

## National training and development Curriculum: Does having access to online “Right-Time” training positively impact Foster/Adoptive Parenting?

John Fowler<sup>a,\*</sup>, Angelique Day<sup>a</sup>, Hung-Peng Lin<sup>a</sup>, Carey Tompkins<sup>b</sup>, Lori Vanderwill<sup>a</sup>, Sue Cohick<sup>c</sup>

<sup>a</sup> University of Washington, School of Social Work, United States

<sup>b</sup> National Training and Development Curriculum (NTDC), North American Council on Adoptable Children, United States

<sup>c</sup> Spaulding for Children, United States

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### ABSTRACT

Trauma-informed parenting is increasingly essential for children in foster care. This study evaluated survey responses from participants before and after an in-service, trauma-informed training that is accessible online in the United States. A total of 361 participants – in-service foster and adoptive parents from areas throughout the United States – completed three surveys across 1,282 training sessions that each covered one of 15 thematic areas. This within-group, cross-sectional study design assessed the caregiver competency, knowledge gain, and satisfaction (i.e., perceived usability, usefulness, amount) of participants. Results indicated that after the training, participants felt more competent in their caregiving abilities, experienced moderate gains in parenting knowledge, and were satisfied with the quality of the training. One implication of these findings is that an asynchronous, online setting can be a feasible and acceptable modality for expanding access and availability of in-service foster and adoptive parent training programs.

### 1. Introduction

Enhanced parenting competency of foster and adoptive parents is linked to decreases in caregiver stress and burnout, and increases in satisfaction and retention (Cooley & Petren, 2011; Kaasbøll et al., 2019; Whenan, Oxlad & Lushington, 2009; Smith-McKeever, 2006; Fleckenstein, 2020). These outcomes are likely to prevent placement disruptions and, therefore, increase the likelihood of children in care achieving physical permanency (Benesh & Cui, 2017; Fleckenstein, 2020). Training of foster parents in the child welfare system falls into two categories: pre-service training and in-service (or on-going) training. In-service training serves to equip foster parents with knowledge and skills needed for coping with challenges faced during foster care experiences and to maintain foster parents' licensure status (Festinger & Baker, 2013). Despite this important task, the existing literature on the content, structure, and amount of in-service foster and adoptive parent training remains scarce. The current study was designed to describe and evaluate an online trauma-informed in-service training for foster and adoptive parents across a diverse sampling of states in the United States.

#### 1.1. Need for relevant and timely in-service foster and adoptive parent training

In-service foster and adoptive parent training programs are frequently lacking or underdeveloped compared to pre-service programs in many states. When available, in-service training is commonly limited to single sessions about specific themes (Benesh & Cui, 2017; Festinger & Baker, 2013), while varying widely in content and structure (e.g., single vs multiple sessions; in-person, online, or hybrid models) (Benesh & Cui, 2017; Hebert & Kulkin, 2018). State-level requirements for in-service training also differ by the length of time (6–20 h) the training takes to complete within a one to two-year timeframe post-licensure (Gerstenzang, 2009; Hebert & Kulkin, 2018). The underdeveloped nature of most in-service trainings has left foster and adoptive parents with unmet needs. Adoptive parents have indicated a need for post-adoption services to increase parental competency and, in turn, reduce parental stress and improve family cohesion (Atkinson & Gonet, 2007). Needs of adoptive parents have been found to include accessing adequate post-adoption services (Barnett et al., 2018), understanding complicated and traumatic family histories of the child (Mariscal et al., 2015), and

\* Corresponding author.

E-mail address: [johnf26@uw.edu](mailto:johnf26@uw.edu) (J. Fowler).

responding to their own depressive and other mental health issues post-adoption (Foli, 2010). Increasing adoptive parent competency in areas like these has been found to be an important factor in adoptive parent satisfaction (James, 2013), which can serve as a protective factor against child behavioral problems and improve child-parent relationships (Nilsson et al., 2011). Foster parents have also expressed the need to be presented with a wider range of specific information on caregiving over the course of serving as a foster parent (Festinger & Baker, 2013). However, current in-service foster parent trainings are not sufficient for foster parents encountering the complexity of their new roles (Festinger & Baker, 2013). For example, specific parenting demands might arise from a child's embodied adverse childhood experiences (ACEs) in forms of internalizing problems (e.g., ADHD, anxiety, depression, PTSD, suicidation, traumatic grief) and externalizing problems (e.g., delinquency, disruptive behavior, sexualized behavior, substance use, running away) (See Bevilacqua et al., 2021; Clarkson Freeman, 2014; Garcia et al., 2017; Hicks, Kernsmith & Smith-Darden, 2021; Hunt, Slack, & Berger, 2017). Moreover, culturally relevant training materials have long been insufficient as foster parents care for children with sociocultural backgrounds different from theirs such as race and ethnicity, and sexual orientation, gender identity and gender expression (SOGIE) (Lin et al., 2021). Additionally, it is noteworthy that in-service training and related support for foster and adoptive parents are even less available and accessible for those in rural areas (Pecora et al., 2018).

### 1.2. Online foster and adoptive parent training quality

Online foster and adoptive parent training programs are generally well-received (Bennesh & Cui, 2016; Pacifici et al., 2006; White et al., 2019). The growing need for online or downloadable modules is evident. First, it provides opportunities for caregivers who have difficulty in attending in-person trainings (Bennesh & Cui, 2016). Specifically, foster parents can schedule times around work. In addition, foster parents can learn at their own speed and benefit from the ongoing training when it is relevant to their own needs (Buzhardt & Heitzman-Powell, 2006). Online trainings also shorten the gap in access to in-service training (Pacifici et al., 2006). But, the existing evidence about the quality of online foster parenting programs is limited. Existing foster and adoptive parent trainings are commonly implemented in single-session, disparate in-service programs (Bennesh & Cui, 2017; Pacifici et al., 2006). Training outcomes are not generalizable yet due to small effect sizes of the programs. Those online, in-service training programs that have been evaluated so far indicate that foster and adoptive parents experienced measurable gains in parenting knowledge and training satisfaction following training sessions (Macdonald & Turner, 2005; Pacifici et al., 2006; White et al., 2019). Additionally, online trainings have been shown to be effective across a variety of geographic locations. For example, an online foster parent training system designed specifically for low-bandwidth internet connections and individuals with limited internet and computer experience showed significantly improved outcomes in knowledge gain and high ratings on training satisfaction by participants (Buzhardt & Heitzman-Powell, 2006). The resultant knowledge improvement in online training programs suggests a direction ensuring consistency in content delivery while allowing agencies to stay within their budgets (Festinger & Baker, 2013).

### 1.3. Trauma-informed approaches to parenting for child welfare-involved children

It is increasingly understood that foster and adoptive parenting should be informed with information on how trauma can impact children. Trauma-informed care describes care that explicitly accounts for the prevalence of adverse childhood experiences and trauma, recognizes the role of those experiences in many behaviors, and respects and empowers people to overcome those experiences (A Treatment Improvement Protocol, 2014). One important part of trauma-informed care is

cultural relevancy (Lucero & Bussey, 2012), which is a grounded way to connect and empower people through inclusion of culture, language, and life experiences. Mounting evidence suggests high rates of effectiveness of trauma-informed care in parenting children with trauma-related behaviors and symptoms (Bailey et al., 2019). A meta-analysis found moderate to high effect sizes of trauma-informed parenting on positive-parenting practices, and alleviated child internalizing problems, externalizing problems, and trauma symptoms (Johnson, Rogers & Hillely, 2018). Similarly, another systematic review found a moderate pooled effect of trauma-informed interventions on post-traumatic stress disorder (PTSD) reduction, behavioral problem reduction, and improvement in the psychological well-being of children involved in foster care (Zhang et al., 2021). Additionally, research shows that trauma-informed parenting in foster care improved placement stability (Murphy et al., 2017), and increased physical permanence (Arvidson et al., 2011). Relatedly, embedding trauma-informed care in foster parenting improves parenting competency. It is linked to identified children's behavioral health needs (Barnett et al., 2019), reduced caregiver stress (Hodgon et al., 2016), and increased parenting satisfaction and commitment (Barnett et al., 2019). With such strong evidence of the importance of trauma-informed care, it is clear that foster and adoptive parent trainings should be trauma-informed as well.

### 1.4. Description of Right-Time training of the National training and development curriculum for foster and adoptive parents (NTDC)

The National Training and Development Curriculum for Foster and Adoptive Parents (NTDC) is a state-of-the-art training program for foster and adoptive parents. NTDC prepares parents to effectively provide care to children exposed to trauma by providing families with ongoing skill development needed to understand and promote healthy child development. NTDC includes three components: self-assessment, classroom-based training, and a series of 15 Right-Time trainings (Salazar et al., 2020).

To inform the development of the NTDC training curriculum, a systematic review (Vanderwill et al., 2021) was conducted to identify caregiver-related factors (i.e., personal characteristics, knowledge, and skills) in promoting the placement stability and permanency of children in foster care. Sixteen factors were categorized into five larger categories from the existing literature (Vanderwill et al., 2021): Access to Support Systems; Attentiveness to the Caregiver-Child Relationship; Sufficient Economic Resources; Value Connection to the Child's Birth Family; and Healthy Family Functioning. The final 15 themes for the Right-Time training were derived from these five categories in combination with review of existing curricula, interviews of key sources, interviews with national experts, surveys of 35 states on current related training, and consultation with a content committee, including professionals and experts with lived experience (Children's Bureau, 2020). As a result, the 15 Right-Time thematic training sessions include: Accessing Services and Supports; Building Children's Resilience; Building Parental Resilience; Common Feelings Associated with Being Adopted; Education; Family Dynamics; Intercountry Adoptions: Medical Considerations; Managing Placement Transitions; Preparing for Adulthood; Preparing for and Managing Visitation; Responding to Children in Crisis; Sensory Integration; Sexual Development and Identity; and Sexual Trauma. A description of each of these Right-Time trainings can be accessed on the NTDC training website (NTDCportal.org, n.d.).

These 15 themes make up a comprehensive, trauma-informed learning program that provides timely access to information about emergent areas of need for caregivers. For in-service caregivers who wish to reinforce their knowledge and skills after the NTDC classroom-based curriculum, the Right-Time training is available online (Salazar et al., 2020). Caregivers can access the training sessions on the website at any time convenient to them, and the trainings are also available to be downloaded and completed offline (Children's Bureau, 2020). Each Right-Time training session includes learning segments that each take

about 15–20 min to complete, including a video, a “My Story” podcast, and discussion questions. The videos showcase two to three professionals’ perspectives on the theme along with real-life examples of an adoptive or foster parent. The podcast features either a former foster youth, adopted youth, or kinship youth who provide their perspective on what foster or adoptive parents should know as it relates to each of the training themes. Discussion questions provide opportunities for parents who are fostering or adopting to think through, discuss, and process training content. Each Right-Time session, including pre- and post-tests taken before and after each session, takes approximately one hour to complete. After finishing each training session, participants can print a certificate to prove completion. Some states in the pilot sites gave parents one hour of credit toward licensing maintenance for each training.

1.5. Study objective

The objective of this study is to understand if NTDC Right-Time trainings impact parental perceptions of competency, abilities to indicate knowledge in important parental content areas, and parental satisfaction with the usefulness, usability, and amount of these trainings. This objective can be understood through the following research questions:

- How does the Right-Time training program impact foster and adoptive parents’ perceptions of their own competency in each of the thematic content areas?
- How does the Right-Time training program impact foster and adoptive parents’ ability to demonstrate knowledge related to each of the thematic content areas?
- How do foster and adoptive parents feel about the usefulness, usability, and amount of the Right-Time training program for each of the thematic content areas?

While the training program is described as the “Right-Time” training program, the current study is less focused on directly evaluating if this name is fitting, and more focused on the quality of the construction of the trainings in terms of the three questions above. To answer these questions, we analyze foster and adoptive parent answers to content-based surveys collected immediately before and after completing each training and course satisfaction surveys focused on the quality of the training itself. In the remainder of this paper, we outline the methodology of the analysis, present the results, and discuss the implications of these results, particularly in relation to relevant policy.

2. Method

2.1. Procedure

Research approval was obtained from the Institutional Review Board (IRB) at the University of Washington. Each session is designed for parents to complete the training at their own pace, on their own, in partnership with parenting partners, with caseworkers during home visits, or in support group settings (Salazar et al., 2020). For the purposes of this study, parents were recruited individually and were asked to complete the Right-Time sessions on their own (see Section 2.2 for more details on participant recruitment and sampling). In this pilot evaluation, parents were asked to complete the training independently in order to maximize our sample size and get as much feedback on the training as possible.

The current study evaluates the Right-Time training based on data collected from the Right-Time pre/post-tests, and course satisfaction assessment. Caregivers complete a pre- and post-test immediately before and after completion of each Right-Time thematic training session. The pre- and post-tests are designed to measure parent knowledge and perceptions of competency in relation to each training theme. Caregivers were also asked to report their satisfaction, including perceptions of

training usability, usefulness, and amount after each training session.

2.2. Participants

Participants were recruited using purposive sampling in light of the pilot nature of the current study. Initially, families were recruited to participate by several targeted pilot sites. These sites were dispersed across a wide geography including Colorado, Florida, Georgia, Illinois, Kansas, Maine, Missouri, and Oklahoma. However, the evaluators opened the Right-Time trainings midway through the evaluations to foster/adoptive/kinship parents who met the original criteria but were not in one of the pilot sites. These participants were located throughout the country, with 38 states represented by at least one participant in the final sample. For the recruitment of participants outside the pilot sites, families were contacted by the North American Council on Adoptable Children (NACAC) and the National Council for Adoption (NCFA). These partners were asked to help with recruitment in order to ensure that at least 70 participants completed each of the training themes. The two partners sent out flyers regarding the Right-Time training program to local adoptive, kinship, and foster parents. The inclusion criteria for participation in the Right-Time program were that the participant (1) needed to be a licensed or approved foster/adoptive/kinship parent and (2) currently have children in the home or have had children in the home within the past year through foster care or adoption. All parents were assigned between two and four specific themes to review, but parents had the option to review any additional themes of their choosing after their assigned reviews were completed. The parents were asked to complete the specific themes assigned to them within one month of receiving an introductory email. Parents who completed two assigned themes within the designated timeframe received a \$50 electronic gift card from Amazon, and parents who reviewed four themes received a \$100 gift card. Each thematic training session takes roughly one hour to complete.

The number of unique individual participants included in the analysis is 361. As 91.6% of these participants completed multiple thematic sessions, the total number of participant responses analyzed in this study is 1,282. Responses were only analyzed if the participant completed the training, filled out all three of the associated pre-test, post-test, and course satisfaction surveys, and the responses passed a quality assurance test (see the first paragraph of Section 3.1 for more details on this filtering process). Note that a total of 121 responses were removed because the participant failed to complete all three of the surveys associated with the thematic training session, and a total of 123 responses were removed due to the quality assurance filtering process. The final breakdown of the number of participant responses analyzed by theme can be found in Table 1. Also, note that descriptive data on age, gender, and race / ethnicity were collected but only 14.1% of

Table 1  
Number of Participant Responses by Theme.

Right-Time Theme	N
Life Story	100
Sexual Trauma	100
Responding to Children in Crisis	98
Commons Feelings Associated with Being Adopted	96
Building Parental Resilience	94
Sensory Integration	89
Sexual Development and Identity	89
Accessing Services and Supports	87
Preparing for Adulthood	82
Education	81
Managing Placement Transitions	78
Intercountry Adoption Medical Considerations	78
Building Children’s Resilience	71
Preparing for and Managing Visitation	71
Family Dynamics	68
Total	1,282

participants chose to provide this information so it has been omitted from this analysis as it is likely not representative of the participant population as a whole.

For each Right-Time training by theme, this table shows the number of responses by participants who engaged in the training, submitted all three of the pre-test, post-test, and course satisfaction surveys, and whose responses satisfied quality assurance tests based on the consistency of responses to negatively keyed survey items in relation to similar positively keyed survey items.

### 2.3. Measures

#### 2.3.1. Self-Reflection of Parental Competency

Each Right-Time thematic training session was accompanied by pre-test and post-test evaluations made up of five to eight questions unique to that training theme. These questions were related to self-perceptions of parenting competency. The parenting competency pre- and post-tests aimed to assess parenting attitude, motivation, preparedness, and knowledge base of each training theme. Parenting competency was assessed through self-reported survey items using a ten-point scale, ranging from 0 (“Strongly Disagree”) to 10 (“Strongly Agree”). An example of one of these survey items from the “Accessing Services and Supports” thematic training is “I understand the benefits of a support network for me and the child.” Participants’ scores indicate their degree of agreement with the scale items. The total score indicates participants’ overall self-rated parenting competency. For most questions, the higher the score, the more competent the participant perceives themselves as a foster/adoptive parent in a given area. A few questions (called “reverse scoring” questions) are negatively keyed so that a lower score indicates a higher degree of parenting competency.

Eleven scales were developed and used immediately before and after completion of the Right-Time training to assess the quality of each of the Right-Time training themes. Participants’ scoring change between the pre-test and post-test indicates their subjective knowledge gains in a specific area of parenting competency. While all 15 themes are represented in the other sections of this analysis, note that four themes (Common Feelings Associated with Being Adopted, Intercountry Adoptions Medical Considerations, Life Story – Birth & Adoption Story, and Sensory Integration) are not included in this section of the analysis. These four themes are not included in the self-reflection of parental competency section because the themes were developed and added after the self-reflection section was created.

#### 2.3.2. Knowledge gain

In addition to the self-reflection questions, participants were also asked content-based questions to measure knowledge gain. Specifically, participants were asked to answer two content-based quiz questions before (pre-test) and after (post-test) each Right-Time training theme. Quiz questions were developed to measure participants’ general knowledge base in each specific training theme. Participants picked the only correct answer from four options to each single-selection question. All 15 themes had exactly two quiz questions presented to participants before and after the training.

#### 2.3.3. Satisfaction

After each Right-Time training, participants were asked to evaluate their individual experience. The satisfaction survey through which participants provided this evaluation included self-reported usefulness of each learning segment, usability of the training, and contentment with the amount of the training. In the usefulness assessment, caregivers rate the usefulness of the three different learning segments on a five-point ordinal scale. The scale ranges from 1 (“Not at all useful”) to 5 (“Extremely useful”). In the usability assessment, caregivers rate their agreement with items reflecting on the various dimensions of usability, including the relevance, clarity, applicability, likelihood of recommending to others, planned use of, and amount of prior knowledge

related to each training. The usability metrics are measured on a five-point Likert scale. Caregivers rate their degree of agreement with each item of the scale ranging from 1 (“Strongly Disagree”) to 5 (“Strongly Agree”). Caregivers also rate their agreement with the training amount by reporting their perception of the amount of information received in each Right-Time training based on a five-point ordinal scale ranging from 1 (“Far Too Little”) to 5 (“Far Too Much”).

#### 2.3.4. Reliability and validity

The reliability of the parental competency, usefulness, and usability measures for each theme was assessed by calculating Cronbach’s alpha for all items that were evaluated as a group. Cronbach’s alpha of 0.60 – 0.69 is considered acceptable and 0.70 or greater is considered good or excellent (Ursachi, Horodnic, & Zait, 2015). Each parental competency theme had unique survey items so each theme was evaluated independently. Seven of the 11 themes had perceived competency measures with Cronbach’s alpha results that indicated good or excellent reliability, and the remaining four had results that indicated fair or acceptable reliability. For the usefulness measures, 10 of the themes included identical survey items evaluating the usefulness of all three of the video, discussion questions, and podcast. Four of the themes included identical survey items evaluating only the usefulness of the video and discussion questions. Themes were evaluated based on these two groupings and, in both instances, the usefulness measures had Cronbach’s alpha results that indicated fair or acceptable reliability. The usability measures were identical across all 15 themes, and the Cronbach’s alpha score was fair or acceptable for these measures.

The reliability of the quiz questions was assessed by calculating the Test-Retest correlation for each theme. Correlation phi values of 0 – 0.39 are considered poor, 0.40 – 0.59 are considered fair or acceptable, and 0.60 or greater are considered good or excellent (Cicchetti, 1994). Based on this criteria, one theme had good or excellent, eight had fair or acceptable, and six had poor reliability for the quiz questions. The results of this section indicate that having more than two quiz questions to evaluate knowledge gain in each theme would be a good revision for a future study. In the current study, the quiz questions were reduced to two questions for each theme on behalf of our community partners due to concerns over survey length.

Validity was assessed by researchers, national experts, and a content committee of professionals and experts with lived experience, as described in Section 1.4. This group constructed and revised questions in each of the themes and reviewed them for face validity. On the website containing our [supplemental materials](#), the final wording of each specific question is available in each of the tables through [Appendices A – C](#) and the results of the reliability tests can be found in [Table D](#).

## 3. Results

### 3.1. Data analysis

Before beginning the analysis, the dataset was filtered for quality assurance. The filtering process entailed two steps. First, any participant who did not complete at least one of the pre-test, post-test, and course satisfaction survey was removed from the sample. Second, negatively keyed “reverse scoring” questions from the participants’ self-reflection of parental competency section were evaluated. This began by recoding responses to parenting competency survey items into numeric score. For any of the “reverse scoring” questions, the reciprocal of the score out of 10 (e.g., 3 out of 10 becomes 7 out of 10) was taken so that analysis of all questions is directionally consistent (i.e., higher scores indicate greater perceived competency). The scores of the adjusted “reverse scoring” questions (i.e., the scores of the negatively keyed questions after taking their reciprocal out of 10) were used to filter out low quality responses. This was done by comparing the adjusted scores of these questions to the scores of the preceding question from the same theme. If these scores differed by more than five, the participant’s response for

that theme was removed. This filtering was completed because tests with widely differing scores for questions with similar content can indicate that a participant was not closely reading the questions (Huang et al., 2012). Once the data was filtered, three separate analyses were completed: self-reflection of parental competency, knowledge gain, and satisfaction.

For the self-reflection of parental competency section, the mean of each survey item and theme were calculated, indicating their degree of agreement with the item (i.e., any specific area of the training theme). This was done to understand changes in participants' perceived parenting competency for each theme of the Right-Time training. Additionally, in order to evaluate the significance of change for each question of a theme and the theme as a whole after the Right-Time training, a series of paired-sample *t*-tests were performed. Specifically, tests were run to determine if the mean score of each specific question and theme changed at a statistically significant level after the Right-Time training. If the resultant *p*-value of the *t*-test was lower than the significance level of  $\alpha = 0.05$ , we are at least 95% confident that the tested competency increased or decreased significantly between the pre-test and post-test. The *p*-values were also adjusted based on the number of other questions in each theme using a Benjamini & Hochberg adjustment (Benjamini & Hochberg, 2000). This was done in order to control the false discovery rate for multiple testing of the same hypothesis (i.e., in order to avoid attributing significance to a change in parenting competency for a specific theme that would have only resulted from chance due to running multiple tests). The participants whose responses were analyzed in this section were the same as in the parenting competency section above. Only participants who completed all three of the pre-test, post-test, and course satisfaction survey were included, and the same criteria as in the parenting competency section to filter out low quality responses based on inconsistent answers to the "reverse scoring" competency questions was used.

For the knowledge gain section, participant responses to the quiz questions were coded into Correct (if the participant selected the correct answer) and Incorrect (if the participant selected any of the three incorrect answers). In order to evaluate if the quiz results varied significantly between pre-test and post-test, McNemar's tests were conducted for each question. Used in lieu of the similar Chi-squared test of independence, McNemar's test is appropriate for this data as each quiz question was analyzed at a level where there existed only two possible nominal and mutually exclusive results (i.e., Correct and Incorrect) (Lachenbruch, 2014). Next, a 2x2 contingency table was created and McNemar's test was performed on the difference in response accuracy for each question between pre-test and post-test. If the *p*-value of the statistical result is smaller than 0.05, one can be at least 95% confident that there is a significant difference in the accuracy between pre-test and post-test groups. The *p*-values were also adjusted based on the number of other questions in each theme (and across all 30 questions for the overall test) using a Benjamini & Hochberg adjustment (Benjamini & Hochberg, 2000). This was done in order to control the false discovery rate for multiple testing of the same hypothesis (i.e., in order to avoid attributing significance to a change in quiz results for a specific theme that would have only resulted from chance due to running multiple tests). This procedure was used to see if the Right-Time training had a significant impact on participants' response accuracy and knowledge in each thematic area of the training and across all themes as a whole.

Finally, participant responses for the satisfaction section were evaluated. This section contains three subsections: training usefulness, training usability, and training amount. For training usefulness, participants rated the usefulness of three training mediums for each theme: video, podcast, and discussion questions. Not all themes have discussion questions and/or podcasts so data only exists for those mediums that exist in each theme. Also, not all participants completed all three of the segments for each theme, so numbers of participants are tabulated for each theme / medium combination. More details can be found in Table C.1 on the website containing our supplemental materials. For

training usability, the analysis required the reversal of scores for two usability metrics that were negatively keyed. By reversing these two usability scores, all usability data is directionally consistent so the closer to five each metric is rated, the more usable the participant found the training. After preparing the dataset, mean and standard deviation of survey responses were calculated for training usefulness, usability, and amount.

This bar chart shows mean pre-test self-reflected competency scores for each theme of the Right-Time training in gray and mean post-test scores in black. The star next to each theme name indicates a statistically significant ( $p \leq 0.001$ ) improvement of the mean score for that theme based on the *p*-value adjusted paired *t*-test. Note that all themes with perceived competency questions showed statistically significant improvement in scores, indicating that each training was effective at making parents feel more competent in that particular content area. Also note that four of the 15 total thematic trainings were excluded from this part of the analysis because the trainings were developed and added after the self-reflection section was created. Note that  $*p \leq 0.001$ .

### 3.2. Self-Reflection of parental competency

In general, the results indicate that the Right-Time trainings had a positive impact on participants' self-reported competency levels. After completing the Right-Time trainings, absolute post-test scores were quite high, as 83.6% of post-test scores were 8.5 or above. Not only was absolute perceived competency high, general improvement in competency was observed as well. Mean rates of perceived competency increased with statistical significance ( $p \leq 0.001$ ) for all 11 themes which contained parenting competency-related questions (see Fig. 1).

On an individual question level, participants' mean scores increased on 100% of questions and did so with statistical significance ( $p \leq 0.05$ ) on 86% (63 out of 73) of those questions (see Fig. 2). More details on the questions from each theme and the specific *t*-test results for each question can be found in Tables A.1 – A.11 on the website containing our supplemental materials.

This scatterplot shows the mean pre- and post-test self-reported competency scores for each of the 73 questions across all of the trainings. The possible scale for these scores was 0 to 10, with higher scores indicating greater perceived competency. All questions showed improvement in perceived competency from pre- to post-test. Points colored in black indicate that the improvement for that question from pre- to post-test based on a *p*-value adjusted paired *t*-test was statistically significant at an alpha level of 0.05, while points colored in red were questions without significant improvement. Note that 86% of questions showed statistically significant improvement and all but two of the questions without statistically significant improvement had mean pre- and post-test scores above 9.0.

### 3.3. Knowledge gain

Overall, our findings indicate that the trainings resulted in significant improvements in participant knowledge-based response accuracy after completion of the training themes. The mean accuracy rate of participants across all 30 questions combined increased from 86.2% pre-test to 93.3% post-test. This increase was statistically significant, with a *p*-value less than 0.001. In terms of individual quiz questions, 10 of the 30 questions had statistically significant increased scores from pre- to post-test. These statistically significant increases clustered heavily around those questions with the lowest pre-test scores, as 9 of the lowest 10 pre-test scores rose with statistical significance after the training. Of the questions without significant increases, all but one had mean pre-test scores of 88% or higher and mean post-test scores above 90%. This high score at pre-test indicates that these questions were areas of significant prior knowledge for participants, and there was little room for improvement rather than any indication of the trainings lacking pertinent information. On the whole, these results show that the trainings

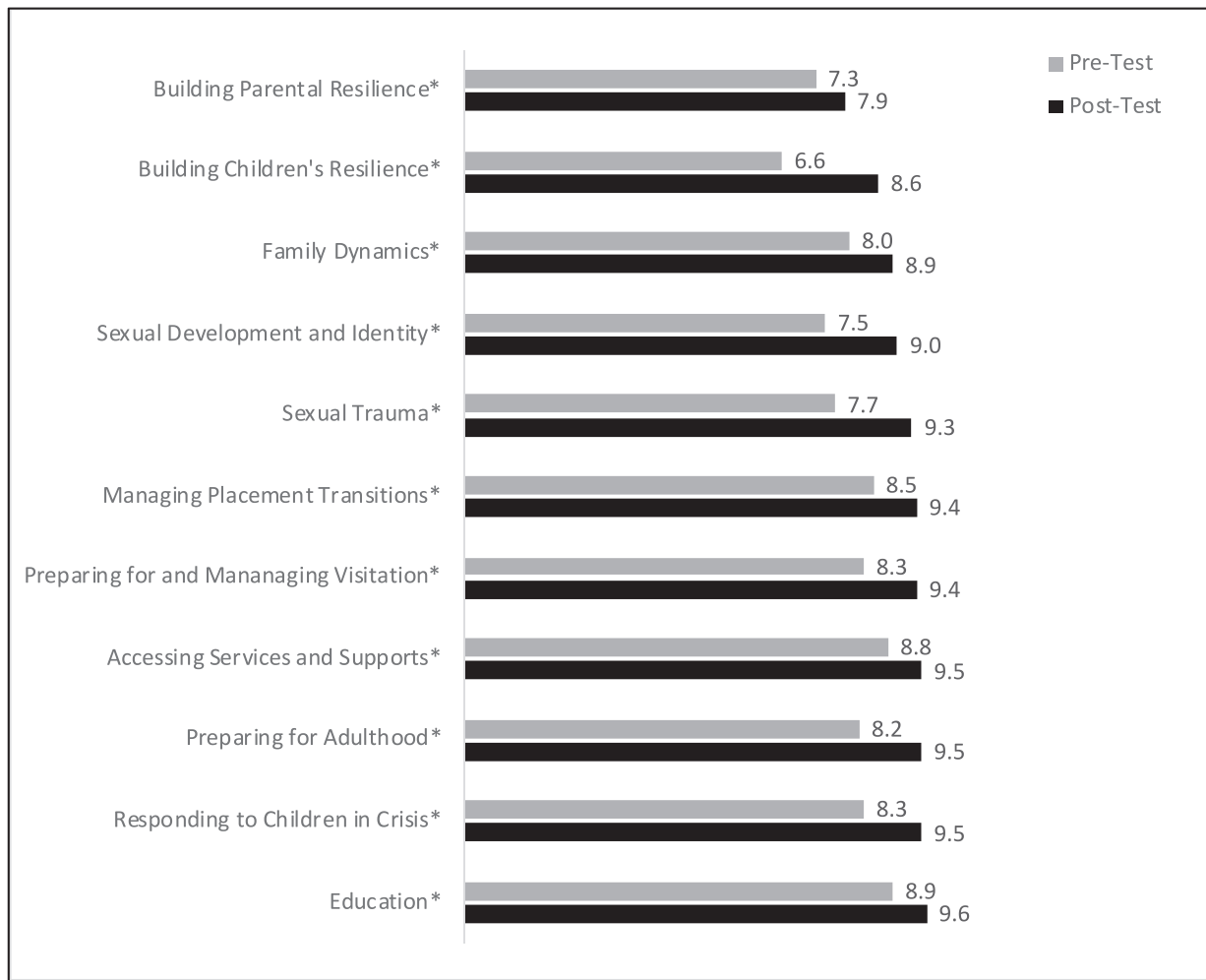


Fig. 1. Mean pre- and post-test perceived competency scores by theme.

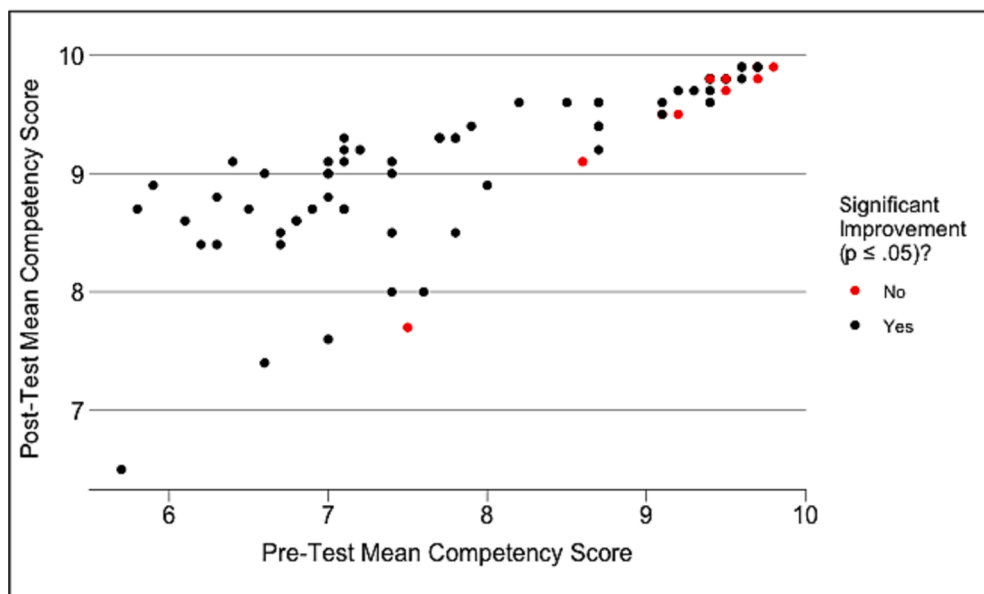


Fig. 2. Mean pre- and post-test perceived competency scores by question.

helped participants to increase knowledge across the wide range of training themes. See Fig. 2 for the pre- and post-test accuracy of each question.

The only question without a statistically significant increase or a high pre-test accuracy rate was one from the Building Children's Resilience theme. This question stated: "What are some concrete things that parents who are fostering or adopting can do to create an environment to help build a child's resilience?" The question had a mean pre-test accuracy rate of 63.4%, which rose to 69.0% post-test, but the increase was not statistically significant.

More details can be found on each specific question and the results of the statistical tests in Table B on the website containing our [supplemental materials](#).

### 3.4. Satisfaction

#### 3.4.1. Training usefulness

Overall, participants reported the Right-Time trainings to be very useful. This was true for all themes and all three training segments (i.e., video, discussion questions, podcast). All themes and segments received ratings above 4.0 out of 5, which indicates consistent perceptions of usefulness.

The mean usefulness rating for the 15 video trainings was 4.6 out of 5 (SD = 0.6; N = 1,277) with a range from 4.2 to 4.9. The mean usefulness rating for the 14 discussion question trainings was 4.4 out of 5 (SD = 0.8; N = 1,201) with a range from 4.1 to 4.6. The mean usefulness rating for the 10 My Story podcast trainings was 4.5 out of 5 (SD = 0.7; N = 834) with a range from 4.3 to 4.7. More details on the self-reported usefulness of each training by theme and segment can be found in Table C.1 on the website containing our [supplemental materials](#).

#### 3.4.2. Training usability

Overall, participants reported the Right-Time trainings to be very usable despite already knowing a lot of what was covered. On average across all of the themes (N = 1,282), participants indicated that they found the trainings relevant (mean = 4.3, SD = 0.8), easy to understand (mean = 4.7, SD = 0.9), learned things applicable to their life (mean = 4.4, SD = 0.7), would recommend them to other parents (mean = 4.5, SD = 0.7), and plan to use the information they had learned (mean = 4.4, SD = 0.7). On the other hand, participants did indicate that they already knew a lot of what is covered in the trainings (mean = 2.6, SD = 1.2). As the evaluation included families already licensed/approved/certified who have likely gone through previous trainings, this finding is not necessarily surprising. It is also not necessarily a negative, as the other categories indicate that the training is still perceived as relevant and helpful for learning and application. A refresher can be useful even for the best of caregivers.

More details on the self-reported usability of each training by theme for each of the six questions can be found in Table C.1 on the website containing our [supplemental materials](#).

#### 3.4.3. Training amount

Overall, participants reported that they received an "about right" amount of information from the trainings (Mean = 3.0; SD = 0.4). One training theme (Intercountry Adoption Medical Considerations) received a mean rating of 2.6, which indicates that participants were split between feeling that there was "too little" and "about right" amount of information. More information might need to be added to this theme to ensure its helpfulness. More details on the amount of each training theme can be found in Table C.1 on the website containing our [supplemental materials](#).

## 4. Discussion

The results indicate that the Right-Time trainings are a promising intervention for improving the parenting competency of in-service

foster/adoptive parents. After completing the trainings, foster and adoptive parents 1) felt more confident about key parenting concepts; 2) showed significant improvement in being able to demonstrate understanding of those key concepts; and 3) indicated that the trainings have a good chance at successful implementation and uptake due to high ratings of usefulness, usability, and amount. For the first area, the trainings clearly improved self-reflected perceptions of parental competency, as 86% of individual survey items and 100% of overall themes measured statistically significant improvements in the perceived competency of participants after completing the trainings. For the second area, the trainings showed improvements in the demonstration of parenting knowledge as response accuracy on the 30 content-based quiz questions improved with statistical significance from 86.2% before to 93.3% after completing the trainings, and all but one of the individual content-based quiz questions either improved with statistical significance or had high response accuracy (i.e., at least 88%) both before and after completing the trainings. For the third area, participants reported high levels of usefulness with ratings of 4.0 or higher out of 5 on all videos, discussion questions, and podcasts across all themes. Despite indicating familiarity with much of the content, participants also reported high levels of usability (i.e., average ratings of 4.3 or higher out of 5) in terms of relevance, ease of understanding, learning things applicable to their life, being worth recommending to other parents, and containing information that they plan to use. Additionally, participants reported on average that the trainings contained an "about right" amount of information, with no individual themes receiving an average rating of "too much" or "too little" information.

When considered as a whole, the high scores on these three areas give credence to the real-world quality and practicability of the trainings. Perhaps most noteworthy is that parents were highly satisfied with the usability, usefulness, and amount of these online trainings. This study provides another example of online, in-service trainings being positively received by parents (Benesh & Cui, 2017). It also extends findings of feasibility and satisfaction compared to existing online, in-service trainings, as this program allows parents to choose whichever trainings they would like to complete from a larger available set and allows the trainings to be completed online or downloaded for later completion, with or without a facilitator. This self-serve nature and associated high levels of parent satisfaction with the Right-Time trainings is an important area to note in relation to existing facilitator-led in-service caregiver training programs like the National Child Traumatic Stress Network's Resource Parent Curriculum (NTCSN RPC) (Pynoos et al., 2008). Like the NTCSN RPC, the NTDC Right-Time trainings include trauma-informed information and culturally-specific information relevant to the population of the fostered or adopted child. The Right-Time training curriculum addresses the concept of trauma in multiple themes, including specific types of traumas (i.e., sexual trauma, secondary traumatic stress via parenting) and how it manifests in different settings (i.e., schools, visitations, placement transitions) and during different developmental periods (i.e., adolescence (gender identity) and young adulthood (and preparing foster youth to transition to adulthood)). In terms of cultural relevancy and context specific material, these trainings were developed for use in tribal communities, and by kinship caregivers and parents who adopt children through private domestic or intercountry in addition to children who are supervised by the state and county public child welfare systems. Moreover, the positive perceptions and satisfactions with the trainings are vital for filling gaps in training implementation, as they indicate that the trainings are more likely to be adopted and used in the field. Ease of use and online accessibility can allow for trainings to reach a wider audience and fill gaps, especially in availability of in-service trainings in rural settings (Pecora et al., 2018).

It is also key that the Right-Time trainings help to improve objective recall of knowledge of evidence-based and trauma-informed approaches to parenting concepts. In order for a training to positively impact the quality of foster and adoptive parenting that children receive, it must

communicate information in such a way that parents can learn and grow. It is also vitally important that parents perceived the trainings to be improving their competency. The broad improvement observed in both self-perceptions and outward demonstrations of competency across the 15 thematic training areas can help to fill gaps in training availability and depth for in-service parents (Festinger & Baker, 2013). Overall, this study – building on previous findings in terms of geographic and thematic areas (Macdonald & Turner, 2005; Pacifici et al., 2006) – provides broad-based, large-scale evidence that online training programs can be feasibly implemented for in-service foster and adoptive parents to maintain access to high quality training materials in a manner that they find highly satisfactory.

#### 4.1. Implications for policy and practice

This study has important implications for foster parent retention and child well-being. Passage of the Family First Prevention Services Act in 2018 placed priority on the recruitment and retention of high-quality foster parents by allocating states \$8 million in competitive grants for this purpose through 2022 (Hanlon, Feltner, et al., 2021). A major factor in recruiting and retaining quality foster parents is provision of appropriate support and training for parents made as easy and effective as possible. In this study, we have provided evidence that online/downloadable, in-service trainings can support parents in learning more about important concepts. Challenges in parenting change over time as children grow and develop. Training programs like the Right-Time training offer the ability for a parent to learn more about what is important to them in a usable and useful manner. Quality online trainings like the Right-Time training can offer a level of support for parents between monthly caseworker visits and at times when caseworkers may not be immediately available to help answer questions.

Because storage of training material on a website allows for increased availability in the time and location that trainings can be accessed, Right-Time trainings have the potential to be offered in multiple ways. In particular, parents can access trainings alone, with a spouse/co-parent partner, in partnership with a caseworker during a monthly visit, or in conjunction with a support group. The flexibility in how the Right-Time trainings can be delivered is a strength of the design and improves the usability and utility of the training.

Due to these advantages, there should be an increase in the availability of online, in-service foster and adoptive parent trainings. The potential impact that trainings like these can have, however, relies on sufficiency of technological infrastructure. This may be contingent on the capacity of states to move the training to their own IT systems for dissemination at the state, county, and tribal level. A flat website has been developed by the Children's Bureau using CapLearn (<https://learn.childwelfare.gov/>), but this system is not completely intuitive for parents who may be in need of technology that is more user friendly.

#### 4.2. Strengths and limitations of the study

This large-scale study was the first-of-its-kind to fill the research void in describing and in evaluating an online in-service foster parent training. The wide range of thematic areas and the disparate geographies of participants provide more generalizable evidence that online, in-service trainings can be effective for foster and adoptive parents. Sample size is another strength of the study, as we had over 1,000 trainings and surveys completed and available for analysis.

A primary limitation of this study is that it does not include a comparison group. However, the current study's results remain valuable as feedback in the process of designing and refining an online, in-service training. It is helpful for validating program details and construction to know that generally foster and adoptive parents who completed these trainings rate them as useful, usable, containing the right amount of information, and that these same parents tend to show moderate gains in knowledge and feelings of competency from immediately before to

immediately following the training. If any of these results pointed otherwise, it would be important to revise the training before considering how effective it is in relation to existing paradigms. Now that these results have pointed to positive absolute ratings of the training program, future research is already underway to recruit, train, and evaluate a comparison group so that the effectiveness of receiving this particular training can be more rigorously evaluated in relation to the status quo.

An additional limitation is that the reliability of the quiz questions related to participant demographics and other background information for some themes was poor. The number of questions was limited in this section for each theme due to concerns of survey length. However, the resulting number of questions appears to be insufficient to properly address this part of the research question. A future version of the study could add more quiz questions for each theme to address this in order to bolster the reliability of our finding that the trainings produce moderate knowledge gains for parents.

One of the other limitations of this study is the lack of quality data related to participant demographics and other background information. Only 14.1% of participants responded to survey questions on age, gender, and race / ethnicity so we were unable to draw accurate conclusions related to the background of parents who completed the training. This is unfortunate because it is important to ensure that the trainings are effective and accessible to parents of all backgrounds. Future research might address this limitation in several ways. Findings could be validated and understood in terms of participant demographic in order to ensure that the trainings are equitable. Understanding the effectiveness of the trainings for kinship caregivers would also be an important step for future researchers, as previous studies have pointed out the potentially unique needs for recruiting and retaining relatives as caregivers in the foster care system (Hanlon, Feltner, et al., 2021; Hanlon, Simon, et al., 2021). The trainings could also be expanded nationally to get an even better and more representative sample of participants. Another sampling concern of the study is that participants may have disproportionately included families who are comfortable with technology and have at-home access to broadband.

Future study designs could also more explicitly address the flexibility and timing afforded by the trainings by measuring whether trainings are truly available at the "right time" to meet parent and children needs. This could be achieved by providing greater choice to participants in regards to which thematic trainings they choose to complete and when they choose to complete them.

Finally, this study uses theory that improved parental competency and satisfaction will positively impact children, but does not directly measure children's experiences. To address this, results could be understood in terms of observed impact on youth to ensure that measurable improvements for parents are translated to improved experiences at home for children.

## 5. Summary and recommendations

Previous research has demonstrated a clear need for thorough trauma-informed training programs to be made available and accessible for in-service foster and adoptive parents. This study of such a trauma-informed, online, in-service training program provides strong evidence that these trainings can improve parental competency across a variety of themes and geographies while maintaining high rates of satisfaction. The implications of these findings are that in-service foster and adoptive parents should be given greater access to online, trauma-informed training programs that they can access as needed. Trauma manifests differently in different people, and as children enter different developmental periods, foster and adoptive parents will need access to different types of information and training that is relevant to that particular developmental period. Right-Time trainings allow families access to the right information at the specific time that they need it. NTDC is also an open access curriculum that is available at no cost to service providers that are responsible for training foster and adoptive parents as well as families interested in using this content directly either in home or in a



support group structure. This content has already been expanded nationally, and we recommend that states, tribes and territories be encouraged to access and use this resource with their foster and adoptive parent populations. However, despite the strong evidence in favor of this form of flexible training, we want to be clear that this solution may not be preferable for everyone. We additionally recommend that the child welfare system works with families to ensure at-home broadband access so that all parents have equitable access to training regardless of their ability to pay for broadband, including in rural areas where publicly available spaces with broadband access may be inconveniently located and public transportation is less accessible. Beyond issues of access, some families, such as those headed by grandparents, may be apprehensive about using technology, so traditional forms of training should remain available to families in addition to recommended online programs like the one in this study.

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### Declaration of Competing Interest

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### Data availability

The data that has been used is confidential.

### Appendix A. Supplementary material

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.childyouth.2023.107305>.

### References

- Arvidson, J., Kinniburgh, K., Howard, K., Spinazzola, J., Strothers, H., Evans, M., ... Blaustein, M. E. (2011). Treatment of complex trauma in young children: Developmental and cultural considerations in application of the ARC intervention model. *Journal of Child & Adolescent Trauma*, 4(1), 34–51.
- Atkinson, A., & Gonet, P. (2007). Strengthening adoption practice, listening to adoptive families. *Child Welfare*, 86(2), 87.
- Bailey, C., Klas, A., Cox, R., Bergmeier, H., Avery, J., & Skouteris, H. (2019). Systematic review of organisation-wide, trauma-informed care models in out-of-home care (Oo HC) settings. *Health & social care in the community*, 27(3), e10–e22.
- Barnett, E. R., Cleary, S. E., Butcher, R. L., & Jankowski, M. K. (2019). Children's behavioral health needs and satisfaction and commitment of foster and adoptive parents: Do trauma-informed services make a difference? *Psychological Trauma: Theory, Research, Practice, and Policy*, 11(1), 73.
- Barnett, E. R., Jankowski, M. K., Butcher, R. L., Meister, C., Parton, R. R., & Drake, R. E. (2018). Foster and adoptive parent perspectives on needs and services: A mixed methods study. *The Journal of Behavioral Health Services & Research*, 45(1), 74–89.
- Bevilacqua, L., Kelly, Y., Heilmann, A., Priest, N., & Lacey, R. E. (2021). Adverse childhood experiences and trajectories of internalizing, externalizing, and prosocial behaviors from childhood to adolescence. *Child Abuse & Neglect*, 112, Article 104890.
- Benesh, A. S., & Cui, M. (2017). Foster parent training programmes for foster youth: A content review. *Child & Family Social Work*, 22(1), 548–559.
- Benjamini, Y., & Hochberg, Y. (2000). On the adaptive control of the false discovery rate in multiple testing with independent statistics. *Journal of educational and Behavioral Statistics*, 25(1), 60–83.
- Buzhardt, J., & Heitzman-Powell, L. (2006). Field evaluation of an online foster parent training system. *Journal of Educational Technology Systems*, 34(3), 297–316.
- Children's Bureau (2020). A new state-of-art curriculum is coming. *National Training and Development Curriculum Newsletter*. A Retrieved from <https://www.nacac.org/wp-content/uploads/2020/08/NTDC.pdf>.
- Cicchetti, D. V. (1994). Guidelines, criteria, and rules of thumb for evaluating normed and standardized assessment instruments in psychology. *Psychological assessment*, 6(4), 284.
- Clarkson Freeman, P. A. (2014). Prevalence and relationship between adverse childhood experiences and child behavior among young children. *Infant mental health journal*, 35(6), 544–554.
- Cooley, M. E., & Petren, R. E. (2011). Foster parent perceptions of competency: Implications for foster parent training. *Children and Youth Services Review*, 33(10), 1968–1974.
- Festinger, T., & Baker, A. J. (2013). The quality of evaluations of foster parent training: An empirical review. *Children and Youth Services Review*, 35(12), 2147–2153.
- Fleckenstein, A. M. (2020). *Predicting Parent Satisfaction with the Adoptive Parent-Child Relationship and the Role of Perceived Parental Competence*. Fielding Graduate University). Doctoral dissertation.
- Foli, K. J. (2010). Depression in adoptive parents: A model of understanding through grounded theory. *Western Journal of Nursing Research*, 32(3), 379–400.
- Garcia, A. R., Gupta, M., Greeson, J. K., Thompson, A., & DeNard, C. (2017). Adverse childhood experiences among youth reported to child welfare: Results from the national survey of child & adolescent wellbeing. *Child Abuse & Neglect*, 70, 292–302.
- Gerstenzang, S. (2009). Foster parent training in America. *Fostering families today*, 28–30.
- Hanlon, R., Feltner, A., Day, A., Vanderwill, L., Kim, J., & Dallimore, E. J. (2021). Systematic Review of Foster Parent Recruitment. *Child Welfare*, 99(1).
- Hanlon, R., Simon, J., Day, A., Vanderwill, L., Kim, J., & Dallimore, E. (2021). Systematic Review of Factors Affecting Foster Parent Retention. *Families in Society*, 1044389420970034.
- Hebert, C. G., & Kulkin, H. (2018). An investigation of foster parent training needs. *Child & Family Social Work*, 23(2), 256–263.
- Huang, J. L., Curran, P. G., Keeney, J., Poposki, E. M., & DeShon, R. P. (2012). Detecting and deterring insufficient effort responding to surveys. *Journal of Business and Psychology*, 27(1), 99–114.
- Hicks, M. R., Kernsmith, P., & Smith-Darden, J. (2021). The effects of adverse childhood experiences on internalizing and externalizing behaviors among Black children and youth. *Journal of Child & Adolescent Trauma*, 14(1), 115–122.
- Hodgdon, H. B., Blaustein, M., Kinniburgh, K., Peterson, M. L., & Spinazzola, J. (2016). Application of the ARC model with adopted children: Supporting resiliency and family well-being. *Journal of Child and Adolescent Trauma*, 9, 43–53.
- Hunt, T. K., Slack, K. S., & Berger, L. M. (2017). Adverse childhood experiences and behavioral problems in middle childhood. *Child abuse & neglect*, 67, 391–402.
- James, A. (2013). *Welcoming a new brother or sister through adoption*. Jessica Kingsley Publishers.
- Johnson, S. L., Elam, K., Rogers, A. A., & Hilley, C. (2018). A meta-analysis of parenting practices and child psychosocial outcomes in trauma-informed parenting interventions after violence exposure. *Prevention science*, 19(7), 927–938.
- Kaasbøll, J., Lassemo, E., Paulsen, V., Melby, L., & Osborg, S. O. (2019). Foster parents' needs, perceptions and satisfaction with foster parent training: A systematic literature review. *Children and Youth Services Review*, 101, 33–41.
- Lachenbruch, P. A. (2014). *McNemar test*. Wiley StatsRef: Statistics Reference Online.
- Lin, H-P., Day, A., Wollen, S., Tompkins, C., & Vanderwill, L. (2021). Characteristics of resource parent trainers and their identified needs for racially, ethnically and culturally relevant training material. (In press). *Child and Family-Serving Systems: A Compendium of Policy and Practice*. DC: Child Welfare League of America (CWLA).
- Lucero, N. M., & Bussey, M. (2012). A collaborative and trauma-informed practice model for urban Indian child welfare. *Child Welfare*, 91(3), 89–112.
- Macdonald, G., & Turner, W. (2005). An experiment in helping foster-carers manage challenging behaviour. *British Journal of Social Work*, 35(8), 1265–1282.
- Mariscal, E. S., Akin, B. A., Lieberman, A. A., & Washington, D. (2015). Exploring the path from foster care to stable and lasting adoption: Perceptions of foster care alumni. *Children and Youth Services Review*, 55, 111–120.
- Murphy, K., Moore, K. A., Redd, Z., & Malm, K. (2017). Trauma-informed child welfare systems and children's well-being: A longitudinal evaluation of KVC's bridging the way home initiative. *Children and Youth Services Review*, 75, 23–34.
- National Training and Development Curriculum for foster and adoptive parents (NTDC). (n.d.). Right time themes. <https://ntdcportal.org/general-curriculum-materials/right-time/#toggle-id-1>.
- Nilsson, R., Rhee, S. H., Corley, R. P., Rhea, S. A., Wadsworth, S. J., & DeFries, J. C. (2011). Conduct problems in adopted and non-adopted adolescents and adoption satisfaction as a protective factor. *Adoption Quarterly*, 14(3), 181–198.
- Pacifici, C., Delaney, R., White, L., Nelson, C., & Cummings, K. (2006). Web-based training for foster, adoptive, and kinship parents. *Children and Youth Services Review*, 28(11), 1329–1343.
- Pecora, P. J., Whittaker, J. K., Barth, R. P., Borja, S., & Vesneski, W. (2018). *The child welfare challenge: Policy, practice, and research*. Routledge.
- Pynoos, R. S., Fairbank, J. A., Steinberg, A. M., Amaya-Jackson, L., Gerrity, E., Mount, M. L., & Maze, J. (2008). The National Child Traumatic Stress Network: Collaborating to improve the standard of care. *Professional Psychology: Research and Practice*, 39(4), 389.
- Salazar, A. M., Day, A., Feltner, A., Lopez, J. M., Garcia-Rosales, K. V., Vanderwill, L. A., ... Haggerty, K. P. (2020). Assessing caregiver usability of the National Training and Development Curriculum for Foster and Adoptive Parents. *Children and Youth Services Review*, 114, Article 105031.
- Smith-McKeever, C. (2006). Adoption satisfaction among African-American families adopting African-American children. *Children and youth services review*, 28(7), 825–840.

- A Treatment Improvement Protocol. (2014). Trauma-informed care in behavioral health services. Rockville, USA: Substance Abuse and Mental Health Services Administration.
- Ursachi, G., Horodnic, I. A., & Zait, A. (2015). How reliable are measurement scales? External factors with indirect influence on reliability estimators. *Procedia Economics and Finance*, 20, 679–686.
- Vanderwill, L. A., Salazar, A. M., Jenkins, G., Larwelle, J., McMahon, A. K., Day, A., & Haggerty, K. (2021). Systematic literature review of foster and adoptive caregiver factors for increasing placement stability and permanency. *Journal of Public Child Welfare*, 15(4), 487–527.
- Whenan, R., Oxlad, M., & Lushington, K. (2009). Factors associated with foster carer well-being, satisfaction and intention to continue providing out-of-home care. *Children and Youth Services Review*, 31(7), 752–760.
- White, L., Delaney, R., Pacifici, C., Nelson, C., Dickinson, S. L., & Golzarri-Arroyo, L. (2019). Understanding and parenting children's noncompliant behavior: The efficacy of an online training workshop for resource parents. *Children and youth services review*, 99, 246–256.
- Zhang, S., Conner, A., Lim, Y., & Lefmann, T. (2021). Trauma-informed care for children involved with the child welfare system: A meta-analysis. *Child Abuse & Neglect*, 122, Article 105296.