in the community with clients.

At the bivariate level, many variables were related to workers' sense of personal risk and safety. Those who were younger, had less time in the field, who were White, and who had a stay-at-home order were less likely to feel more at risk and unsafe. Workers who had a stay-at-home advisory were more likely to feel at-risk. At the multivariate level, only two variables were significantly related to worker's sense of safety: those who were younger ($p < .001$) and had a stay-at-home order ($p=.013$) were less likely to feel unsafe in their professional responsibilities. The adjusted $R^2 = .04$, $p < .001$.

Workers' concerns regarding children being at-risk

Table 6 also presents workers' practice concerns about children and families during the early months of the pandemic. Nearly 90% of respondents worried that more children were in danger, but were not being reported to child protective services. Other practice concerns that were more frequently noted included worrying that children were experiencing more non-fatal abuse or neglect due to the pandemic (85.9% and 87.5%, respectfully), that more children and families were struggling at that time (86.1%), and concern that even children on their caseload were at an increased risk at that time, as compared with before the COVID-19 pandemic (79.7%). There were, again, minimal differences between AZ and non-AZ respondents. bottom part of Table 4 displays the circumstances under which workers were practicing, which had implications for child safety. Over two-thirds of workers reported that their agencies were having a harder time finding foster placements and around one-half believed that their agencies were responding to fewer reports during the early days of the pandemic. This latter finding was less true for AZ workers.

At the bivariate level, workers who were younger and who had less time in the field were more likely to be worried about children's level of risk. This was also true of respondents who were White, but less true of workers who were Black. At the multivariate-level, OLS regression showed that many of these relationships remained. Workers who had less time in the field ($p < .001$) and

who were White (p=.012) were more worried about children's levels of risk. Workers who were Black reported being less worried (p=.039). The model explained a small amount of variance with the adjusted R^2=.09, $p < .001$.

Worker exposure/contraction of COVID-19 through professional duties

COVID−19 exposure among Child welfare professionals is displayed in Table 7. About one-third indicated that they had been exposed to COVID −19 through their employment. Conversely, another one-third indicated not having been exposed to the virus. AZ respondents were both more likely to indicate they had been exposed at work, more likely to state they had not been exposed at work, but were less likely to select the option "maybe" to being exposed at work. Participants that indicated they had been exposed through their jobs reported that they had most likely been exposed by a client (63.7%) or through a coworker (69.4%). Only 18% of respondents indicated having been exposed through another professional that they interacted with. Last, of those exposed, 10.7% indicated they had contracted COVID−19 through their jobs. AZ respondents were more likely to report having been exposed to COVID−19 through work with clients.

Table 7. Worker Perception of Safety, Practice Concerns, and Practice Behaviors, Presented in Rank Order (n = 420–443).

Area of Concern	% Agree
Guidance and Expectations	
Supervisor: Adequate guidance on staying safe during pandemic	77.1
Supervisor: Reasonable expectations during pandemic	73.7
Area manager: Adequate guidance on staying safe during pandemic	67.1
State/public health officials: Adequate guidance staying safe during pandemic	63.8
Area manager: Reasonable expectations during pandemic	56.8
Contact with my supervisor since start of pandemic:	
• less	55.1
• the same	20.9
• more	24.0
Worker Perception of Safety	
Feel more at risk carrying out professional duties	83.5*
Please select the times when you feel more at risk:	
• Doing home visits	86.7
• Clients in the office	42.4
• While supervising family visits	37.5
• In the community with clients	34.8*
Practice Concerns	
Worried more children in danger but not being reported	89.8
Worried that more children experiencing non-fatal neglect	87.5
Seeing more children and families struggle	86.1
Worried that more children experiencing non-fatal abuse	85.9
Worry children on caseload more at-risk now	79.7
Worried more children will die or be seriously harmed	72.9
Worry children not getting adequate supervision at home	59.4*
Believe agency responding to fewer reports right now	53.6*
Harder time finding foster placements	68.1

Note: *Statistically significant difference between AZ and non-AZ respondents.

At the bivariate level, workers who were White were less likely to contract COVID, but those in regions where their government's response to COVID was controversial were more likely to contract COVID. At the multivariate level, logistic regression showed that only one variable was statistically significant. Respondents who were White were about half as likely to contract COVID as respondents of other races or ethnicities (OR = .46, $p = .052$).

Discussion

This study is the first, US, multi-state, large-scale study to examine the conditions under which Child welfare professionals operated during the early weeks and months of the COVID-19 public health pandemic. Using a systems framework, the results show that workers felt more at-risk carrying out their professional roles than they did before the pandemic, that they were highly concerned about the safety of children in their communities, and that about two-thirds were exposed to COVID through their jobs. Further, the majority of workers and clients were using PPE regardless of distribution. Demographic factors that were most consistently related to these findings were the age of respondents and the local government's response with regard to stay-at-home advisories or orders. The results of these findings can better inform child welfare administrators and policy/decision-makers about the resources and guidance that Child welfare professionals need in order to carry out their professional responsibilities during a public health pandemic or other major regional or national state of emergency.

Practice guidance and expectations

Child welfare professionals felt that they received the best guidance from their supervisors. About three-quarters indicated that their supervisors provided them with adequate guidance in staying safe and also had reasonable expectations of them during the pandemic. Further, workers who had a stay-at-home order were more likely to report higher levels of guidance. Child welfare professionals work most closely with their supervisors and previous research indicates that they can play a key role in worker resilience, longevity on the job, and job satisfaction (Landsman, 2007). Other research has noted that supervisors are the key element in all aspects of child welfare practice, reform, and organizational culture (Dill & Bogo, 2009; Frey et al., 2012). This finding suggests that workers were receiving support from their most important professional relationship. In fact, there were almost no predictors of whether a worker reported having less contact with their supervisors, minus those with less restrictive government orders.

Workers felt less supported by others – area managers and state/public health officials. Perhaps this is because they are one-or-several steps-removed from these individuals and knowing and understanding their motivations may not be as clear to those in this study.

Worker beliefs regarding child risk

The child welfare professionals in our study reported high levels of concern about the well-being of children, in almost every category that we inquired about: rates of reporting, families struggling, and experiencing higher rates of nonfatal and fatal maltreatment. The only area where that was less of a concern was children's supervision at home, presumably because it was assumed that parents were home with their children. Similar worries by human service professionals have been captured in other research, both in the United States and other nations, as well (Harrikari, Romakkaniemi, Tiitinen, & Ovaskainen, 2021; Ross, Schneider, Muneton-Castano, Caldas, & Boskey, 2021). Social workers in these studies reported being concerned about clients, about how the pandemic disproportionately has an impact on vulnerable populations, and how the pandemic has spurred a recommitment to their profession and expertise (Ross, Schneider, Muneton-Castano, Caldas, & Boskey, 2021).

Systems theory emphasizes that different elements of a whole system can have a negative impact on each other when they are not attended to (Forder, 1976). The constant worry about clients and their well-being has weighed significantly on human service professionals. During the pandemic, social workers have played a central role in promoting the well-being of the most vulnerable populations. A quantitative random sample design study conducted in Spain (Martinez-Lopez, Lazaro-Perez, & Gomez-Galan, 2021) found that a high percentage of social workers reported emotional exhaustion (70.1%). Just under one half experienced depersonalization, which includes seeing clients as problems, as opposed to humans (48.5%). Overall, 20.4% of social workers suffered from burnout, which is quite lower than what one other study found, at 63.7% (Holmes, Rentrope, Korsch-Williams, & King, 2021). Further, the study from Spain found that 70.8% of social workers stated that they might need psychological care because of COVID−19 (Martinez-Lopez, Lazaro-Perez, & Gomez-Galan, 2021). Similarly, a study in Israel (Ben-Ezra & Hamama-Raz, 2021) found that job demands were significantly associated with psychological distress and that emotion-focused coping was associated with higher psychological distress and high job demands. Finally, a Canadian study found that 79.5% of direct service providers reported a decline in their mental health throughout the pandemic, with 41.9% screening positive for post-traumatic stress symptoms as well as reporting high rates

of compassion fatigue and burnout (Kerman, Ecker, Gaetz, Tiderington, & A Kidd, 2021). Examining the relationship between the practice concerns of Child welfare professionals and burnout will be examined in a future set of analyses with the current dataset. That will be the first to explore this topic on a sample of child welfare professionals.

Use of PPE

As we have learned since the start of the COVID−19 pandemic, the use of PPE is one of the primary ways to protect against infection of the virus (World Health Organization, 2020). We found that the majority of workers, 81–86%, were using PPE and in most of these cases, use of PPE was well aligned with distribution from their employers. This is in contrast to research by others in this area. A number of other studies found that workers had inadequate access to PPE when the pandemic first hit. This was true among social workers in Spain (Martinez-Lopez, Lazaro-Perez, & Gomez-Galan, 2021) and in Finland (Harrikari, Romakkaniemi, Tiitinen, & Ovaskainen, 2021), direct care workers in England (Nyashanu, Pfende, & Ekpenyong, 2020), and a number of other studies noted rationing or having unequal access to PPE across a workforce (Ross, Schneider, Muneton-Castano, Caldas, & Boskey, 2021; Tedam, 2021). It is possible that our study was carried out far enough into the pandemic that the availability and distribution of PPE had smoothed out, as compared with the initial weeks of the pandemic. Regardless, access to PPE is not a trivial matter or just connected to transmission and physical health. One study found that social workers' levels of stress and anxiety had increased due to the lack of PPE (Martinez-Lopez, Lazaro-Perez, & Gomez-Galan, 2021), which highlights the importance of giving human service professionals adequate resources to carry out their jobs during the pandemic.

Worker perception of own safety and exposure to COVID19

Even before a worldwide pandemic, the child welfare workforce has had high rates of secondary traumatic stress, burnout, and turnover, which can put workers' physical and emotional well-being at-risk (Bride, Jones, & MacMaster, 2007; Kothari et al., 2021; Travis & Mor Barak, 2010). It is not surprising that workers felt more at risk carrying out their professional duties during the pandemic, and that this was most true when they were conducting home visits with clients. This was less true for younger workers who didn't feel that their safety was as compromised. Previous research has found that younger populations have not felt that the COVID pandemic posed as much risk as older adults (Lin, 2022; Tedaldi, Orabona, Hovnanyan, Rubaltelli, & Scrimin, 2022; van Baal, Walasek, Karanfilovska, Cheng, & Hohwy, 2022).

About two-thirds of respondents said that they were or were potentially exposed to COVID through their jobs. That exposure was almost as likely to come from a coworker as it was a client. About 11% of respondents reported they had contracted COVID because of exposure through their jobs. This is similar to a wide-scale Canadian study ($n > 700$) of support workers in the field of housing insecurity wherein 10% of participants reported they had contracted COVID−19 (Kerman, Ecker, Gaetz, Tiderington, & A Kidd, 2021). That said, these authors did not specify if the respondents had contracted COVID through their professional responsibilities. These findings should be balanced against research from the CDC which found that in the early months of the pandemic, only 46% of those with COVID could identify their source of exposure (Tenforde et al., 2020).

Regardless of whether workers can identify their sources of exposure, our findings about worker concern regarding COVID exposure are consistent with other research which found that throughout the most challenging part of the pandemic, social workers have continued to practice while facing the stress of continuous exposure and possible contagion of the virus (Lázaro-Pérez, Martínez-López, Gómez-Galán, & López-Meneses, 2020; Martinez-Lopez, Lazaro-Perez, & Gomez-Galan, 2021). In addition, a study conducted with social workers in Spain found that workers experienced high levels of anxieties related to death, specifically the fear of death of others and the fear of the process of others dying (Martinez-Lopez, Lazaro-Perez, & Gomez-Galan, 2021).

Limitations

This paper has several limitations. First, the methods employed in this survey did not use random sampling; what we present is a convenience sample of child welfare professionals who were interested enough in the topic of our research to follow the link to the study. We cannot guarantee that the workers who participated in our study are representative of workers in their home states or anywhere in the USA. Workers who were having more negative or extreme experiences practicing during the pandemic may have been particularly drawn to this study and thus, present results which are mis-representative of the whole. Nonetheless, the demographic characteristics of our sample are fairly consistent with what has been found in other research (Kim & Hopkins, 2017; National Child Welfare Workforce Institute, 2011); that said, the participants in our sample had higher rates of formal social work education. Second, over half of the sample was from the state of AZ. Someone in that state disseminated the information and the resulting participation was high. We cannot provide a reason for this, but we did control for the state of AZ in all of our analyses. There were some differences in responses, but not always in the same direction. Third, the results from the survey represented one slice in

time and may not currently reflect the conditions under which Child welfare professionals practice today. The COVID-19 public health pandemic continues to require change and modification as the virus mutates throughout the globe. The experiences captured by the workers in this study in the spring and summer of 2020 are still informative and yield useful information should other public health or other disasters (natural or person-made) in the future substantially limit in-person contact with clients. Fourth, this paper only reported on the experiences of workers and did not seek to understand the reasons for their experiences or the potential outcomes associated with them. These additional explorations would have been too ambitious to take on with the current paper, but they will be the focus of papers in the future from this dataset. Fifth, child welfare practice is challenging. The workforce is under-resourced, it can be physically dangerous, and workers have higher rates of post-secondary traumatic stress (Conrad & Kellar-Guenther, 2006; Horwitz, 2006; Shemmings, Shemmings, & Cook, 2012). The pandemic didn't take an easy job and make it hard; it took a hard job and made it harder. We don't have baseline data on the participants in our sample to demonstrate the magnitude of the effect of the pandemic on our participants, but a longstanding literature confirms that child welfare practice has always been a challenging field (Chen & Scannapieco, 2009; Dill, 2007; Drake & Yadama, 1996; Kim, 2010; Sprang, Craig, & Clark, 2011; Stevens & Higgins, 2002). Finally, in our multivariate analyses, there is a chance, that the findings might be an artifact of missing variables and differing operational samples for analysis. That said, there is always a chance in social science research that we have not controlled for all variables in our models, thus not accounting for a potential confounding variable (UCLA Statistics, n.d).

Conclusion and recommendations

Child welfare workers face insurmountable challenges on the job. Many work under excessive workloads, experience high rates of burnout and secondary traumatic stress, and are woefully underpaid. The research on the child welfare workforce reflects a constant state of precarity (Barth, Lloyd, Christ, Chapman, & Dickinson, 2008; Brenner, Kindler, & Freundlich, 2010; Dill, 2007; Sprang, Craig, & Clark, 2011). The COVID −19 pandemic thrust everyone, regardless of job title or location, into a constant state of stress, as we collectively worried about threats to our health and economic well-being. This survey provides a window into what it was like for child welfare workers during the early weeks and months of the pandemic. While attempting to manage the individual and collective stress of the pandemic, their typical on-the-job stress was unavoidably exacerbated by the responsibility of trying to protect vulnerable children during a time when setting eyes on them could potentially result in

serious illness or death (Abrams & Dettlaff, 2020; Ashcroft, Sur, Greenblatt, & Donahue, 2022). The workers in our study were worried about the accuracy of reporting rates, the struggles of high-risk families in a high-risk pandemic, and the likelihood of more kids dying as a result of fatal maltreatment. They managed these stressors while anywhere from ~ 25–45% of them reported having less contact with their supervisors and having less than adequate guidance on how to stay safe. These were changes that our respondents reported, as a result of the pandemic. If there is a silver lining in the results of this study, it is that the government responses were related to worker experiences and perceptions. Restrictions that were intended for the whole of a society or population had a positive impact on the specific profession of child welfare professionals, an apt example of what systems theory seeks to explicate (Forder, 1976). Those who had stay-at-home orders felt more supported by their superiors, felt that their professional responsibilities were not placing them at an increased risk, and they were less likely to spend their own money on PPE for their professional needs. Further, those with a shelter-in-place order didn't have less contact with their supervisors. These findings are what one would expect from such government actions. So, this offers validity about the findings of our study and also is a nod toward the efficacy of state and local government action in response to the pandemic.

The immediate crisis of the pandemic has passed and we are living and working with an active, but significantly reduced threat from the virus, yet there are still lessons to be learned. Child welfare workers reported receiving inadequate support and guidance in their professional lives. This was true across the board – from their supervisors all the way up to state leaders. Future researchers may want to consider different theoretical approaches, in order to gain additional insights into child welfare and other human serving organizations. One potential theory that might be helpful is to take an institutional approach, in which both internal and external pressures on an organization are taken into effect, in order to better understand the overall functioning and health of a human service organization (Hasenfeld & Garrow, 2012). This perspective has historically been used to examine other substantive changes in human service organizations, their structures, and delivery of services (Hasenfeld, 1984, 1985). More recent research has also used this framework in order to map external pressures of child-serving organizations (Collins-Camargo, Chuang, McBeath, & Mak, 2019). This approach may be especially helpful now, as we continue to navigate a world with active COVID threats.

There will be other crises – local, national, or worldwide – that will place stressors on the systems that we have in place: pandemics, natural disasters, or person-created disasters. This study and many others that we cite throughout

this paper provide evidence for the need for a substantially different approach that doesn't leave human service professionals quite so vulnerable and susceptible to working in an unsupported environment. Perhaps most important, government action and guidance mattered more than other characteristics examined in this study. This is an important finding and speaks to the crucial role that supportive government actions can play in potentially reducing stress on a system that already routinely operates under too few resources.

Notes

1. In this paper, we use the terms "social worker," "human service professional," and "child welfare professional" interchangeably. This is a result of trying to stay true to the literature that we are citing, but also seeking to use language that is as inclusive as possible, when appropriate. We recognize that social workers in the United States (and some other nations) are educated through accredited programs and yet we also acknowledge that not everyone who holds the title of "social worker," has a degree or a license in social work.
2. At the time that this study was carried out, EMD was on the faculty of Worcester Polytechnic Institute. MKG was on the faculty of Simmons University.
3. The full survey and set of questions are available upon request from the authors.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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