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Trauma Systems Therapy in Child Welfare Settings

Importance and Purpose

Child abuse and neglect is a serious and pervasive public health problem, with child victims often suffering adverse, long-term consequences. Approximately 3.6 million reports of maltreatment were made to child protective services (CPS) in 2014, involving 6.6 million children; over 415,100 children experienced abuse and neglect that was severe enough to require them to be removed from their homes and placed in foster care (Child Welfare Information Gateway, 2013; 2016). The negative effects of maltreatment may be compounded by family disruption and repeated placement disruptions, leading to multiple experiences of separation and loss that place children's mental health and well-being further at risk (Kisiel, Fehrenbach, Small, & Lyons, 2009). Public awareness of the complex traumatic experiences of maltreated children has increased in recent years, as has understanding of children's experiences in the context of child welfare service delivery. Research has shown that children who are exposed to complex trauma are at greater risk for emotional and behavioral problems, which may contribute to placement instability and delay permanency. Many foster parents and kinship caregivers are not well equipped to care for these children and to stabilize them so that their placements remain intact.

State child welfare systems are charged with supporting children in foster care, maintaining stable placements for them, and working toward permanency. To achieve these goals, child welfare agencies must develop and maintain a cadre of staff, foster parents, and kinship caregivers who can identify trauma symptoms and provide appropriate supports to children who have been exposed to trauma. A critical component of developing a capable foster care and child welfare system is system-wide adaptation of a trauma-informed approach. Child Trends completed a five-year evaluation of the implementation of Trauma Systems Therapy (TST) in KVC Health Systems (KVC), a public child welfare agency. As a result of the positive findings from this initial evaluation of TST, the Annie E. Casey Foundation (AECF) partnered with KVC and New York University (NYU) to provide technical assistance to two public child welfare agencies – in Washington County, Virginia and Richland County, Ohio – to implement Trauma Systems Therapy-Foster Care (TST-FC, an adapted version of TST for public child welfare). Child Trends evaluated the implementation process. In this report, we present findings from our examination of how two public child welfare agencies implemented TST-FC.

Evaluation Method

Child Trends used a mixed method, multi-informant approach to the implementation evaluation. We designed the evaluation to answer three broad research questions:

(1) How well, and with what degree of fidelity, has TST-FC been implemented in each county?

(2) Among staff and foster parents/kinship care providers who participate in TST-FC, does TST-FC increase their knowledge of the impact of trauma on child behavior and functioning? Does it improve their skills and approaches to working with and caring for children who have experienced trauma, and support the use of TST-FC tools and approaches?

(3) Does implementation of TST-FC result in positive outcomes for children related to well-being, placement stability, and permanency?

Our sample consisted of groups of individuals who participated in the implementation of TST-FC: child welfare staff (*n* = 117), mental health providers (*n* = 21); foster parents and kinship caregivers (*n* = 111); and children placed in TST-FC trained foster homes (*n* = 52), including a subset (*n* = 25), who received TST-clinical services. We administered surveys that included standardized measures at three time points (pre-training; post-training; follow-up) with staff and foster parents/kinship caregivers, analyzed clinical fidelity checklists, observed and reviewed notes from team meetings, and conducted focus groups and interviews with foster parents and kinship caregivers, child welfare staff, mental health providers, developers, and child welfare agency leaders.

Summary of Key Findings

Overall, the two public child welfare agencies successfully implemented TST-FC with fidelity to the model. They adhered to the four central service elements of the model, with minor adaptations that were approved by the developers. Both child welfare agencies engaged private mental health partners to provide treatment for children receiving the intensive TST-FC services, and developed collaborative working relationships with them. They both established TST-FC treatment teams that met consistently throughout the implementation process; they identified and began serving children who met their eligibility criteria for TST-FC services, though the process was more complex and took longer than staff and leaders had anticipated. Both agencies trained the majority of their case workers and supervisors as well as mental health providers in TST-FC. Washington County required all existing and new foster parents to be trained in TST-FC training and trained the majority of foster parents and licensed kinship caregivers; Richland County trained some of their foster parents and licensed kinship caregivers, and will make TST-FC training mandatory for licensure moving forward. In a preliminary exploration, we observed significantly higher numbers of foster homes retained and significantly fewer children exiting TST-FC trained foster homes compared to homes in which resource parents were not trained in TST-FC across both counties by the end of the implementation period. These initial findings are promising, but warrant future investigation.

The evaluation identified a number of positive outcomes associated with TST-FC implementation:

- **Trauma-informed care.** We found marked improvements in both counties with regard to improvements in staff and foster parent/kinship caregiver knowledge, confidence, and practice in trauma-informed care from pre-training to post-training and follow-up. Foster parents and kinship caregivers also exhibited gains in knowledge and beliefs about trauma-informed care.
- **Relationships with mental health providers.** Both counties reported that the implementation of TST-FC led to newly established relationships with mental health providers which increased service capacity. Mental health providers reported a better understanding of how child welfare agencies work and the intense challenges they face. TST-FC developers also noted this strength.
- **Common language**. County staff indicated that having a common "trauma language" was important for understanding and talking about the subject. This common language improved communication among the staff and foster parents charged with caring for a child.
- **Fidelity.** Initial findings on fidelity are encouraging. Although children only participated in the first three treatments by the end of the evaluation period, staff reported a 92 percent completion rate for related activities on TST-FC Fidelity Checklists. Both counties implemented non-clinical activities largely as intended by the developers. Trainings were offered as planned, with few exceptions. Survey results strongly suggest that child welfare staff and foster

parents/kinship caregivers learned how to provide TST-FC, planned to use the tools and approaches, and had increased confidence and knowledge in providing trauma-informed care.

The evaluation also revealed several challenges to TST-FC implementation in the two county child welfare systems:

- **Limited time frame.** The short evaluation period raised several challenges. Due to difficulty in defining service eligibility criteria, few children received TST-FC clinical services, and overall no child assessment or treatment was fully completed. This limited our capacity to assess fidelity to the clinical model. Nevertheless, the preliminary results of TST-FC fidelity are promising. In addition, county staff are still working to strike a balance between utilizing the essential components of TST-FC and adapting agency culture and processes. This process will likely take several years. We recommend exploring process and child outcomes over a longer period of implementation to obtain a more comprehensive understanding of the effects of TST-FC.
- **Staff workload and capacity.** Both counties initially encountered difficulties identifying and developing partnerships with qualified mental health providers, and these difficulties persisted in Richland County. The extensive time commitment necessary to support the model was a concern for child welfare agency staff. An important indicator of success will be the extent to which the public agencies can integrate TST-FC with current procedures while still maintaining model integrity. Securing adequate funding to support participation by all of the individuals in the child's TST-FC team is an important predictor of success as well.
- **Training structure and format.** Individuals trained to provide the foster parent/kinship caregiver training did not feel adequately prepared. Several staff suggested that a "booster training" would be useful. They had concerns about the way the materials were organized both for trainers and for foster parents. Staff disagreed on whether the training should be one day or two. Some of the child welfare staff suggested separating the staff training into two sessions, one for the overview and one for tools and measures. We recommend the addition of "booster trainings" and additional support for presenting complex material to foster parents and kinship caregivers. We also suggest piloting different formats for the training and making adjustments to different populations, depending upon their needs.

Implications and Conclusions

The evaluation findings suggest that TST-FC is a promising intervention for improving public child welfare service delivery by developing a trauma-informed system. In particular, the findings show that:

- TST-FC can be implemented effectively in a public child welfare setting.
- TST-FC is associated with significant improvements in trauma-informed care among child welfare staff and foster parents/kinship caregivers.
- Tailoring the structure and format of TST-FC to the needs of particular settings may increase engagement.
- Support for implementation beyond the initial year may help optimize the impact of implementation.
- Additional research is needed to investigate the association between TST-FC and positive child outcomes.

INTRODUCTION

Child abuse and neglect is a serious and pervasive public health problem. Approximately 3.6 million reports of maltreatment were made to child protective services (CPS) in 2014, involving 6.6 million children. Child victims often suffer severe and long-lasting adverse effects of abuse and neglect, including impairments in brain functioning, alterations to gene expression, physical injuries, chronic health problems, difficulty forming attachments, and psychological disorders (Child Welfare Information Gateway, 2013). Public awareness of the complex traumatic experiences of maltreated children has increased in recent years, as has understanding of children's experiences in the context of child welfare service delivery. For example, the negative effects of maltreatment may be compounded by family disruption and repeated placements in foster homes, leading to multiple experiences of separation and loss that place children's mental health and well-being even further at risk (Kisiel, Fehrenbach, Small, & Lyons, 2009). Moreover, this experience is common. The most recent data from the Adoption and Foster Care Analysis and Reporting System (AFCARS) show that 415,100 children were in foster care as of September 2014 (Child Welfare Information Gateway, 2016). Abused and neglected children placed in foster care, for example, leave their birth parents, and often their home, school, and friends. Once in the child welfare system, they may endure additional disruptions over time. Research indicates that placement stability decreases the longer children remain in foster care (Children's Bureau, Administration for Children and Families, U.S. Department of Health and Human Services).

Research suggests that early exposure to multiple, chronic, and cumulative traumatic experiences beginning early in life–otherwise known as complex trauma—is likely to exacerbate negative outcomes among maltreated children. Kolko and colleagues (Kolko et al., 2010) found that 19 percent of children placed in foster care had post-traumatic stress disorder symptoms. Investigations by other researchers have shown that children who are exposed to complex trauma are at greater risk of exhibiting emotional or behavioral problems (Finkelhor, Ormrod, & Turner, 2007; Kisiel, Fehrenbach, Small, & Lyons, 2009). In turn, children's trauma symptoms and related behaviors can contribute to placement instability and delay permanency, as foster and kinship caregivers may be ill-equipped to care for children with these behaviors and to stabilize them so that placements remain intact. Extant literature suggests that disruptions in children's placements in foster care are especially likely when children exhibit challenging behaviors. One study reported that 20 percent of all placement changes were related to children's behavioral issues (Kolko, Hurlburt, Jinjin, Barth, Leslie, & Burns, 2010). Placement changes occurred most often for children who were older, had a pattern of externalizing behaviors, or had suffered emotional abuse.

Since the passage of the Child Abuse Prevention and Treatment Act (CAPTA) in 1974, state child welfare systems have been charged with the care of children who are maltreated or at risk for maltreatment. This means they are responsible for prevention, assessment, investigation, prosecution, and treatment services. As part of this mandate, state child welfare systems must support children in foster care, maintain stable placements for them, and help them achieve permanency as quickly as possible (e.g., reunification with parents, or placement with kin or adoptive parents). To achieve these goals, child welfare systems must develop and maintain a cadre of professionals, staff, foster parents, and kinship caregivers who can competently identify trauma symptoms and provide appropriate supports to children who have been exposed to trauma. In order to develop a capable workforce, there must be system-wide adaptation of a trauma-informed approach, which enables everyone in the child welfare system to understand how trauma impacts children, to recognize and identify the signs and symptoms, to respond by fully integrating evidence informed and evidence based methods for addressing their

needs, and to actively avoid re-traumatization (Substance Abuse and Mental Health Services Administration, 2014).

Understanding the need for a trauma-informed approach in the child welfare system, KVC Health Systems (KVC)—a large, private child welfare agency that provides foster care services to half the children in Kansas—adopted the TST model and implemented it agency-wide. Child Trends conducted a five-year evaluation of this implementation, with positive results. Based on these initial results, The Annie E. Casey Foundation (AECF) was interested in learning if Trauma Systems Therapy-Foster Care (TST-FC) could be successfully implemented in a public child welfare setting. AECF therefore partnered with KVC and New York University (NYU) to provide technical assistance to public child welfare (CW) agencies in Richland County, OH, and Washington County, MD, for the purpose of implementing TST-FC. AECF selected Child Trends to evaluate the implementation process and to conduct a preliminary outcome study to examine associations between TST-FC implementation and child safety, permanency, and well-being. In this report, we present our findings from this first implementation evaluation of TST-FC in a public child welfare setting. We begin by providing important background information on Trauma Systems Therapy, including model components, adaptations for child welfare, and previous evaluation findings on the implementation of TST-FC in a private child welfare setting.

Trauma Systems Therapy

Trauma Systems Therapy (TST) is a model of care for children who experience trauma that attends to both the child's emotional needs and the social environment in which the child is embedded. The model has roots in Bronfenbrenner's ecological systems theory (Bronfenbrenner, 1979), acknowledging the interplay between individual development and the social ecology. TST is both a clinical and an organizational model that emphasizes breaking down barriers between services, understanding the child's trauma symptoms in his or her developmental context, and building on family strengths.

TST can be applied across all child trauma types. Glenn Saxe, MD, and his colleagues at New York University (NYU) developed TST specifically to improve emotional, social, and behavioral functioning among children and youth ages 6-18, who have experienced trauma (Saxe, Ellis & Brown, 2015). The clinical model focuses on treating children with exposure to trauma who have difficulty regulating their own emotional states. Clinical staff (i.e., mental health providers) received special training and materials that were developed to ensure that the approach is implemented with fidelity, even with the most challenging children. As the manual states, the model "offers the specific and actionable information you need to help a traumatized child, no matter how complex and severe his/her problems."

TST takes a phase-based approach to treatment and consists of four primary intervention modules: (1) home- and community-based care; (2) services advocacy; (3) emotion regulation skills training; and (4) psychopharmacology. It is also an organizational model for agencies that treat children exposed to trauma. The focus is on a "trauma informed system"[1] rather than on the child alone, and treatment takes place in a range of settings, including adoptive and birth family homes, foster/kinship care, community agencies, outpatient clinics, residential care facilities, hospitals and schools. Typically, TST trainers and/or developers offer training and technical assistance to organizations for a period of one to two years to embed the model in the organizational system.

[1] A trauma-informed child- and family-service system is one in which all parties involved recognize and respond to the impact of traumatic stress on those who have contact with the system including children, caregivers, and service providers. See http://www.nctsn.org/resources/topics/creating-trauma-informed-systems

Components of TST

TST is a team-based approach to treatment. There is a *provider team* that is comprised of the TST supervisor/team leader, the home based service provider, the mental health clinician, a psychiatrist and a legal advocate. This team meets regularly to create the assessment and treatment plans for the children being served. The *full treatment team* includes all of the provider team plus the child, the child's caregivers, including the child's biological and foster parents, school personnel and other service providers involved in the care of the child. TST is a structured approach and utilizes specific tools and set procedures. See Table 1 for examples of TST tools. TST adheres to 10 principles, and four service elements that are central to the TST model.

10 TST Principles:

1. Fix a broken system
2. Put safety first
3. Create clear focused plans that are based on facts
4. Do not go before you are ready
5. Put scarce resources where they will work
6. Insist on accountability—particularly your own
7. Align with reality
8. Take care of yourself and your team
9. Build from strength
10. Leave a better system

Training. An essential part of the TST intervention is training all individuals involved with the care of children impacted by trauma and served by the agency. This is in line with the model's comprehensive approach to treatment. Initial training is offered using a "train-the-trainer" model. The trainers teach staff how to deliver the material to foster parents and kinship caregivers, ensuring that the child welfare agency develops the capacity to provide future TST training on their own. TST-FC developers advocate for training of all foster parents and kinship caregivers so they are better prepared to care for children who are impacted by trauma, even for children who do not need intensive clinical services.

4 TST Service Elements:

1. Services are provided for the child in their home and use community-based care
2. The more intensive clinical component includes outpatient, skills-based psychotherapy
3. Psychopharmacology is used as needed and appropriate, but sparingly
4. Services advocacy is part of ensuring that children receive the services they need

Originally designed as a therapeutic approach for mental health providers in in-patient settings, TST was not initially designed for a child welfare context. For example, TST did not designate specific roles for non-clinical staff, which a large number of providers within a child welfare context happen to be. Another challenge is that using a therapist as the sole interventionist is very costly. In addition, exclusive reliance on mental health providers might undermine the ability of the child welfare agency to provide a responsive and consistent continuum of care tailored to the needs of each child.

Table 1

TST Tools

TST Tool	Description	Use
Moment-by-Moment	The Moment by Moment assessment tool is designed to help recognize a child's triggers. It examines a child's behavioral disruption in conjunction with the environment and the events that occurred leading up to the dysregulation.	• All members of a child's team (most commonly the care takers) • Ongoing, as needed
Emotion-Regulation Guide (ER Guide)	The Emotion Regulation Guide is an individualized worksheet that identifies triggers, behavioral cues, and appropriate interventions throughout the four phases of regulation (regulating, revving, re-experiencing, and reconstituting).	• Developed by caregiver and the child • Updated as needed
Priority Problem Worksheet	To create an intervention plan, members of the child's team identify the source of a child's emotional pain, how the child experiences that pain, and how the staff can intervene to help the child and family address the pain.	• All members on a child's team • During case consultations

TST in a Private Child Welfare Setting

Recognizing the limitations above, KVC administrators, in conjunction with the TST developers, adapted TST by integrating it throughout their child welfare care continuum and by incorporating all members of a child's care team. The goal was to provide an integrated system of care embedding trauma interventions throughout all points of contact between children and families and the system. To accomplish this, KVC partnered with Dr. Saxe and his New York University colleague, Dr. Brown to develop the materials necessary for training non-clinical staff and implementing an innovative, enhanced, and expanded version of TST. KVC administrators developed and provided a wide range of training approaches (including Web-based, E-Learning modules) specific to role performance, and they created fidelity measures for non-clinical service systems (Moore et al., 2016).

In 2010, Child Trends initiated a five-year implementation and outcome evaluation of KVC's adaptation and expansion of TST. The goal of the evaluation was to understand how TST was integrated across a private child welfare organization and to assess whether this integration promoted positive outcomes (well-being, placement stability, and permanency) for the nearly 1,500 children (age 6 and up) entering out-of-home care between 2011 and 2014. Evaluators used administrative data to examine child outcomes, and training and fidelity data to examine children's TST exposure, or "dosage." Incorporating trauma-informed care throughout KVC's system took several years, and it changed over time. The evaluators' findings include:

- 90 percent of staff and 70 percent of 400 foster parents were trained in TST.
- Staff received in-person and online training boosters, including coaching and mentoring.
- KVC implementation was associated with increased knowledge of TST both for their staff and the broader social services system and community.

- Greater fidelity to TST led to greater improvements in child well-being and placement stability.
- TST can be effective in a larger child welfare setting.
- Non-clinical staff and foster parents were receptive and willing partners in the provision of trauma-informed care.
- No single individual is the cornerstone for improved child well-being.

While the results of the evaluation indicated that TST can be effective in a large privatized child welfare setting (like KVC), TST had not yet been implemented or evaluated in a public child welfare setting. AECF recognized that it could potentially be effective in that domain, and thus engaged Dr. Glen Saxe, Dr. Adam Brown, and Ms. Kelly McCauley from KVC to adapt the model and oversee implementation. Once again, AECF secured the services of Child Trends to conduct evaluation of the adapted model, Trauma Systems Therapy-Foster Care (TSF-FC).

Trauma Systems Therapy-Foster Care

Trauma Systems Therapy-Foster Care (TST-FC) incorporates the same 10 principles and four essential components of TST, as well as its tools and measures. The developers made adaptations that focused on making the model responsive to the particular nature of public child welfare settings. Public child welfare staff do not typically provide mental health counseling, therapy, or psychiatric services within the agency, and more often engage outside partners to provide these services. To fully implement TST-FC with its comprehensive, team-based approach, public child welfare agencies must work collaboratively with external partners. This complicates the implementation, as these relationships may need to be established or strengthened. Aside from this adaptation, TST-FC uses the same approach to treatment as TST. TST-FC is team-based, services are provided in the home of the foster parent, as well as in an agency setting, and the model requires foster parents and service providers to participate actively as team members in the treatment process. The training format and content, as well as the tools, are essentially the same as TST, only implemented in a private child welfare setting for KVC (see Table 2). AECF selected two counties that agreed to pilot TST-FC and participate in an evaluation of its implementation.

Table 2

TST-FC Trainings

Target Audience	Format	Trainer	Content

Child Welfare Staff and Mental Health Mental health providers	Two full days	KVC trainers	• Introduction to TST concepts
			• Foundations of child traumatic stress
			• How to do TST
			  ○ Assessment
			  ○ Treatment Planning
			  ○ Engagement
			  ○ Intervention
			• How TST is going to work in your setting

Child Welfare Staff and Mental Health Mental health providers providing	One half-day	KVC trainers	• Role on the team • Phase based treatment • Use of TST tools and forms

Target Audience	Format	Trainer	Content
TST-FC clinical services			
TST-FC Trainers	Two full days	KVC trainers using a train-the-trainer model	• Review of the Foster Parent Resource Guide • Tips on how to convey the material
Foster Parents and Kinship Caregivers	Four two-hour modules, either: • one full day; • two half days; or • four evenings	Site staff	• Understanding trauma and my child • Preparing for success with my child • Handling challenging behaviors in the moment • Finding energy and hope

EVALUATION OF TST-FC IMPLEMENTATION

Child Trends conducted an evaluation of the TST-FC implementation process, examining the manner in which TST-FC was initiated and administered in two public child welfare agencies: Richland County, Ohio, Children's Services, and Washington County, Maryland, Department of Social Services. The study was approved by the Child Trends Institutional Review Board.

Research Questions

Research questions for the evaluation focused on the implementation of TST-FC. Table 3 displays our three key research questions, along with the particular data collection methods and data sources we employed to answer each question.

Table 3

Research Questions, Data Collection Methods, and Data Sources

Research Question	Data Collection Methods	Data Sources

1. How well and with what degree of fidelity has TST-FC been implemented in each county?	• Observed trainings
	• Observed Leadership Team meeting calls
	• Collected attendance at trainings and team meetings
	• Conducted focus groups with staff, developers and foster parents/kinship caregivers
		• Organizational planning tool
		• Treatment fidelity checklists
		• Meeting attendance, agendas and notes
		• Training format and attendance
		• Focus groups with:
		  ○ Foster parents and kinship caregivers
		  ○ Case managers and supervisors

Research Question	Data Collection Methods	Data Sources
		○ Other key implementation staff
2. Among staff and foster parents/kinship care providers who participate in TST-FC, does TST-FC increase their knowledge of the impact of trauma on child behavior and functioning, improve their skills and approaches to working with and caring for children who have experienced trauma, and support the use of TST-FC tools and approaches?	3. Administer pre-, post-, and follow-up surveys for staff and foster parent/kinship caregivers who took the TST-FC training 4. Conduct focus groups with staff, developers and foster parents/kinship caregivers	• Focus groups • Staff pre-, post-, and follow-up surveys • Foster parent pre-, post-, and follow-up surveys • Focus groups

Sample and Procedures

TST-FC is a multi-level, comprehensive model that requires the involvement of child welfare and mental health leadership, direct service providers, foster parents and kinship caregivers, and children and their families. At the systems level, agency leaders participate in a comprehensive implementation planning process that involves making changes and incorporating new practices into all levels of service provision, as well as training agency staff in the TST-FC approach. In both counties, TST-FC implementation planning and training at the systems level included agency administration, managers and supervisors, management from community mental health agencies, and other key stakeholders who had the authority to make changes in their systems. Direct service workers participating in TST-FC in included front-line case workers, foster care workers, and mental health providers, each of whom worked directly with children and youth in foster care, as well as with foster parents and kinship caregivers. Mental health providers, both within the agency and in local community service agencies, provided TST-FC treatment to youth selected by each of the two child welfare agencies. Children and families who participated in TST-FC were licensed foster parents and kinship caregivers, and children and youth in their care.

Figure 1 shows the study timeline. Initial contact among AECF, the developers, and the two counties occurred in June (Richland) and July (Washington) of 2015, and the collaboration continued through June 2016, for a total implementation period of approximately one year. Trainers provided the first staff trainings in December 2015 in Washington County, and in January 2016 in Richland County. Initial foster parent trainings were conducted in February and sessions were offered periodically through April 2016. Child Trends administered surveys before (pre-training) and after (post-training) both of the staff and foster parent trainings, as well as one month after the training (follow-up) for foster parents and three months after the training (follow-up) for staff. Child Trends held focus groups in May, 2016 in Washington County and June, 2016 in Richland County. Both sites provided additional administrative data in September, 2017, covering the period April 2016 through July, 2017.

Figure 1

Study Timeline

	2015		2016				2017		
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Implementation activities									
Initial contact with sites, TA, developers									
Site kick-off meetings									
Staff training									
Foster parent training									
Peer learning day									
Evaluation activities									
Developed research materials									
IRB approval									
Administrative data collection									
Observations of trainings									
Pre-training surveys									
Post-training surveys									
Follow-up surveys									
Focus groups and interviews									
Deliverables									
Final report									
Revised final report including new administrative data									

Sample Demographics

Our sample consists of five groups of individuals who participated in the implementation of TST-FC. See Table 4 below for details.

Table 4

TST-FC Study participants

Participant type	Washington County	Richland County	Combined
Child welfare staff	35	82	117
Mental health providers	6	15	21
Foster parents/kinship caregivers	82	29	111
Children placed in TST-FC homes	38	12	52
Children receiving TST-FC services	13	12	25

Richland County trained all their staff, so had higher attendance than Washington County, whereas Washington County made training mandatory for all current and new foster parents and kinship caregivers, so had higher participation rates among the foster parents and kinship caregivers.

Child welfare staff demographics. Demographics of staff who received TST-FC training (see the Appendix: Table 1) varied at the county level. The majority of staff in both counties were female, white, and age 31 or older. There was a higher proportion of staff who had a graduate degree in Washington County compared to Richland County. The majority of staff who participated in TST-FC in both counties were case managers. Compared to staff in Richland County, staff in Washington County had spent more years working at the agency and working with children and families. On average, staff worked at their agency for approximately 10 years and worked with children and families more than 12 years.

Mental health provider demographics. Washington County collaborated with an individual private therapist and psychopharmacologist, as well as San Mar Children's Home, a private foster care and adoption service provider serving the community. Richland County collaborated with Catalyst Life Services, a crisis, counseling, and rehabilitation service agency nearby in the Mansfield area. As shown in the Appendix, Table 2, the mental health training participants were largely white females, though the pool was more diverse in terms of race/ethnicity. The ages of providers clustered largely in two age groups: 21-25 years and 50+ years.

There was a considerably higher proportion of mental health providers with a graduate degree (Masters or above) in Washington County compared to Richland County (67 percent vs. 31 percent). Roughly one-third of mental health providers who participated in TST-FC in both agencies were case managers and one-third were mental health providers. Compared to staff in Richland County, staff in Washington County had spent more years working at the agency (*M* = 6; *SD* = 8; *Range* = 1-27 vs. *M* = 11 *SD* = 14; *Range* = 2-27) but fewer years working with children (*M* = 9; *SD* = 10; *Range* = 1-32 vs. *M* = 4; *SD* = 12; *Range* = 3-5). The mean number of years that providers spent working in the two agencies was 7 (*SD* = 9, *Range* =1-27) and they had worked with children for an average of 8 years (*SD* = 9, *Range* = 1-32).

Foster parent/kinship caregiver demographics. Sample demographics of foster parents and kinship caregivers who participated in TST-FC training (see Appendix: Table 3) also varied by county on some characteristics. More than half of both counties were female (Washington County = 60 percent; Richland County = 69 percent, total = 62 percent). The majority of individuals in both counties were white (88 percent in Washington County; 83 percent in Richland County, combined 87 percent). Almost all foster parents and kinship caregivers were age 31 years or older (98 percent), with more foster parents in Richland county in the 50+ group (55 percent) than in Washington County (39 percent). Foster parents and kinship caregivers in the two counties reported a similar number of years of experience as foster parents (*M* = 5; *SD* = 5; *Range* = 0-19 years in Washington County; *M* = 5; *SD* = 5; *Range* = 0-21 years in Richland County, combined *M* = 5; *SD* = 5; *Range* = 0-21 years).

Foster parents and kinship caregivers in both counties reported adequate financial resources. When asked to rate how often they were able to pay the bills, buy food, and utilize transportation on a four-point scale (1 = never; 4 = always), mean scores were all in the 4-point range, with a range from 2-4. Six TST-FC trained foster parents in Washington County and two TST-FC trained foster parents in Richland County had children who received TST-FC clinical services.

Evaluation Procedures

Participants in TST-FC engaged in a range of data-collection activities, including paper-and-pencil surveys, on-line surveys, interviews, focus groups, and meeting notes. We describe specific procedures and measures used with each group below.

Foster parent and kinship caregiver surveys. Foster parents and kinship caregivers who participated in the TST-FC training completed evaluation surveys at three time points: prior to the start of training (pre-training), at the completion of the training (post-training), and approximately one month later (follow-up). Pre- and post-training surveys were administered in paper-and-pencil format by either a member of the Child Trends evaluation team, an AECF consultant, or a member of the county staff (other than the trainer). All non-Child Trends personnel signed a Pledge of Confidentiality assuring that they would not divulge response to anyone besides the Child Trends research team. Child Trends administered follow-up surveys via a secure online survey platform (SurveyGizmo) or by telephone (administered by a Child Trends evaluation team member) using the preferred contact information the participants provided at the end of the training as part of the post-training survey. Specifically, foster parents and kinship caregivers were asked if they would be willing to be contacted and, if so, to provide their contact information. The majority of participants provided an email address rather than a telephone number. In addition, foster parents and kinship caregivers were asked to participate in a focus group conducted by Child Trends at each of the two county sites on May 23, 2016 in Washington County and June 1, 2016 in Richland County.

Staff surveys. All staff who participated in the TST-FC staff training also completed three surveys (pre-training, post-training, and a follow-up three months after the training). The surveys were administered using similar methods described above for foster parents and kinship caregivers. We surveyed staff in Washington and Richland County child welfare agencies who had contact with children in foster care, as well private mental health providers and other stakeholders who were potential partners for the TST-FC service. Staff also participated in focus groups appropriate to their specific role (leadership team, caseworkers, mental health providers).

Focus groups and interviews with other stakeholders. We conducted focus groups and key informant interviews with TST-FC participants beginning in May and ending in June 2016, at the end of the evaluation period. TST-FC developers, trainers, and agency leaders participated in focus groups, interviews, and team meetings (see description below under Focus Groups, Interviews, and Leadership Team Meetings) at the end of the evaluation period. Staff trainers participated in focus groups and interviews with Child Trends evaluators. TST developers and the KVC trainer also participated in a focus group (see description below under Focus Groups, Interviews, and Leadership Team Meetings) at the end of the evaluation period.

Measures

Staff surveys. Figure 2 shows the staff measures and times points. The pre-training survey for Staff collected information on participant demographics, prior training in child, parent, and secondary trauma, the extent to which they felt that they and their agencies were practicing trauma-informed care and agencies had trauma-informed policies, and staff confidence in providing trauma-informed care. The Child Trends evaluation team developed all items in the pre-training surveys aside from the Trauma Informed Systems Change Instrument (TISCI; Richardson, Coryn, Henry, Black-Pond, & Unrau (2010). We describe the measure in additional detail below. The post-training survey for staff asks for their opinions of the training and its potential benefits. The follow-up survey includes a second administration of the TISCI and repeated questions on confidence in providing trauma-informed care from the pre-training survey for the purpose of assessing change over time. See Table 5 below for the number of staff who attended each type of training and the response rate for each type of survey.

Figure 2

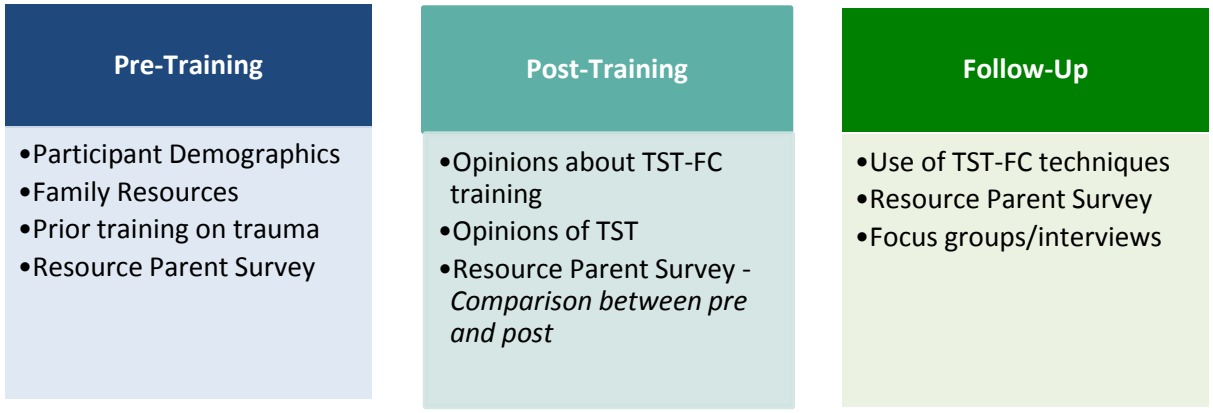
Staff Evaluation Measures and Time Points

Foster parent/kinship caregiver surveys. Figure 3 displays the evaluation measures and time points for foster parents and kinship caregivers. Child Trends developed survey items aside from those included in a measure developed by the National Child Traumatic Stress Network for their resource parent training, the Resource Parent Knowledge and Beliefs Survey-Version 4 (RPKBS; Sullivan, Murray, Kane, & Ake, 2014). We included the RPKBS in the Follow-up Survey as well to assess change over time. See Table 5 for the number of foster parents and kinship caregivers who attended each type of training and the response rate for each type of survey.

Trauma Informed Systems Change Instrument (TISCI). The TISCI has 18 questions answered on a five-point Likert scale (*1 = Not at all true for my agency/me to 5 = Completely true for my agency/me*) with weighted scores ranging from 20 to 100 that make up the following three subscales: (1) Agency Policy, which refers to local, state, and federal policy that shapes the focus and action of professionals. It also refers to cooperation between agencies and within-agency policy that guides practice and decision-making (e.g., "Written policy is established committing to trauma informed practices;" "The agency has a formal system for reviewing whether staff are using trauma informed practices"); (2) Agency Practice: which refers to specific treatments or resources available locally that support a trauma informed system, as well as day to day agency practices that are trauma informed. These could look different depending on local context. (e.g., "Timely trauma informed assessment is available and accessible to children served by my agency;" "Staff receive supervision from trauma informed supervisor."); and (3) Individual Practice, which assesses the extent to which individuals see themselves as practicing consistently in a trauma informed manner. (e.g., "I have a clear understanding of what trauma informed practice means in my professional role;" "I feel equipped to help children make meaning of their trauma history and current experiences from a trauma perspective").

Figure 3

Foster Parent/Kinship Caregiver Measures and Time Points



Resource Parent Knowledge and Beliefs Survey (RPKBS). The RPKBS is a self-report measure that captures resource parents' beliefs and attitudes related to parenting a child who has experienced trauma. Parents rate their agreement to statements on a five-point Likert scale, with response options ranging from strongly disagree to strongly agree. There are three separate scales on this measure: (1) Trauma-Informed Parenting, which measure parents' knowledge about how trauma affects children and beliefs and attitudes about parenting a child exposed to trauma; (2) Tolerance of Misbehavior (TOM), which assesses a parent's ability to care for a child with behaviors that commonly occur in children who have experienced trauma and are difficult to manage, placing children at risk for placement disruption; and (3) Parenting efficacy (EFF), which assesses a parent's overall confidence in their ability to be successful in their role as a parent.

The response rate to the staff and foster parent/kinship caregiver surveys is detailed in Table 5. The response rate for the staff pre- and post-training surveys was over 90 percent for both counties, and over 80 percent for the foster parents/kinship caregivers. The rates were similar for each county. The rate dropped considerably for the follow-up survey, with only about a third (36 percent) completion for the staff follow-ups and 42 percent for foster parent follow ups. Washington County had a higher rate of completion for follow-ups than Richland County for both staff and foster parent/kinship caregiver surveys.[2]

Table 5

Staff and Foster Parent/Kinship Caregiver Survey Response Rates

Survey	Washington County			Richland County			Combined		
	n Attended	*n* Surveys	%	*n* Attended	*n* Surveys	%	*n* Attended	*n* Surveys	%
Pre-training staff survey	38	37	97.37	93	87	93.55	131	124	94.66

[2] This rate of completion for follow ups is not unusual for electronic and phone surveys.

Survey	Washington County			Richland County			Combined		
	n Attended	*n* Surveys	%	*n* Attended	*n* Surveys	%	*n* Attended	*n* Surveys	%
Post-training staff survey	38	35	92.11	79	79	100.00	117	114	97.44
Follow-up staff survey*~	38	17	44.74	90	29	32.22	128	46	35.94
Pre-training foster parent survey	103	82	79.61	29	29	100.00	132	111	84.09
Post-training foster parent survey	103	76	73.79	28	28	100.00	131	104	79.39
Follow-up foster parent survey*+	44	25	56.82	25	4	16.00	69	29	42.03

*Attendees are people who agreed to participate in a follow-up survey and provided contact information. Child Trends collected contact information as part of the post-training surveys.
~Staff were sent an email link and two reminders to complete the follow-up survey
+Foster parents chose to either provide a phone number (*n* = 13) or email (*n* = 42) to receive the follow up survey. Child Trends contacted them on average twice by phone or with an email link to the survey and two reminders.

Mental health provider fidelity checklists. The TST Fidelity Checklists are completed monthly after a child's first intake session while the child is in TST treatment. The developers of TST-FC designed these checklists to enable mental health providers to record information based on the completion of sets of tasks related to the implementation of TST. These sets of tasks correspond to the process of a child's transition through TST treatment in each of six steps: (1) Assessment; (2) Treatment Planning; (3) Treatment Engagement; (4) Treatment Implementation I: Safety-Focused Treatment; (5); Treatment Implementation II: Regulation-Focused Treatment; and (6) Treatment Implementation III: Beyond Trauma Treatment. The information recorded on the Fidelity Checklists is cumulative, such that each fidelity recording is built from the information rated from the previous recording (i.e., once a task is rated as complete, it no longer has to be rated in subsequent fidelity assessments). All children sequentially transition through Steps 1-3 and start Treatment Implementation at Step 4, 5, or 6. Fidelity Checklist requires that mental health providers rate the degree to which the activity has been completed (based on the description of the activity in the TST Manual) using the following scale:

- **Green Light:** The activity is fully completed based on the guidelines specified in the corresponding section of the TST Manual, and recorded in the relevant TST form. If even one aspect of the activity is not completed, based on guidelines specified in the TST manual, record as partially completed.
- **Yellow Light:** The activity is partially completed based on the guidelines specified in the corresponding section of the TST Manual, and recorded in the relevant TST form.
- **Red Light:** The activity is not even partially completed based on the guidelines specified in the corresponding section of the TST Manual, and recorded in the relevant TST form.

Focus groups, interviews, and leadership team meetings. To further understand the process of implementation of TST-FC and the perceptions of participants in TST-FC, we conducted focus groups and interviews. See Appendix: Table 4 for details of each type of focus group or interview, as well as the number of participants for each of the two child welfare agency counties. There were 33 participants in Washington County, 30 in Richland County, and three developers for a combined total of 66 participants. Child Trends developed all focus group protocols and conducted interviews and focus groups with key stakeholders in person during site visits and on the telephone. A two-person team

conducted focus groups at the Washington County Department of Social Services (Washington County), with one team member serving in the role of facilitator and the other taking notes. One person conducted focus groups in Richland County Children's Services (Richland County), and was both the facilitator and note-taker for the foster parent/kinship caregiver and mental health clinician focus groups; a Richland County administrative assistant took notes for the caseworker and leadership team focus groups. The two telephone interviews with the Richland County trainer and the Washington County psychiatrist were conducted by a single member of the Child Trends evaluation team, who also took notes during the call. All interviews and focus groups were recorded with permission of the participants. One evaluation team member listened in on Leadership Team meeting calls in both counties and took notes.

Key questions posed to caseworkers included:

(a) Before TST, how much prior experience did you have with trauma-informed care models?

(b) To what extent do you think the agency has incorporated the knowledge gained from TST-FC about the impact of trauma and trauma-informed care approaches into: Work with children and families? Work with staff?

(c) How well did the TST-FC staff training prepare you to use the TST-FC concepts presented, such as the Cat Hair, the four R's and Survival in the Moment states?

(d) Did you participate in any of the TST-FC training for foster parents/kinship caregivers offered in the agency? If yes, how well do you think the training prepared the foster parents/kinship caregivers to use TST-FC the concepts presented?

(e) How well do you think TST-FC fits with [AGENCY] child welfare agency and the work you do here? (f) Have you (and your staff) used TST-FC specific ideas, approaches, or tools to working and caring for trauma impacted children?

(g) Have foster parents/kinship caregivers used TST-FC specific ideas, approaches, or tools in caring for their trauma impacted children?

(h) What challenges have you encountered using the TST-FC model in your practice?

(i) What factors have helped or facilitated (if any) using the TST-FC model in your practice?

(j) What elements of the program do you think are critical for it to succeed in [COUNTY]?

(k) Would you like to see the agency continue to use TST-FC? Why or why not?

(l) For those of you who would like to see TST-FC continue, what supports from the agency do you think will be needed for it to succeed?

Questions for the other focus groups mirrored the questions for the caseworkers, while focusing on aspects of the training and implementation that were specific to each group.

Data Analysis Plan

Child Trends evaluators employed both qualitative and quantitative data analysis in the evaluation of TST-FC implementation, depending on the method most appropriate for answering the research question. Quantitative analysis was most appropriate for examining the majority of survey data (aside from open-ended questions), whereas qualitative analysis was optimal for examining information obtained through interviews, focus groups, and team meetings.

We extracted quantitative data from surveys, entered the information into a database, and cleaned all data entered. We conducted all descriptive and exploratory analyses, including t-tests investigating differences in responses prior to and following TST-FC training, in SPSS. We analyzed all data both by county and in aggregate. Quantitative analysis also included an examination of attendance patterns at Supervisor and Clinical Team Meetings.

We uploaded notes from focus groups, interviews, and team meetings into NVivo (a qualitative analysis software program) and then analyzed. Qualitative data analysis in NVivo included the identification and refinement of relevant themes through a constant comparative model. All themes were identified and refined in accordance with their relevance to specific research questions.

EVALUATION FINDINGS

In this section, we present the results of the TST-FC implementation evaluation, organized by our four research questions. Accordingly, we begin by presenting our findings on how well and with what level of fidelity TST-FC was implemented. This includes the organizational planning process, and the implementation process overall. Next, we describe results related to the extent to which TST-FC implementation was linked to increased use of TST-specific tools and approaches to working and caring for trauma-impacted children. We then describe our findings on whether TST-FC implementation was associated with increased knowledge of the impact of trauma on children's behavior and functioning among foster parents, child welfare staff, and mental health providers, as well as more trauma-informed approaches to their work. Finally, we present preliminary findings on potential links between the implementation of TST-FC and positive outcomes (e.g., placement stability) for children.

TST-FC Implementation and Fidelity

Research Question #1:

How well and with what degree of fidelity has TST-FC been implemented in each county?

The first question we sought to answer in the evaluation of TST-FC in a public child welfare setting was: *How well and with what degree of fidelity has TST-FC been implemented in each county?* To address this question, we analyzed data from a variety of sources: TST Treatment Fidelity Checklists; meeting attendance, agendas, and notes; information on training format and attendance; and focus groups/interviews with foster parents and kinship caregivers, case managers and supervisors, and other key implementation staff.

Organizational Planning Process

A central aspect of the TST-FC model is an intensive organizational planning process that takes place prior to the initiation of TST-FC services. According to the developers, this is a lengthy process and can take a year or more for the agency to begin to reach fidelity to the model. The developers were committed to providing the support needed by the agencies to install the program and to begin implementation. Over a five- to six-month period, the developers met with each agency 15-18 times, averaging three meetings per month. The organizational planning form was completed at the end of this period.

Overall the organizational planning process was completed successfully. During focus groups, however,

several Washington County staff expressed the opinion that the communication with developers was frustrating at times, especially during the initially planning process. Staff wanted clear information on how to proceed but found that this information was not available on a consistent basis. Staff reported that there were moments when the county was focused on resolving practical issues and the developers were focused on theoretical issues of the model, which led to some initial tension. The developers, on the other hand, said that the planning process is lengthy and that they believed both counties had been able to identify the priority problem they wanted to address and make progress toward addressing it. They reported that a main goal for both counties was better integration of the public and private child welfare services in their area.

Adapting TST-FC to a Public Child Welfare Setting

Both counties made several adjustments to accommodate the TST-FC model. Washington County leadership reassigned several existing staff to the TST-FC team as permanent clinical caseworkers. Other caseworkers involved with the child and foster family were not always able to find the time to join the TST-FC team meetings. Leadership reported that, as a result, only a few workers became familiar with the model and the other staff had to take over additional responsibilities, which leaders were worried might lead to feelings of resentment among their staff. Richland County did not reassign staff to TST-FC, but rather brought existing staff onto the treatment team as needed. In turn, many staff developed a basic knowledge of TST-FC, but few, if any, became experts. The developers underscored how difficult and time-consuming it can be to make adjustments to existing structures, and how much flexibility this requires. They acknowledged that each agency made different accommodations and had some concerns about the lack of a consistent, dedicated team for TST-FC in Richland County.

Staff workload and capacity. Washington County staff and leadership had more difficulty identifying external mental health providers, whereas Richland County reported that internal county staff did not have sufficient clinical training to implement TST-FC. Further, mental health providers and child welfare leaders expressed concern about the viability of the model in their agencies due to the required time commitment from staff and the amount of funding needed to support the model.

Home- and community-based care. Staff and leadership in both counties understood and were committed to implementing TST-FC as a home-based service, and provided this service in house. Washington County leaders reported that many staff had clinical training and some had prior trauma-informed training. These staff members were willing and able to provide TST-FC clinical services to children. They also were able to identify a core group of staff willing and able to become TST-FC trainers. Richland County staff, on the other hand, did not have clinical training for the most part, yet they were committed to learning what was required by the TST-FC model. The developers reported that staff flexibility facilitated implementation, especially for Washington County. Staff in both counties agreed to use the TST-FC assessment process, which focuses on the child in his or her environment, and used the tools developed by NYU for TST. Richland County staff struggled with the TST-FC forms, primarily because they were already using case plans and safety assessment forms to which staff were already accustomed; they found it confusing and duplicative to have to use the TST-FC forms. By the end of the evaluation, county administrators were in the process of exploring how to adapt these to meet the requirements of TST. The developers, following the principle of "aligning with reality," attempted to strike a balance between emphasizing what is essential to the TST-FC model and encouraging the counties to adapt what already works for them (i.e., use of their current forms and planning tools). This issue was not fully resolved at the end of the evaluation period and is likely to require further attention.

Team approach. The team approach to TST-FC is a central element of developing a plan to provide

home- and community-based care. Mental health providers and caseworkers at both agencies agreed that the team approach is a major strength of the TST-FC model. Several workers in both counties said they felt more supported in providing services to children as a result of working with a team. One caseworker reported that foster parents experienced more support and less hopelessness about challenging situations with children. The same caseworker felt that the team approach increased the stability of a child's placement. In addition, one of the mental health providers reported that “it seems there has to be a true model and a team to improve placements and decrease number of placement disruptions,” and indicated that TST-FC met this standard.

Challenges also emerged in relation to the team approach. For instance, several Washington County staff reported that they did not always have a clear understanding of what their roles were on the TST-FC treatment team. In particular, they lacked clarity about which team member was responsible for which component of the treatment process. They reported that workers were afraid of "stepping on each other’s toes." This issue arose primarily among caseworkers and TST-FC in-home workers. Richland County leadership reported that staff caseloads did not consistently include children receiving the TST-FC intervention, which made it more difficult to develop a clear understanding of their role in the treatment process.

Relationship with partners. Staff from both agencies worked with external mental health providers as part of the treatment team. Both counties lacked the capacity to provide the outpatient psychotherapy required for TST-FC in their respective agencies and thus sought out external partners to provide this service. These partners had existing relationships with the counties and they reported that relationships were strengthened through the TST-FC planning and implementation process. External mental health providers attended the TST-FC trainings as well as the TST-FC team meetings. Richland County worked with a large, established mental health provider and leaders reported that they were well qualified to provide TST-FC clinical services. Washington County had initially planned to partner with another agency, but due to lack of capacity and staff turnover within that agency, had to look elsewhere. They identified two additional partners, but had concerns about their ability to meet the demands of TST-FC as they expanded the number of children they serve. Mental health providers in each county reported their work with the public child welfare agencies on TST-FC has improved understanding of how the agencies work, as well as the high level of needs of the children they serve. The majority of child welfare staff in Richland County and Washington County agreed that their relationships with external partners were stronger as a result of TST-FC, which in turn helped to build agency capacity for serving children exposed to trauma. One mental health provider described the agencies as "cousins" rather than "rivals" as a result of working together in TST-FC. The developers also noticed that the two counties had forged productive working relationships with their mental health partners by the conclusion of the organizational period.

Eighteen months after implementation began, Richland County reported difficulty in their working relationship with their external mental health provider. Challenges included: differences in working styles; different mandates for public and private child welfare agencies (i.e., private agencies could be more selective in who they serve compared to public agencies, which leadership reported caused conflict among workers and confusion for parents); an unmet expectation that mental health providers would offer in-home therapy, rather than in the community or office; the time commitment was too much for staff to manage; and staff felt there was too much paperwork associated with the TST-FC model. Due to these issues, Richland County is unsure if they will continue offering the TST-FC clinical intervention, but will continue to provide TST-FC training for staff and foster parents.

Washington County developed a Memorandum of Understanding to formalize the working relationship with the developers, mental health providers and Child Trends, which the manager reported was useful and should have been done at the beginning of the implementation process. One Washington County caseworker said that being able to share TST-FC assessments with the child's teacher was useful in shifting the teacher's responses to the child's behavior from a punitive approach to a therapeutic approach. Another caseworker reported that a county judge wanted to mandate TST-FC for all children. According to leadership, Washington County remains committed to the TST-FC model, and has continued to offer the clinical service, in addition to training.

The TST-FC developers noticed more collaboration between the county and the mental health providers in both counties. They observed that the lack of mental health services in the agency, which is in line with most public child welfare agencies, made it difficult to implement clinical services, but also noted that it may have facilitated relationships by forcing child welfare staff and mental health providers to forge stronger relationships.

Communication within the child welfare agency. A team approach requires good communication, which took some time to develop among team members who had not worked together before, as well as for members who had a history of poor communication in the past. Both counties worked to overcome prior tensions and misunderstandings among team members and reported progress. One mental health provider stated that it was no longer necessary to "have a meeting after the meeting" to address issues that arose, and that everyone was able to be talk more freely and feel heard, which made meetings more productive. Staff in both counties regretted not making more use of formal agendas during the organizational planning process and for treatment team meetings. They believed this might have reduced "wasted time" by ensuring only staff who needed to attend a particular meeting did so. Washington County administrators and team leaders were frustrated that they did not have a way of sharing case notes and treatment plans among team members between meetings. They believed it would have facilitated the assessment process if team members could see each other's notes in real time, and would have made case planning and collaboration among team members easier.

Staff in both counties reported that a strength of TST-FC is the use of a "common language" for staff and foster parents/kinship caregivers to understand and talk about trauma. In addition, they thought the tools used by both staff and foster parents/kinship caregivers for assessment and planning purposes was another strength of TST-FC. Having a common language improved communication among all parties.

Psychopharmacology. Here again, Richland County's existing partners had psychiatrists on staff who could partner on the casework. Washington County was able to identify a psychiatrist in private practice who was passionate about providing trauma-informed care and became a strong advocate for the program. She attended most treatment team meetings and expressed strong appreciation for the TST-FC model and intended to use the model with her own private patients.

Services advocacy. This aspect of TST-FC presented challenges for Richland County, as staff reported it was a conflict of interest to bring in an external legal advocate when they had in-house legal services. Washington County also decided to use in-house counsel to fulfil the role of independent legal advocate. This was a departure from the original TST-FC model, which calls for an outside, independent legal advocate who advocates solely for the child. Here the model was "aligned with the reality" (one of the 10 TST-FC principles) of the existing agency structure.

Engagement of agency staff and leadership. In both counties, caseworkers and supervisors, as well

as and mental health providers, reported that leadership had made a strong commitment to TST-FC's initial implementation, as well as continued implementation. The developers also reported that leadership played an important role in supporting implementation and described the leadership in Washington County as being a "program champion." The developers acknowledged that they could have been be more proactive in reaching out to the leadership in Richland County, as neglecting to do so may have slowed down their implementation process. Washington County reported that leadership demonstrated their commitment to program success in many ways, including regularly attending meetings. In Richland County, leadership leveraged a strong relationship with their mental health provider to resolve issues that arose. For example, private mental health providers were concerned about the level of care that child welfare staff could provide to children, but after many discussions with child welfare staff, mental health providers gained a greater appreciation of the pressures faced by child welfare staff, as well as the severity of the situations they deal with on a daily basis. They realized that the priority for child welfare workers it to keep children safe, and that this is sometimes in conflict with meeting other needs the child may have.

TST-FC Training

TST-FC involves training several different groups of people. The developer trained staff and mental health providers and conducted a separate training for staff who provided the TST-FC clinical services; the KVC conducted a train the trainer training for staff, and these staff then conducted the foster parent/kinship caregiver training.

Staff training. Trainers conducted the initial training for child welfare staff, as well for mental health providers and other stakeholders, such as a local judge, who were potential partners in TST-FC. Below we present training participants' responses from evaluation surveys on the initial trainings for child welfare staff, mental health providers. Both counties offered the initial, basic training to a wide range of staff (n = 123), with nearly all staff at Richland County participating. A total of 38 people attended one training in Washington County, and a total of 85 people attended two trainings in Richland County. Trainers offered the provider training to a select group of staff (n = 14) who would be conducting clinical work with children in foster care; ten people were trained in Washington County and four people in Richland County. Both counties also held trainings for a number of people to prepare them as trainers who could then offer the TST-FC training foster parents and kinship caregivers—a train-the-trainer model. Washington County trained 27 people to be trainers and Richland County trained 14 (total *n* = 41). Appendix Table 5 displays attendance at trainings by role and agency.

The TST-FC train-the-trainer model was a two-day training that KVC staff conducted for child welfare staff so that they could become TST-FC trainers with foster parents and kinship caregivers. Washington County developed a core of seven trainers who then conducted trainings during the implementation period. Richland County opted to hire an experienced external trainer to conduct their foster parent/kinship caregiver trainings, and as a result did not train staff who can conduct these trainings. The KVC trainers attended the first session of the foster parent/kinship caregiver training and gave feedback to the county trainers to support and strengthen their skills as trainers. Research staff observed these trainings, which appeared to focus primarily on content, though some training strategies were offered. Trainers in both counties commented that the material was very dense and required a lot of preparation time to present the material effectively. They appreciated having the KVC trainer attend their first round of foster parent/kinship caregiver trainings, reporting the support and input the trainer gave them following these initial sessions was very helpful.

Staff perceptions of training. Results of the post-training staff survey indicate that staff in both

counties had positive perceptions of the TST-FC staff training. Most participants agreed (1 = Strongly Disagree and 6 = Strongly Agree) that:

- the training was useful;
- the presentation was balanced;
- the presenters were clear;
- the training improved their knowledge of strategies to address child trauma;
- children who experience trauma, staff, and foster parents will benefit from TST-FC;
- they felt more equipped to care for children exposed to trauma after the training; and
- their knowledge of TST-FC will be useful in their work and in their work with other staff.

They slightly agreed that they already knew the training content, indicating that most of the content was new. See Table 6 below for results. Three months after training (follow up), most participants agreed with the following statements about the benefits and usefulness of the training (1 = Strongly Disagree and 6 = Strongly Agree):

- The training improved my knowledge about strategies to address children's trauma.
- All children who experience trauma will benefit from TST-FC.
- Staff who work directly with families will benefit from using TST-FC.
- Foster parents will benefit from using TST-FC.
- Staff who do not work directly with families (e.g., supervisors) will benefit from using TST-FC.

Staff in Richland County reported a greater range of results (*Range* = 1-6) compared to Washington County (*Range* = 3-6). Table 6 provides descriptive statistics on staff's response to each survey item. Figure 4 compares mean ratings for items by county.

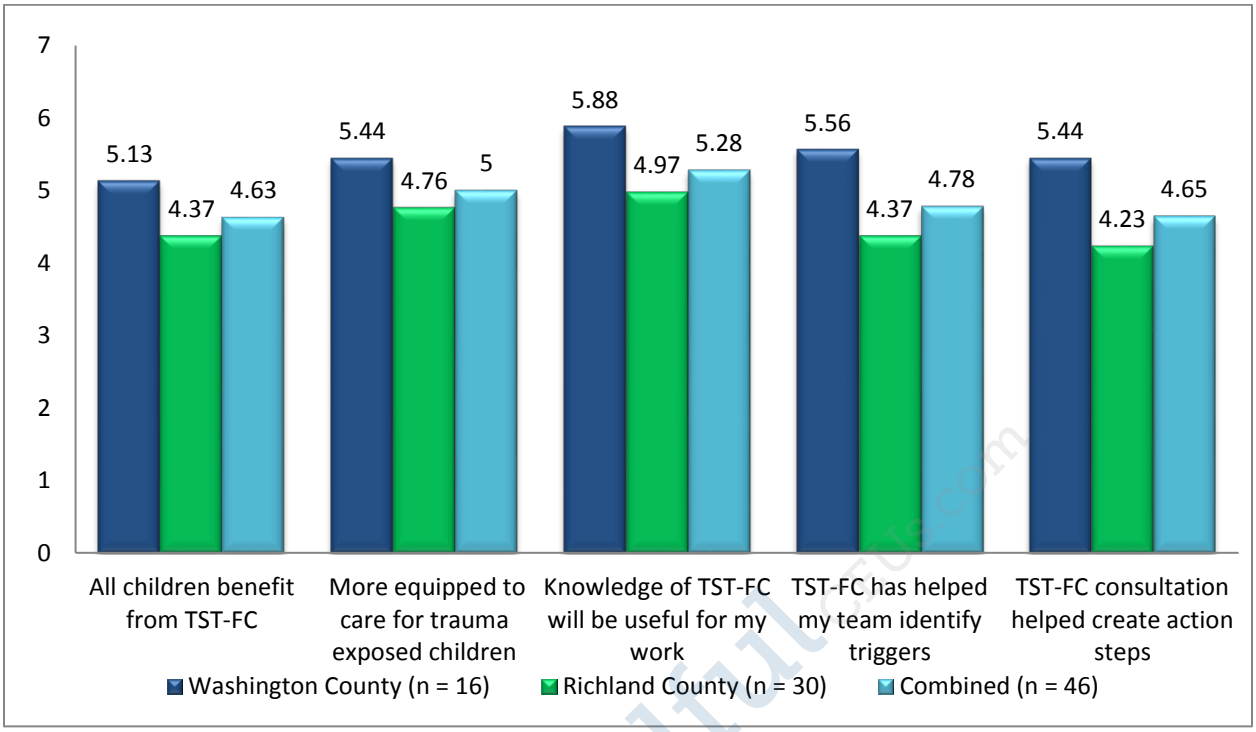
Table 6

Staff Perceptions of TST-FC three months after training completion

	Washington County (*n* = 15)			Richland County (*n* = 26)			Combined (*n* = 41)		
	M	*SD*	*Range*	*M*	*SD*	*Range*	*M*	*SD*	*Range*
All children benefit from TST-FC	5.13	.99	3-6	4.12	1.40	1-6	4.63	1.34	1-6
More equipped to care for trauma exposed children	5.40	0.51	5-6	4.56	1.16	1-6	5.00	1.04	1-6
Knowledge of TST-FC will be useful for my work	5.87	0.35	4-6	4.81	0.75	4-6	5.28	0.81	4-6
TST-FC has helped my team identify triggers	5.53	0.64	4-6	4.12	1.31	1-6	4.78	1.30	1-6
TST-FC consultation helped create action steps	5.40	0.63	4-6	3.96	1.70	1-6	4.65	1.53	1-6

Figure 4

Staff Perceptions of TST-FC Training three months after completion of training



Quality of the staff training and materials. During the focus groups with staff, some of the Richland County child welfare caseworkers said they felt unprepared to implement the TST-FC clinical services after the initial training. Moreover, several supervisors reported that they had not paid close enough attention to the tools and forms used in TST-FC because they did not think children on their caseload would be receiving the TST-FC clinical service and therefore would not need to be familiar with these tools. Some staff suggested having a booster training for staff providing the in-home service, especially when there was a gap between training and actually working with a child receiving TST-FC services.

Staff training content and structure. Several staff in both counties noted that they felt that the foster parent training was better than the staff training because it provided an excellent introduction and overview of TST-FC without presenting all the tools and forms. They recommended that staff be offered the foster parent training instead of the staff training, and then have a separate training that focused on the tools and forms. The staff found it overwhelming and confusing to try to absorb all the information about the tools and forms at the same time they were learning TST-FC concepts. In Richland County, staff had just completed a "Signs of Safety" training and were overwhelmed with new information.

Training of trainers. Trainers from both Richland County and Washington County observed that the training for foster parents and kinship caregivers was difficult to present and required extensive preparation time. Overall, the trainers felt that the train-the-trainer model did not sufficiently prepare them to conduct the foster parent/kinship caregiver training. They also felt that the time commitment was more than they had expected, especially when preparing for the first foster parent/kinship caregiver training sessions. One trainer said that she was more comfortable with the material after conducting several sessions. Several trainers thought a booster session on how to train would have been

helpful. Another trainer suggested that a one-on-one debrief of the training for trainers with the KVC trainer would have been helpful. Some trainers found that it was helpful to observe the trainer doing the role plays, whereas other trainers did not like them as much. The new trainers reported that it was helpful to observe the KVC trainer—to have someone to emulate. One trainer asserted, "You can fake it and do it the ways she did it," referring to the modelling the trainer provided that could be used during the training sessions they conducted. Another trainer said that the quality of the KVC trainers varied.

Several trainers in both counties mentioned not receiving the foster parent/kinship caregiver materials in a complete package, which led to confusion when they attempted to determine which materials were linked to which modules. In addition, some trainers felt that the training notebook was not well-organized. They reported that parents appeared to like TST-FC strategies, but generally found the concepts difficult to understand, such as the explanation of brain functioning and the impact of trauma and how this can manifest in challenging behaviors.

Trainers had mixed opinions regarding the content of the sessions. One trainer felt that the sessions were too content heavy and would have liked more opportunity for the foster parents/kinship caregivers to move around. Another trainer thought the content was excellent and conveyed the concepts well. Trainers seemed to like that the PowerPoints were already made for them, but some who liked the slides thought they could have been improved by having more information on them so that they did not have to read their notes. Several trainers expressed appreciation for the KVC trainer's presence and support at their first foster parent/kinship caregiver training session and reported that she was very accessible and even available over the phone if they needed help. Similarly, there were differing opinions about the training structure. Some trainers reported that foster parents appreciated being able to attend a one-day training, as there were scheduling conflicts when they attempted to spread the training out over several days. However, they also had concerns that it could be challenging for training participants to absorb all of the material at once.

Foster parent/kinship caregiver training. Washington County committed to requiring all licensed foster parents to participate in the TST-FC training, and offered four trainings in various formats: one-day, two-day, and four-day sessions. They trained 103 foster parents in total. Richland County provided TST-FC as an optional training for foster parents. They planned four trainings but ultimately held two trainings due to low enrollment. They trained a total of 29 foster parents. Table 7 describes the format of the trainings.

Table 7

TST-FC Foster Parent Training Format

	Washington County DSS		Richland County CS	
	Date	**Attendance (*n* = 103)**	**Date**	**Attendance (*n* = 29)**
Training dates	2/8/2016 2/27/2016 4/9/2016 4/30/2016	25 32 24 22	2/11 - 2/12/2016 4/13/2016	21 8
Number of trainers	One person as anchor; two trainers per module, switched for each		One trainer initially, may include others and possibly a foster parent	

	Washington County DSS		Richland County CS	
	Date	**Attendance (*n* = 103)**	**Date**	**Attendance (*n* = 29)**
	module; there is a core of seven experienced trainers currently		as co-trainer.	
Training schedule	Multiple options: one-day, two-day, four-day.		Two-day option.	
Worker involvement	At least one trainer knew the foster parents. Workers who provided the in-home service attended trainings.		Trainer was a retired, contracted trainer. Foster care workers attended trainings.	
Technical assistance	KVC trainer attended the first training and provided support. She offered to be available by phone for help with preparation, and monthly support calls for the first six months of training.		KVC trainer attended the first training and provided support. She offered to be available by phone for help with preparation, and monthly support calls for the first six months of training.	
Participants	Licensed foster parents and kinship caregivers (required) and unlicensed kinship caregivers if the child is in state custody. One-on-one training will be offered to unlicensed kinship caregivers if they don't want to come to training.		Licensed foster parents and kinship caregivers.	

Foster parent and kinship caregiver perceptions of training. Foster parents and kinship caregivers reported their perceptions of the training format and content on the post-training Survey by indicating the extent to which they agreed or disagreed with five statements, based on a six-point scale (1 = Strongly Disagree; 6 = Strongly Agree). Their responses appear in Table 8. On average, parents in Richland County reported higher levels of agreement compared to those in Washington County in relation to the following statements:

- "All sessions of the training were interesting and engaging."
- "There was a good balance of presentations; discussion, and activities."
- "I already knew a lot of what was covered in the training."
- "The presenters/trainers were clear and effective."
- "The activities during the trainings were helpful."

However, mean scores for participants in both groups suggested that, as a group, they "agreed" with the four positive statements about the training and "slightly disagreed" to "agreed" that they already knew a lot of what was covered in the training.

Table 8

Foster Parent and Kinship Caregiver Perceptions of TST-FC Training Format and Content

	Washington County (*n* = 69)			Richland County (*n* = 27)			Counties Combined (*n* = 96)		
	M	*SD*	*Range*				*M*	*SD*	*Range*
Sessions were interesting	4.88	1.08	1-6	5.26	1.06	2-6	4.99	1.08	1-6
Sessions were balanced	4.96	1.08	1-6	5.44	0.64	4-6	5.09	1.00	1-6
Already knew the material	3.62	1.38	1-6	4.04	1.22	1-6	3.74	1.35	1-6
Presenters were clear	5.14	0.99	1-6	5.52	0.64	4-6	5.25	0.92	1-6
Activities were helpful	5.01	1.02	1-6	5.19	1.18	2-6	5.06	1.06	1-6

Foster parents and kinship caregivers also responded to four statements about their experiences related to trauma and TST-FC (see Table 9), indicating the extent that they believed the statement to be true on a scale of 1 - 4 (1 = None; 4 = A lot). Mean scores were comparable across both counties for all items and indicated overall agreement (between "some" and "a lot") with the following statements:

- "All children who experience trauma will benefit from TST."
- "I feel more equipped to care for traumatized children than I did prior to the training."
- "My knowledge of TST will be helpful for the children I care for."
- "The training will help me talk to my child's worker about how trauma affects children in my care."

Ratings were comparable in relation to TST-FC benefitting all children, feeling more equipped to care for traumatized children, and TST-FC knowledge being helpful for children in their care, and the training being helpful for talking to the child's worker about how trauma affects children.

Table 9

Foster Parent and Kinship Caregiver Perceptions of Trauma and TST-FC

	Washington County (*n* = 69)			Richland County (*n* = 27)			Counties Combined (*n* = 96)		
TST-FC benefits all children	3.68	0.47	3-4	3.63	0.49	3-4	3.66	0.48	3-4
I feel more equipped	3.57	0.56	2-4	3.59	0.64	2-4	3.57	0.58	2-4
TST-FC knowledge helpful	3.58	0.65	1-4	3.56	0.75	2-4	3.57	0.68	1-4
Training helps to talk to child's worker	3.73	0.48	2-4	3.69	0.47	3-4	3.72	0.48	2-4

Usefulness of training tools, activities, and concepts. Foster parents/kinship caregivers responded to open-ended questions about their favorite activities and tools and the ones they felt were most helpful, as well as their least favorite or the least helpful activities and tools. They also responded to an open-ended question about what they were hoping to learn but did not.

Specific TST-FC tools or training components that foster parents and kinship caregivers found *most useful* and were among their favorites included:

- role plays (*n* = 13)
- learning coping skills and intervention strategies: controlling yourself before your child (*n* = 8)
- understanding and reacting to a range of situations (*n* = 8)
- having discussions and sharing personal experiences with other foster parents (*n* = 5)
- having a calm down plan; the moment by moment guide (*n* = 4)
- engagement with the trainer, including the question and answer sessions (*n* = 3)
- 4 Rs (*n* = 4)
- use of actual examples (*n* = 3)
- breathing exercise (*n* = 2)
- learning and practicing coping skills (*n* = 2)
- four houses activity (*n* = 2)
- learning self-assessment processes and support mechanisms (*n* = 1)
- managing emotions guide (*n* = 1)
- being on the balls of their feet (*n* = 1)

In contrast, TST-FC activities and tools they found *least useful* were:

- mirroring exercise (*n* = 2)
- role plays and acting out scenes (*n* = 2)
- discussions or listening to others explaining their problems (*n* = 1)
- fright, flight, freeze concept (*n* = 1)
- 4Rs (*n* = 1)
- breathing exercise (*n* = 1)
- paperwork (*n* = 1)

In addition, six foster parents/kinship training participants reported gaining a better understanding of child trauma and how to deal with children who have been exposed to trauma. This included developing a different view to take of how to deal with children who have been traumatized, what the reasons for trauma are, understanding the concept of cat hair for children, what triggers revving behavior, how to use assessment tools to understand child trauma and the use of intervention strategies to cope with behaviors related to trauma exposure in children. Another training participant commented that " the training was very informative and worth taking."

Only four foster parents/kinship caregivers responded to the question about what they would have liked to learn from the training but did not. These comments were:

- How are outcomes being measured and can foster parents see the results?
- Training did not acknowledge that “children are individuals and each case is not the same. The child may have specific needs and therapy should be completely geared to that child. Blanket analysis is not helpful.”
- How should foster parents “respond to the child when there needs to be a consequence."

- How do you know what to do if there are no apparent triggers to the child's behavior and yet you have the "child that is always acting up."

Training structure. Several foster parents/kinship caregivers were not entirely satisfied with the structure of the training. Two participants said that the training day was very long; another reported that it "got boring at the end"; and another said it was "a very, very long day without organized, predictable breaks." Three foster parents/kinship caregivers thought the PowerPoints were too generic, and three said the trainer seemed to keep repeating the same thing. One participant said that the notebook was confusing and that they would have liked to see the PowerPoint information included in the book. Foster parent/kinship caregiver feedback on particular sessions indicated that Session 1 was the most difficult to follow and Sessions 2 and 3 were especially useful; another commented that they would have liked more activities in the first two sessions. One foster parent reported wanting more real-life scenarios rather than the made up case study, so foster parents could share their actual experiences and learn from each other.

Common language. In both counties, foster parents and kinship caregivers reported that the training provided a "common language" for staff and foster parents/kinship caregivers to talk about and describe trauma, as well as tools for helping cope with the impact of trauma on children. The TST-FC language also provided foster parents and kinship caregivers with a framework to help them understand their child's behavior, in addition to offering specific tools to handle difficult behaviors and other reactions to trauma.

Staff and trainer perceptions of the foster care/kinship caregiver training. Staff from both Richland and Washington counties recounted that the foster parents/kinship caregivers responded well to the training and observed several "a-ha" moments during the course of training. One caseworker reported that a foster parent used the concept of "cat hair"[3] to understand personal triggers; another said foster parents used the Moment by Moment tool to understand the child's behavior. The majority of the Washington County trainers reported that the content was straightforward and easy to understand. The content included concrete examples which staff and parents reported were useful in practice. They described the quality of the content was starkly different from other trauma-informed workshops and curricula they had been exposed to in the past. Opinions were more mixed regarding the structure of the training, including the merits of offering the training in a single day versus two or four days.

TST-FC Clinical Treatment

In both counties, the implementation of TST-FC clinical treatment required a unique time commitment from all parties. There were three implementation teams in each county. Table 10 details who participated in each team, how frequently they met, and the purpose of their meetings.

[3] "Cat hair" refers to a study done on play behavior between rats, and how a stressor, such as a cat hair, can impact the frequency of play activities even after the stressor is removed.

Table 10

TST-FC clinical services teams and their purpose

Team	Participants	Meeting Frequency	Purpose
Supervisory team	Child welfare supervisors, lead private mental health providers.	Weekly and participated in a telephone consultation with the developer.	Discuss case selection and other programmatic issues.
Clinical implementation team	TST-FC supervisors and agency administrative staff, the agency TST-FC caseworkers, private mental health providers, a psychiatrist, the TST-FC developers, other professionals working with the child, the foster parents caring for the child, and the AECF consultant.	Weekly and participated in a telephone consultation with the developer.	Develop and implement the treatment plan for each child receiving the TST-FC intervention.
Leadership team	Agency administrators and TST-FC supervisors, lead private mental health providers, AECF consultants and the developers and Child Trends research team members.	Bi-weekly and participated in a telephone consultation with the developer.	Discuss general implementation issues that were not case related.

This intensive team approach was seen as a major strength of the model, and essential to the level of service required. During focus groups, child welfare staff and private mental health providers reported that this approach strengthened collaboration and gave staff and foster parents a sense of support and reduced isolation.

In Washington County, an average of 10 people attended each of the 16 clinical implementation team meetings held between December 21, 2015 and June 13, 2016. (*Range* = 3-19 individuals per meeting). A total of 25 individuals attended at least one meeting (*Range* = 1-15 meetings attended). The developers attended every meeting, and two child welfare managers attended 80 percent of the meetings. Other members of the team attended frequently, with the most frequent attendance by the psychiatrist (73 percent).

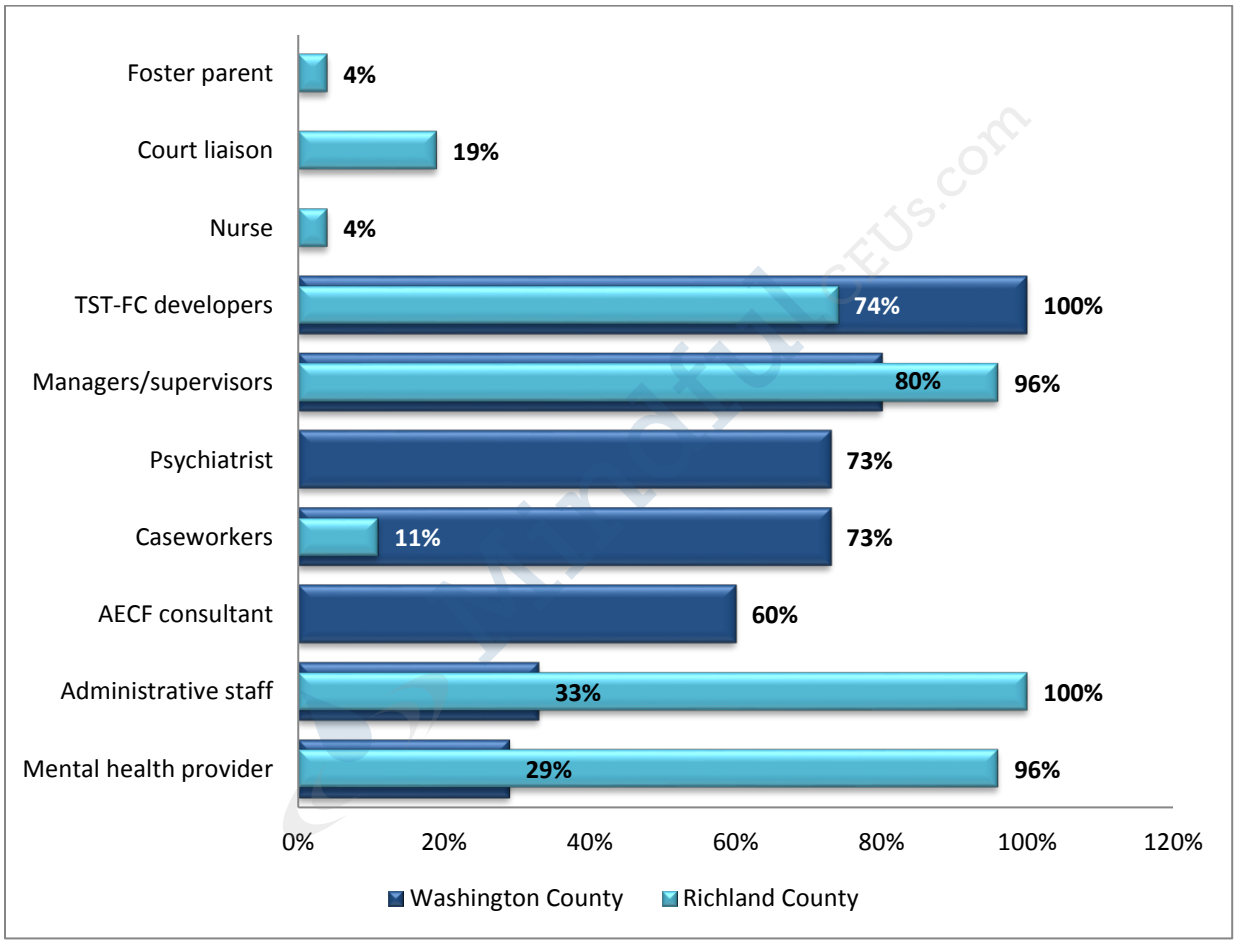
In Richland County, an average of 11 people attended each of the 27 clinical implementation team meetings held between January 28 and June 9, 2016 (*Range* = 9-13 individuals per meeting). Thirty-three people attended at least one meeting (*Range* = 1-27 meetings attended). Richland County held meetings more frequently than did Washington County, as they opted to hold a separate meeting for each child served in the clinical intervention, whereas Washington County discussed all children at the same weekly meeting. The clinical director at Richland County attended every meeting, and a mental health

provider attended nearly all meetings, with strong support from the TST-FC developers. Figure 5 shows attendance of team members at the clinical implementation team meetings in Washington and Richland counties.

The intensity of the time commitment presented some financial difficulties for private providers, as they were not able to be reimbursed for their time and a couple of people donated this time. Two private mental health providers said that this was not sustainable for them, and were looking at ways to cover their time, with one person applying for grant funding to cover costs.

Figure 5

Attendance by Role in Each County



Fidelity of clinical intervention. A total of six children from Washington County were enrolled in TST-FC clinical services and had mental health providers complete TST Fidelity Checklists. All mental health providers reported that they had completed Steps 1-3 (see Table X below) by the end of the evaluation period. Richland County did not implement TST Fidelity Checklists during the evaluation period. Mental health providers gave a "Green Light" (activity is fully complete) to every task in Step 1 (Assessment) and Step 2, with the exception of one clinician reporting a "Yellow Light" (activity is partially completed) for Step 2, Activity 3 ("all decisions concerning the interventions that will be used in treatment are properly made"). Five out of six mental health providers assigned a "Green Light" to all tasks in Step 3. One clinician assigned a "Yellow Light" to all but one of the tasks in Step 3. None of the mental health

providers gave a task a "Red Light" ("activity is not even partially completed"). Taken together, these findings suggest a high level of fidelity, with mental health providers reporting a 92 percent completion rate across all TST-FC steps and related tasks.

The average number of days from the beginning of service to the completion of the assessment phase and signing a treatment agreement letter was 54 (*SD* = 14; *Range* = 35-69). This was longer than the recommended length of 21 days, which may be a result of the process still being new and staff being unfamiliar with the complexity of the model. Table 11 shows the suggested timeframe for completion of each phase of the TST-FC treatment model.

Table 11

Fidelity to the TST-FC Treatment Model

Activity	Target Day of Completion	Completed (*n* = 6)
Determine if Safety Focused Treatment needed	By day 7	6
Start safety focused treatment	By day 14	N/A
Step 1: Assessment		
Activity 1 -5	By day 21	6
Step 2: Treatment Planning		
Activity 1-5	By day 21	6
Step 3: Treatment Engagement	N/A	
Activity 1-8		6
Treatment Agreement Letter Signed		5
Safety Focused Treatment	By day 90	N/A
Regulation-focused Treatment	By day 120	N/A
Beyond Trauma Treatment	By day 120	N/A

The TST-FC Fidelity Checklists also provide space for mental health providers to record notes on their progress on each task. Mental health providers' notes were more complete for Step 1 (Assessment) than for Step 2 (Treatment Planning) and Step 3 (Treatment Engagement). Most mental health providers did not utilize the notes section in Step 3. The two activities in Steps 1 and 2 pertained to child and family strengths ("All information used to determine the strengths that will be used to address the child's problems is fully and properly collected"; "All decisions concerning the strengths that will be used to address the child's problems are properly made"). Mental health providers gave the most detail in tasks related to Step 1 (Assessment) and consistently articulated that the children in treatment had been exposed to multiple traumatic events. We identified additional trends in mental health providers' notes on Steps 2 and 3, including:

- Problems to be addressed in treatment were primarily related to children exhibiting posttraumatic stress symptoms and functional impairments.

- A focus on survival states/helpful and protective environment (Survival states refer to a child's shift into a "survival in the moment states," and a helpful and protective environment is the measure of the environment, including caregivers and providers) ability to understand and meet the child's emotional and physical needs) in treatment was common.
- Family strengths, including the child's positive energy and engagement; foster parents' support and dedication; male foster parents as a positive male role model; approach of the child's new school; and network of supports available to the child.
- Barriers to treatment included foster parents' reticence to discuss the child's trauma; foster parents' limited understanding of the link between a child's trauma and his or her behavior; biological parents' interference with treatment; a child's therapist's unwillingness to collaborate with TST-FC provider; and a child's trauma symptoms affecting his or her mood and willingness to talk.

Staff perceptions of the TST-FC clinical service. During focus groups, several caseworkers said they thought TST-FC was a model that could be used successfully with children in treatment foster homes and group homes and suggested expanding this to those settings. Several people saw the benefit of the treatment team approach and recommended including the birth parents in the treatment team. They also thought this model had made them more understanding of and sensitive to parents' exposure to trauma. Some caseworkers reported the team could be further enhanced by including a wider range of stakeholders (e.g., school and court personnel) in service planning. Some agency staff reported that the children who most needed TST-FC were not receiving it. The staff in Washington County also expressed broad concern about a limited number of community resources, including a lack of mental health providers who could provide treatment for children who have been sexually abused. In addition, TST-FC had not been implemented with children in treatment foster homes or group homes.

Sustainability

Both counties expressed the desire to continue TST-FC and were committed to the model. Several caseworkers in Washington County reported widespread adoption of a trauma-informed approach to working with children and families. They reported workers were actively discussing how children and parents may have been impacted by trauma, even for non-TST-FC cases, and were looking for trauma-trained therapists as to treat their cases. In Richland County, some caseworkers reported they wanted to use the concepts of TST-FC, but "in their own way." They hoped to adapt it to fit current child welfare practice so that they did not have to duplicate their efforts, such as using one assessment form, rather than having to use their current assessment form and the TST-FC assessment form. Richland County leadership reported they wanted all caseworkers to use TST-FC with all cases. One leader said: "It forces us to ask 'Is it normal child behavior, or is it related to their trauma?'" The mental health providers in Richland County expressed a commitment to using the TST-FC model with all cases. Further, they were looking into offering TST-FC training to schools in the area in the fall. A few caseworkers recommended including unlicensed kinship caregivers and birth parents in the TST-FC foster parent training to ensure that all caregivers in a child's life could participate in TST-FC.

Both counties plan to make the TST-FC Training mandatory for foster parents and perhaps "strongly recommended" for kinship caregivers. Washington County has already implemented a requirement for currently licensed foster parents to participate in TST-FC training. Richland County plans to do so in the near future. Washington County now has seven trainers who have conducted at least one training, and in some instances several trainings. Richland County has one trainer, but plans to include foster parent co-trainers in the future. One worker theorized that children may not need to be placed in group homes if foster parents were trained in how to use TST.

Eighteen months after implementation began, Washington County offered a full-day TST-FC training for foster parents in December 2016 and are planning another training in October, 2017. They plan to offer TST-FC trainings twice a year unless it is needed more often. It is still mandatory for foster parents. Richland County also remains committed to offering TST-FC training for new staff and foster parents.

Both counties now have caseworkers who have some experience with providing the TST-FC model of foster home-based care. Washington County has a dedicated team and Richland County has a number of staff who have had at least one case receiving the TST-FC intervention. Both agencies initially strengthened their partnerships with outside mental health service providers; staff in both agencies reported this was a result of the TST-FC team approach. Eighteen months later, Richland County was struggling to maintain these relationships, although they had not yet severed them completely. They plan to contract with another mental health agency to offer in-home support for resource families, and perhaps a warmline (a help-line that operates less than 24 hours a day). Washington County continued their relationship with the outside mental health service provider, and plans to continue to do so in the future. Several staff reported that the Technical Assistance from developers at NYU had been critical and wanted it to continue. Staff from both counties said they needed ongoing funding, though it will likely not be available after the project ends.

Staff members and leaders of both county child welfare agencies reported the support they received from AECF staff and developers was important for implementing TST-FC effectively in their agencies and creating the conditions for sustaining the program. For instance, support from AECF staff provided structure and important logistical support. One staff person described AECF's role as being the "cheerleader" for TST-FC. Both counties appreciated the regular and extra phone calls with the developers and said that these were essential to the successful implementation. They also found the feedback from the KVC developer at the first foster parent/kinship caregiver training especially helpful. The developers emphasized that implementation is a lengthy process and both counties are still at the beginning stages. They reported that each county could benefit from at least a year of technical assistance to further ensure the program was sustained. Staff in both counties reported potential challenges to sustainability, including difficulties with reimbursement for outside providers, especially for team meeting time. Meeting time was not considered billable, and thus staff had to donate their free time to the project, which would not be a sustainable solution in the long term.

Increased Knowledge, Skills, Approaches, and Use of TST-FC Tools Approaches with Children Exposed to Trauma

The second question we examined was: *Among staff and foster parents/kinship care providers who participate in TST-FC, does TST-FC increase their knowledge of the impact of trauma on child behavior and functioning, improve their skills and approaches to working with and caring for children who have experienced trauma, and support the use of TST-FC tools and approaches?* To answer this question, we examined qualitative data from focus groups and interviews with caseworkers, mental health providers, and foster parents, as well as survey results from staff and foster parents.

Prior trauma training for staff

Staff in both counties were asked to indicate the amount of training they had received prior to TST-FC on child trauma, parent trauma, and secondary trauma on a scale of 1-4 (1 = None; 4 = A lot). Findings revealed only a small percentage of Washington County staff had received a lot of training on child trauma (16 percent), parent trauma (7 percent), and secondary trauma (19 percent), and over half of staff (55 percent) had very little training on parent trauma (see Table 12 and Figure 6). A similarly low proportion of Richland County staff reported that they received a lot of training on parent trauma (7 percent) and secondary trauma (19 percent), but a lower percentage of Richland County staff were trained on child trauma (11 percent). Perhaps most relevant to TST-FC, the vast majority of Washington County and Richland County staff reported that they received some or very little training on child trauma (84 percent and 89 percent, respectively) prior to receiving TST-FC, suggesting a notable gap in their professional development. Mental health providers in both counties reported training in several trauma-informed care models; some were generic trainings (no specific model) on the effects of trauma on children. Two providers had received training on Trauma Focused Cognitive Behavior Therapy (TF-CBT). Several child welfare staff said they had received training in the effects of trauma on children, with some trained in more than one model, including TF-CBT, and others reporting minimal exposure to training. Some of the foster parents/kinship caregivers reported prior education on how trauma affects children, and that the TST-FC training had not provided new information on this topic.

Research Question #2:

Among staff and foster parents/kinship care providers who participate in TST-FC, does TST-FC increase their knowledge of the impact of trauma on child behavior and functioning, improve their skills and approaches to working with and caring for children who have experienced trauma, and support the use of TST-FC tools and approaches?

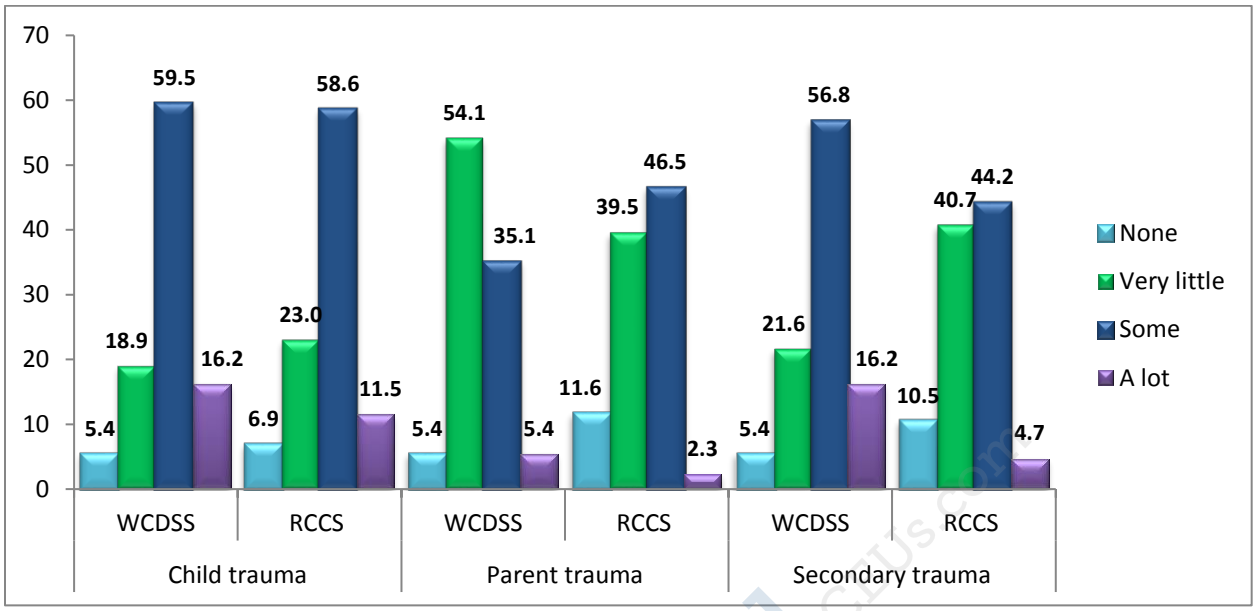
Table 12

Washington County Staff Knowledge of Trauma Prior to TST-FC

	Washington County (*n* = 37)			Richland County (*n* = 87)			Combined (*n* = 124)		
	M	*SD*	*Range*	*M*	*SD*	*Range*	*M*	*SD*	*Range*
Child Trauma	2.86	0.75	1-4	2.74	0.75	1-4	2.78	0.75	1-4
Parent Trauma	2.41	0.69	1-4	2.40	0.74	1-4	2.40	0.71	1-4
Secondary Trauma	2.84	0.76	1-4	2.48	0.76	1-4	2.55	0.77	1-4

Figure 6

Staff Training in Trauma Prior to TST-FC (Washington County (n = 37, Richland County, n = 87)



Trauma-Informed Policy and Practice

Results of the Trauma Informed Systems Change Instrument (TISCI; Table 13) show some differences in trauma-informed practice and policy from baseline (pre-training) to follow-up (three months after training). Washington County staff endorsed somewhat higher scores for trauma-informed agency practices compared to Richland County staff, but somewhat lower scores for agency policy and individual practice. However, after conducting significance testing (t-tests), we found that separately both counties demonstrated considerable improvements from baseline to follow-up, as well as when taken together, on all three subscales, Agency Policy, Agency Practice, and Individual Practice (see Figure 7), suggesting that implementation of TST-FC was associated with an increase in trauma-informed policies and practices. For the two counties combined, there was a significant improvement in Agency Policy from pre-training (M = 50, SD = 20.) to follow-up (M = 65, SD = 17); t (31) = -4, p = 0.001, as well as for Agency Practice from pre-training (M = 51, SD = 18) to follow-up (M = 64 SD = 18); t (31) = -4, p = 0.001), and for Individual Practice from pre-training (M = 58, SD = 22) to follow-up (M = 75, SD =19); t (31) = -5, p = 0.000).

Table 13

Trauma-informed Practices and Policies

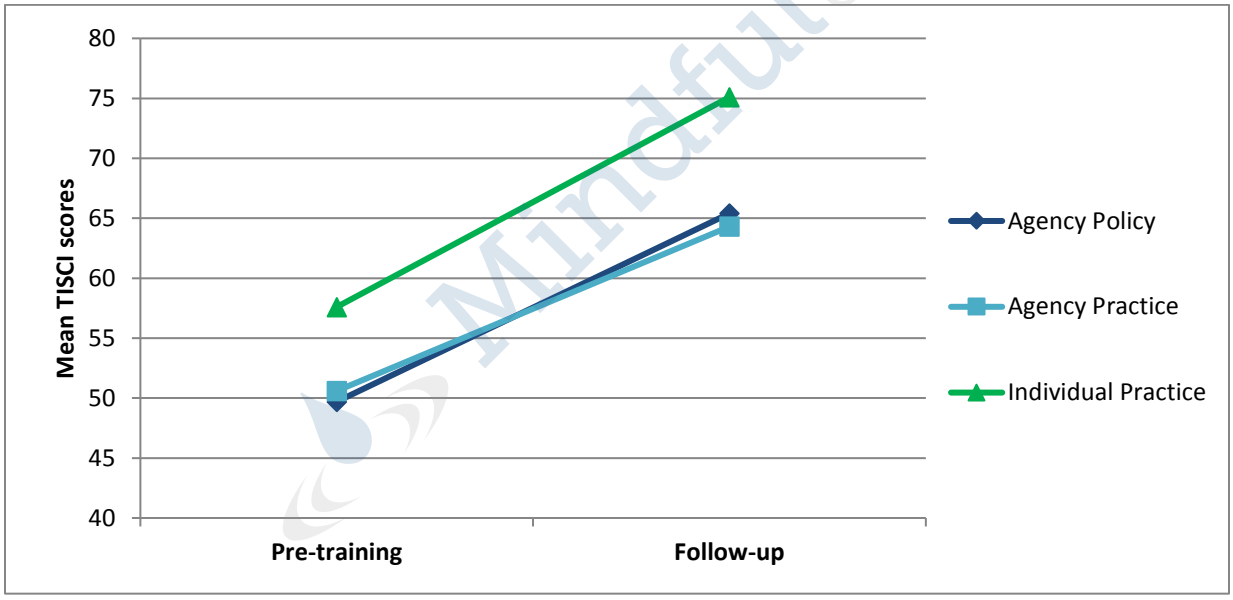
Counties Combined	Pre-Training		Follow-up			95% CI for Mean Difference	
	M	*SD*	*M*	*SD*	*n*		
Agency Policy	49.7	20.16	65.4*	17.44	31	-24.872	-6.580
Agency Practice	50.6	17.47	64.3*	17.48	31	-21.713	-5.771
Individual Practice	57.6	21.74	75.1*	19.24	31	-25.221	-9.618

Washington County							
Agency Policy	43.7	18.57	70.6**	18.25	12	-45.634	-8.116
Agency Practice	53.1	18.07	69.7**	13.19	12	-28.720	-4.747
Individual Practice	56.7	20.00	84.4*	12.81	12	-41.513	-14.042
Richland County							
Agency Policy	53.4	20.70	62.1***	16.54	19	-17.934	0.566
Agency Practice	48.9	17.38	60.8**	19.22	19	-23.257	-0.448
Individual Practice	58.2	23.29	69.1**	20.51	19	-19.916	-1.839

*$p \leq .001$; **$p < .05$; *** $p = .064$

Figure 7

Change in Trauma-Informed Agency Policy from Baseline to Follow-up in both counties



Staff Confidence in Providing Trauma-Informed Care

Child welfare staff answered a series of questions on the pre-training staff survey and again on the follow-up staff survey regarding their confidence in providing trauma-informed care when working with children and families. Staff confidence in the two counties combined improved significantly on six out of 14 items from pre-training to follow up ($p < 0.01$). Staff confidence significantly improved on three items in Washington County ($p < .01$). There were no significant improvements in staff confidence in Richland County (see Table 14).

Table 14

Staff Confidence in Providing Trauma-Informed Care

	Washington County				Richland County				Counties Combined			
	Pre-Training (*n* = 37)		Follow-up (*n* = 20)		Pre-Training (*n* = 85)		Follow-up (*n* = 25)		Pre-Training (*n* = 122)		Follow-up (*n* = 45)	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Teach caregivers about stress response to trauma	3.86	1.13	4.35	1.31	3.56	1.29	3.96	1.40	3.66	1.24	4.16	1.35
Teach caregivers' self-care practices	3.97	1.21	4.71	1.26	3.66	1.31	4.24	1.33	3.75	1.28	4.46**	1.29
Support caregivers in identifying triggers	4.03	1.14	4.81**	1.20	3.75	1.30	4.24	1.16	3.84	1.26	4.50**	1.19
Support caregivers in self-care practices	4.16	1.01	4.75	1.16	3.80	1.23	4.40	1.19	3.91	1.18	4.56	1.17
Teach caregivers strategies for managing behaviors	4.00	1.12	4.65	1.14	3.94	1.20	4.36	1.15	3.96	1.17	4.52	1.15
Assess if families need additional services	4.43	1.09	5.05	0.51	4.20	1.24	4.48	1.08	4.27	1.20	4.74	0.91
Link families to services	4.61	1.18	5.21	0.63	4.39	1.34	4.80	0.87	4.45	1.29	5.00	0.80
Understand how trauma impacts children's brains	4.84	0.90	5.45	0.69	4.81	0.95	4.92	0.76	4.82	0.93	5.17	0.77

	Washington County				Richland County				Counties Combined			
	Pre-Training (*n* = 37)		Follow-up (*n* = 20)		Pre-Training (*n* = 85)		Follow-up (*n* = 25)		Pre-Training (*n* = 122)		Follow-up (*n* = 45)	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Almost all children in foster care have experienced trauma	5.32	0.67	5.63	0.50	5.06	0.99	5.32	0.95	5.14	0.91	5.47	0.79
Tell others about child trauma symptoms	4.22	1.03	5.00	1.20	3.86	1.36	4.76	1.01	3.97	1.28	4.89**	1.09
Identify trauma reminders in the lives of children	4.50	0.85	5.52***	0.51	4.27	1.29	4.88	1.13	4.34	1.17	5.18**	0.96
Past experiences impact how to respond to misbehavior	4.92	0.76	5.52**	0.51	4.94	0.93	5.24	0.72	4.93	0.88	5.38***	0.65
Self-care is an important part of my work	5.14	0.63	5.65	0.49	5.02	1.12	5.52	0.51	5.06	1.00	5.57**	0.50
There is always a reason for misbehavior	4.73	0.90	5.25	0.64	4.67	1.18	4.60	1.35	4.69	1.10	4.91	1.13

**Significant at the p <.010 level; ***Significant at the p <.001 level

Prior trauma training for foster parents/kinship caregivers. Foster parents and kinship caregivers were asked to indicate the amount of training they had received prior to TST-FC on child trauma, parent trauma, and secondary trauma on a scale of 1-4 (1 = None; 4 = A lot). Mean scores were comparable for child trauma training across counties (Washington County, M = 2, and Richland County, M = 2), indicating that, on average, they had received some prior training. Mean scores were lower for parent trauma and secondary trauma, with Richland County foster parents/kinship caregivers reporting less training in these areas than Washington County. See Table 15 and Figure 8.

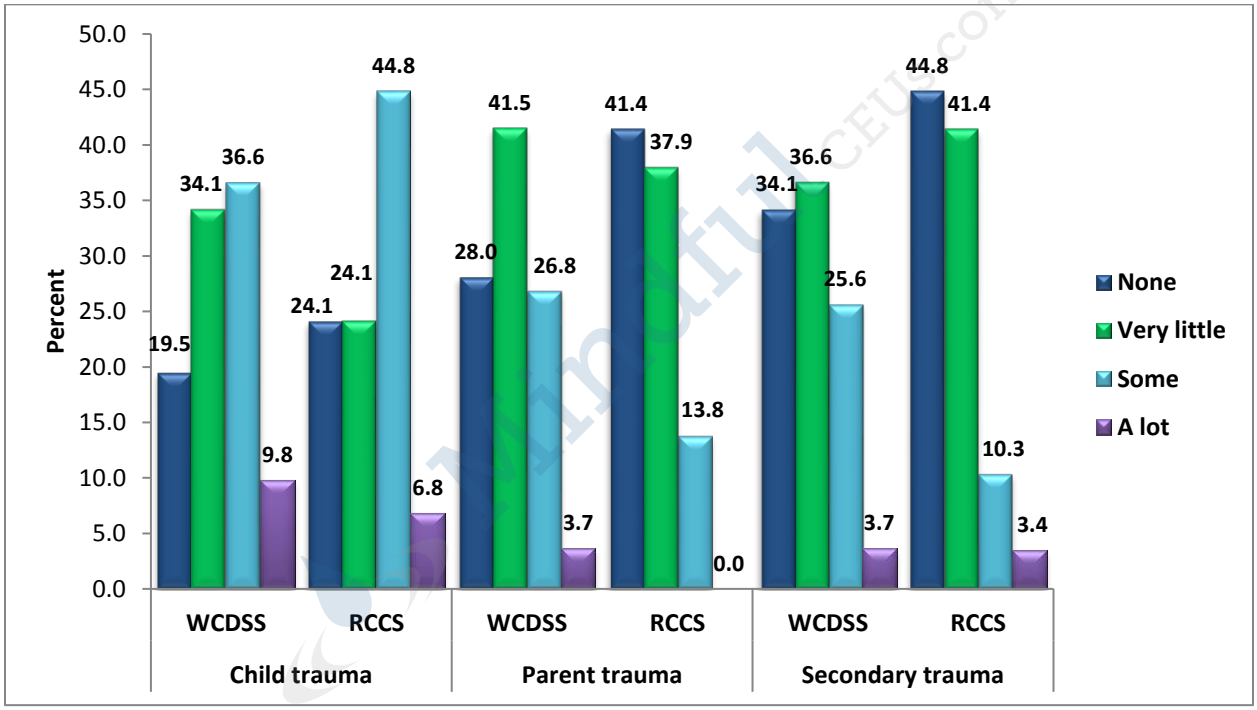
Table 15

Foster Parents and Kinship Caregivers Prior Trauma Training

	Washington County (*n* = 82)			Richland County (*n* = 29)			Combined (*n* = 111)		
	M	*SD*	*Range*	*M*	*SD*	*Range*	*M*	*SD*	*Range*
Child Trauma	2.37	0.91	0-4	2.29	0.90	0-4	2.35	0.90	0-4
Parent Trauma	2.06	0.84	1-4	1.89	0.92	0-4	2.02	0.86	0-4
Secondary Trauma	1.99	0.87	1-4	1.75	0.79	0-4	1.93	0.85	0-4

Figure 8

Foster Parent Training in Trauma Prior to TST-FC (Washington County n=111, Richland County n=29)



Comparison of prior training in trauma for staff and foster parents/kinship caregivers. Both the staff and foster parents/kinship caregivers reported having only very little or some training in child, parent, and secondary trauma. The foster parents reported less training overall, with the least training in secondary trauma when compared to the staff in both counties. There was little difference between Washington and Richland counties when analyzed separately, for either the staff or foster parents/kinship caregivers. Our results for both counties and for both groups indicate that there were gaps in their prior professional development training in the area of trauma.

Foster Parent/Kinship Caregiver Knowledge and Beliefs

To assess foster parents' and kinship caregivers' knowledge and beliefs about parenting a child who has experienced trauma, we administered the Resource Parent Knowledge and Beliefs Survey (RPKBS) three times: before they were trained in TST-FC (pre-training), after they completed the training (post-

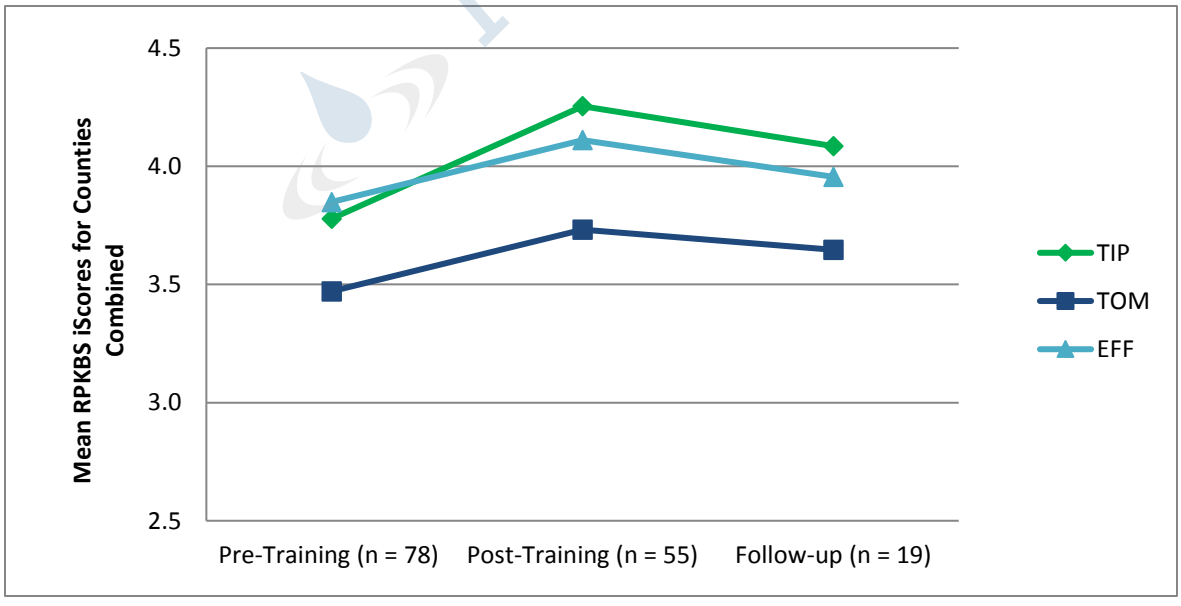
training), and a third time one month later (follow-up). We examined group differences between time points for each of the measure's three subscales: Trauma-informed Parenting (TIP); Tolerance of Misbehavior (TOM); and Parenting Self-Efficacy (EFF). We ran dependent samples t tests to compare mean scores from pre-training to post-training, from post-training to follow-up, and from pre-training to follow-up. This allowed us to identify any improvements associated with training, and the extent to which these gains were maintained one month later.

For both counties combined, foster parents' and kinship caregivers' knowledge and beliefs about parenting a child who has experienced trauma improved directly following the training (see Figure 9). On all three subscales, we found a statistically significant improvement: mean TIP scores increased from pre-training (M = 3.78; SD = 0.48) to post-training (M = 4.29; SD = 046); t (58) = -10.67; p = 0.000; mean TOM scores increased from pre-training (M = 3.46; SD = 0.63) to post-training (M = 3.81; SD = 0.72); t (73) = -5.04; p = 0.000; and mean EFF increased from pre-training (M = 3.92; SD = 0.56) to post-training (M = 4.21; SD = 0.52); t (70) = -6.05; p = 0.000. We found similar results for each county separately. Results were still significant when we examined changes for both counties together from pre-training and follow-up one month after the training (TIP M = 4.10; SD = 0.45); t (18) = -4.50; p = 0.000; TOM (M =3.71, SD =0.65); t (23) = -2.19; p = 0.039; and EFF (M =4.10; SD = 0.56; t (22) = -1.78; p = 0.089.

When we examined differences between the end of the training and one month later, the only significant change was between TIP post-training and TIP follow-up (M =4.13; SD = 0.42); t (17) = 1.80; p = 0.089). This was a small but significant decline. TOM and EFF declined slightly, but the difference was not significant. Overall, participants retained knowledge, with a slight drop-off in trauma-informed parenting. The two counties had similar results when examined separately (see Figure 9). TST-FC training was associated with improved knowledge and beliefs about parenting a traumatized child. Some improvements were less pronounced over time, but significantly better than prior to the training.

Figure 9

Changes in Foster Parents and Kinship Caregiver Knowledge and Beliefs for Both Counties



Preliminary Examination of Child Outcomes

The final question we explored in this evaluation was: *Does implementation of TST-FC result in positive outcomes for children related to well-being, placement stability, and permanency?* We used child welfare administrative data at baseline (pre-implementation), after the first quarter, and then again post-implementation, from April 2016 – July 2017 (a total of 16 months) to conduct a preliminary analysis to begin to explore this question (see Table 7 in Appendix for additional information on child welfare administrative data).

Research Question #3:

Does implementation of TST-FC result in positive outcomes for children related to well-being, placement stability, and permanency?

Placement Stability and Permanency for Children Receiving Clinical Intervention

Implementation took longer than initially expected and, as a result, enrollment of children into the TST-FC clinical model was slow to get started. Thirteen children in Washington County and 12 children in Richland County received TST-FC clinical services by July 2017. We collected additional information about the progress of treatment for eight children enrolled in treatment as of March 2016: six in Washington County and two in Richland County. In Washington County, all six children were screened and found not to need safety focused treatment; they completed the assessment, treatment planning, and treatment engagement stages. They had not yet progressed to the treatment phase, so did not complete well-being measures. By the end of March 2017, Richland County had not yet used fidelity checklists for the two children in treatment. The site did not utilize measures of well-being with these children, so we were not able to examine associations between TST-FC and child well-being as planned.

Each county developed an inclusion checklist to help in selecting appropriate cases for TST-FC clinical services. Washington County's inclusion criteria were:

- Known or suspected history of abuse or neglect, or other traumatic event(s); and at least one of the following:
    - Known or suspected history of abuse or neglect, or other traumatic event(s)
    - Known or suspected history of abuse or neglect, or other traumatic event(s)
    - Known or suspected history of abuse or neglect, or other traumatic event(s)

Richland County's inclusion criteria were:

- Known or suspected history of abuse or neglect, or other traumatic event(s)
- History of physical acting out
- History of sexual acting out
- History of placement disruptions or considered at risk for placement disruption
- History of multiple system involvement

As of March 2016, the most common reasons that children in both counties who received clinical treatment entered the child welfare system were neglect (n = 5); behavioral issues (n = 2) was the next most common reason. One child entered care due to sexual abuse. On average, children were in care for 20 months (*Range* = 10-46 months) and changed placements three times (*Range* = 1-6). The most common case goals were: reunification (n = 3); relative placement (n = 2); and adoption (n = 1). Two children had case plans that were undetermined. Three quarters of the children (n = 6) were on psychotropic medications.

By July 2017, Richland County was no longer enrolling new children into TST-FC treatment. Washington County continued to enroll children and offer the TST-FC intervention. We obtained child welfare administrative data from 2014 and 2015 to provide baseline data on children's placement stability and on retention of foster homes for comparison to the period after implementation of TST-FC began. The Child Trends team collected follow-up data on children's placement stability and foster home retention at two time points: the first data collection period spanned the first three months (first quarter of the calendar year) after implementation (January - March 2016); the second data collection period was 18 months after implementation and covered the time period from April 2016 – July 2017. Data on children in TST-FC clinical treatment were minimal, with a total of 25 children in the sample. Given these limitations, we concluded that it was not appropriate to conduct significance testing on associations between their clinical treatment outcomes and placement stability or permanency. However, we present descriptive findings that point toward positive trends and suggest promising areas for future study.

Children's placement stability. To look at foster home retention, we combined the number of homes open on the first day of the period with the number of homes licensed or certified during that period, to give us the total number of homes in a given period. We then combined the number of foster homes that closed for negative reasons, which included homes closed by the resource parents for reasons other than adoption or guardianship, and homes closed by the agency. The two time periods used for comparison included the year prior to implementation, as most proximal to the implementation, (2015) and the 16 months post-initiation of TST-FC (April 2016 - July 2017). See Table 16 below for additional detail.

Table 16

Number of Homes, and Those Closed for Negative Reasons, Pre- To Post-Implementation

	Pre-Implementation			Post-Implementation		
	Washington County	Richland County	Total	Washington County	Richland County	Total
Total Homes	92.00	77.00	169	98.00	69.00	167
Other				60.00	51.00	111
TST-FC trained				38.00	18.00	56
Total Closed Negative Reasons	10.00	10.00	20	5.00	21.00	26
Other				2.00	20.00	22
TST- FC trained				3.00	1.00	4

We calculated the percentage of homes closed for negative reasons (due to foster parent decision, other than adoption, and agency decision) out of the total homes open during that period. We compared the percentages of homes closed for negative reason pre-implementation to TST-FC trained homes post-implementation, and TST-FC trained homes to other homes post-implementation. Overall, few homes closed due to negative reasons, and the numbers were even smaller for TST-FC trained homes. Therefore, we combined Washington County and Richland County data to increase the sample size for

analysis. We also compared percentages of homes closed, because the time periods were different lengths (pre-implementation was 12 months and post-implementation was 16 months).

The difference between homes closed for negative reasons pre-implementation compared to TST-FC trained homes closed for negative reasons post-implementation was not significant (n = 20; 12% vs. n = 4, 7%; p = .324). However, as shown in Table 17, the difference post-implementation in TST-FC trained homes closed for negative reasons and other homes closed for negative reasons, was significant (n = 4,7% vs. n = 20; 20%; p = .032). This indicated greater TST-FC trained foster home retention compared to other foster home retention in the post-implementation period.

Table 17

Percentage of homes closed for negative reasons, pre- to post-implementation

	Number of Homes in Period	Homes Closed Negative Reasons	Significance
Pre- to Post-Implementation			p=.324
Pre-Implementation	169	20 (12%)	
TST-FC Trained	56	4 (7%)	
Post-Implementation			p=0.032
Other	111	22 (20%)	
TST-FC Trained	56	4 (7%)	

Child exits from foster homes. To investigate difference in placement stability for children in TST-FC trained and non-trained homes, we combined the number of children in homes on the first day of the period with the number of children placed in homes during that period, to calculate the total number of children in homes in a given period. We then combined the number of children who exited homes for negative reasons, including aging out, transferring to another agency, or running away, or moving to a group home, residential facility or other type of institutional setting. See Table 18 below.

Table 18

Number of Children in Homes, and Exiting Homes, for Negative Reasons, Pre- to Post-Implementation*

	Pre-implementation			Post-Implementation		
	Washington County	Richland County	Total	Washington County	Richland County	Total
Total Children	279	121	400	236	102	338
Other				180	88	268
TST-FC				56	14	70
Total Exited for Negative Reasons	90	4	94	60	38	98
Other				57	31	88
TST-FC				3	7	10

*We were not able to distinguish between placement changes from TST-FC trained homes and other homes, so we did not include these numbers in the analysis.

We used the same method described above to calculate the percentage of children exiting homes for negative reasons. The difference between children exiting homes for negative reasons pre-implementation compared to children exiting TST-FC trained homes post-implementation showed a statistical trend (n = 94, 24% vs. n = 10, 14%, p = .086). The difference post-implementation in children exiting TST-FC trained homes for negative reasons, and children exiting other homes was statistically significant (n = 10, 14%, vs. n = 88, 33% p = .002). See Table 19 below for details. This indicated that fewer children left TST-FC trained homes for negative reasons than children left other homes for the same negative reasons.

Table 19
Percentage of Exits from Homes for Negative Reasons, Pre- to Post-Implementation

	Children in Homes	Children Exiting for Negative Reasons	Significance
Pre- to Post Implementation			p = 0.086
Pre-Implementation	400	94 (24%)	
TST-FC Trained	70	10 (14%)	
TST-FC Trained to Other			p = 0.002
Other	268	88 (33%)	
TST-FC Trained	70	10 (14%)	

CONCLUSIONS AND IMPLICATIONS

In recent years, efforts to improve services for children impacted by trauma have increased, with a growing number of initiatives seeking to ensure that child welfare services and systems provide trauma-informed care to maltreated children (Hanson & Lang, 2016). However, evidence on the optimal processes and outcomes associated with effective trauma-informed care in child welfare is limited. In particular, evaluations of interventions are needed that target the substantial number of children who endure severe enough abuse and neglect that they are removed from their homes and placed in foster care or with kinship caregivers, as these children are at especially high risk for poor life outcomes (Harden, 2004).

Trauma Systems Therapy-Foster Care is one of the earliest child trauma models designed for a child welfare setting that seeks to infuse the entire system. In fact, the aims of Trauma Systems Therapy-Foster Care (TST-FC) are in line with the National Child Traumatic Stress Network (NCTSN)'s definition of a trauma-informed child and family service system, namely "one in which all parties involved recognize and respond to the impact of traumatic stress on those who have contact with the system including children, caregivers, and service providers. Programs and agencies within such a system infuse and sustain trauma awareness, knowledge, and skills into their organizational cultures, practices, and policies. They act in collaboration with all those who are involved with the child, using the best available science, to facilitate and support the recovery and resiliency of the child and family."

Summary of TST-FC Implementation Strengths

Trauma-Informed Care

We found marked improvements in both counties with regard to improvements in staff and foster parent/kinship caregiver knowledge, confidence, and practice in trauma-informed care from just prior to participation in TST-FC to both post-training and follow-up after they received training. Neither child welfare staff nor foster parents and kinship caregivers reported extensive prior training in child trauma, parent trauma, or secondary trauma. Foster parents and kinship caregivers had the least amount of prior training in secondary trauma, as compared to training in other areas. Implementation of TST-FC was associated with statistically significant improvements in individual practices, agency practices, and agency policies in trauma-informed care in the two counties combined. Each of the two counties exhibited different strengths in this area. Washington County reported slightly more trauma-informed agency practices compared to Richland County staff, but Richland County staff reported more trauma-informed agency policy and individual practice. Moreover, staff confidence in providing trauma-informed care in the two counties combined showed significant improvements in six of fourteen areas. Independently, Washington County staff had significant increases across three areas; Richland County did not show significant improvement in any areas.

Foster parents and kinship caregivers also exhibited gains in knowledge and beliefs about trauma-informed care. Both in aggregate and divided by county, staff showed improvements in trauma informed parenting, tolerance of misbehavior, and parenting self-efficacy from prior to training to directly following the training. A drop-off in knowledge retention is to be expected for most adult learners following a training, and indeed foster parents/kinship caregivers' knowledge of trauma-informed parenting decreased slightly from post-training to the one month follow-up; however, increases in all three areas remained significant when we compared their assessment results prior to the training to one month after the training.

Relationships Between Child Welfare Staff and Mental Health Providers

Despite the fact that both counties faced the challenge of seeking out new partnerships in the community to accommodate the clinical requirements of TST-FC, leaders and staff in both Washington County and Richland County reported that newly established relationships with mental health providers was a direct benefit of implementing TST-FC. They also asserted that their agencies had developed more capacity to serve children who had experienced trauma as a result of these partnerships. Moreover, mental health providers stated that the relationships they had formed with child welfare staff through the team model of TST-FC had improved understanding of how child welfare agencies work and the intense challenges they face. TST-FC developers also noted this as a strength of the implementation process.

Common Language

One of the potential benefits of TST-FC's systemic approach is the emphasis on a common language about child trauma among child welfare staff and leaders, mental health providers, and foster parents and kinship caregivers. Staff from both counties indicated that this was an important vehicle for understanding and talking about trauma. Sharing this common language improved communication among the adults charged with caring for a child.

Fidelity

Although few children had received TST-FC clinical treatment and none had completed treatment by the end of the evaluation period, initial findings on fidelity are encouraging. Staff reported a 92 percent completion rate for activities during the first three steps of treatment on the TST-FC Fidelity Checklists. Furthermore, both counties implemented non-clinical activities largely as intended by the developers.

Trainings were offered as planned, with the exception of some that were combined or cancelled due to difficulty recruiting foster parents and kinship caregivers, particularly in Richland County where the training was not mandatory. Survey results in both counties strongly suggest that child welfare staff and foster parents/kinship caregivers learned how to provide TST-FC, planned to use the tools and approaches, and had increased confidence and knowledge in providing trauma-informed care according to the TST-FC approach.

Resource home stability and retention

We found significantly fewer TST-FC trained foster homes closed for negative reasons, and there were significantly fewer exits from these homes for negative reasons during the post-implementation period compared to non-trained foster homes. This may indicate that foster parents and kinship caregivers who are trained in TST-FC have a greater understanding of trauma and its effects, and are better able to manage the challenging behaviors the children in their care may exhibit. This is a promising finding, and is in-line with findings from the prior KVC study. However, this finding should be interpreted with caution, as sample size was small, this was not a rigorously designed study, and we were not able to examine site differences. Further investigation would be useful to establish more conclusive evidence.

Summary of TST-FC Implementation Challenges

There are numerous challenges in the process of building a trauma-informed child welfare system in general, and related to the process of implementing TST-FC in two county public child welfare agencies in particular. The final report on Child Trends' large-scale, five-year implementation and outcome evaluation of TST in a private child welfare setting, *Bridging the Way Home*, included an observation that, "Incorporating trauma-informed care throughout KVC's system of care was no simple task; it was an intensive and iterative process carried out over multiple years" (Moore et al., 2016). Thus, it is not surprising that both counties were still working toward full implementation of TST-FC after one year. A number of the challenges that the Child Trends KVC evaluation team highlighted also emerged in the current evaluation, including: child welfare leaders and their staff are still in the process of implementing and refining training materials, engaging stakeholders (e.g., foster parents, staff, mental health providers), integrating TST-FC into ongoing agency activities and training efforts, facilitating communication across the agency, and maintaining fidelity. We describe additional areas of difficulty below.

Limited Time Frame for Implementation

The evaluation period was relatively short, with the majority of data collection occurring within a one-year period (we collected limited administrative data on placement stability and limited data on children receiving the TST-FC clinical treatment 18 months after the study ended). The short time period raised several challenges. The child welfare agencies in both counties found it more difficult than they had anticipated to identify and engage children who were most appropriate for TST-FC clinical treatment. As a result, few children received treatment, none completed treatment, and no child assessments were conducted by the end of a one-year period. This limited our capacity to assess fidelity to the clinical model and to examine child outcomes that had potential associations with the intervention. For instance, we were only able to examine fidelity for three of eight steps in TST-FC treatment for six children in one county. Nevertheless, the preliminary results from our analysis of TST-FC fidelity are promising, as mentioned above. In addition, county staff were still working to strike a balance between utilizing the essential components of TST-FC and making appropriate adaptations to their agency culture and processes. This process is likely to take several years. Moreover, some counties might need longer than others. Richland County appeared to struggle with TST-FC implementation in some areas, for

example, and it is possible that they might resolve some of these issues with support from developers and TA providers over time. The TST-FC developers themselves underscored how much time and flexibility is needed to make adjustments to existing structures. We recommend additional exploration into both process and child outcomes over a longer period of implementation to obtain a deeper understanding of the impact of TST-FC.

Staff Workload and Capacity

Each county approached staffing for TST-FC in a unique way. Washington County reassigned existing staff and formed a designated treatment team. Richland County brought existing staff onto the treatment team as needed. Both counties initially encountered difficulties identifying and developing partnerships with qualified mental health providers, although they appeared to have largely resolved these issues by the end of the evaluation. Richland County leaders, staff, and mental health providers in particular expressed concerns about the viability of the model given the extensive time commitment necessary to support the model. Encouragement from developers to make adaptations based on existing structures and processes that were effective appeared to be critical. However, they also expressed concern that Richland had not been able to shift current practices to accommodate a designated TST-FC team. The extent to which these two child welfare agencies can integrate TST-FC with current procedures while still maintaining the integrity of the model appears to be a key indicator of their long-term success with the model. Furthermore, each agency's ability to support TST-FC using current funding mechanisms and/or by securing additional funding to support full team participation, is likely to be an important predictor of success.

Training Structure and Format

There was no clear consensus about how the TST-FC training structure and format might be improved, but certain criticisms and suggestions for improvement seem worthy of note, as they were raised repeatedly. Individuals who were trained to provide the foster parent/kinship caregiver training did not feel adequately prepared. They expressed concern about being truly ready to become TST-FC trainers in the absence of additional support, including having a KVC trainer to watch, which would provide them a model of how to provide the training. Several staff suggested that a "booster training" would be useful. The new trainers also did not appear cognizant of the time commitment that would be necessary to provide the training, and they did not feel that the materials were provided to them in an organized and effective way. They also worried that some of the material was not as accessible to foster parents/kinship caregivers as they had hoped (e.g., brain functioning and how trauma manifests in challenging behaviors). Some staff and trainers felt the training should be divided into more than one day; others felt the one-day model worked well. Some of the child welfare staff who participated in training found it overwhelming at times to learn the content of the model at the same time as the tools and the forms, and suggested separating these into two separate trainings. We recommend the addition of "booster trainings" and additional support for presenting complex material to foster parents and kinship caregivers. We also suggest piloting different formats for the training and making adjustments to different populations, depending upon their needs.

Implications

The results of this evaluation offer early evidence that the implementation of TST-FC can significantly improve a public child welfare agency's capacity to provide trauma-informed care to children and their families. These findings have potential implications for practitioners, program developers and leaders, funders, and policymakers. Findings from Child Trends previous evaluation of TST in a private child welfare setting already has shown that, when implemented with fidelity, TST is associated with

improvements in children's emotional regulation and placement stability (Moore et al., 2016). The current evaluation expands our understanding of changes in the child welfare system that are associated with the implementation of TST-FC and that, in turn, lead to positive child outcomes. For example, we found that TST-FC training was linked to improvements in both staff's and foster parent/kinship caregivers' knowledge, confidence, and practices in trauma-informed care. We also found that it led to more trauma-informed agency policies. These outcomes suggest that similar interventions have the potential to transform child welfare services provided to children impacted by trauma in important ways, and are thus worthy of our investments. This also suggests that TST-FC can be a successful mechanism for strengthening our foster care system by increasing the skills and knowledge of the people who care for our most severely maltreated children. Clearly, larger scale, long-term rigorous research is still needed to establish links between TST-FC's model of trauma-informed care with child welfare service providers, parents, foster parents, kin, and other adults in children's lives, as well as with child outcomes over time. We also need additional research on how different aspects of TST-FC implementation (e.g., fidelity; dosage; training format and structure; extent of support from developers and TA providers; different populations and settings) moderate or help explain outcomes for children and their caregivers.

Limitations

Child Trends carefully designed this mixed-methods evaluation to maximize its potential for elucidating processes, strengths, and challenges of implementing TST-FC. However, we feel that certain limitations of the evaluation are especially important to note. First, this evaluation constitutes a preliminary, short-term, descriptive analysis of the implementation of TST in two county child welfare agencies. We cannot claim a causal link between TST-FC and more trauma-informed child welfare systems. .We were not able to control for existing characteristics of the two sites (e.g., population served; qualifications of the staff; demographic characteristics of staff, foster parents/kinship caregivers, or children), and we did not have a comparison or control group that would allow us to contrast results from these two sites to a public child welfare setting that did not implement TST-FC. In addition, we did not have a large enough sample size or adequate baseline or follow-up administrative data for children in TST-FC that we could use to draw definitive conclusions about the relation between TST-FC and child placement stability or foster home retention. Finally, we could not fully assess fidelity to the TST-FC clinical model, as the sample was too small and none of the children progressed beyond the third stage of treatment. We believe that these limitations highlight specific areas of inquiry for further investigation and, despite them, we think our findings provide important insights regarding the role of TST-FC in creating a culture of trauma-informed care in a child welfare context.

Conclusion

Taken together, the results of this evaluation suggest that TST-FC is a promising intervention for improving public child welfare service delivery through the development of a trauma-informed system. In particular, our findings show that (a) TST-FC can be implemented effectively in a public child welfare setting; (b) TST-FC is associated with significant improvements in trauma-informed care among child welfare staff and foster parents/kinship caregivers alike; (c) tailoring the structure and format of TST-FC to the needs of particular settings may increase engagement; (d) support for implementation beyond the initial year of implementation may be needed to optimize the impact of implementation; and (e) additional research is needed to investigate the association between TST-FC and positive outcomes for some of the highest risk children served by child welfare systems.

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