Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.
"Oh, this is actually okay": Understanding how one state child welfare training system adapted to the COVID-19 pandemic

Laura M. Schwab-Reese a, b, *, Ida Drury b, Heather Allan b, Kasey Matz b

a Department of Public Health, Purdue University, West Lafayette, IN, USA
b The Kempe Center for the Prevention and Treatment of Child Abuse and Neglect, University of Colorado Anschutz Medical Campus, Aurora, CO, USA

ARTICLE INFO
Keywords:
Training
Pandemic
COVID-19
Child protection
Child welfare

ABSTRACT
Background: Training for new and existing child protection system (CPS) caseworkers is critical to developing and maintaining a competent workforce that effectively works towards safety, permanency, and wellbeing outcomes for children in the system. The COVID-19 pandemic required a shift to virtual training to continue training CPS professionals safely.

Objective: The purpose of our project was to determine if there were differences in learning outcomes between learners who completed training in the usual delivery methods (Pre-COVID) and the fully virtual delivery methods (Post-COVID). We also sought to understand any factors that facilitated or impeded successful virtual training during the pandemic.

Participants and setting: Caseworkers-in-training completed learning and satisfaction assessments through standard continuing quality improvement efforts. Training facilitators, course developers, and leadership completed qualitative interviews.

Methods: We assessed quantitative differences in one US state in learner knowledge, satisfaction, and behaviors before and during the COVID-19 pandemic and conducted a qualitative thematic analysis of interviews with training system employees.

Results: Overall, there were limited differences in learner outcomes before and after the transition to virtual training delivery. Across the employee interviews, three main themes emerged: organizational culture facilitated the transition, external constraints caused challenges during the transition, and there were opportunities to evolve training practices positively.

Conclusions: The shift to a virtual learning environment had little impact on learner knowledge or satisfaction. Employee perspectives indicated that the pre-COVID investment in organizational culture has substantial dividends for performance during the crisis.

1. Introduction

Much has been written, in both popular and academic press, about the heightened risk of child abuse and neglect during the COVID-19 pandemic (Boserup, McKenney, & Elkbuli, 2020; Bryant, Oo, & Damian, 2020; Campbell, 2020; Griffith, 2020; Jonson-Reid, Drake, Cobetto, & Ocampo, 2020; Latsch, Eberitzsch, & Ofelia Brink, 2020; Leslie & Wilson, 2020; Posick, Schuehrs, Christian, Grubb, & Christian, 2020; Roca, Melgar, Gairal-Casadó, & Pulido-Rodríguez, 2020; Roje Dapić, Buljan Flander, & Prijatelj, 2020; Stewart, 2020; Teo & Griffiths, 2020; Usher, Bhullar, Durkin, Gyamfi, & Jackson, 2020; Woodall, 2020; World Health Organization, 2020). Although

* Corresponding author at: 812 W State St, MTHW 214F, West Lafayette, IN 47907, USA.
E-mail address: lschwabr@purdue.edu (L.M. Schwab-Reese).

https://doi.org/10.1016/j.chiabu.2020.104697
Received 27 July 2020; Received in revised form 13 August 2020; Accepted 15 August 2020
Available online 19 August 2020
0145-2134/© 2020 Elsevier Ltd. All rights reserved.
the impact of the pandemic on child maltreatment is not yet clear, there is substantial reason to be concerned about rising rates and severity of abuse and neglect. Several studies during disasters and periods of heightened distress have demonstrated that many more children experience maltreatment during these challenging times (Brooks-Gunn, Schneider, & Waldfogel, 2013; Cherry & Wang, 2016; Conrad-Hiebner & Byram, 2020; Curtis, Miller, & Berry, 2000; Keenan, Marshall, Nocera, & Runyan, 2004; Moon, 2018; Schneider, Waldfogel, & Brooks-Gunn, 2017). A recent review by Griffith (2020) succinctly described the confluence of factors that could lead to increased child maltreatment during the pandemic, including financial insecurity due to lost or reduced employment, work-family spillover due to lack of childcare and closed schools, limited social support due to shelter-in-place orders or distancing efforts, and stress related to lack of leisure time due to increased work hours and limited access to communal leisure activities. Given the convergence of these risk factors, appropriate responses to child maltreatment are critical to ensuring the safety and wellbeing of children and young people during times of societal crisis (Posick et al., 2020; Teo & Griffiths, 2020; World Health Organization, 2020).

In the United States, the child protection system (CPS) is the center of nearly every community’s response to child maltreatment, so the system must continue to function well during crises. Maintaining normal functioning within the CPS during societal crises is particularly challenging for several reasons. First, many child welfare agencies are underprepared for large-scale catastrophes and disruptions to work processes (Berne, 2009; Daughtery & Blome, 2009). Second, face-to-face contact between children and CPS workers has been a cornerstone of child protection work in many states and has been, in some cases, a requirement from the federal and/or state governments (Child Welfare Policy Manual, 2020; Milner, 2020; North Carolina Department of Health & Human Services, 2020). As a result, transitioning away from in-person contact is a substantial shift from usual work processes.

Training with new and existing workers is critical to developing and maintaining a competent workforce that can effectively work towards safety, permanency, and wellbeing outcomes for children in the system (Collins, Amodeo, & Clay, 2007). Training the CPS workforce does not occur in a vacuum, and contextual factors play a significant role in the delivery and impact of trainings (Collins et al., 2007). In addition to requiring changes in child welfare practice itself, the COVID-19 pandemic altered training delivery. Given the importance of training to the preparedness of the CPS workforce, understanding factors that facilitate or impede training during a crisis may be helpful to inform continued and future responses during disasters. To systematically understand the experience of CPS workers, we conducted a qualitative study to systematically understand the experience of CPS workers.

In the United States, the child protection system (CPS) is the center of nearly every community’s response to child maltreatment, so the system must continue to function well during crises. Maintaining normal functioning within the CPS during societal crises is particularly challenging for several reasons. First, many child welfare agencies are underprepared for large-scale catastrophes and disruptions to work processes (Berne, 2009; Daughtery & Blome, 2009). Second, face-to-face contact between children and CPS workers has been a cornerstone of child protection work in many states and has been, in some cases, a requirement from the federal and/or state governments (Child Welfare Policy Manual, 2020; Milner, 2020; North Carolina Department of Health & Human Services, 2020). As a result, transitioning away from in-person contact is a substantial shift from usual work processes.

Training with new and existing workers is critical to developing and maintaining a competent workforce that can effectively work towards safety, permanency, and wellbeing outcomes for children in the system (Collins, Amodeo, & Clay, 2007). Training the CPS workforce does not occur in a vacuum, and contextual factors play a significant role in the delivery and impact of trainings (Collins et al., 2007). In addition to requiring changes in child welfare practice itself, the COVID-19 pandemic altered training delivery. Given the importance of training to the preparedness of the CPS workforce, understanding factors that facilitate or impede training during a crisis may be helpful to inform continued and future responses during disasters. To systematically understand the experience of CPS workers, we conducted a qualitative study to systematically understand the experience of CPS workers.

In the United States, the child protection system (CPS) is the center of nearly every community’s response to child maltreatment, so the system must continue to function well during crises. Maintaining normal functioning within the CPS during societal crises is particularly challenging for several reasons. First, many child welfare agencies are underprepared for large-scale catastrophes and disruptions to work processes (Berne, 2009; Daughtery & Blome, 2009). Second, face-to-face contact between children and CPS workers has been a cornerstone of child protection work in many states and has been, in some cases, a requirement from the federal and/or state governments (Child Welfare Policy Manual, 2020; Milner, 2020; North Carolina Department of Health & Human Services, 2020). As a result, transitioning away from in-person contact is a substantial shift from usual work processes.

Training with new and existing workers is critical to developing and maintaining a competent workforce that can effectively work towards safety, permanency, and wellbeing outcomes for children in the system (Collins, Amodeo, & Clay, 2007). Training the CPS workforce does not occur in a vacuum, and contextual factors play a significant role in the delivery and impact of trainings (Collins et al., 2007). In addition to requiring changes in child welfare practice itself, the COVID-19 pandemic altered training delivery. Given the importance of training to the preparedness of the CPS workforce, understanding factors that facilitate or impede training during a crisis may be helpful to inform continued and future responses during disasters. To systematically understand the experience of CPS workers, we conducted a qualitative study to systematically understand the experience of CPS workers.
learners and training facilitators during the COVID-19 pandemic, we assessed differences in one US state in learner knowledge, satisfaction, and behaviors before and during the COVID-19 pandemic. To contextualize these data, we conducted qualitative interviews with training facilitators, training developers, and leadership of the state’s training system. Together, these data provide a rich understanding of pandemic-related changes that may inform CPS disaster preparedness efforts in the future.

2. Methods

2.1. Setting

The Kempe Center for the Prevention and Treatment of Child Abuse and Neglect was founded in 1972 to “understand and prevent child maltreatment and to serve affected children and their families” (University of Colorado, 2020). Professionals located at the Kempe Center provide clinical services to maltreated children and their families and interdisciplinary case consultation for complex maltreatment cases. Kempe Center employees also conduct child maltreatment-related prevention and intervention research, and provide training and coaching to child protection system workers, healthcare providers, and researchers. In 2013 The Kempe Center was selected by the Colorado Department of Human Services to design and implement a competency-based training and coaching program for child welfare professionals and para-professionals. Known as the Colorado Child Welfare Training System (CWTS), the program provides training for new caseworkers and supervisors, in-service training for CPS professionals, and coaching services for child protection system leaders in all 64 Colorado counties. There are also training opportunities for community partners, foster and kinship care providers, and others directly or indirectly engaged with child protection.

CWTS maintains a large-scale learning community with over a hundred training or coaching opportunities, many of which are offered multiple times per year. These learning experiences are uniquely designed through a myriad of different approaches: classroom, web-based, and hybrid. The CWTS system also provides opportunities for leader and team coaching. Classroom trainings occur in-person, where content is provided, and learners are engaged in various activities to enhance their learning with guidance from a professional facilitator. Coaching happens in-person with teams and via video conferencing with individual leaders. Web-based trainings are primarily informative in nature and may be taken at the leisure of the learner. Hybrid trainings include a classroom training session and asynchronous web-based activities.

On March 13, 2020, CWTS ceased all in-person delivery in response to the COVID-19 pandemic. Immediately, Kempe staff began the process of adapting CWTS classroom trainings to a virtual format. The first courses to transition were the pre-service fundamentals series for caseworkers, supervisors, and foster parents. These pre-service trainings are a requirement for certification for learners in their respective roles. The remaining in-service trainings were reviewed to determine if they were appropriate for virtual delivery. Beginning on March 30, 2020, canceled learning events were replaced with virtual adaptations.

2.2. Approach

We used a sequential mixed-method design (Fig. 1), beginning with a quantitative analysis of existing training evaluation survey data, then moving to a qualitative analysis of employee interview data (Ivankova, Creswell, & Stick, 2006). We used quantitative data to understand learner experiences, including differences in experiences before and after the transition to virtual delivery. Guided by the quantitative results, we conducted qualitative interviews with five employees who held a range of roles related to the transition activities. These interviews provided additional context to the learner experiences and further explained how the transition process occurred. Once all data were collected and independently analyzed, we compared the findings to identify where the learner and employee perspectives confirmed each other, where each expanded the findings of the other, and instances where the perspectives conflicted.

For this evaluation, we focused on the learners enrolled in the Caseworker Fundamentals series. All newly hired child welfare workers must complete it before they are certified to serve families. Thus, it was a high priority for CWTS to continue to offer these trainings. The series includes six trainings and a culminating simulation experience. Welcome to CO Child Welfare was a web-based training embedded in the learning management system. Web-based trainings were primarily didactic (i.e., information presented directly to the learner) and were taken at the leisure of the learner. Because it was web-based before the COVID transition, the format did not change. The second training of the series, ‘Choose Your Own Trail’ was a pre-COVID hybrid course, which combined a classroom seminar with web-based training. During the COVID transition, the classroom seminar portion transitioned to a synchronous video-conference format (i.e., a virtual seminar) with a facilitator, and the web-based training component was unchanged. The remaining experiences, including all other trainings and the simulation, were fully classroom-based before the COVID transition. After the COVID transition, all moved to virtual seminar delivery.

2.3. Learner Experiences

2.3.1. Data source

As part of their usual continuous quality improvement (CQI) processes, CWTS assessed learner knowledge and satisfaction from learners for nearly all of its offerings. These data included multiple-choice knowledge assessments completed before and after each learning experience, and Likert-scale course, facilitator, and technology evaluation questions completed after each learning experience. Learners were also asked to share more-detailed perspectives through a series of open-ended questions focused on barriers to their learning, how the learning experience could have been improved, and any other additional feedback. These data are
The dependent variables for this section of the analyses were learner knowledge, self-reported satisfaction with the training, and simulation behaviors. To assess baseline and post-course knowledge, learners complete a multiple-choice questionnaire before and after the training. These questionnaires were tailored to the content of each course, and knowledge was operationalized as the percent of responses correctly answered. Learner satisfaction was assessed after the training with Likert-scale survey questions. These questions focused on the course materials and content, training approach, the facilitator (if applicable), the technology (if applicable), and other more general questions. Learner satisfaction was operationalized as the response to each of these questions. Because the questions were not designed to function as a scale, they were not combined to represent an overall satisfaction measure. Learner behaviors during simulation were assessed using the observer-rater tool and were operationalized as the scores on each rating tool dimensions.

For each course, learners were categorized as "Pre-COVID transition" or "Post-COVID transition." Pre-COVID transition indicated that they received their fundamentals training in the usual manner. Post-COVID transition indicated that they received their fundamentals training through virtual delivery. For knowledge-related analyses, learners were considered to be "Pre-COVID transition" if they completed their pre-course knowledge assessment between January 1, 2020, and March 13, 2020 (the date of the last classroom training). They were categorized as "Post-COVID transition" if they completed the pre-course assessment after March 13, 2020. For satisfaction-related analyses, learners were considered to be "Pre-COVID transition" if they completed their course evaluation between January 1, 2020, and March 18, 2020 (the date of the first virtual training). They were considered to be "Post-COVID transition" if they completed their course evaluation after March 18, 2020. Because learners may delay taking the pre-course knowledge assessment or the course evaluation, this is an imprecise categorization but is the best available option given the anonymous nature of this data source.

2.3.3. Data analysis

We used bivariate analyses, including paired t-tests, Wilcoxon-Mann-Whitney U test, and Cochran-Armitage test for trend, to assess differences between pre-COVID and post-COVID learners on pre-course knowledge, post-course knowledge, post-course satisfaction, and simulation behaviors. For the knowledge-related questions, results were reported by each of the courses in the Caseworker Fundamentals series. The Choose Your Own Trail course and the role-play simulation did not have knowledge-related assessments. For the learner satisfaction-related question, the results were reported by Pre-COVID training format (classroom, hybrid, web-based, simulation).

Because of the substantial number of quantitative comparisons in this paper, we used Bonferroni correction when assessing statistical significance. Without the Bonferroni correction, there were a few marginally statistically significant differences between pre-COVID and post-COVID learners. With the Bonferroni correction, there were no statistically significant differences. As such, we concluded that there were no statistically significant differences, and p-values were not reported.

After the quantitative analysis of the learner knowledge and satisfaction outcomes, we conducted an informal review of the open-ended responses to more general satisfaction questions. The substantial number of responses precluded formal qualitative analysis; however, we used this informal review to guide the development of the semi-structured guide for the employee interviews.

Immediately after the COVID transition, we coded the first twenty virtual simulations and the in-person simulations completed during the first quarter of 2020. We compared the characteristics of the Pre-COVID in-person simulations to the Post-COVID virtual simulations.
2.4. Employee perspectives

2.4.1. Data collection

The transition to virtual learning required a substantial investment from CWTS training facilitators, instructional and web designers, and leadership. To understand their experiences during the immediate transition and in sustaining virtual learning, we conducted semi-structured interviews with five employees in a variety of roles. These interviews were broadly focused on their roles, their experiences through the transition and in sustained virtual delivery, and their perceptions of learners’ experiences. Interviews lasted approximately 50–60 min. All interviewees consented to participate in the interview and to audio record their interview following the processes outlined in the protocol approved by the first author’s local Institutional Review Board.

2.4.2. Data analysis

We used an inductive thematic analysis framework for this component of the research (Braun & Clarke, 2006, 2012). We audio-recorded these interviews and transcribed them using HappyScribe, a computer-assisted transcription platform (Happy Scribe, 2020). Because HappyScribe does not produce entirely accurate transcripts, one author reviewed the audio files and transcripts to produce verbatim transcripts that included all spoken words and sounds. After the transcripts were finalized, she reviewed them for a second time while taking notes of areas of emerging interest. Then, she began to develop the initial codes. Using Atlas.ti, she reviewed the transcripts and identified segmented sections of relevant material and coded the segments with a preliminary code. As she progressed through the data, she modified codes to incorporate new material. With each revision to a code, she reviewed the previously coded material to assess if recoding or new coding was necessary. After she segmented and coded all the transcripts, she reviewed and, as necessary, recoded the transcripts for a second time. Then, she shifted to focusing on the themes. She reviewed the coded segments to identify similarities and differences between the codes. When codes shared a unifying theme, they were clustered. When all similar codes were clustered into themes, these themes were compared against the coded materials and the full transcripts to determine if they adequately captured the information shared by participants. Then, the themes were defined, and a report of the results drafted. These synthesized results were shared with participants, who were asked to reflect on whether the results accurately reflected their experiences.

Given the small size of the organization and the relatively limited number of people in each of the roles, we do not report the characteristics of the participants, nor do we attribute the transcript segments to a specific role. This decision was made to protect the confidentiality of the participants.

3. Results

3.1. Learner experiences

3.1.1. Learner knowledge

We compared the percent of correct responses on before (baseline) and after (post-test) training assessments between Pre-COVID and Post-COVID learners. For example, Pre-COVID learners who completed Working Toward Closure correctly answered, on average, 59.8% of questions before the training and 72.9% of questions after the training. Post-COVID learners correctly answered, on average, 60.0% before the training and 71.4% after the training. For this course and the other trainings, there were no significant differences between Pre-COVID and Post-COVID learners on the percent of correct responses on the assessment completed before the training, which suggests that the pandemic did not substantially alter learners’ ability to engage with the assessment. In addition, there were no differences in scores between Pre- and Post-COVID learners after the trainings, further suggesting that learners retained approximately the same amount of information, and the pandemic and its associated transition to a virtual learning environment did not negatively impact participant learning (Table 1).

3.1.2. Learner satisfaction

We examined differences in learner satisfaction before and after the COVID transition for each type of course (web-based, hybrid, classroom, simulation). Because the web-based training format did not change during the COVID transition, we were able to determine

Table 1
Percentage Correct Responses, by Test Type and Date.

| Course/Type                                | Before Training Assessment | After Training Assessment |
|--------------------------------------------|----------------------------|---------------------------|
|                                           | Pre-COVID                  | Post-COVID                | Pre-COVID                  | Post-COVID                |
|                                           | n  | % Correct (sd) | n  | % Correct (sd) | n  | % Correct (sd) | n  | % Correct (sd) |
| Welcome to CO Child Welfare               | 127 | 61.8 (13.3)  | 23  | 60.6 (15.8)   | 116 | 75.0 (12.8)   | 19  | 75.2 (11.3)   |
| Hotline & Red Team: Where Assessments With Families Begins | 105 | 50.8 (14.5)  | 114 | 48.7 (15.1)   | 99  | 73.2 (12.3)   | 98  | 70.3 (12.7)   |
| Legal Preparation for Caseworkers         | 57  | 56.5 (17.0)  | 129 | 57.5 (15.8)   | 59  | 82.1 (14.6)   | 116 | 83.6 (12.6)   |
| Safety Through Engagement                 | 130 | 46.7 (17.6)  | 79  | 45.8 (18.2)   | 115 | 61.5 (15.9)   | 67  | 58.2 (16.3)   |
| Working Toward Closure                    | 103 | 59.8 (15.9)  | 103 | 60.0 (16.7)   | 96  | 72.9 (16.8)   | 88  | 71.4 (12.6)   |
Table 2
Perceptions of Trainings, by Format and Date.

|                                   | In-Person Seminars Mean (sd) | Hybrid Courses Mean (sd) | Web-based Trainings Mean (sd) | Simulation Mean (sd) |
|-----------------------------------|-------------------------------|--------------------------|-----------------------------|----------------------|
|                                   | Pre-COVID n = 410 | Post-COVID n = 369       | Pre-COVID n = 82 | Post-COVID n = 93 | Pre-COVID n = 100 | Post-COVID n = 86 | Pre-COVID n = 81 | Post-COVID n = 89 |
| I can readily identify how the information from this course will apply to my job. | 6.5 (0.8) | 6.7 (0.5) | 6.0 (1.0) | 6.3 (1) | 6.5 (0.8) | 6.5 (0.7) | 6.4 (0.9) | 6.5 (0.8) |
| I am confident I can apply what I learned in this course to my job. | 6.3 (1.1) | 6.6 (0.6) | 5.6 (1.2) | 6.0 (1.3) | 6.3 (0.8) | 6.4 (0.8) | 6.3 (1.1) | 6.3 (0.8) |
| The pre and post learning assessment was based on material delivered during this course. | 6.3 (1.1) | 6.5 (0.8) | 5.7 (1.3) | 6.1 (1.1) | 6.2 (1.0) | 6.4 (0.8) | 6.2 (0.9) | 6.2 (1) |
| This course provided critical information that will enable me to do my job better. | 6.5 (0.9) | 6.7 (0.5) | 5.7 (1.3) | 6.1 (1.3) | 6.3 (0.8) | 6.4 (0.8) | 6.3 (1.1) | 6.3 (0.8) |
| I had enough opportunities to practice skills and knowledge application during the course. | 6.2 (1.2) | 6.5 (0.7) | 5.6 (1.5) | 6.0 (1.3) | 5.7 (1.4) | 6.2 (1.0) | 6.1 (1.1) | 5.7 (1.4) |
| I felt that the course materials and exercises enhanced my learning. | 6.3 (1.1) | 6.6 (0.7) | 5.4 (1.6) | 5.7 (1.6) | 5.9 (1.0) | 6.2 (0.9) | 6.1 (1.2) | 5.9 (1.0) |
| I was able to relate each of the learning objectives to the learning I achieved. | 6.3 (1.0) | 6.6 (0.6) | 5.5 (1.4) | 5.9 (1.4) | 6.1 (0.8) | 6.3 (0.9) | 6.3 (1.0) | 6.1 (0.8) |
| I was encouraged to critically think about how to apply knowledge and skills from this course to my work with children, youth, and families. | 6.5 (0.9) | 6.7 (0.6) | 5.6 (1.5) | 6.1 (1.3) | 5.9 (1.2) | 6.2 (0.9) | 6.3 (1.0) | 5.9 (1.2) |
| I was given ample opportunity to have my questions answered. | 6.5 (0.9) | 6.7 (0.7) | 5.9 (1.3) | 6.2 (1.2) | 5.5 (1.4) | 6.0 (1.2) | 6.3 (1.0) | 5.5 (1.4) |
| Overall, I was satisfied with what I learned from this course. | 6.4 (1.1) | 6.6 (0.6) | 5.3 (1.6) | 5.8 (1.5) | 6.1 (0.9) | 6.4 (0.8) | 6.1 (1.3) | 6.1 (0.9) |

Range: 1=Strongly Disagree, 4 = Neutral, 7=Strongly Agree.

Note: Learners complete a separate evaluation for each course. In this table, the n’s represent the number of responses, not the number of individual learners.
if factors other than course type/format were influencing learners’ perceptions of the training. For example, balancing childcare and professional responsibilities in the wake of stay-at-home orders may have influenced the way learners perceived the training, even though the training itself did not change. However, there were no differences in Pre- and Post-COVID perceptions of the one web-based training. As a result, any differences that we found for the other course formats (in-person, hybrid, simulation) would likely be due to changes in the course format, rather than other non-format specific factors, such as stress. Ultimately, we found that there were minimal differences in learner perceptions of the in-person, hybrid, and simulation trainings before and after the COVID transition (Table 2). Overall, both Pre- and Post-COVID learners reported average responses between 5.5 (between "Somewhat Agree" and "Agree") to 6.5 (between "Agree" and "Strongly Agree"). This finding suggests that learners were, overall, quite satisfied with the trainings, regardless of whether they completed the course before or after the transition to fully virtual formats. We also found that there were no changes to reported satisfaction with facilitators between in-person (Pre-COVID) and virtual contexts (Post-COVID) (Table 3).

### 3.1.3. Learner behavior

Overall, we found minimal differences in caseworker-in-training behaviors between the in-person and virtual simulations. In both formats, the substantial majority of caseworkers followed statute requirements (Table 4). There were four main safety concerns in the simulation: substance use, basic needs, domestic violence, and supervision. A similar number of in-person and virtual simulation caseworkers conducted an adequate safety assessment for the first three concerns before and after the COVID transition (Table 5). However, a substantially higher percentage of caseworkers adequately assessed the supervision concern in the virtual simulation (55.2 % in-person; 85.0 % virtual). This difference was statistically significant (p = 0.03) prior to the Bonferroni correction but was no longer significant after this correction. There were also limited differences in the length of time caseworkers spent on each domain during the in-person and virtual simulations.

### Table 3

Perceptions of Platform or Facilitator, by Format and Date.

|                        | In-Person Seminars Mean (sd) | Hybrid Courses Mean (sd) | Simulation Mean (sd) |
|------------------------|------------------------------|--------------------------|---------------------|
|                        | Pre-COVID n = 410            | Post-COVID n = 369       | Pre-COVID n = 82    | Post-COVID n = 93 | Pre-COVID n = 81 | Post-COVID n = 89 |
| The facilitator was knowledgeable about the subject matter. | 6.6 (0.8) | 6.8 (0.4) | 6.2 (1.1) | 6.4 (0.9) | 6.5 (0.9) | 6.8 (0.5) |
| The facilitator managed time effectively. | 6.5 (1.1) | 6.7 (0.7) | 6.2 (1.1) | 6.4 (0.8) | 6.5 (1.0) | 6.8 (0.4) |
| The facilitator encouraged class participation and engagement. | 6.7 (0.6) | 6.7 (0.6) | 6.3 (0.9) | 6.4 (0.8) | 6.6 (0.7) | 6.8 (0.4) |
| The facilitator’s presentation style enhanced my learning experience. | 6.4 (1.2) | 6.6 (0.7) | 6.1 (1.3) | 6.3 (1.0) | 6.4 (1.1) | 6.8 (0.4) |
| The facilitator was able to answer my questions satisfactorily. | 6.5 (1.0) | 6.7 (0.6) | 6.1 (1.1) | 6.3 (1.0) | 6.5 (0.9) | 6.7 (0.5) |
| The feedback I received from the facilitator during the course helped me refine my practice. | 6.4 (1.1) | 6.6 (0.6) | 6.1 (1.2) | 6.3 (1.0) | 6.4 (1.2) | 6.7 (0.5) |
| The facilitator was respectful and inclusive of other’s opinions, experiences, and thoughts. | 6.7 (0.7) | 6.8 (0.5) | 6.4 (0.9) | 6.6 (0.6) | 6.6 (0.7) | 6.8 (0.4) |

Range: 1 = Strongly Disagree, 4 = Neutral, 7 = Strongly Agree.

Note: Learners complete a separate evaluation for each course. In this table, the n’s represent the number of responses, not the number of individual learners.

### Table 4

Percentage of Caseworkers Meeting Statute Requirement During Simulation, by Date.

|                        | Pre-COVID (n = 29) | Post-COVID (n = 20) |
|------------------------|-------------------|---------------------|
| Explained Referral Reason (Intake Only) Yes | 75.0 % | 90.9 % |
| Made Contact with Both Children | 96.6 % | 80.0 % |
| Substance Use Assessment Yes | 65.5 % | 65.0 % |
| Basic Needs Assessment Yes | 62.1 % | 55.0 % |
| Domestic Violence Assessment Yes | 82.8 % | 80.0 % |
| Supervision Assessment Yes | 55.2 % | 85.0 % |

if factors other than course type/format were influencing learners’ perceptions of the training. For example, balancing childcare and professional responsibilities in the wake of stay-at-home orders may have influenced the way learners perceived the training, even though the training itself did not change. However, there were no differences in Pre- and Post-COVID perceptions of the one web-based training. As a result, any differences that we found for the other course formats (in-person, hybrid, simulation) would likely be due to changes in the course format, rather than other non-format specific factors, such as stress. Ultimately, we found that there were minimal differences in learner perceptions of the in-person, hybrid, and simulation trainings before and after the COVID transition (Table 2). Overall, both Pre- and Post-COVID learners reported average responses between 5.5 (between "Somewhat Agree" and "Agree") to 6.5 (between "Agree" and "Strongly Agree"). This finding suggests that learners were, overall, quite satisfied with the trainings, regardless of whether they completed the course before or after the transition to fully virtual formats. We also found that there were no changes to reported satisfaction with facilitators between in-person (Pre-COVID) and virtual contexts (Post-COVID) (Table 3).
3.2. Employee perspectives

To better understand the transition process, we conducted interviews with five CWTS employees in several different roles within the organization: training facilitator, coach, course developer, and organization leader. Most participants held multiple roles (e.g., training facilitator and coach; course developer and training facilitator). During these interviews, participants were specifically asked to reflect on their experiences during the transition, the virtual trainings that resulted from the transition, and their perceptions of how learners experienced the virtual trainings. Across the interviews, three main themes emerged: the organizational culture made the transition easier; external factors caused challenges during the transition; the transition was an opportunity to evolve training practices in a positive way.

3.2.1. Organizational culture as a facilitator

Participants clearly described their belief that leadership was invested in their wellbeing. In some ways, this culture manifested as direct leadership actions. In other ways, the culture was demonstrated in the ways that employees talked to and about others, supported each other, and engaged with the overall mission of the work. As a result of these factors, employees were more willing to work hard throughout the process. One employee reflected that I have never worked harder than I have over this period of... weeks that we’ve been home. While there were numerous intentional decisions that encouraged this culture, the mission and vision of the organization may also attract people who are inherently more willing to engage, particularly during a crisis. As one employee reflected, they [social workers] were bred for this... They’ll swoop in and they’ll help, and they’ll rescue, and yes, it will work them to the bone.

The organization culture discussions centered around three subthemes: 1) flexibility in accomplishing work tasks, 2) leaders, co-workers, and learners recognizing the challenges of the situation and extended grace and compassion to each other, 3) support given throughout the process.

*we can’t do that right now...so we’ve had to adjust.* The ability to be flexible was mentioned numerous times across the interviews (Table 5). In some ways, the ability to be flexible was given by leadership to employees. Employees in most roles were allowed to be flexible with their work schedule, as long as the work was completed. However, facilitators had relatively less flexibility in their schedules because virtual seminar trainings occurred according to a set schedule. Despite this requirement, they, and employees in other roles, also had flexibility in how the work was completed, such as experimenting with training approaches, taking breaks, and creating extra space to respond to learner needs.

In other ways, the ability to be flexible manifested in facilitator-learner interactions. Technology issues, spillover of personal responsibilities, and general stress related to the pandemic changed the way learners engaged with trainings. Facilitators gave learners flexibility in how they engaged with the material while still achieving the same competencies. This flexibility was unique in the virtual context, as classroom structures tended to require more rigid adherence to timelines and participation. As one participant reflected, I feel like with doing virtual curriculum or virtual online learning, people are able to be flexible with learners’ needs, and they’re able to be like, let’s start from here or here.

*what’s nice is that everyone had grace.* While the term "grace" was used most frequently, this concept was also described using phrases like, "self-care," "compassion," or "understanding [that others are] suffering." The need for and provision of compassion echoed through several aspects of the transition. First, employees talked about receiving compassion from their supervisors, leadership, and co-workers. This type of compassion most obviously manifested in allowing staff development time during working hours. Employees were encouraged, if possible, to take time during normal working hours to engage in self-care, such as attend a training ...go for a walk... read an article...whatever you need to do so you’re not facilitating or not on a computer all day. Second, facilitators talked about receiving compassion from their learners. Particularly during the early stages of the transition, facilitating trainings through virtual platforms

| Subtheme | Example Quote | Example Quote |
|----------|---------------|---------------|
| Flexibility in Accomplishing Work Tasks | It [work] might not have happened between nine and five. For me, it might happen at 10 p.m. one night. And we have a lot of, grace, to do that, as long as we get our work done kind of thing. | I feel like people have had to stretch themselves and their creativity like never before. So I think there’s been some things that we’ve been able to do to just like from just like a part of it, trial and error. And part of it just like let’s give this a try and see what happens 
 …in the past we said, ‘oh, you need a web cam, we can mail it to you.’ But, we can’t do that right now. So I think that that’s tricky, so we’ve just had to adjust. |
| Flexibility: Leader to Employee | …if you have kids, we get it, go off camera...if you need to go and take care of an elderly parent. We get that. Totally get that. So we’ve allowed them to be in control more than [the facilitator]. | We’ve showed them a lot of grace because typically, like if we were in the classroom and people kept getting interrupted by their spouse or their kids, we’d be like, can you just put your phone away? Right. But we’ve had to just be like, you know, do the best you can be as present as you can. And so they’ve shown us a lot of grace. And I think we’ve shown each other a lot of grace. I think it’s kind of like we’re all in this together kind of thing. |
| Flexibility: Facilitator to Learner | …they [employees] were also given like staff development time... to, like, take care of themselves …I’ve never had a place like that. | Everybody was meeting like, every single day, twice a day, three times a day. And they [people transitioning the caseworker fundamentals] were teamed with a developer if they needed assistance in adapting it. |
| Extending grace | They [employees] were also given like staff development time... to, like, take care of themselves …I’ve never had a place like that. | |
| Supportive gestures | We get together once a week…we just spend that time connecting. I’m like, ‘how are you?’ So that’s been really helpful, I think, that connection | |
had some challenges. The facilitators reflected on the importance of the understanding extended to them by the learners, what’s nice is that everyone had grace…Zoom kicked me out. So I’ve had to come back in, and people are still there. Third, employees reflected that they also extended this type of understanding to others. The need to extend compassion to others was particularly salient during challenging aspects of the transition. For example, some employees wished they had received more guidance and structure on how to manage the transition, but reflected that they were just trying to have, like, so much compassion that, it’s not like our leadership was immune to this…all the challenges I’m experiencing, they’re also experiencing. Other employees discussed the substantial investment required for the transition to virtual platforms was more palatable because they recognized that your learners are suffering. You hear that and you’re suffering too, right? And so that helped them make that change. Finally, they talked about needing to be understanding with themselves and their responses to the transition. One employee reflected that …we had to allow yourself permission to, like, fail and permission to, like, not get it right and learn from it.

**“we really have been supported through the process.”** All employees talked about the support they received and provided during the transition. Some of the support was instrumental (tangible aid/services) or informational (advice/suggestions), such as access to resources to manage the transition, assistance in setting up home offices, guidance on adapting to the transition, or opportunities for sharing wellness-related information during meetings. In other instances, the support was emotional, such as employees reaching out to check on their colleagues or sending positive messages.

### 3.2.2. Challenges

While the overall tone of the interviews was quite positive, there were also areas that many participants wish had gone differently. Many of these issues were outside the control of the organization, but some were within the organization’s control. For example, there were instances when the employees were confused about the organizational structure regarding decision-making responsibilities (And it was like, what’s my role?) and received some inconsistent communication (…that was very chaotic… And you get different messages from different people.) Further, the learning management system (LMS) was not initially designed to host fully virtual training, so it was challenging to adapt some of the active learning strategies, such as assignments and peer collaboration opportunities, into the platform.

The other primary challenges were external to the organization, such as technology issues, personal-professional role spillover, and the mental/emotional aspects of living through a pandemic. The technology was challenging in a few ways. Learners and facilitators had some practical issues with technology. For example, not all learners or facilitators had reliable access to the internet. Additionally, the technology was new to many employees and learners, so there was a learning curve during the early stages of the transition.

Work-life spillover was noted as a challenge for learners and employees. Many were

- providing care for children or parents (My husband and I both work full time, like, and we don’t have childcare. So that’s really challenging to navigate),
- working from unusual spaces (one of her workers lives in a studio apartment with her husband. And so if he’s working and on a call, she literally has to, like, put herself in the closet to take Zoom calls),
- or managing having limited boundaries between their personal and professional time and space (some of us were like answering emails because we had nothing else to do on a Saturday, you know, we couldn’t be out of the house.)

Balancing these responsibilities and challenges reduced their ability to concentrate on the trainings. As the pandemic continued, employees began to feel the effects of living through the pandemic and observed similar experiences among learners. For many, these effects manifested as exhaustion, which limited the amount of energy they were able to dedicate to trainings.

### 3.2.3. Opportunity to positively evolve training practices

Multiple participants described the pandemic as an opportunity to grow and positively change training practices. By being nimble in their approach and content, CWTS was able to meet the immediate needs of the learners, including some of the challenges of the pandemic For example, new learning opportunities were created to address the emergent needs of learners:

*We did a whole series about...How are you now? How have you, the learning community had to, like, alter the way you do group supervision or RED team [referral review] or home visits or assessing for safety? Just creating a space for counties across the state to come together and just like share stories and brainstorm and steal ideas from each other. I love that we’ve been able to do that, and I hope that we’ll continue with that for sure.*

In addition, the need to move to virtual trainings pushed learners and facilitators who were otherwise reluctant to adopt these technologies in usual circumstances (I think that it’s kind of pushed our learning community over, like we’ve been wanting for a long time for people to really embrace learning over technology... And it’s forced them to have to, like, figure it out.) Colorado has many remote areas, so some learners had to travel substantial distances to attend in-person class trainings pre-COVID. The shift to an exclusively virtual training catalogue opened opportunities for extending the reach of trainings to learners throughout the state. Because learning over technology became the standard, some aspects of the virtually-focused approach may persist to facilitate the ease of access for rural learners. One participant reflected that

*Colorado is a big state, and there’s mountains and lots of mountains... even with [four regional training centers dispersed throughout the state], we still had people coming from counties who had to drive five hours to training. They’d love this [virtual system]. And it makes perfect sense for them, and so I think some of that’s going to continue.*

Finally, the pandemic provided the opportunity to respond with compassion and understanding more freely. When participants are
sitting in a classroom, it is easier to expect their full attention because personal issues are less visible. In contrast, virtual trainings from home increased the visibility of those competing demands. Several facilitators reflected that they were pleasantly surprised about the ability to develop connections. In some instances, facilitators reported that they were able to have more connection with learners because of the ability to have one-on-one conversations privately before or after class or through the use of breakout sessions in the virtual platform.

4. Discussion

The COVID-19 pandemic has caused unprecedented disruptions to the lives and work of people around the world (Fairlie, Couch, & Xu, 2020; Nicola et al., 2020; Tull et al., 2020; Zhang, Wang, Rauch, & Wei, 2020). Despite these disruptions, the work of CPS had to continue, as it was central to many community responses to child maltreatment. Our work examined how one CPS training system adapted to the pandemic-related disruptions. From the learner perspective, pre-service training outcomes were relatively unchanged by the transition to virtual learning. There were no differences between Pre- and Post-COVID learners on knowledge assessments, satisfaction evaluations, or role-play simulation behaviors. Interviews with employees showed that substantial time and energy investments facilitated this relatively smooth transition. These employees reflected that they had never worked harder.

Training staff resiliency, as demonstrated by an intense commitment to the learner experience and willingness to adapt to the COVID-related transition, was likely the result of the positive organizational culture and high organizational engagement (Baykal, 2018; Denhardt & Denhardt, 2010; Parent & Lovelace, 2015; Pathiranage, 2019). Positive organizational culture encourages employees to be confident, hopeful, and optimistic while fostering wellbeing and emotional intelligence (Avey, Wernsing, & Luthans, 2008; Luthans, 2002). Beyond worker efficiency and productivity, companies with positive organizational culture are invested in their employees and create an environment where employees can grow into their full potential (Robbins & Judge, 2012). High organizational engagement occurs when employees are involved and enthusiastic about their workplace, and believe in its values and mission (Harter, Schmidt, & Hayes, 2002; Robinson, Perryman, & Hayday, 2004). High levels of organizational engagement are more likely to occur in organizations with a positive culture because employees are supported and recognized by their peers and leaders, and have opportunities for personal and professional development (Harter et al., 2002; Saks, 2006; Schaufeli, Bakker, & Salanova, 2006). Employees in organizations with positive organizational culture are generally more satisfied and invested in their work, and better able to manage bad news or other disruptions (French & Holden, 2012; Hanaysya, 2016; Sok, Blomme, & Tromp, 2014).

While CWTS leadership invested in positive organizational culture and engagement before the COVID-19 pandemic, this commitment persisted through the transition. Leadership provided tangible and intangible support, encouraged self-care and development, promoted flexibility, and listened to the employees. As a result, employees were able to move beyond surviving the transition to using it as an opportunity to continue to improve the trainings.

5. Implications

Beyond the pandemic and disaster-specific implications of our findings, our work may have implications for child protection system training practices. First, it highlights the importance of ongoing evaluation efforts within child welfare training. Without continuous quality improvement (CQI) data, we would have been unable to determine the differences or similarities from usual training practices. While we are certainly not the first to call for the evaluation of training efforts (see Collins, Kim, & Amodeo, 2010), our work further highlights its importance in responding to unexpected and necessary changes to training processes.

In addition, the preliminary documentation of virtual training success may have implications for future training practices. Prior work has demonstrated the substantial workload of many child welfare professionals, which may diminish enthusiasm and engagement with training (Kim, 2011; Thompson, Stevenson Wojciak, & Cooley, 2017). However, quality professional development and training opportunities may help caseworkers develop new skills, reduce burnout, and improve retention, so it is crucial to provide these opportunities (de Guzman, Carver-Robers, Leake, & Rienks, 2020; Radey & Stanley, 2019). Virtual training may be one approach to reduce the burden of training, particularly among professionals for whom extended travel is necessary to attend trainings (Kobulsky et al., 2020). Additionally, virtual training may be implemented with relatively limited financial investment, so it may be more feasible than more costly approaches to learner engagement (e.g., smaller classes, in-person trainings at each agency). In our work, there were no additional funds available for the transition, so employees and learners leveraged existing resources. Further, virtual training may be less expensive for child welfare agencies as a result of reduced or eliminated travel costs.

Despite these potential benefits and others described by the participants in our study, virtual learning may not be appropriate for all circumstances and topics. Kobulsky et al. (2020) examined virtual learning and virtual coaching among caseworkers and found that between 85 % (training alone) and 93 % (training + coaching) of caseworkers completed the virtual training. These findings may suggest the format was not able to support all caseworkers to training completion. However, there was not an in-person comparison group, so it is unclear how these completion rates compare to standard approaches. Before virtual training is widely adopted, more research is necessary to confirm what types of training are appropriate for virtual settings and how to structure these learning environments most effectively. Research on virtual learning among other professionals may further guide this work.

6. Limitations

The disruptions associated with the pandemic and the need for rapid evaluation required some decisions that reduced the strength of our conclusions. First, we were unable to link the learners to the specific trainings they attended and used their date of survey
completion as a proxy for the date of attendance. Thus, we may have incorrectly categorized some learners as Post-COVID, particularly if learners were delayed in completing the knowledge and satisfaction measures. Second, we used administrative data for the assessment of learner experiences, which did not seek information specifically about the COVID transition. Thus, learner experiences may have been impacted in ways that are not included in these measures. Finally, the sample size for the interviews was small (n = 5) but includes nearly 20 % of individuals in the relevant roles at the organization. Collecting qualitative data from a limited number of participants allowed us to engage in a rich exploration of experiences that would not be possible with surveys or other quantitative data collection.

7. Conclusions

The COVID-19 pandemic had the potential to disrupt the training of CPS workers. However, we found no evidence to suggest that learners had worsened knowledge or satisfaction outcomes after the pandemic-related transition to entirely virtual training. This success may be due to the investment of training system leadership in a positive organizational culture prior to the pandemic, which facilitated substantial employee commitment to the learner training experience.

Funding

This work was supported, in part, by a contract with the Colorado Department of Human Services.

Declaration of Competing Interest

Dr. Schwab Reese is a paid consultant for the Kempe Center.

References

Avey, J. B., Wernsing, T. S., & Luthans, F. (2008). Can positive employees help positive organizational change? Impact of psychological capital and emotions on relevant attitudes and behaviors. The Journal of Applied Behavioral Science, 44(1), 48–70.
Baykal, E. (2018). Promoting resilience through positive leadership during turmoil. International Journal of Management and Administration, 2(3), 34–48.
Berne, R. (2006). Disaster preparedness resource guide for child welfare agencies. The Annie E. Casey Foundation.
Boserup, B., McKenney, M., & Elbuly, A. (2020). Alarming trends in US domestic violence during the COVID-19 pandemic. The American Journal of Emergency Medicine. https://doi.org/10.1016/j.ajem.2020.04.077.
Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77–101.
Braun, V., & Clarke, V. (2012). Thematic analysis. In H. Cooper, P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), APA handbooks in psychology®. APA handbook of research methods in psychology (Vol. 2, pp. 57–71). American Psychological Association.
Brooks-Gunn, J., Schneider, W., & Waldfogel, J. (2013). The Great Recession and the risk for child maltreatment. Child Abuse & Neglect, 37(10), 721–729.
Bryant, D. J., Oo, M., & Damian, A. J. (2020). The rise of adverse childhood experiences during the COVID-19 pandemic. Psychological Trauma Theory Research Practice and Policy, 12(S1), S193–4.
Campbell, A. M. (2020). An increasing risk of family violence during the Covid-19 pandemic: Strengthening community collaborations to save lives. Forensic Science International: Reports, 2, Article 100089.
Cherry, R., & Wang, C. (2016). The link between male employment and child maltreatment in the US, 2000–2012. Children and Youth Services Review, 66, 117–122.
Child Welfare Policy Manual (2020). https://www.acf.hhs.gov/cwpm/public_html/programs/ch/laws_policies/laws/cwpm/index.jsp.
Collins, M. E., Amoedo, M., & Clay, C. (2007). Review of the literature on child welfare training: Theory, practice, and research. US Department of Health and Human Services, Administration on Children and Families.
Collins, M. E., Kim, S. H., & Amoedo, M. (2010). Empirical studies of child welfare training effectiveness: Methods and outcomes. Child and Adolescent Social Work Journal, 27, 41.
Conrad-Hiebner, A., & Byram, E. (2020). The temporal impact of economic insecurity on child maltreatment: A systematic review. Trauma, Violence & Abuse, 21(1), 157–178.
Curtis, T., Miller, B. C., & Berry, E. H. (2000). Changes in reports and incidence of child abuse following natural disasters. Child Abuse & Neglect, 24(9), 1151–1162.
Daughtery, L. G., & Blome, W. W. (2009). Planning to plan: A process to involve child welfare agencies in disaster preparedness planning. Journal of Community Practice, 17(4), 483–501.
de Guzman, A., Carver-Robers, T., Leake, R., & Rienks, S. (2020). Retention of child welfare workers: Staying strategies and supports. Journal of Public Health Welfare, 14(4), 60–79.
Denhardt, J., & Denhardt, R. (2010). Building organizational resilience and adaptive management. In J. W. Reich, A. J. Zautra, & J. S. Hall (Eds.), Handbook of adult resilience (pp. 333–349). The Guilford Press.
Drury, L., & Schwab-Reese, L. (2017). Qualitative analysis of pre-service simulation. In National Staff Development and Training Association Annual Conference.
Drury, L., & Schwab-Reese, L. (2019a). Got empathy? Exploring how simulations may relate to subsequent caseworker behavior. In International Conference on Innovations in Family Engagement.
Drury, L., & Schwab-Reese, L. (2019b). Training simulation evaluation and subsequent worker performance: Typing practice to emergent behavior. In National Child Welfare Evaluation Summit.
Fairlie, R., Couch, K., & Xu, H. (2020). The impacts of COVID-19 on minority unemployment: First evidence from April 2020 CPS microdata. NBER Working Paper No. 27246.
French, S. L., & Holden, T. Q. (2012). Positive organizational behavior. Business Communication Quarterly, 75(2), 208–220.
Griffith, A. K. (2020). Parental burnout and child maltreatment during the COVID-19 pandemic. Journal of Family Violence. https://doi.org/10.1007/s10896-020-00172-2.
Hanaysha, J. (2016). Testing the effects of employee engagement, work environment, and organizational learning on organizational commitment. Procedia-Social and Behavioral Sciences, 229(8), 289–297.
Happy Scribe. (2020). Transcripts and subtitles, by machines for humans.
Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. The Journal of Applied Psychology, 87(2), 268–279.
Ivankova, N. V., Creswell, J. W., & Stick, S. L. (2006). Using mixed-methods sequential explanatory design: From theory to practice. Field Methods, 18(1), 3–20.
Jonsson-Reid, M., Drake, B., Cobetto, C., & Ocampo, M. (2020). Child abuse prevention month in the context of COVID-19. Center for Innovation in Child Maltreatment Policy, Research and Training, Washington University in St. Louis.

Keenan, H. T., Marshall, S. W., Nocera, M. A., & Runyan, D. K. (2004). Increased incidence of inflicted traumatic brain injury in children after a natural disaster. American Journal of Preventive Medicine, 26(3), 189–193.

Kim, H. (2011). Job conditions, unmet expectations, and burnout in public child welfare workers: How different from other social workers? Child and Youth Services Review, 33(2), 358–367.

Kobulsky, J. M., Smith Goering, E., Lee, B. R., Gray, C., Moon, C., Bright, C. L., et al. (2020). Virtual coaching for child welfare workers - a tool to promote learning. Journal of Public Health Welfare, 14(4), 458–476.

Latsch, D., Eberitzsch, S., & Ofelia Brink, I. (2020). Social assistance and child protection during the COVID-19 pandemic in Switzerland. A survey of social services. https://doi.org/10.21256/zhaw-2387.

Leslie, E., & Wilson, R. (2020). Sheltering in place and domestic violence: Evidence from calls for service during COVID-19. Journal of Public Economics (Forthcoming).

Luthans, F. (2002). Positive organizational behavior: Developing and managing psychological strengths. The Academy of Management Perspectives, 16(1), 57–72.

Milner, J. (2020). New norms on caseworker visits via video conferencing. Department of Health and Human Services Administration for Children and Families Administration on Children, Youth and Families.

Moon, C. A. (2018). Neighborhood and cumulative ecological risk: Predicting physical abuse and neglect in an urban longitudinal studies of child abuse and neglect (LONGSCAN) sample. Doctoral Dissertation. University of Maryland Baltimore https://archive.hshsl.umaryland.edu/handle/10713/8184.

Nicola, M., Alsafi, Z., Sohrabi, C., Kerwan, A., Al-Jabir, A., Iosifidis, C., et al. (2020). The socio-economic implications of the coronavirus pandemic (COVID-19): A review. International Journal of Surgery, 78, 185–193.

North Carolina Department of Health and Human Services. (2020). Child welfare practice guidance during COVID-19 crisis. https://files.nc.gov/nchhs/COVID-19-Child-Welfare-Guidance28966-5-1-2020.pdf.

Parent, J. D., & Lovelace, K. J. (2015). The impact of employee engagement and a positive organisational culture on an individual’s ability to adapt to organisation change. Philadelphia, PA: 2015 Eastern Academy of Management.

Pathmanage, J. (2019). Organizational culture and business performance: An empirical study. International Journal of Economics and Management, 24(2), 264–278.

Posick, C., Schueths, A. A., Christian, C., Grubb, J. A., & Christian, S. E. (2020). Child victim services in the time of COVID-19: New challenges and innovative solutions. American Journal of Criminal Justice. https://doi.org/10.1007/s12103-020-09543-3.

Radey, M., & Stanley, L. (2019). Beginning the ‘never-ending’ learning process: Training experiences of newly-hired child welfare workers. Child and Youth Services Review, 104, Article 1043778.

Rawlings, M. A., & Blackmer, E. R. (2019). Assessing engagement skills in public child welfare using OSCE: A pilot study. Journal of Public Child Welfare, 13(4), 441–461.

Robbins, S. P., & Judge, T. (2012). Essentials of organizational behavior. Prentice Hall.

Robinson, D., Perryman, S., & Hayday, S. (2004). The drivers of employee engagement. Institute for Employment Studies.

Roca, E., Melgar, F., Giral-Casado, R., & Pulido-Rodríguez, M. A. (2020). Schools that ‘open doors’ to prevent child abuse in confinement by COVID-19. Sustainability, 12(11), 1–11.

Roje Đupić, M., Buljan Flander, G., & Prijatelj, K. (2020). Djeca iza zatvorenih vrata COVID-19 izolacije: Zlostavljanje, zanemarivanje i nasilje u obitelji. Archives of Psychiatry Research, 56(2), 181–192.

Saks, A. M. (2006). Antecedents and consequences of employee engagement. Journal of Managerial Psychology, 21(7), 600–619.

Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire. Educational and Psychological Measurement, 66(4), 701–715.

Schneider, W., Waldfogel, J., & Brooks-Gunn, J. (2017). The Great Recession and risk for child abuse and neglect. Children and Youth Services Review, 72, 71–81.

Schwab-Reece, L., Tamulonis, A., & Drury, I. (2018). Evaluating child protection services caseworker training using simulated families. In American Public Health Association Annual Meeting.

Sok, J., Blomme, R., & Tromp, D. (2014). Positive and negative spillover from work to home: The role of organizational culture and supportive arrangements. British Journal of Management, 25(3), 456–472.

Stewart, N. (2020). Child abuse cases drop 51 percent. The authorities are very worried. USA Today.

Thompson, H. M., Stevenson Wojciak, A., & Cooley, M. E. (2017). Through their lens: Case managers’ experiences of the child welfare system. Qualitative Social Work, 16(6), 411–429.

Tull, M. T., Edmonds, K. A., Scamoldo, K. M., Richmond, J. R., Rose, J. P., & Gratz, K. L. (2020). Psychological outcomes associated with stay-at-home orders and the impact of employee engagement and a positive organizational culture on an individual's ability to adapt to organisation change. Philadelphia, PA: 2015 Eastern Academy of Management.

Usher, K., Bhullar, N., Durkin, J., Gyanfl, N., & Jackson, D. (2020). Family violence and COVID-19: Increased vulnerability and reduced options for support. International Journal of Mental Health Nursing, 29(4), 549–552.

Woodall, C. (2020). As hospitals see more severe child abuse injuries during coronavirus, ‘the worst is yet to come’. USA Today.

World Health Organization. (2020). Addressing violence against children, women and older people during the COVID-19 pandemic: Key actions. https://www.who.int/publications/i/item/WHO-2019-nCoV-Violence-actions-2020.1.

Zhang, S. X., Wang, Y., Rauch, A., & Wei, F. (2020). Unprecedented disruption of lives and work: Health, distress and life satisfaction of working adults in China one month into the COVID-19 outbreak. Psychiatry Research, 288, Article 112958.