




Bringing fidelity monitoring to child welfare: lessons learned from the CORE Teen resource parent training

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ABSTRACT

While a variety of disciplines regularly use fidelity monitoring in order to understand a program's efficacy, few examples of fidelity monitoring exist within the field of child welfare. This study provides an example of a fidelity-monitoring measure used the Critical Ongoing Resource Family Education (CORE) Teen, a training program for prospective and current resource parents of teenagers. The fidelity-monitoring tool provided valuable insights into the strengths and weaknesses of the training program as well as possible explanations for changes (and lack thereof) in participants' competency levels. While the lack of diverse trainers limits the generalizability of the findings, this tool provides a promising start to fidelity monitoring in the child welfare field.

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Introduction

The current number of teens in foster care who need placements exceeds the number of available foster care placements in the United States (Wiltz, 2019). One way to address the lack of placement options is to increase resource parent (the collective term for adoptive/foster/kinship parents and guardians) recruitment and retention. An effective method for recruitment and retention involves providing resource parents with sufficient training, which can increase their ability to navigate uncertain situations in the resource parent role and improve outcomes for foster children (Chamberlain, Price, Reid, & Landsverk, 2008; Price, Chamberlain, Landsverk, & Reid, 2009). However, it is important to ensure that these trainings effectively deliver the appropriate content. Fidelity monitoring enables child welfare organizations to understand whether resource parents receive the trainings the way organizations intended.

Program fidelity involves using tools to understand and improve the consistency and validity of an intervention (Baer et al., 2007). Understanding whether a program functions as originally intended improves standardization increases the knowledge regarding strengths and limitations of a certain

approach, and improves trust in the generalizability of the program results (Spillane, Byrne, Leathem, O'Malley, & Cupples, 2007). A variety of disciplines regularly use fidelity monitoring to understand a program's efficacy, such as public health (Borelli, 2011), psychology (Schoenwald, Henggeler, Brondino, & Rowland, 2004), and education (Smith, Daunic, & Taylor, 2007). However, few examples of fidelity monitoring exist within the field of child welfare (Aarons, Sommerfeld, Hecht, Silovsky, & Chaffin, 2009; Buchanan, Chamberlain, Price, & Sprengelmeyer, 2013; Kaye & Osteen, 2011).

Within the realm of resource parent training, monitoring fidelity may help practitioners deliver the training as designed as well as allow researchers to fully understand what and how a training was implemented which would increase accuracy in drawing conclusions from outcome measures (Bellg et al., 2004). Presently, only one article could be found regarding the use of fidelity monitoring in resource parent training (Buchanan et al., 2013). However, the study focused on the difference between generation 1 and generation 2 trainers in curriculum adherence rather than on the development or use of the fidelity tool (Buchanan et al., 2013). The lack of fidelity monitoring in parent training literature highlights a gap in research. This study seeks to address this gap by providing a process evaluation of the development and findings of a fidelity-monitoring tool developed for a resource parent training. This study also examines co-trainer relationships, which will help the field understand how the relationship between trainers can impact results.

Background

Fidelity monitoring aids in understanding whether a program delivery adheres to its original design and enables those interpreting outcomes to make informed inferences about whether the results relate directly to the intervention itself (Spillane et al., 2007). Once a researcher or practitioner understands whether a program successfully achieves its goal, they can begin to improve the program (Baer et al., 2007). Accurately understanding whether a program succeeds in one context will enable researchers, practitioners, and policy-makers to discern whether the program results may translate to other environments (Bellg et al., 2004). This understanding will also improve the researcher's ability to disseminate the results and accurately discuss the outcomes (Bellg et al., 2004). Relevant literature addressing whether fidelity monitoring may also increase a trainer's sense of confidence and self-efficacy, could not be located. Furthermore, while research findings from the field of medical education indicate that high fidelity can improve student learning (Rodgers, Securro, & Pauley, 2009), we could not locate findings

regarding whether the act of fidelity monitoring itself improve student outcomes.

While the current literature does not offer best practices for monitoring fidelity in resource

parent training, research suggests best practices do exist for fidelity monitoring in general.

Best practices for general fidelity monitoring

Many approaches currently exist for fidelity monitoring (Spillane et al., 2007). Fidelity monitoring may include observation, either in person (Aarons et al., 2009) or via video recordings (Buchanan et al., 2013). Checklists and/or self-report forms can also be an effective way to monitor program fidelity (Haynes et al., 2009). Another effective type of fidelity monitoring includes reviewing field notes (Wickersham et al., 2011). Each of these approaches have certain tradeoffs. For example, while observations or independent quality assurance checks may enable close fidelity monitoring, these approaches are more resource-intensive than surveys or field note reviews. Self-report forms provide a less-resource intensive option but can also lead to biased-responses from participants.

For a program to be successful, trainers must complete and teach the necessary components of the model (Bellg et al., 2004). This certainly applies to the child welfare field, where completing the entire training is more important to participant learning than the training modality itself (Marcynyszyn, Maher, & Corwin, 2011; Nash & Flynn, 2016). However, fidelity monitoring tools should not only evaluate whether content was delivered, but how that delivery took place in order to ensure that the content remains consistent over time (Bellg et al., 2004). Training delivery factors include the time it takes to complete training, when trainings take place, and in what format (i.e. online vs. in person). Understanding these factors may help in controlling for and understanding differential outcomes (Bellg et al., 2004).

In order to assist the evaluation of resource parent trainings, it can also be helpful to capture the trainers' ability to convey the information and manage the classroom experience. Research from the education field indicates teachers' competency and relationship with their co-teacher influence student learning, interest, and engagement (Fauth et al., 2019; McCormick, Noonan, Ogata, & Heck, 2001). These results illustrate that is not only important for the teachers to cover all the content, but to do so in an effective manner. One way to capture teaching effectiveness is through measuring teacher self-efficacy, which positively correlates with teaching effectiveness, student performance, and student motivation (Klassen & Tze, 2014; Mojavezi & Tamiz, 2012).

The co-teaching relationship is also important for student learning and engagement (McCormick et al., 2001). The co-trainer relationship can be captured through measuring the extent to which trainers believe themselves to be similar to one another in regard to views about roles, responsibilities, motivation to teach, and commitment to teaching (Noonan, McCormick, & Heck, 2003). Outside of the education field, no sources could be located regarding co-training models and fidelity monitoring. The parent training in this study used a co-training model, where one co-trainer had experience as a foster or adoptive parent. This approach allows for trainers to use real-life examples that coincide with the curriculum which provides a more relatable and tangible experience for the participants.

The current paper details the process of developing and implementing fidelity monitoring in the piloted parent training program Critical Ongoing Resource Family Education (CORE) Teen. The aim is to understand what and how the curriculum content was delivered, what potential impact it had on knowledge gains of the participants, and what modifications may be needed to ensure the curriculum is able to be implemented to fidelity. To meet this aim, we ask the following research questions: 1) What is the level of adherence to the curriculum? 2) Does the level of adherence to the curriculum impact posttest scores of the participants? 3) What is the relationship between trainer perceived competency and adherence to the curriculum, co-trainer

Table 1. Trainer demographics (N = 30).

Demographics		N	%
Gender	Female	21	70
	Male	3	10
	Missing	6	20
Age	20–29	4	13
	30–39	11	37
	40–49	3	10
	Over 50	6	20
	Missing	6	20
Race	African American	1	3
	American Indian/Alaskan Native	2	7
	Hispanic	1	3
	Caucasian	19	63
	Missing	7	24
Resource parent	Yes	9	30
	No	16	53
	Missing	5	17
Parented Teens	Yes	8	26
	No	17	57
	Missing	5	17
Years of experience training	1 year	9	30
	2 to 5 years	15	50
	Missing	6	20
Trainings per year	1	3	10
	2–5	21	70
	Over 10	1	3
	Missing	5	17

relationships, and overall posttest scores, and 4) What worked well or didn't work well during curriculum implementation?

Methods

Sample

CORE Teen trainings occurred in four pilot sites across three states, which included Florida, Pennsylvania, Tennessee, and in one tribal community located in the southeast region of the United States. Thirty trainers from the various sites (FL = six, PA = 13, Tribe = three, TN = eight) completed the module fidelity tool. The majority of trainers identified as Caucasian females ranging in age from 30 to 39. The majority of trainers had two to 5 years of experience and conducted two to five trainings per year. Of the 25 trainers that responded to demographic questions, nine identified as resource parents and eight paraprofessional trainers stated they had experience parenting a teen. See [Table 1](#). It is important to note trainers were selected independently by each state or tribal community.

Intervention

The CORE Teen intervention aims to prepare resource parents to effectively parent teens, in particular, those with challenging behaviors due to trauma exposure. The intervention also seeks to provide these families with ongoing skill development needed to understand and promote committed, continual relationships. CORE Teen specifically targets families who are fostering and/or adopting teens (ages 12–20) through the public child welfare system as well as those placed in kinship care and was adapted to support parents under tribal jurisdiction.

The training consists of seven classroom modules:

- (1) Introduction and understanding of the impact of trauma on youth in foster care
- (2) Parenting youth who have experienced trauma
- (3) Developing and sustaining a healthy and supportive relationship with your youth
- (4) Nurturing youth's cultural/racial/ethnic needs and sexual orientation/gender identity and expression
- (5) Understanding and managing youth challenging behaviors, part 1
- (6) Understanding and managing youth challenging behaviors, part 2
- (7) A new suitcase of parenting knowledge and skills (<https://spaulding.org/professionals/spaulding-institute/core-teen-curriculum/>).

Curriculum developers estimated that each model would take approximately 2 hours to complete.

Trainers implemented CORE Teen by combining 1–2 modules per training day. Some trainers combined as many as three modules in one day of training. This resulted in most trainings being completed over two week-ends, while others provided trainings over 6–7 weeks with one module per week being taught. Trainers were encouraged to utilize a co-trainer model that included a professional trainer and a parent trainer.

Data collection

To ensure accuracy, trainers were asked to complete the fidelity forms at the end of each training module while the participants completed their posttest. Given that CORE Teen uses a co-trainer model, if a co-trainer was present, the co-trainer also completed the fidelity form. Each trainer then submitted the fidelity form to the project manager who then provided access to the evaluation team. An example of the fidelity form is in the [Appendix A](#).

Measures

Fidelity forms were designed for each of the seven modules to measure the level of adherence to the curriculum as designed. Each fidelity form utilized the same structure and included the following sections: training logistics, perceived co-trainer relationship, perceived level of competency, activity checklist, and qualitative questions. Training logistics included the date of session, how long it took to complete the module and if the module was combined with other modules.

The perceived co-trainer relationship is a self-rated scale ($\alpha = .671$) which consists of six questions and uses a 5-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. Sample questions include “I work well with my co-trainer”, “my co-trainer and I share the same commitment to the training” and “My co-trainer listens to me when I present a problem or concern.” It is important to note the alpha score is below the desired .7 or above threshold (Kline, 1999), however, given the small sample size and short nature of the survey this was not unexpected. The perceived self-competence index consists of three-five questions that are based on the objectives identified in that specific classroom module. Trainers rate themselves on their perceived level of confidence on training each of the competencies identified. The questions use a 5-point Likert scale ranging from 1 = not confident at all to 5 = very confident. Example questions for trainer confidence in module 1 include, “the definition of trauma,” “how trauma and adversity impacts a youth’s development,” and “the importance of

responding to the underlying cause of youth's behavior." The activity checklist contains a space for each component of the module (videos, lectures, activities, etc.). The trainer is asked to check whether they completed each of the components during the training. If they were unable to complete a component of the curriculum, the trainer was asked to describe why they were not able to complete that component. The last section of the fidelity tool asks trainers to provide qualitative feedback for each module. The open-ended questions include the following: "What materials were best received by your audience," "Which of the activities did not work well," and "What support(s) or additional training would be helpful."

Lastly, participant posttests were developed for each module to measure knowledge. The posttests consisted of 12–17 multiple choice questions that reflected the content of the curriculum.

Analysis

Descriptive statistics were utilized to examine the time it took to complete each module, co-trainer relationship, the trainer's level of confidence, trainer demographics, and percentage of adherence to the curriculum.

To answer the second research question seven independent t-test was conducted to examine the participant posttest scores and the percentage of adherence to the curriculum. The percentage of curriculum adherence was determined by how many activities were checked off the list. This variable was then dichotomized into two categories, completed less than 80% of the curriculum and completed 80% or more of the curriculum.

In order to answer the third research question, seven Pearson Correlations were conducted to examine the relationship between co-trainer relationship, trainer competency, adherence to the curriculum, and average posttest scores by cohort.

Lastly, to answer the fourth research question, content analysis was used to uncover recurring themes from the qualitative data.

Findings

Twenty cohorts completed the classroom CORE teen curriculum, and trainers completed 226 fidelity measures in total. Trainers (trainer and co-trainer) submitted approximately two fidelity measures for each module and cohort. On average, each module took approximately 2 hours and 7 minutes to complete, this ranged from 1 h and 30 minutes to 3 hours and 17 minutes. An average of eight participants per cohort completed the training, ranging from 6 to 12 participants per cohort. Trainers rated their co-trainer relationship as high with an average rating of 4.5. Trainers rated their confidence level for training the material as high with an average rating of 4.4. On average,

Table 2. Averages of trainer responses by content module.

		Tribe	FL	PA	TN
		M	M	M	M
Module 1	Duration	1.5	2.75	3	2.16
	No. of participants	7.6	8.3	7.3	12.4
	Co-trainer relationship	4.9	4.9	4.9	5
	Competence of trainer	4.6	4.6	4.5	4.3
	% Completed activities	94.6	95.2	95.7	76.5
		M	M	M	M
Module 2	Duration	1.5	2.25	3	2.5
	No. of participants	7.2	8	6.75	12.4
	Co-trainer relationship	4.9	4.8	4.9	4
	Competence of trainer	4.6	4.6	4.6	4.2
	% Completed activities	86.8	90.2	81.6	63.2
		M	M	M	M
Module 3	Duration	1.75	2.75	2.75	2.15
	No. of participants	7.6	8.1	7	12.4
	Co-trainer relationship	4.9	5	4.9	4
	Competence of trainer	4.6	4.7	4.7	4.8
	% Completed activities	89.8	79.1	77.3	58.2
		M	M	M	M
Module 4	Duration	1.5	2.67	3.17	2
	No. of participants	7.6	7.6	7	11.6
	Co-trainer relationship	4.8	4.9	4.8	3.9
	Competence of trainer	4.6	4.6	4.4	3.7
	% Completed activities	90	82.5	88.8	44
		M	M	M	M
Module 5	Duration	1.5	2.7	2.4	1.9
	No. of participants	7.6	7.8	6.8	11.4
	Co-trainer relationship	4.9	4.9	4.8	4
	Competence of trainer	4.5	4.7	4.7	4.2
	% Completed activities	84	74.7	70	54.7
		M	M	M	M
Module 6	Duration	1.5	2.75	2.5	1.8
	No. of participants	7.6	7.5	6.75	11.6
	Co-trainer relationship	4.8	4.9	4.8	4.9
	Competence of trainer	4.6	4.7	4.6	4.3
	% Completed activities	84.3	73.3	71.4	52.4
		M	M	M	M
Module 7	Duration	1.5	2.6	1.5	1.67
	No. of participants	7.2	7	6.5	11.75
	Co-trainer relationship	4.8	5	3.8	5
	Competence of trainer	4.5	4.8	4.2	4.4
	% Completed activities	83.3	94.4	88.9	86.1

trainers completed 76% of the activities in each module, this ranged from 44% to 96%. See [Table 2](#). Module 1 (Introduction and understanding the impact of trauma on youth in foster care) and Module 7 (A new suitcase of parenting knowledge and skills) had the highest adherence to the curriculum and Module 5 (Understanding and managing youth challenging behaviors, part 1) had the lowest. The average percentage of completed activities per module can be viewed in [Figure 1](#). Several independent samples t-test were conducted to compare posttest scores in cohorts that adhered to less than 80% of the curriculum (group 1) and those that adhered to 80% or more of the curriculum (group 2). In modules 1 and 4 greater adherence to fidelity was associated with an increase in posttest scores. There was a significant difference in module 1 posttest scores between group 1 ($M = 11.53$, $SD = 1.8$) and

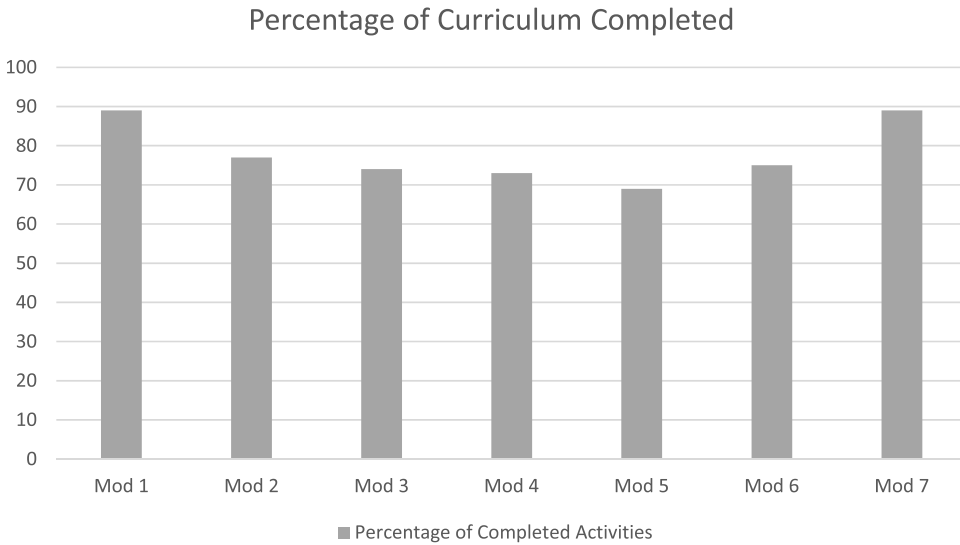


Figure 1. Average percentage of curriculum completed for each module.

Table 3. Independent t-test of posttest scores and adherence to curriculum.

	<80% Adherence			≥80% Adherence			T	p
	N	M	SD	N	M	SD		
Mod 1	43	11.53	1.80	139	12.81	2.01	-3.74**	.001
Mod 2	106	11.26	1.86	74	11.27	2.89	-.017	.986
Mod 3	102	11.98	2.17	75	12.39	1.85	-1.31	.192
Mod 4	76	9.59	2.09	99	10.64	1.67	-3.56**	.001
Mod 5	130	13.39	2.07	37	12.03	2.9	2.68**	.01
Mod 6	103	15.04	2.45	72	15.08	2.39	-.120	.905
Mod 7	16	10.19	2.56	141	11.13	2.81	-1.29	.199

group 2 ($M = 12.81$, $SD = 2.01$); $t(180) = -3.74$, $p < .0001$. There was a significant difference in scores in module 4 posttest scores between group 1 ($M = 9.59$, $SD = 2.09$) and group 2 ($M = 10.64$, $SD = 1.67$); $t(91) = -3.56$, $p < .001$. In module 5 lower adherence to fidelity was associated with higher posttest scores. There was a significant difference in module 5 posttest scores between group 1 ($M = 13.39$, $SD = 2.07$) and group 2 ($M = 12.03$, $SD = 2.9$), $t(47) = 2.68$, $p = .01$. See Table 3.

Seven Pearson's product-moment correlation were conducted to determine the relationship between co-trainer relationship, trainer competence, adherence to curriculum, and posttest averages by cohort. There was a strong, positive correlation between co-trainer relationship and perceived competence across all modules: module 1 $r(14) = .975$, $p < .001$, module 2 $r(52) = .915$, $p < .001$, module, module 3 $r(53) = .923$, $p < .001$, module 4 $r(50) = .965$, $p < .001$, module 5 $r(53) = .945$, $p < .001$, module 6 $r(52) = .941$, $p < .001$, module 7 r

Table 4. Pearson's correlation tables for co-trainer relationship, trainer perceived confidence, percentage of adherence and overall posttest scores.

	M1 Co-tr	M1 PC	M1 Adherence	M1 Posttest
M1 Co-tr	1			
M1 PC	.957**	1		
M1 Adherence	.946**	.981**	1	
M1 Posttest	-.63	-.139	.902*	1
	M2 Co-tr	M2 PC	M2 Adherence	M2 Posttest
M2 Co-tr	1			
M2 PC	.915**	1		
M2 Adherence	.885**	.955**	1	
M2 Posttest	.24	.285	.268	1
	M3 Co-tr	M3 PC	M3 Adherence	M3 Posttest
M3 Co-tr	1			
M3 PC	.923**	1		
M3 Adherence	.906**	.933**	1	
M3 Posttest	.115	.335	.104	1
	M4 Co-tr	M4 PC	M4 Adherence	M4 Posttest
M4 Co-tr	1			
M4 PC	.965**	1		
M4 Adherence	.935**	.934**	1	
M4 Posttest	.026	.278	.160	1
	M5 Co-tr	M5 PC	M5 Adherence	M5 Posttest
M5 Co-tr	1			
M5 PC	.945**	1		
M5 Adherence	.905**	.944**	1	
M5 Posttest	.393*	.528**	.341	1
	M6 Co-tr	M6 PC	M6 Adherence	M6 Posttest
M6 Co-tr	1			
M6 PC	.941**	1		
M6 Adherence	.940**	.941**	1	
M6 Posttest	.103	.221**	.086	1
	M7 Co-tr	M7 PC	M7 Adherence	M7 Posttest
M7 Co-tr	1			
M7 PC	.841**	1		
M7 Adherence	.860**	.938**	1	
M7 Posttest	-.140	-.054	.089	1

** Correlation is significant at the 0.01 level *. Correlation is significant at the 0.05 level (2-tailed). Co-tr = Co-trainer relationship; PC = Trainer perceived confidence; Adherence = % of adherence to curriculum; posttest = overall posttest scores for each cohort; M = equal module.

(53) = .841, $p < .001$. There was a strong positive correlation between perceived competence and adherence to the curriculum across all modules: module 1 $r(52) = .981$, $p < .001$, module 2 $r(52) = .955$, $p < .001$, module 3 $r(53) = .933$, $p < .001$, module 4 $r(49) = .934$, $p < .001$, module 5 $r(53) = .944$, $p < .001$, module 6 $r(52) = .941$, $p < .001$, module 7 $r(53) = .938$, $p < .001$. See Table 4.

There were three major themes found in the qualitative section; 'time,' 'what materials were best received by your audience?' and 'what did not work well?' Given the lower adherence to the curriculum as designed, the qualitative questions help provide the answer as to why adherence was not higher. The majority of trainers reported there was not enough time allocated to cover the material in each theme ($n = 24$). Trainers stated there was "way too much content,"

Table 5. What materials were best received by your audience? (N = 226 fidelity forms).

Theme 1: Time Constraints		N
	"There was too much heavy material to cover in one session. I found we had to limit discussion at times. This information is too important to rush through. I felt we had to limit time for introspection which may have reduced effectiveness."	24
	"Time restraints hindered ability to delve too deep into handouts."	
	"Way too much content. This class is too rushed."	
Theme 2: What materials were best received by your audience?		
Video	"Participant find the videos enjoyable and relatable"	58
	"Videos are very powerful"	
	"The videos show/explain the topics in a way that they understand"	
	"Videos continue to assist, real life examples"	
	"Videos were impactful"	
Handout	"Pages with resources, meaning links, or websites to go whenever they felt they need more education regarding a situation"	24
	"The participants enjoyed handout 5.1 and turned it in to thinking through their own regulated responses as well as reflecting on their emotions and triggers to each scenario"	
Activity	"Parents enjoy hands on activities"	47
	"Parents enjoyed exercises to practice using techniques"	
Vignette	"Participants enjoyed scenarios and discussions"	7
Discussion	"Participants enjoyed open discussion about the various topics throughout module"	15
Theme 3: What did not work well?		
Role Play	"Role plays were not engaging"	25
	"they didn't want to participate"	
	"role play content too heavy"	
	"no one wanted to do it so we read through as a big group"	
	"instructions not clear, people not comfortable with role play"	
	"less role plays and more talking about what they can really do, fearful of speaking and pressure to participate; role play should be specific not just ask families to come up with a conversation."	
Cultural	"[We] chose to skip "white privilege" because class is predominantly African American and knowledgeable about topics like white privilege."	5
	"The explicit/implicit bias – the trainer recognized participants in other classes were not honest so she chose to lead a group discussion rather than work individually"	

which led to limiting discussions and shortening or skipping activities. See [Table 5](#).

The fidelity forms provided the venue for trainers to identify "what materials were best received by your audience" and "what did not work well." Trainers identified videos and hands on activities as the two primary materials that were best received. Trainers stated, "parents enjoy hands on activities" and the videos because "the videos show/explain the topics in a way that they understand." Trainers reported 'role play' and 'cultural themes' did not work well. Trainers reported difficulty in getting the participants to engage in the role plays, "they didn't want to participate" and "role plays were not engaging." Another point of concern was the cultural theme, trainers identified issues with not feeling prepared to tackle this theme or the participants were not being honest around the topic of 'white privilege.' Trainers reported skipping "white privilege" "because the class is predominantly African American" or bringing the discussion to the group rather than an individual work piece because "participants were not honest." See [Table](#)

5. Since this was a pilot test, the qualitative responses were used to modify the curriculum to address the concerns of ‘what did not work well’ and the time needed to complete the curriculum to fidelity.

Discussion

Fidelity tools are designed to demonstrate the level of adherence to the curriculum as planned, to understand what adjustments, if any, were made to the original design, and to understand why those adjustments were made (Bellg et al., 2004). The fidelity tools used in this pilot project adopted the several components to reflect best practice. Specifically, the self-reporting fidelity forms contained tracking for the required curriculum activities, how the material was delivered: date, time, location, format, and duration (Bellg et al., 2004), and the trainer’s perceived competency level and co-trainer relationship (Fauth et al., 2019; McCormick et al., 2001).

Utilizing the fidelity tools allowed researchers and curriculum developers to understand the strengths and limitations of the curriculum design (Spillane et al., 2007). As we see from the descriptive statistics, the training themes, on average, ran over the 2 hours estimated for each theme, with some taking over 3 hours to complete. The time constraints led to the trainer’s inability to cover all the content as evidenced by the average percentage of completed activities (76%). The variability in content covered across the seven modules demonstrates why fidelity tools are important. For the purpose of this pilot, the fidelity tools worked as a guide to demonstrate length of time to train the theme, what activities worked well, and what activities did not work well. This is important information in curriculum development as adjustments needed to be made to ensure the curriculum is in fact able to be administered with fidelity. Without the use of fidelity tools, we would not have had a detailed picture of what each cohort experienced, what activities were completed or skipped, and how this may have impacted outcomes (Bellg et al., 2004).

In two out of the seven modules (modules 1 and 4), adherence of 80% or more to the curriculum was associated with higher posttest scores. These findings support the idea that greater adherence to curriculum design may improve knowledge gains of the participants (Rodgers et al., 2009). This may be particularly true for module 1 (Introduction and understanding of the impact of trauma on youth in foster care), which contained a large amount of technical terms, and module 4 (Nurturing youth’s cultural/racial/ethnic needs and sexual orientation/gender identity and expression), which contained culturally sensitive/challenging information. However, it is important to note that in module 5, the findings were reversed, lower adherence was associated with higher posttest scores. This may be in part due to the topic. Module 5 covered the theme ‘understanding and managing youth challenging behaviors part 1’. The Pearson’s R correlations for module 5 and module 6

(part 2), show a positive relationship between trainer perceived confidence and posttest scores. This implies the perceived confidence of the trainer had a greater impact to knowledge gains than adherence to the curriculum in those two modules. Another factor that may have impacted scores was the choice of delivery, since not all sites chose to deliver the curriculum one module at a time, the combination of multiple themes in one training day may have impacted the knowledge gains of the participants.

The ability to implement curriculum is impacted by the trainer's level of competency. Studies show that competency and co-trainer relationship may impact participant learning experiences and engagement (Klassen & Tze, 2014; Mojavezi & Tamiz, 2012), the findings support this as there was a strong positive correlation between the trainer competency and adherence to the curriculum. Further, there was a strong positive correlation between trainer perceived competency and co-trainer relationship. This may indicate that trainers who are confident with the training material are able to build positive relationships with their co-trainers. This positive relationship between co-trainers is promising, as research demonstrates that the strength of the co-teacher relationship and the educational quality of a program positively correlate with one another (McCormick et al., 2001).

Lastly, the qualitative data provided further detail into challenges with implementing the curriculum to fidelity. Time was a consistent concern and trainers reported not having enough time for group discussion that would allow participants to gain a deeper understanding of the material. In addition to time, trainers noted difficulties that stemmed from the topic of cultural competency. Trainers specifically discussed concern regarding the topic of "White Privilege." Trainers reported the need to be flexible and have different approaches available for this topic, depending on the demographic makeup of the class participants. Results demonstrate that one of the activities in the first module needed modification so that it could be more inclusive and focus on other cultural factors in addition to race such as economic privilege and cultural differences between resources parents and teens. Role plays were another area of concern with a large portion of facilitators either modifying the role play activities or skipping them altogether.

Implications for practice

The purpose of fidelity tools ensures the adherence to the curriculum as designed. The continued use of fidelity tools will track adherence to the curriculum which will allow for future research into the efficacy of the curriculum in preparing foster, adoptive, and kinship parents. Many parent training curricula lack rigorous evaluation of effectiveness with large sample sizes which in part due to the lack of standardized implementation of the curriculum (Chamberlain et al., 2008; Greeno et al., 2016; Uretsky, Lee,

Greeno, & Barth, 2017). Examining efficacy is important given that foster, adoptive, and kinship parents a lack of preparedness contributed to placement instability and/or adoption disruption (Fisher, Gunnar, Chamberlain, & Reid, 2000; Perez, 2015; Rock, Michelson, Thomson, & Day, 2013; Wind, Brooks, & Barth, 2005). This underscores the necessity to assess parent training curriculum for efficacy in order to arm parents with the tools they need to maintain their status as a foster, adoptive, or kinship parent.

Additionally, fidelity tools can be utilized in curriculum development to collect data on what is working, not working, and establish realistic timeframes for completing the curriculum. These detailed checklists with options for qualitative feedback provide a complete view of not only what was implemented, but how it was implemented. This amount of detail allows for curriculum revision to be guided by evidence rather than guessing. The finding here further details the importance of testing out curriculum prior to implementation in order to ensure sufficient time exists for content and the content will meet the needs of the participants. For example, trainers stated that participants felt uncomfortable with the role-play activities. Trainers suggested having clear scripts for participants to follow if they do not feel comfortable creating the dialogue themselves (such as creating a sample dialogue for participants to read between a parent and a child that demonstrate a learning objective). Trainers also reported using role-plays as a whole class experience rather than having chosen participants come to the front of the room to “act it out.” The qualitative feedback from the fidelity forms provided suggestions on how the curriculum could be revised to meet the needs of the participants while still covering the required material.

Lastly, as race and privilege have come to the forefront of our national conversation, it is important to note that the qualitative data demonstrated a need for diversity. For example, trainers felt discussions regarding race and privilege may be improved by recruiting a more diverse set of trainers, as the majority of these trainers identified as white and female. Trainers also reported wanting additional resources to facilitate disagreements and discussions between participants for this topic. Given that the topic of privilege can be sensitive and provoke feelings of discomfort (Zembylas, 2018), future curriculum should provide more support to for trainers in facilitating these discussions.

Limitations

This study had several limitations. First, the quantitative measure captures trainers’ perceived feelings of competence, which may differ from their actual level of understanding. Second, the trainings all varied in the number of participants as well as length in time, so the differences between groups may lead to inconsistencies in the data. Third, the trainers were inconsistent with

completing the qualitative components of the fidelity forms. The first time the trainer facilitated a module, they were more likely to provide detailed qualitative feedback compared to second time they facilitated the same module. Fourth, the majority of the trainers were Caucasian females, which means that some of the findings may not generalize to other populations. Future research should look at how a more diverse set of trainers (such as more male trainers and trainers from diverse backgrounds) may impact fidelity monitoring results. Fifth, no kinship caregivers served as trainers. Given that kinship caregivers frequently provide out-of-home placements and that their experiences may differ from other resource families, the lack of their perspective limits the ability to generalize these findings. Lastly, the findings regarding the relationship between co-trainer relationship, trainer competency, and adherence to the curriculum show an positive correlation, however, further research is needed to determine if a trainer competency leads to adherence to curriculum and a positive co-trainer relationship.

Conclusions

This study provides an example of a fidelity-monitoring tool within a specific resource parent training. We used a self-report form and questionnaire survey that addressed content completion, trainer competency, training logistics aspects that current literature finds important for effective trainings. Our tool enabled us to understand both how the training delivery adhered to the program's design and to capture areas of strength and weaknesses within the training, which will help with the curriculum improvement. The data from the fidelity-monitoring tool will provide valuable insight and explanations for changes (or lack of changes) in participants' competency scores. For example, we expect that changes in participants' competency scores will reflect module completion. The inclusion of both qualitative and quantitative questions on our tool presented nuanced results, specifically regarding module completion. Furthermore, trainers used this fidelity-monitoring tool in different states and settings, demonstrating that the tool's effectiveness is not isolated to one place. We plan to continue using this fidelity-monitoring tool in future Core Teen trainings to understand the participant outcome scores as well as needed curriculum modifications.

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Appendix A. Module 1 Trainer Fidelity Survey

1. How much time did it take you to complete the training (start to finish in hours/minutes)?	
2. At what time of the day did the training occur?	a. Day b. Evening c. If the times vary, please describe: _____
3. Tell us how your session was delivered.	a. Session 1 only b. combination of sessions: identify which sessions: _____
4. What day of the week did the training occur on?	
5. Were you able to complete module 1?	a. Yes b. No
6. Were both co-trainers present for the training?	a. Yes b. No
7. How many participants attended this training?	
8. Were all training materials gathered and available for the training session?	a. Yes b. No

9. For the following questions, please rate yourself on your perceived co-trainer relationship using a 5-point scale 1 strongly disagree to 5 strongly agree.

	Strongly Disagree	Disagree	Somewhat Agree	Agree	Strongly Agree
I work well with my co-trainer.	1	2	3	4	5
My co-trainer contributes equally to the training.	1	2	3	4	5
My co-trainer and I clearly understand each other's roles.	1	2	3	4	5
I appreciated my co-trainers' unique capabilities.	1	2	3	4	5
My co-trainer and I share the same commitment to the training.	1	2	3	4	5
My co-trainer listens to me when I present a problem or concern.	1	2	3	4	5

10. For the following learning objectives, please rate yourself on your perceived level of confidence on training these competencies. For the following please rate yourself as on a 4-point scale ranging from 1 = Not at all confident to 5 = Very Confident.

Competency Number	Name and	Not at all confident	A little Confident	Somewhat Confident	Confident	Very Confident
1.	The definition of trauma	1	2	3	4	5
2.	How trauma impacts and adversity impact a youth's development.	1	2	3	4	5
3.	Importance of responding to the underlying cause of youth's behavior.	1	2	3	4	5

a.

b. If you rate yourself at a 3 or below in any of the competencies identified in table 10a., please write the *number* of the competency followed by your description of what would help you increase confidence in that area. (ex. Competency 3: your description)

Competency # _____ : _____

Competency # _____ : _____

Competency # _____ : _____

11. Please check off activities that you were able to fully complete during module 1 training. If you were not able to complete the activity, please provide the barriers to completion. If you need more room to describe please use the back of the sheet.

- Trainer provided information on Core Teen curriculum.
Not able to complete

-
- Trainer introduced themselves providing name, background, and their desire to teach this training

<input type="radio"/> Not	able	to	complete:
 - Trainer provided each participant with an introduction card and completed introduction activity.

<input type="radio"/> Not	able	to	complete:
 - Trainers completed the “what do we need to pack” activity

<input type="radio"/> Not	able	to	complete:
 - Trainer showed video “Who are the Youth Whom we are Parenting or Will Parent?”

<input type="radio"/> Not	able	to	complete:
 - Trainer reviewed and debriefed the first of the vignettes provided

<input type="radio"/> Please identify which vignette was reviewed: _____			
<input type="radio"/> Not	able	to	complete:
 - Trainer reviewed and debriefed the second of the vignettes provided

<input type="radio"/> Please identify which vignette was reviewed: _____			
<input type="radio"/> Not	able	to	complete:
 - Trainer covered the vignette about Merlin and Joanne “what is the trauma”

<input type="radio"/> Not	able	to	complete:
 - Trainer reviewed what determines a traumatic event

<input type="radio"/> Not	able	to	complete:
 - Trainer showed video Three E’s by Dr. Bruce Perry

- Not able to complete:

- Trainer covered Handout #1.1 Three E's Exercise
 - Did the trainer complete:
 - In a small group
 - In a large group
 - Not able to complete:

- Trainer showed video Understanding Trauma: Brain Basics by Dr. Bruce Perry
 - Not able to complete:

- Trainer showed video Developmental Disruptions by Dr. Bruce Perry
 - Not able to complete

- Trainer covered Handout #1.2 Developmental Disruptions Checklist
 - Not able to complete:

- Trainer covered Handout #2 and #3
 - Not able to complete

- Trainer showed Dr. Bruce Perry video: Making Sense of the World
 - Not able to complete:

- Trainer showed Dr. Bruce Perry video: Sequential Engagement
 - Not able to complete

- Trainer completed small group activity "think about examples from your life"
 - Not able to complete:

- Trainer completes activity "Role Play" Handout #1.3 Wilt
 - Not able to complete:

- Trainer covered Handout #1.3 Wilt activity
 - Not able to complete:

- Trainer showed video "Debbie Schugg" part 1 (18:35 to 20:43)
 - Not able to complete:

- Trainer showed video "Debbie Schugg" part 2 (34:21 to 40:19)

○ Not _____ able _____ to _____ complete:

- Trainer summarized module 1 and reviewed homework for the next training module: handed out worksheet #1.4 Underlying Causes of Behavior and #1.5 Children Don't Misbehave!

○ Not _____ able _____ to _____ complete:

12. Were any changes (additions/modifications) made to the goals and objectives during this module? (i.e. did you add a resource, new handout, or activity) ___No ___Yes

a. If you answered "Yes", identify each activity that was changed, explain the change, and the rationale for the change.

For the next set of questions, please reflect on your experience with Module 1. The following questions will help us understand if the module design works for both the trainer and the participants. Please be specific and detailed so we may better understand what changes may be needed.

13. Of the materials you presented for module 1, what materials were best received by your audience?

14. Which of the activities did not work well?

15. What support(s) or additional training would be helpful. This could be supplemental handouts, additional videos, more activities, having more trainers leading the session, additional trainings for trainers, more time to review. If you do not feel any additional support is needed, please describe the supports and training you have access to for this module.