



School of Social Welfare

**Final Report
Regional Partnership Grant – Third Round
Kansas Serves Substance-Affected Families (KSSAF)**

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I. Executive Summary

The University of Kansas School of Social Welfare (KUSSW), in partnership with the following agencies: State of Kansas Department for Children and Families (DCF), Kansas Department of Aging and Disability Services Addiction and Prevention Services (AAPS), the State's network of contracted privatized providers & SFP fidelity and support personnel established and delivered a successful implementation of the Strengthening Families Program, ages Birth-47 months (SFP B-3) for foster care involved, substance abuse affected families in KS. Highlights of this collaborative initiative include:

- Successful implementation of 9 multi cohort cycles of SFP across 6 sites across the State of Kansas, resulting in 38 total SFP groups over the project period;
- Enrollment of 314 families, comprised of 424 children and 477 adults;
- Overall retention was 65.78% of families;
- SFP fidelity was monitored for each group, and scores met or exceed program standards for the entire period of the RPG funded implementation;
- 151 implementation staff were involved in the program, 61% of whom are still employed in their respective roles;
- Using RPG funded training mechanisms, both privatized agencies in Kansas now have the ability to train staff in-house for SFP, making them independent of the national SFP organization;

Program collaboration was measured through the Wilder Collaborative Inventory, and the partnership demonstrated high levels of collaboration throughout the Regional Partnership Grant (RPG). Challenges that did occur centered on:

- Partners rated the social and political climate in Kansas to be challenging to do the work of the RPG at multiple points in the life of the project;
- The administration of DCF changed multiple times during the course of the project, and the KSSAF leadership had to reestablish relationship and validate the importance of the work of the RPG to leadership (among competing priorities);
- The State Addiction and Prevention Services disbanded the use of their electronic data keeping system, and this created challenges in obtaining the required data elements for the cross site evaluation. Though we were ultimately able to fully comply, with each 6 month request, there was institutional resistance to compliance with this aspect of the grant;
- The leadership of the KSSAF project changed 3 times during the course of the grant. Dr. McDonald retired unexpectedly, Dr. Mariscal resigned unexpectedly, and the project was transferred to its final director (Dr. Jody Brook) for the final 14 months. These abrupt transitions in both State leadership and project leadership were difficult to navigate while simultaneously building a sense of cohesion and continuity for the project teams;
- The State of KS experienced increased child welfare enrollment along with a decline in community based resources, thus community based contracted providers experienced exceptionally high degrees of stress and turnover during the course of the grant;

Evaluation of SFP B-3 participation can be conceptualized in multiple ways. By design, the KSSAF project utilized an experimental design with random assignment to treatment (SFP B-3) and control conditions (child welfare services as usual). Applying an intent-to-treat framework, the final randomization included 712 treatment families and 384 control families. However, the randomization condition only applied to child welfare administrative outcomes (improved permanency, such as increased reunification with birth families, decreased time to reunification), as control families were not available to complete psychometric instruments that were designed to capture changes in child, adult and family well-being over time.

- Participants in the SFP B-3 program reported statistically significant differences in trauma symptomatology at program exit, as measured by the TSC-40. There are 6 subscales to this measure, and 5 of the 6 and the total scaled score produced significant differences from pre-participation to post-participation in SFP B-3;
- Participants in the SFP B-3 program had improvements in a number of parenting domains, as measured by the Adult Adolescent Parenting Inventory (AAPI), including expectations, empathy, and role reversal. However, the results also reveal that the KSSAF adult sample started the program with good scores, and maintained good scores over time;
- The Addiction Severity Index (ASI) was used to assess current and lifetime alcohol and other drug use and correlating characteristics. Two of the 7 scales utilized in the ASI demonstrated significant changes: legal status and psychiatric status;
- The Center for Epidemiologic Studies Depression Scale (CES-D) demonstrated significant improvements in program participant levels of depression from program start to completion;
- The Ages & Stages Questionnaire 3 and the Ages & Stages-SE-2 were used to measure improvements in developmental functioning and social emotional functioning of SFP B-3 focal children. Four of the five developmental domains assessed by the ASQ-3 revealed statistical improvements for children, yet, non-significant results were found on in the personal social scale of the ASQ-3 as well as the ASQ SE-2.
- At the time of analysis (November 2019), 38% of the treatment group (n=268) had achieved reunification, while 34% (n=128) of the control group had reached the same milestone. Twenty-two percent (22%; n=159) of the treatment group had reached permanency through adoption, while 25% (n=97) of the control group were adopted. It should be noted that still relatively high proportions of children from both the treatment (37%) and the control (38%) are still in foster care.
- While the findings in this area are nuanced and should not be reported in aggregate; in general-using 3 separate approaches (Intent to Treat, Treatment on Treatment, and Treatment to Fidelity), SFP participants fared better than control children. Results revealed that SFP B-3 participants who completed the curriculum to fidelity reunified at faster rates compared to all other children (including the control group) who did not complete SFP B-3 to fidelity when examining length of time to reunification both ways (i.e., number of total days in OOH placement and number of days *after* initial

randomization). This finding is extremely important, indicating that the program has positive impacts for families who attend and complete the program to fidelity.

II. Program Overview

Overview of the Target Population and Service Areas

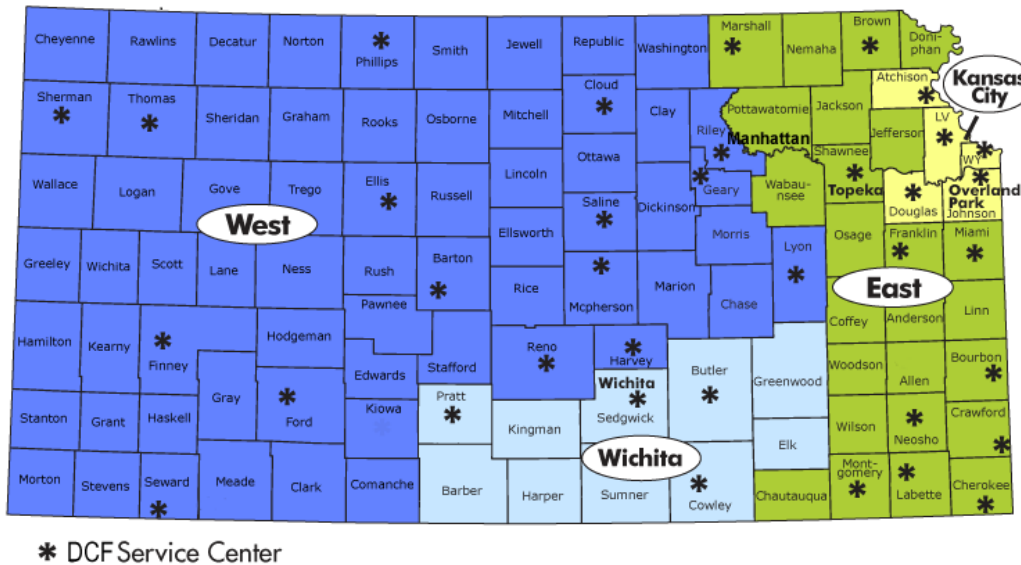
The Kansas Serves Substance-Affected Families (KSSAF) project sought to improve the well-being, ensure safety, and increase permanency for young children and their child-welfare-involved families. The target population for the KSSAF project was children 0-47 months who were in, or at-risk of, out-of-home placement (e.g., receiving aftercare or family preservation services), affected by parental substance use and who had a case plan goal of reunification. In order to be eligible to participate in KSSAF families must have met the following inclusion criteria:

1. Receipt of services from one of the two foster care and family preservation contractors in Kansas and residence within one of the following identified KSSAF catchment areas or within a 60-mile radius of the program delivery site:
 - i. KVC: Johnson, Wyandotte, or Shawnee County
 - ii. St. Francis: Sedgwick, Reno, or Saline County
 2. The focal child, must have been zero to three years of age, and enrolled in the SFP program at any time prior to 47 months of age (3 years, 11 months).
 3. Focal children in out-of-home placement (i.e., foster or kinship care) must have had a case plan goal of reunification prior to enrollment. Families enrolled in aftercare or family preservation services were also eligible. Priority for family enrollment in SFP groups was as follows:
 - i. Out-of-home placement
 - ii. Aftercare*
 - iii. Family Preservation*
- * Aftercare and family preservation families were not included in randomization.
4. Substance use must have been identified as a reason for removal to out-of-home placement or referral to Family Preservation or After Care Services according to the 5110 form, FACTS, or as identified through initial assessment with agency staff in the first six months after removal or referral. Eligibility was *not* contingent upon substance use being the *primary* reason for removal or referral.
 5. The focal child must have been in out-of-home placement for no more than 12 months prior to the start of the SFP group. Families receiving Family Preservation or After Care Services must have been receiving these services for no more than 12 months prior to the start of the SFP group.
 6. The focal child in out-of-home placement could have an order of supervised visitation but may not have had an order of no contact unless a judge granted approval to participate.

In 2014, when the planning period of KSSAF initiated, the state of Kansas was divided into four service regions by the Department of Children and Families (DCF) (e.g., Kansas City, East, Wichita, and West). *Figure 2.1* below details the four service regions in the state of Kansas between 2014-2019. The KSSAF project contracted with two the two State privatized foster care

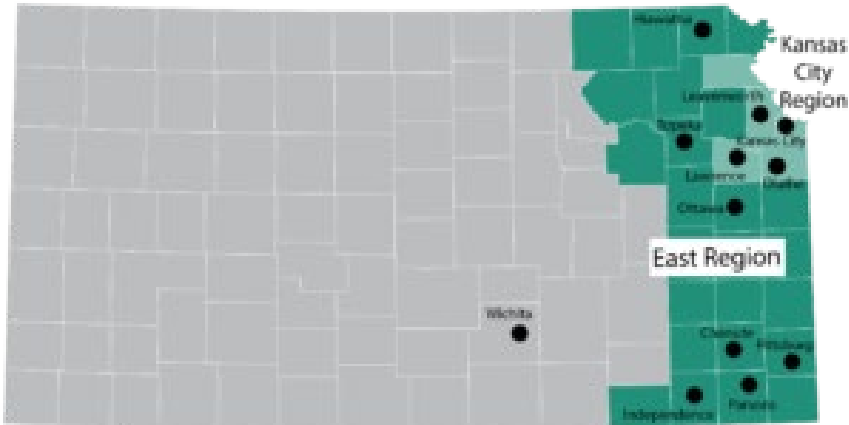
agencies throughout the duration of the program, which included KVC Behavioral HealthCare, Inc. (KVC) and Saint Francis Community services (SFCS).

Figure 2.1. Map of service regions in Kansas 2014-2019



KVC Behavioral HealthCare, Inc. (KVC) is a private, not-for-profit organization providing a comprehensive behavioral healthcare network for at-risk children. Throughout the KSSAF grant, KVC served as the state’s largest accredited child services provider, covering two of the four service regions (30 counties in the Kansas City and East Regions) in Kansas with responsibility for more than half of the children in the state’s child welfare system. A large geographic area of these two regions is urban. KVC provided a continuum of integrated child welfare and mental health services to children and families. KVC served more than 12,700 children yearly, operating in 12 offices across their regions. These densely populated areas often face barriers to receiving quality social services due to low socioeconomic status, higher community violence, limited resources, unemployment, and lack of financial stability. Low-income communities of color and groups who are undervalued and marginalized often reside in these urban areas. They face further discrimination and social and economic injustices within their cities that creates additional barriers to services. *Figure 2.2* below illustrates KVC’s service area; showing their two regions (i.e., East region and the Kansas City Metro region).

Figure 2.2. Map of KVC Service Areas



Saint Francis Community Services, Inc. (SFCS) is a private, not-for-profit organization providing family preservation, foster care, adoption, and behavioral health services to children and families since 1945. SFCS provided a broad continuum of services in Kansas, which covered two of four regions. SFCS served in the Western and Wichita regions. They served more than 3,700 children yearly, operating in 25 facilities within 17 communities. Capacity for and access to comprehensive family treatment services is challenging in Kansas due to the large geographic area that is rural or frontier. In these areas, accessing comprehensive family treatment can be significantly time delayed. If a parent receives primary substance abuse treatment, it may be located hours from where their child is placed in foster care. These more remote and isolated towns with lower populations have limited social service resources to offer. SFCS worked to help meet the needs of these communities and develop sustainable practices and services for the future. *Figure 2.3* below illustrates SFCS’s two service area regions (e.g., Wichita region and West region).

Figure 2.3. Map of SFCS Service Area

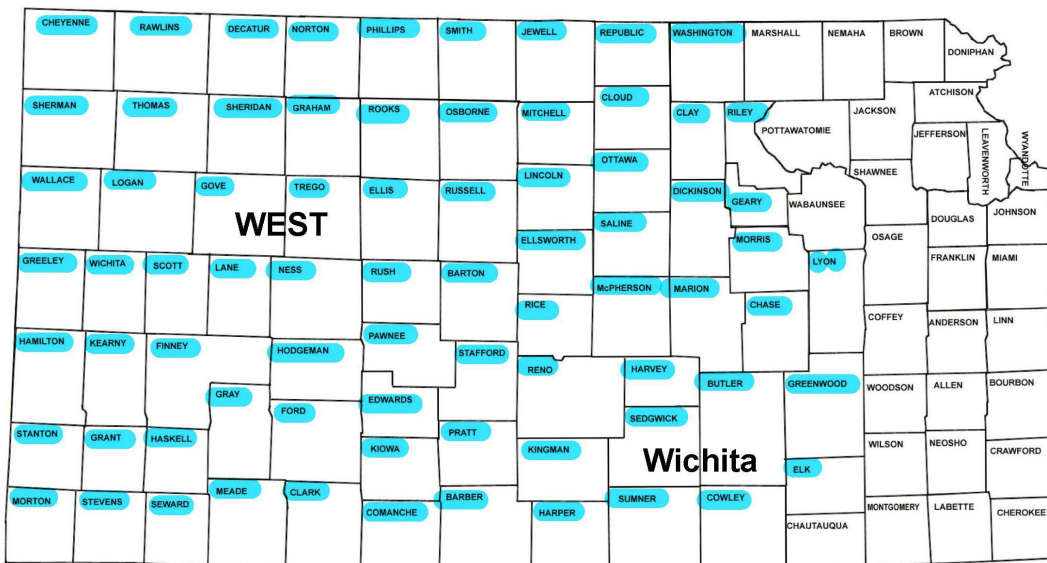
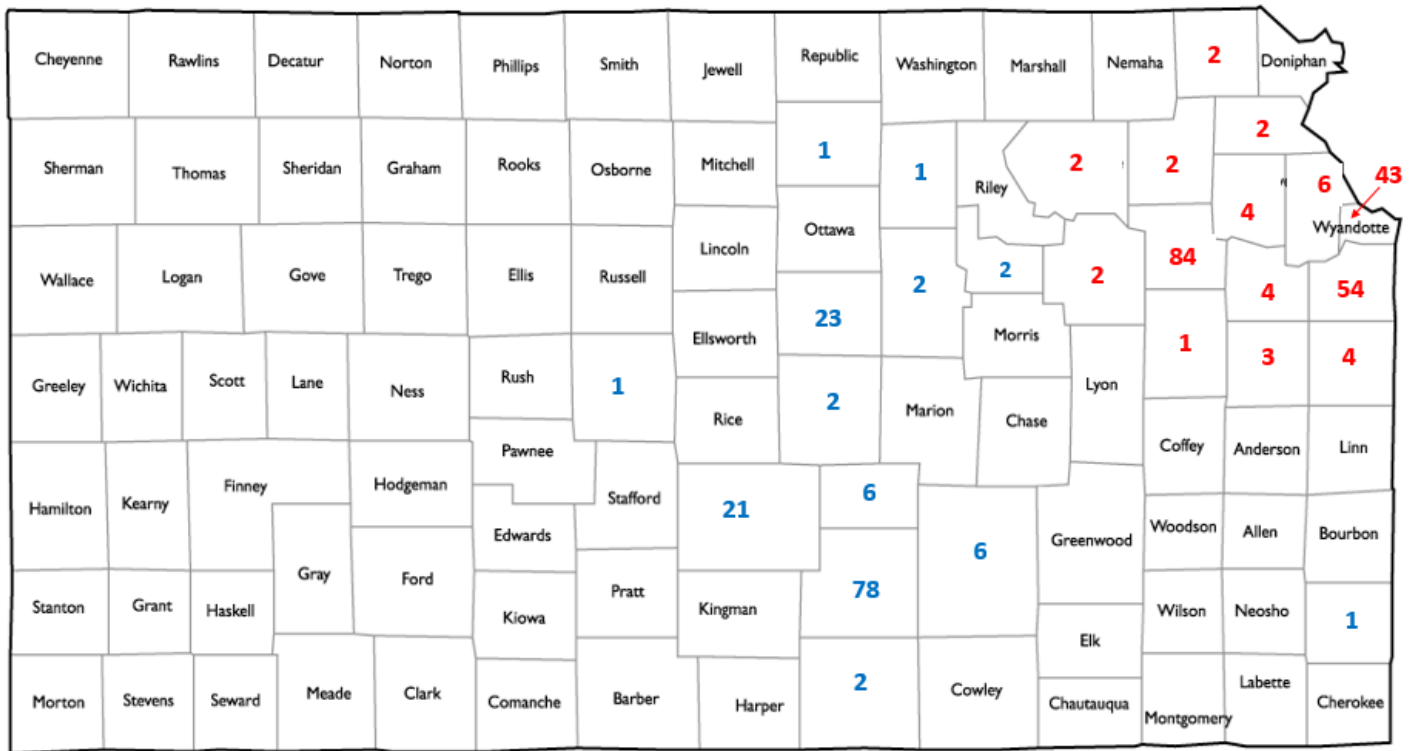


Figure 2.4 below illustrates the geographic dispersion of all cases that verbally consented, within each county, to participate in the KSSAF project. Numbers in red indicate counties serviced by KVC and numbers in blue indicate counties serviced by St. Francis Community Services. It is important to note the county-specific information was pulled from the state administrative data for each child in Spring 2019, therefore, some children may have moved since their oral consent to participate in the KSSAF program (i.e., the one case in Crawford county in the southeastern corner of Kansas, was not in the catchment area for the KSSAF project). Additional information regarding enrollment numbers and descriptive information is provided in *section III* of this report.

Figure 2.4. KSSAF cases that orally consented (by county)



Overview of the Regional Partnership

The regional partnership members included the University of Kansas, School of Social Welfare (KUSSW), KVC Behavioral HealthCare, Inc. (KVC), Saint Francis Community Services (SFCS), Federal RPG-3 partners, Lawrence Head Start Association, Kansas Department of Children and Families (DCF), and Kansas Department of Aging and Disability Services (KDADS).

The Kansas Serves Substance-Affected Families (KSSAF) project maintained strong working and collaborative relationships with partners through the duration of the grant. The strong partnerships established in the beginning helped in sustaining a large and complex implementation processes. Site coordinators developed local partnerships with churches and community members, and they continued to identify and strengthen these partnerships across all five implementation sites. These local partnerships were vital in terms of future sustainability.

For example, volunteers (community partners in Topeka and Kansas City) participated in the SFP B-3 basic trainings starting in Cycle 6. Interested church members were able to become volunteers with KVC to assist with childcare, dinner set-up, and clean-up. Several of these volunteers participated in both the basic and advanced trainings and implemented SFP B-3 as parent group leaders.

KSSAF's collaboration with federal partners continued to strengthen through ongoing communication and collaboration. The KSSAF project received consistent positive feedback provided by federal partners regarding implementation, evaluation, outcomes, and reports. KSSAF's Management Team participated in monthly calls (bimonthly calls since January 2017) with the federal partners to report progress, get technical assistance, and address any concerns.

Representatives of both foster care agencies, KVC Behavioral HealthCare, Inc. (KVC) and Saint Francis Community Services (SFCS) regularly participated in the Steering Committee meetings and consistently provided great expertise on child welfare, mental health, family service access and sustainability planning. The Director of the Kansas Head Start Association regularly participated in the Steering Committee meetings, providing expertise around early childhood and facilitated local partnerships.

Representation from Kansas Department of Children and Families (DCF) at the Steering Committee meetings existed until spring 2018. The representative who attended the meetings supported the project until transitioning to another job. The Kansas DCF representative participated in the Steering Committee meetings and provided constant support and access to necessary data and information. From spring 2018-September 2019 our relationship with the DCF data representative remained consistent and reliable, with all child welfare state administrative data successfully received for all cross-site required data uploads.

Kansas Department of Aging and Disability Services (KDADS) continued to have representation on the KSSAF Steering Committee through the entirety of the grant. KDADS committed to providing KSSAF access to recovery data for consenting participants, and there was extensive organizational-wide data system issues limiting access to the state administrative substance use treatment records during a large portion of this grant period. The KSSAF Management Team worked persistently to maintain contact and communication with our representative. Recovery data was successfully uploaded in all but one cross-site required upload period.

Table 2.5, *Implementation Sites Detailed by Cycle*, identifies which of the six KSSAF sites implemented SFP B-3 during which cycle, by foster care agency. Between August 2015 and June 2019, the KSSAF project facilitated nine cycles each with 4 – 5 sites (excluding Cycle 5 – summer) implementing SFP B-3. In total, 38 SFP B-3 groups were held: 21 groups facilitated by KVC; 17 groups facilitated by SFCS.

Table 2.5. Implementation Sites Detailed by Cycle

Cycle #	KVC			St. Francis Community Services (SFCS)			Total # Site/Cycle
	<i>Kansas City</i>	<i>Olathe</i>	<i>Topeka</i>	<i>Hutchinson</i>	<i>Salina</i>	<i>Wichita</i>	
Cycle 1		X	X	X		X	4
Cycle 2	X		X		X	X	4
Cycle 3		X	X	X		X	4
Cycle 4	X	X	X		X	X	5
Cycle 5 (Summer)						X	1
Cycle 6	X	X	X	X		X	5
Cycle 7	X	X	X		X	X	5
Cycle 8	X	X	X	X		X	5
Cycle 9	X	X	X		X	X	5
Total # cohorts by Site	<i>6 cohorts</i>	<i>7 cohorts</i>	<i>8 cohorts</i>	<i>4 cohorts</i>	<i>4 cohorts</i>	<i>9 cohorts</i>	38 SFP B-3 Groups
Total by Agency	21 SFP B-3 Groups			17 SFP B-3 Groups			

III. Evaluation Overview

The original evaluation design proposed by Brook & Akin (2012) utilized an experimental design with randomization and testing for all program impacts. The funded proposal, modified and submitted by Thomas McDonald, Susana Mariscal and Kaela Byers also utilized an experimental design. Upon funding, the project was notified that only families that received the services would be available for program change measures; therefore, the implemented design was experimental for purposes of randomization into program services, therefore administrative outcomes are the only ones that have true treatment and control outcomes. Between October 2015 and July 2018 the evaluation was led by Drs. Thomas McDonald and Susana Mariscal. From August 2018 through present, the evaluation was led by Drs. Jody Brook and Kiley Liming. The KSSAF evaluation plan was comprised of process (formative) and outcomes evaluation with a rigorous design to assess the conduct of the project as well as the results. Quantitative research methods were used to measure process and outcomes data to determine the extent that SFP B-3 was implemented to fidelity and if the project's objectives were achieved. KSSAF's main objectives were:

1. Implement a successful adaptation of the Strengthening Families Program to families affected by substances, involved in the child welfare system with young children (0-47 months),
2. To increase the well-being of and enhance permanency for families with young children (0-47 months) involved in the child welfare system who are affected by substances.

The *Evaluation Domains and Associated Measures/Data Table* below provides an overview of the evaluation domains of interest, the associated measures, and additional data/information, if applicable. See *Table 3.1* below for more information.

Table 3.1. Evaluation Domains and Associated Measures/Data		
Domain	Standardized Instruments/Forms	Additional Data/Information
Child Well-Being	<ul style="list-style-type: none"> • Ages and Stages Questionnaire – Third Edition (ASQ-3) © • Ages and Stages Questionnaire: Social Emotional – Second Edition (ASQ-SE-2) © • Trauma Symptoms Checklist for Young Children (TSCYC) © 	<ul style="list-style-type: none"> • Department of Children & Families Safety and Permanency Administrative Data
Family Functioning	<ul style="list-style-type: none"> • Adult-Adolescent Parenting Inventory (AAPI-2) © • Center for Epidemiologic Studies – Depression (CES-D) • Parenting Stress Index-Short Form (PSI-SF) © 	
Recovery	<ul style="list-style-type: none"> • Addiction Severity Index – Self Report (ASI) • Trauma Symptoms Checklist-40 (TSC-40) 	<ul style="list-style-type: none"> • Kansas Department of Aging and Disability Services State Administrative Treatment Data (KDADS)
Implementation	<ul style="list-style-type: none"> • Electronic Service Log (ESL) Enrollment • ESL Service Log Forms • ESL Case Exit Forms • ESL Case Participation • SFP B-3 Fidelity Set Surveys (i.e., weekly Fidelity Checklist, Site Information Surveys) 	<ul style="list-style-type: none"> • Site-Visits • Technical Assistance Calls • Tracking & Documentation Reports (i.e., Attendance, etc.) • Staff Surveys • Feedback Loops & Staff Interviews

The evaluation plan was guided by the KSSAF logic model (see *Appendix A*). The KSSAF logic model depicts key service provisions, including input activities, which were tracked for the process evaluation. Proximal and distal outcomes identified for the KSSAF evaluation are illustrated in *Table 3.2* below. Proximal outcomes (e.g., child well-being, adult well-being, and family well-being) were tracked with pre- and post-test measures using standardized instruments identified by the cross-site and local evaluation. Distal outcomes related to child and adult well-being, safety, and permanency were measured through child welfare administrative data and the state substance use treatment episode administrative data.

Table 3.2. KSSAF Proximal and Distal Outcomes and Associated Indicators and Measures					
Outcome Type (Proximal/Distal)	Domain	Indicator	Measurement Tool	Local/Cross-Site Evaluation	Analyzed?
Proximal	Child Well-being	<ul style="list-style-type: none"> • Improved developmental functioning • Improved social emotional competencies 	<ul style="list-style-type: none"> • ASQ-3 • ASQ-SE-2 	Local	Yes
Proximal	Child Well-being	<ul style="list-style-type: none"> • Decreased trauma symptomology in young children 	<ul style="list-style-type: none"> • TSCYC 	Cross-site	No*
Proximal	Adult Well-being	<ul style="list-style-type: none"> • Decreased trauma symptomology • Decreased substance use behaviors • Decreased depressive symptomology 	<ul style="list-style-type: none"> • TSC-40 • ASI-SR • CES-D 	Cross-site	Yes
Proximal	Family Well-being	<ul style="list-style-type: none"> • Improved parental empathy • Improved parenting skills • Decreased parental stress 	<ul style="list-style-type: none"> • AAPI-2 • PSI-SF 	Cross-site	Yes (AAPI-2) No* (PSI-SF)
Distal	Improved permanency	<ul style="list-style-type: none"> • Improved rates of reunification with birth family • decreased time to reunification • decreased reentry 	Child Welfare Administrative Data	Cross-site	Yes, for rates of reunification with birth family and time to reunification. Not enough time to examine reentry as of this report writing
Distal	Enhanced safety	<ul style="list-style-type: none"> • Reduced occurrence and reoccurrence of child maltreatment 	Child Welfare Administrative Data	Cross-site	Not as of this report writing
Proximal	Implementation	<ul style="list-style-type: none"> • Adherence to SFP B-3 curriculum 	Fidelity Set	Local	Yes

Notes. * indicates insufficient sample size to analyze due to the KSSAF target population and instrument requirements. The PSI-SF required the reporter to have had primary care of the child for “at least the past 30 days”. The TSCYC required the reporter to have had primary care of the child for “at least 30 days” and for the child to be older than 36 months.

Additional details of the evaluation are described below, including randomization, recruitment, data collection, and analysis. Throughout the duration of KSSAF, the evaluators managed, analyzed, interpreted, and reported data at regular intervals to the cross-site evaluation, federal partners, and the Steering Committee members. The KSSAF evaluation plan made strong efforts to incorporate the ACF emphasis on child and adult well-being indicators by incorporating and analyzing these important metrics.

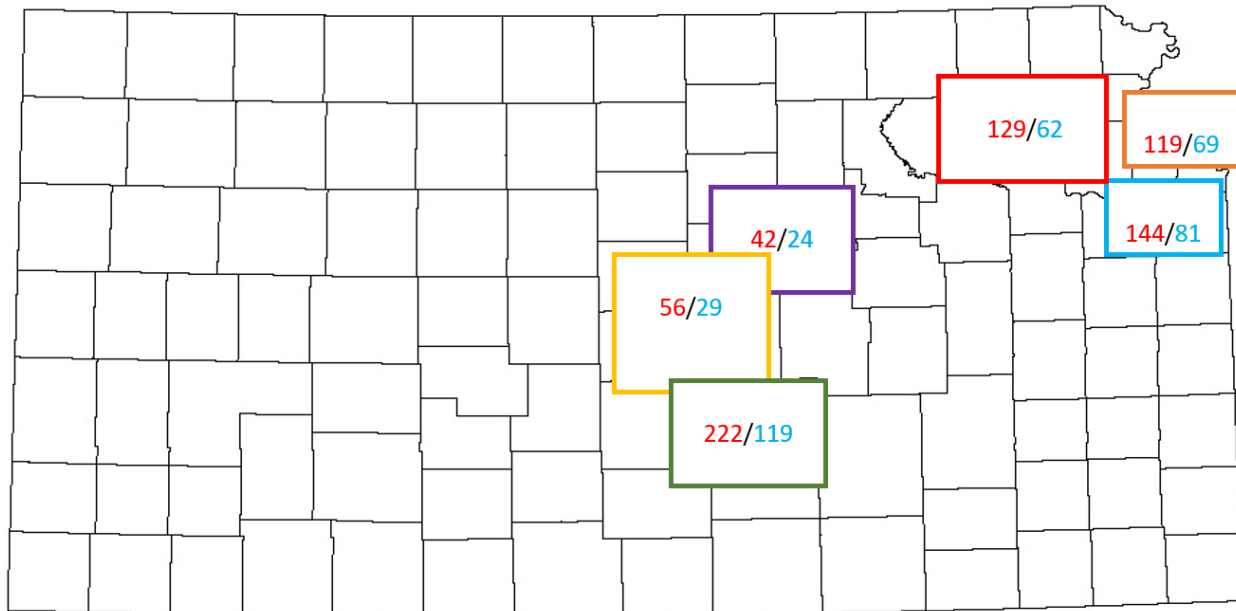
Randomization

The KSSAF project utilized an experimental design with random assignment to treatment (e.g., SFP B-3) and control conditions (e.g., child welfare services as usual). The process of determining eligibility and assigning cases to the treatment or control conditions relied heavily on the site coordinators identifying potentially eligible families within their organizational databases. Site coordinators utilized the eligibility criteria (see *Section II* for eligibility criteria) to establish a list of eligible children and families 60-days prior to the start of an implementation cycle, see *Appendix E* for the final randomization process.

After eligibility was confirmed by the site coordinators with case managers, the evaluators (KU) were sent a list of eligible families and conducted the random assignment by utilizing a random number generator in Microsoft Excel. Once chronologically sorted, group assignment was allocated by the respective randomization ratio (i.e., 1:1 or 2:1). Initially, during Cycles 1 and 2, an even randomization ratio (e.g., 1 treatment group family: 1 control group family) was utilized; however, given the challenges of recruitment for rural implementation sites, the design criteria was revised, in consultation with our federal partners and steering committee members, to increase the number of treatment group families for recruitment. Cycles 3-9 utilized an uneven randomization ratio (e.g., 2 treatment group families: 1 control group family). The final randomization ratio for cycles 1-9 was 1.85 treatment group families: 1 control group family. The six implementation sites yielded similar overall randomization ratios (see *Table 3.3* below). For an additional randomization breakdown of treatment and control group numbers by site, see *figure 3.4* below.

Table 3.3. Final Randomization Numbers by Implementation Site		
Site	# of Families Randomized	Randomization Rate
Hutchinson	56 Tx : 29 Control	1.93
Salina	42 Tx : 24 Control	1.75
Wichita	222 Tx : 119 Control	1.87
Kansas City	119 Tx : 69 Control	1.72
Olathe	144 Tx : 81 Control	1.78
Topeka	129 Tx : 62 Control	2.08
Total	712 Treatment : 384 Control	1.85

Figure 3.4. Treatment and Control Group Numbers by Implementation Site



It is important to note that neither *Table 3.3* nor *Figure 3.4* include the ten aftercare/family preservation cases. The final randomization pool is $n=1096$, not including the 10 aftercare/family preservation families. The 10 aftercare/family preservation families were not randomized and were primarily added to the rural SFP B-3 implementation sites (i.e., Salina [4 families] and Hutchinson [4 families]) to meet fidelity group requirements for SFP B-3; both Kansas City and Wichita sites each had 1 family preservation case. Including the 10 aftercare/family preservation families the final sample for the KSSAF project is $N=1106$. For purposes of the *impact evaluation*, these cases were essentially treated as wildcards, and were not included.

Random Assignment & Treatment Intervention

Children allocated to the control group received treatment as usual through each of the two partnering child welfare agencies. Cases allocated to the treatment group and who were contacted by the Site Coordinator were offered to participate in the Strengthening Families Program: Birth-to-Three (SFP B-3) in addition to child welfare services as usual. The SFP B-3 curriculum is an adaptation of the original SFP curriculum that was targeted for families with children 3-16 years old; KSSAF implemented this adapted curriculum over 16 weeks (14 content sessions) to allow for data collection. The original SFP curriculum has a large evidence-base that has shown the program to be effective in decreasing risk factors for mental health issues, later drug abuse, and delinquency by improving parenting skills, increasing family strengths, and a child's social competencies (Kumpfer, Alvarado, Smith, & Bellamy, 2002). The KSSAF project was an adaption of the evidence-based SFP intervention to test the effectiveness of SFP B-3 curriculum with particular attention to families affected by substances with children in out-of-home placement who are between the ages of 0 and 47 months. The SFP B-3 curriculum was based on the same structural model as the original SFP parenting intervention and the age variants (Ahearn Greene, 2019).

Enrollment

KSSAF Enrollment began in August 2015 and ran through June 2019, yielding nine implementation cycles, at six sites across the state of Kansas. Cycles 1 (Fall 2015) and 2 (Spring 2016) had four implementation sites (three urban sites and one rural site); Cycles 3, 4, 6, 7, 8, and 9 consisted of five implementation sites (four urban sites and one rural site); and Cycle 5 (summer 2017) implemented at one urban site. *Table 3.5* details, per cycle, the number of implementation sites and the total number of families enrolled between August 2015 and June 2019.

Table 3.5. Cycle, Implementation Sites, and Total Families Enrolled		
Cycle Number	Number of Implementation Sites	Total # of Families Enrolled
Cycle 1	4 Sites	38
Cycle 2	4 Sites	43
Cycle 3	4 Sites	42
Cycle 4	5 Sites	51
Cycle 5 (Sum. 2017)	1 Site	13
Cycle 6	5 Sites	47
Cycle 7	5 Sites	52
Cycle 8	5 Sites	48
Cycle 9	5 Sites	41

For all cycles, the Site Coordinator made the initial contact to each potential randomized treatment participant; this was referred to as “recruitment”, which occurred approximately two weeks before the scheduled cycle start date. During recruitment, site coordinators would contact potential eligible treatment participants, by phone or in-person, asking if they would like to voluntarily participate in a parenting-skills intervention. If the participant(s) agreed, their information was forwarded to the Implementation Team Coordinator at the KUSSW. All families who orally agreed to participate were enrolled into the SFP B-3 group and data collection packets were created for each family by the KUSSW implementation team. Based on the cross-site requirements and eligibility criteria, site coordinators decided who would fulfill the roles of the Family Functioning Adult (FFA) and Recovery Domain Adult (RDA), if applicable (FFA, RDA and focal child roles defined below).

Total enrollment for the KSSAF program, between August 2015 and June 2019 was 314 families (including the 10 aftercare/family preservation families). *Table 3.6* below, lists in detail, by implementation cycle, the number of families, adults and children recruited, enrolled, completed pre-test and post-test measures, and the total number of dropouts (D/O) per cycle. Families were considered “recruited” if the respective agency’s Site Coordinator contacted or attempted to contact, either in-person or via phone, the treatment-eligible case. Families were considered “enrolled” if they consented to the evaluation and were entered into the Electronic Service Log (ESL) data system and were enrolled in the SFP B-3 intervention. SFP B-3 was considered “completed” if the enrolled families attended 10 or more SFP B-3 sessions, per fidelity guidelines.

Table 3.6. Final KSSAF Tracking Table: Recruitment, Enrollment, Data Collection, and Intervention

Cycle #	A. Recruited			B. Enrolled			C. Pre-test Completed			D. Post-test Completed			E. SFP B-3 Completed			D/O
	Fam	Child	Adts	Fam	Child	Adts	Fam	Child	Adts	Fam	Child	Adts	Fam	Chd	Ad	Fam
Cycle 1 Total	38	50	61	31	38	46	29	29	34	27	27	32	27	36	44	3
Cycle 2 Total	43	60	63	34	48	52	32	32	36	29	29	31	25	34	33	9
Cycle 3 Total	42	50	62	36	46	59	36	36	36	35	35	35	32	38	47	5
Cycle 4 Total	51	74	78	42	64	62	42	42	42	31	31	31	32	53	49	10
Cycle 5 Wichita	13	16	25	9	11	14	9	9	9	9	9	9	8	10	16	2
Cycle 6 Total	47	68	74	41	61	68	40	40	40	33	33	33	33	48	55	8
Cycle 7 Total	52	66	81	45	60	68	43	43	43	29	29	29	32	41	47	14
Cycle 8 Total	48	63	69	42	56	61	42	42	58	27	27	37	26	25	31	16
Cycle 9 Total	41	47	59	34	40	47	34	34	46	23	23	31	24	26	31	11
Cumulative Total	375	496	572	314	424	477	307	307	344	243	243	268	239	311	353	78

Data Collection & Management

As required by the cross-site evaluation, each case (i.e., family) must have at least one adult identified as the family functioning adult and the recovery domain adult, and one child identified as the focal child. The *family functioning adult (FFA)* was the adult in the respective case that was considered the primary caregiver and who had the goal of reunification with the focal child. The *recovery domain adult (RDA)* was the adult in the respective case that was substance-affected; if there was no RDA for the respective case, or if the individual affected by substances chose not to participate in services, then the FFA would also fulfill the role of the RDA. In one-parent cases, the participating adult would fulfill the role of both the FFA and RDA; in two-parent cases, where both adults were considered the “primary caregiver”, the mother would fulfill the role of FFA as the default. The focal child must have met the aforementioned eligibility criteria; if more than one child within a case met the eligibility criteria then the youngest child within the given case would be selected to fulfill the role of the focal child. The FFA would complete both the family-functioning assessments and the child assessments. The RDA would complete both recovery assessments. The *focal child* was the child who received the SFP B-3 services.

The evaluation team collected data, in-person, at baseline and program exit for all implementation sites for every cycle. Both baseline and post-test data collection took approximately 45 minutes to one-hour, depending on group size and staffing resources. KUSSW staff was present to assist participants in completing their cross site and local measures and to ensure proper completion of standardized instruments and minimize missing data. If the participant felt uncomfortable answering a question, they did not have to provide an answer. Within the days after data collection, each packet would be opened and reviewed for completion

of data or missing data. After being reviewed, the instruments were placed in the family's correct site folder with their Case ID's on the front. Once collection was complete for all sites, data entry began in REDCap for all instruments and validated once more.

Standardized instrument data collection for the KSSAF project was handled solely by the KUSSW evaluation team for the entirety of the project. Although this was a significant time and monetary commitment (i.e., travel to rural locations, transportation, etc.), this decision was made prior to program start in an attempt to ease the burden on site implementation staff and to ensure accurate consenting and data collection procedures. The KUSSW evaluation team attended data collection once at each implementing site. At times, slight modifications were made to the data collection schedules due to staffing resources, less-than-ideal weather conditions (i.e., snow/ice storms, tornadoes), and to enhance efficiency with time traveled and administration of program incentives (i.e., gift cards). At post-test, the KUSSW evaluation team collected program exit forms. Incentives were provided to consented individuals after all pre-test and program exit data was completed and collected by the KUSSW evaluation team.

The cross-site evaluation required that the identified FFA and RDA within each case complete specific standardized instruments. Cross-site measures completed by the FFA included: the Adult-Adolescent Parenting Inventory – Second Edition (AAPI-2); the Center for Epidemiologic Studies – Depression (CES-D); Parenting Stress Index – Short Form (PSI-SF); and the Trauma Symptom Checklist for Young Children (TSCYC). Cross-site measures completed by the RDA included: the Addiction Severity Index – Self Report form (ASI); and the Trauma Symptom Checklist – 40 Item (TSC-40). Bi-annually (in April and October) cross-site measures for each of the reporters, state administrative recovery data, and state administrative child welfare data were uploaded to a secure cross-site portal. The instruments uploaded were scored by Mathematica Policy Research and returned to the respective grantee with scored variables and norm scores, if applicable.

Given the target population of the KSSAF project (i.e., children 0-47 months and in out-of-home [OOH] placement), the PSI-SF, which requires the child to have been in the custody of the respondent for the past 30 days, and the TSCYC, which is for children 36 months and older who have been in the custody of their parents for the past 30 days, were rarely administered to KSSAF participants. The vast majority of the focal children (n=306; 97.5%) were in out of home placement at the time of program enrollment.

For the implementation/process evaluation data collection, select data elements were gathered by implementation staff at each respective implementation site and were sent to KUSSW for data entry and analysis. *Table 3.7* details each set of measures/information, what staff were responsible for completion, a brief description of the forms, and the administration time-point/frequency.

Set #	Implementation Staff – Completed By:	Description	Administration Frequency
Set #1	Site Coordinator	<ul style="list-style-type: none"> • Case Member Demographic Information • Case Enrollment Data 	Baseline
Set #2	Site Coordinator	<ul style="list-style-type: none"> • SFP B-3 Exit & KSSAF Closure Dates • Permanency Question • SFP Site Information Survey 	Program Exit
Set #3 (Appendix C)	Group Leaders	<ul style="list-style-type: none"> • Implementation Fidelity & Content Areas • Family Attendance • SFP Weekly Fidelity Checklist 	Weekly
Set #4 (Appendix D)	Group Leaders	<ul style="list-style-type: none"> • Set #3 • Family Engagement 	Baseline & Program Exit

Additional information uploaded to the cross-site evaluation included state administrative recovery data for adult participants who provided a separate written consent to access their treatment data, if applicable, and state child welfare safety and permanency data for the KSSAF focal child. Both administrative data sets were obtained through partnering agencies: Kansas Department of Aging and Disability Services (KDADS) and the Kansas Department of Children and Families (DCF), respectively. Memorandums of Understanding (MOU) were obtained in 2015 from both agencies detailing an agreement for bi-annual receipt of data (although, due to staff turnover at KDADS data was not always received in time for upload). A representative at KDADS, the state substance use treatment record agency, was a member of the KSSAF Steering Committee and was an integral part in obtaining state substance use treatment records for the KSSAF participants, bi-annually. A representative at DCF, the administrative child welfare agency, has a long-standing relationship with researchers at the KUSSW and was a vital role in obtaining biannual (sometimes more frequent, depending on reporting needs) child welfare administrative data for all children younger than 48 months between the years 2015 – 2019.

Utilizing the state child welfare administrative data, the final randomization pool was able to be linked to the child welfare data and outcomes (hereinafter referred to as “DCF data”).

Descriptives: Randomization Pool – Treatment and Control

As mentioned previously, the final KSSAF project sample includes 1,106 children, however, ten cases were aftercare/family preservation cases that were not randomized but were included in the intervention to meet fidelity group requirements, primarily needed by the rural implementation sites. The rural implementation sites (Hutchinson and Salina) each had 4 aftercare/family

preservation families over the duration of KSSAF implementation; two urban sites, Kansas City and Wichita, each had 1 aftercare/family preservation family over the duration of KSSAF implementation. Not including the 10 aftercare/family preservation families, the final *randomization* pool was n=1096.

Included in the descriptive statistics below are 1,096 children who were eligible for KSSAF randomization during one of the nine randomization time points across the duration of the project. As mentioned, the randomization process/period began 60-days prior to the scheduled start date of the respective implementation cycle (see *Appendix E*). Of the 1,096 children eligible for randomization, 384 children were allocated to the control group and 712 children were allocated to the treatment group. All 1,096 children randomized had an associated DCF child welfare case file.

Of the 712 children allocated to the treatment group, 362 cases were contacted and verbally agreed to participate in the KSSAF project. Within the remaining 350 cases that were allocated to the treatment group: 178 cases were contacted, offered to participate, and declined participation and 172 cases were never contacted. Reasons for declining the intervention are detailed in *Table 3.8* below and in *Appendix F, Evaluation Flowchart*. Reasons for not contacting the 172 cases include: implementation groups were at capacity and no treatment group spots were available; case managers did not respond in time for sufficient recruitment; and recruitment period had closed (i.e., no families, per fidelity, were allowed to join the SFP B-3 group after curriculum session 3).

Table 3.8. Reasons for Declining Intervention for Cases Randomly Assigned to Treatment Group (n=178)	
Reason for Declining	# of Cases (n)
Unresponsive/Attempted Contact/No Response	46
Declined/Not Interested in KSSAF	41
No Contact Information for Case/No Way to Contact	11
Work/Schedule Conflict	23
Child Returned Home/Reintegration Approaching	12
Verbally Agreed, Did Not Show Up to Class	11
No Notes on Family	11
Transportation Issues	8
Jail or In Patient Treatment	6
No Longer Eligible for Program/Not Longer Meet Study Criteria	5
Relinquishment	1
Other	3

Among the 362 cases that were recruited to participate in the intervention, 304 cases were enrolled in the intervention, 58 cases did not attend any SFP B-3 sessions.

Univariate analyses (i.e., descriptive statistics) were conducted separately for the total sample (N=1106), the control group (n=384), the treatment group (n=712), and aftercare/family preservation cases (n=10). The aftercare and family preservation cases were analyzed separate from the treatment group cases because they were not in the randomization pool and were *not* included in the impact analysis (see *Section VIII*). It is important to note that the variables used to conduct the univariate analyses were pulled from the Kansas DCF child welfare data base. Four aftercare/family preservation cases did not have an associated child welfare record and therefore were not included in some of the univariate analyses. Data were triangulated from KSSAF demographic records to complete the descriptives as best as possible, however, not all demographic categories collected by KSSAF were as detailed as the child welfare database (i.e., ethnicity, race). Additionally, child welfare variables (i.e., reasons for removal, discharge code, etc.) were not available for four aftercare/family preservation families.

The total sample (N=1106), including all control, treatment and aftercare/family preservation cases, was primarily White (74.6%) males (53.5%), identified as non-Hispanic (87.8%), with a mean age of 12.61 (SD= 12.5) months. The control group and treatment group children had similar results being primarily composed of non-Hispanic, White males with a mean age slightly over 12 months. Of the aftercare/family preservation children whom information was available for, they were primarily non-Hispanic (66.7%), White (66.7%) females (60%), with a mean age of 20.7 months.

Two variables were collapsed (e.g., race and ethnicity) to run additional analyses to see if the control and treatment group children varied on demographic variables. Race was transformed into a trichotomous variable (i.e., White, Black/African American, all other races) and ethnicity was transformed into a dichotomous variable (i.e., non-Hispanic/Latino and Hispanic/Latino); these transformed variables are presented in *Table 3.9*, below.

Table 3.9. Descriptive Statistics: Entire Sample and by Random Assignment				
Categorical Variables	Total Sample (%) (N=1106)	Control Group % (n=384)	Treatment Group % (n=712)	After Care/Family Preservation % (n=10)
Biological Sex				
Female	514 (46.5)	191 (49.7)	317 (44.5)	6 (60)
Male	592 (53.5)	193 (50.3)	395 (55.5)	4 (40)
Race (All Categories)				
White	822 (74.3)	279 (72.7)	539 (75.7)	4 (66.7)
Black/AA	152 (13.7)	63 (16.4)	88 (12.4)	1 (16.7)
Asian	4 (.4)	3 (.8)	1 (.1)	0
Native Hawaiian/PI	1 (.1)	1 (.3)	0	0
American Indian/ Alaskan Native	11 (1)	3 (.8)	8 (1.1)	0
Multi-Racial	111 (10.1)	35 (9.1)	75 (10.5)	1 (16.7)
Race (3 Categories)				
White	822 (74.3)	279 (72.7)	539 (75.7)	4 (66.7)
Black/AA	152 (13.7)	63 (16.4)	88 (12.4)	1 (16.7)
All Other	132 (11.9)	42 (10.9)	85 (11.9)	1 (16.7)
Ethnicity (All Categories)				
Not Hispanic	969 (87.8)	340 (88.5)	623 (87.6)	6 (66.7)
Mexican	121 (11)	40 (10.4)	78 (11)	3 (33.3)
Puerto Rican	1 (.1)	0	1 (.1)	0
Other Spanish Cultural Origin	2 (.2)	0	2 (.3)	0
Unable to Determine	11 (1)	4 (1)	7 (1)	0
Ethnicity (Dichotomous)				
Non-Hispanic/Latino	969 (87.8)	340 (88.5)	623 (87.6)	6 (66.7)
Hispanic/Latino	137 (12.3)	44 (11.5)	89 (12.5)	3 (33.3)
Age @ Entry of Associated Episode - Categorical				
1 – 6 Months	296 (32.2)	104 (33.2)	191 (31.8)	1 (16.7)
7 – 12 Months	169 (18.4)	56 (17.9)	112 (18.7)	1 (16.7)
13 – 18 Months	133 (14.5)	42 (13.4)	89 (14.8)	2 (33.3)
19 – 24 Months	105 (11.4)	41 (13.1)	64 (10.7)	0
25 – 30 Months	71 (7.7)	24 (7.7)	47 (7.8)	0
31 – 36 Months	79 (8.6)	25 (8)	53 (8.8)	1 (16.7)
37 – 42 Months	47 (5.1)	15 (4.8)	32 (5.3)	0
43 – 47 Months	19 (1.7)	6 (1.9)	12 (2)	1 (16.7)
	Total Sample (N=1106)	Control Group (n=384)	Treatment Group (n=712)	After Care/Family Preservation (n=10)
Continuous Variable	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Age @ Entry of Associated Episode (Months)	12.61 (12.5)	12.08 (12.4)	12.84 (12.5)	20.67 (16.1)

Cross-tabulations were conducted on all four dependent demographic variables to observe variation among partnering agencies, across random assignment groups. *Table 3.10* below provides the descriptive statistics for each agency for both the treatment and control groups. The following descriptives include only the children that were eligible for randomization (n=1,096); therefore, the 10 aftercare/family preservation cases were excluded.

Examining the descriptive statistics for SFCS, control group children were primarily non-Hispanic/Latino (89%), White (78%), males (53%), with 65% of the control sample being between the ages of birth and 18 months old. Very similar descriptives were found for the SFCS treatment group. Demographics varied slightly for the KVC control group; the KVC control group was primarily non-Hispanic/Latino (88%), White (68%), females (52%), with 63% of the control sample being between the ages of birth and 18 months. The KVC treatment group had similar results except the treatment group consisted of more: males (55%) than females (45%); had a slightly higher percentage of children who identified as White (73%); and had a slightly lower percentage of children who identified as Black/African American, compared to the KVC control group. See *Table 3.11* for more information.

Table 3.10. Descriptive Statistics by Agency		
Categorical Variables	Saint Francis Community Services (Control = 172; Treatment = 320)	KVC (Control = 212; Treatment = 392)
Female - Control	81 (47%)	110 (52%)
Male - Control	91 (53%)	102 (48%)
Female - Tx	140 (44%)	177 (45%)
Male - Tx	180 (56%)	215 (55%)
White - Control	134 (78%)	145 (68%)
Black/AA - Control	17 (10%)	46 (22%)
All Other – Control	21 (12%)	21 (10%)
White – Tx	254 (79%)	285 (73%)
Black/AA – Tx	28 (9%)	60 (15%)
All Other – Tx	38 (12%)	47 (12%)
Non-Hispanic/Latino – Control	153 (89%)	187 (88%)
Hispanic/Latino - Control	19 (11%)	25 (12%)
Non-Hispanic/Latino – Tx	283 (88%)	340 (87%)
Hispanic/Latino - Tx	37 (12%)	52 (13%)
1 – 6 Months - Control	47 (33%)	57 (33%)
7 – 12 Months- Control	26 (18%)	30 (17%)
13 – 18 Months- Control	19 (14%)	23 (13%)
19 – 24 Months- Control	19 (14%)	22 (13%)
25 – 30 Months- Control	13 (9%)	11 (6%)
31 – 36 Months- Control	10 (7%)	15 (9%)
37 – 42 Months- Control	5 (4%)	10 (6%)
43 – 47 Months- Control	2 (1%)	4 (2%)
1 – 6 Months- Tx	90 (33%)	101 (31%)
7 – 12 Months- Tx	49 (18%)	63 (19%)
13 – 18 Months- Tx	42 (15%)	47 (14%)
19 – 24 Months- Tx	27 (10%)	37 (11%)
25 – 30 Months- Tx	22 (8%)	25 (8%)
31 – 36 Month- Tx	28 (10%)	25 (8%)
37 – 42 Months- Tx	12 (4%)	20 (6%)
43 – 47 Months- Tx	2 (.7%)	10 (3%)

A dummy-coded variable (0/1) was created to compare demographic differences between treatment and control group children. The dummy variable served as the independent variable in a cross-tabulation with four dependent categorical demographic variables to observe significant demographic differences across groups (e.g., treatment and control group). The total sample size for this analysis was 1096 randomized children. Children in the control group were not statistically significantly different for children in the treatment group on any of the four tested demographic variables: biological sex, race (trichotomous), ethnicity (dichotomous), and age (categorical).

Descriptives for the entire sample, excluding aftercare/family preservation cases (n=1096), were examined by implementation site. Demographics by implementation site are similar to the demographics observed by agency. A notable difference was found in the rural locations (e.g. Salina and Hutchinson) versus the metropolitan locations (e.g., Kansas City, Olathe, and Topeka), including: less racial diversity. Specifically, KVC's metropolitan locations (Kansas City in particular) were comprised of a higher percentage of children who identified as Black/African American. See *Table 3.11* below for more details.

Table 3.11. Descriptive Statistics by Implementation Site

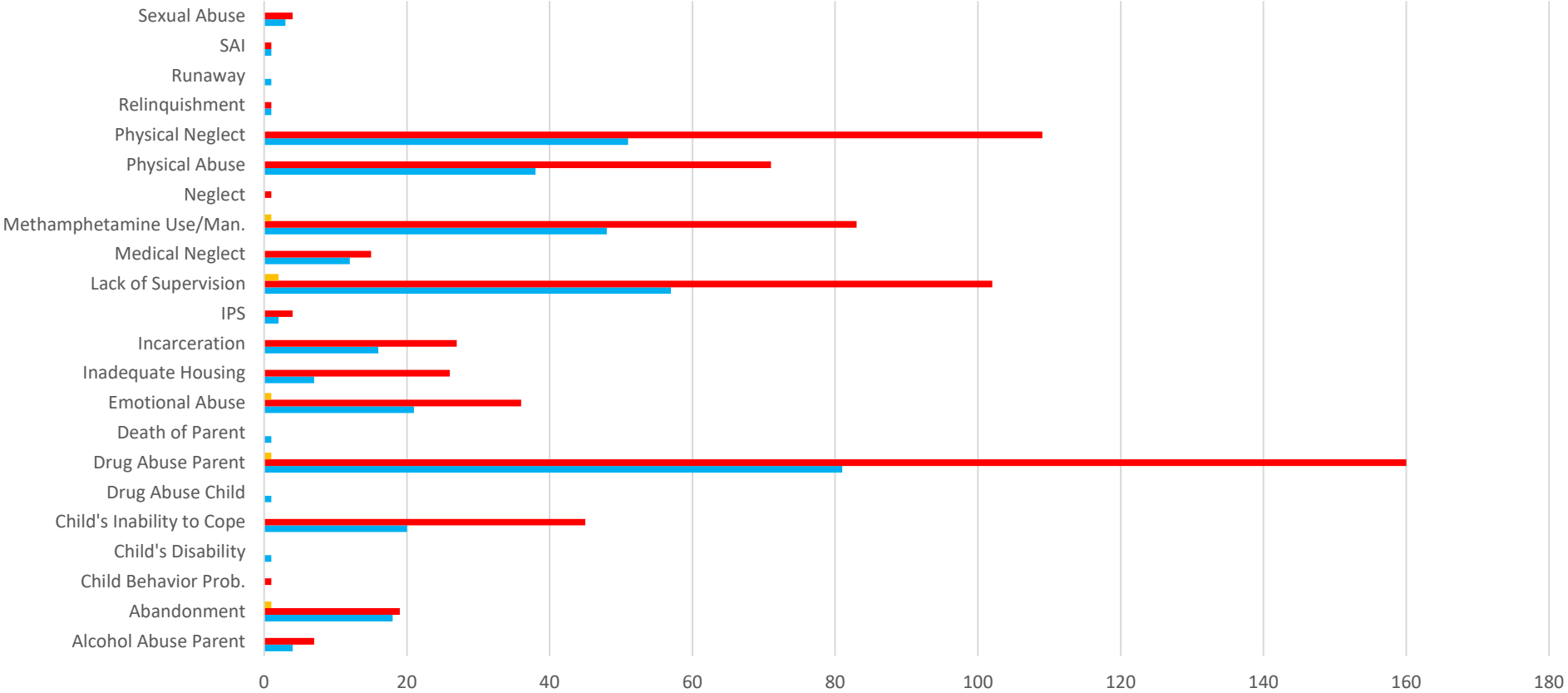
Categorical Variables	Hutchinson* (n=85)	Salina*(n=66)	Wichita* (n=341)	Kansas City ^ (n=189)	Olathe ^ (n=224)	Topeka ^ (n=191)
Biological Sex						
Female - Control	17 (59%)	8 (33%)	56 (47%)	38 (55%)	38 (47%)	34 (55%)
Male - Control	12 (41%)	16 (67%)	63 (53%)	31 (45%)	43 (53%)	28 (45%)
Female - Tx	23 (41%)	13 (31%)	104 (47%)	48 (40%)	62 (43%)	67 (52%)
Male - Tx	33 (59%)	29 (68%)	118 (53%)	72 (60%)	81 (57%)	62 (48%)
Race - Trichotomous						
White - Control	27 (93%)	18 (75%)	89 (75%)	45 (65%)	57 (70%)	43 (69%)
Black/AA - Control	1 (3.4%)	3 (12.5%)	13 (11%)	17 (25%)	15 (19%)	14 (23%)
All Other – Control	1 (3.4%)	3 (12.5%)	17 (14%)	7 (10%)	9 (11%)	5 (8%)
White – Tx	50 (89%)	35 (83%)	169 (76%)	74 (62%)	106 (74%)	105 (81%)
Black/AA – Tx	1 (2%)	5 (12%)	22 (10%)	33 (28%)	14 (10%)	13 (10%)
All Other – Tx	5 (9%)	2 (5%)	31 (14%)	13 (11%)	23 (16%)	11 (9%)
Ethnicity - Dichotomous						
Non-Hispanic/Latino – Control	25 (86%)	23 (96%)	105 (88%)	54 (78%)	77 (95%)	56 (90%)
Hispanic/Latino - Control	4 (14%)	1 (4%)	14 (12%)	15 (22%)	4 (5%)	6 (10%)
Non-Hispanic/Latino – Tx	49 (87%)	37 (88%)	197 (89%)	98 (82%)	128 (90%)	114 (88%)
Hispanic/Latino - Tx	7 (13%)	5 (12%)	25 (11%)	22 (18%)	15 (10%)	15 (12%)
Age @ Entry - Categorical						
1 – 6 Months- Control	8 (31%)	8 (42%)	31 (32%)	20 (39%)	17 (25%)	20 (37%)
7 – 12 Months- Control	3 (12%)	1 (5%)	22 (23%)	9 (18%)	12 (18%)	9 (17%)
13 – 18 Months- Control	4 (15%)	2 (11%)	13 (14%)	5 (10%)	11 (16%)	7 (13%)
19 – 24 Months- Control	4 (15%)	3 (16%)	12 (13%)	8 (16%)	6 (9%)	8 (15%)
25 – 30 Months- Control	4 (15%)	3 (16%)	6 (6%)	2 (4%)	6 (9%)	3 (6%)
31 – 36 Months- Control	0	1 (5%)	9 (9%)	5 (10%)	6 (9%)	4 (7%)
37 – 42 Months- Control	2 (8%)	0	3 (3%)	0	8 (12%)	2 (4%)
43 – 47 Months- Control	1 (4%)	1 (5%)	0	2 (4%)	1 (2%)	1 (2%)
1 – 6 Months- Tx	16 (31%)	14 (37%)	60 (33%)	28 (28%)	34 (27%)	39 (38%)
7 – 12 Months- Tx	9 (18%)	7 (18%)	33 (18%)	22 (22%)	20 (16%)	21 (21%)
13 – 18 Months- Tx	6 (12%)	8 (21%)	28 (15%)	12 (12%)	17 (14%)	18 (17%)
19 – 24 Months- Tx	9 (18%)	3 (8%)	15 (8%)	14 (14%)	15 (12%)	8 (8%)
25 – 30 Months- Tx	1 (2%)	2 (5%)	19 (10%)	3 (3%)	12 (10%)	10 (10%)
31 – 36 Month- Tx	6 (12%)	2 (5%)	20 (11%)	10 (10%)	14 (11%)	1 (1%)
37 – 42 Months- Tx	3 (6%)	2 (5%)	7 (4%)	10 (10%)	8 (6%)	2 (2%)
43 – 47 Months- Tx	1 (2%)	0	1 (.5%)	2 (2%)	5 (4%)	3 (3%)

Notes. * = St. Francis Community Services; ^ = KVC

In addition to examining demographic variables by group assignment, child welfare variables were also examined for the control, treatment, and aftercare/family preservation cases. Results revealed that the primary reason for removal, for both the control and treatment group was “Drug Abuse Parent”. Other common primary reasons for removal for both the control and treatment group were: lack of supervision, physical neglect, methamphetamine use or manufacturing, and physical abuse. See *Chart 3.12* below, for a detailed breakdown of all primary removal reason categories and frequencies by group.

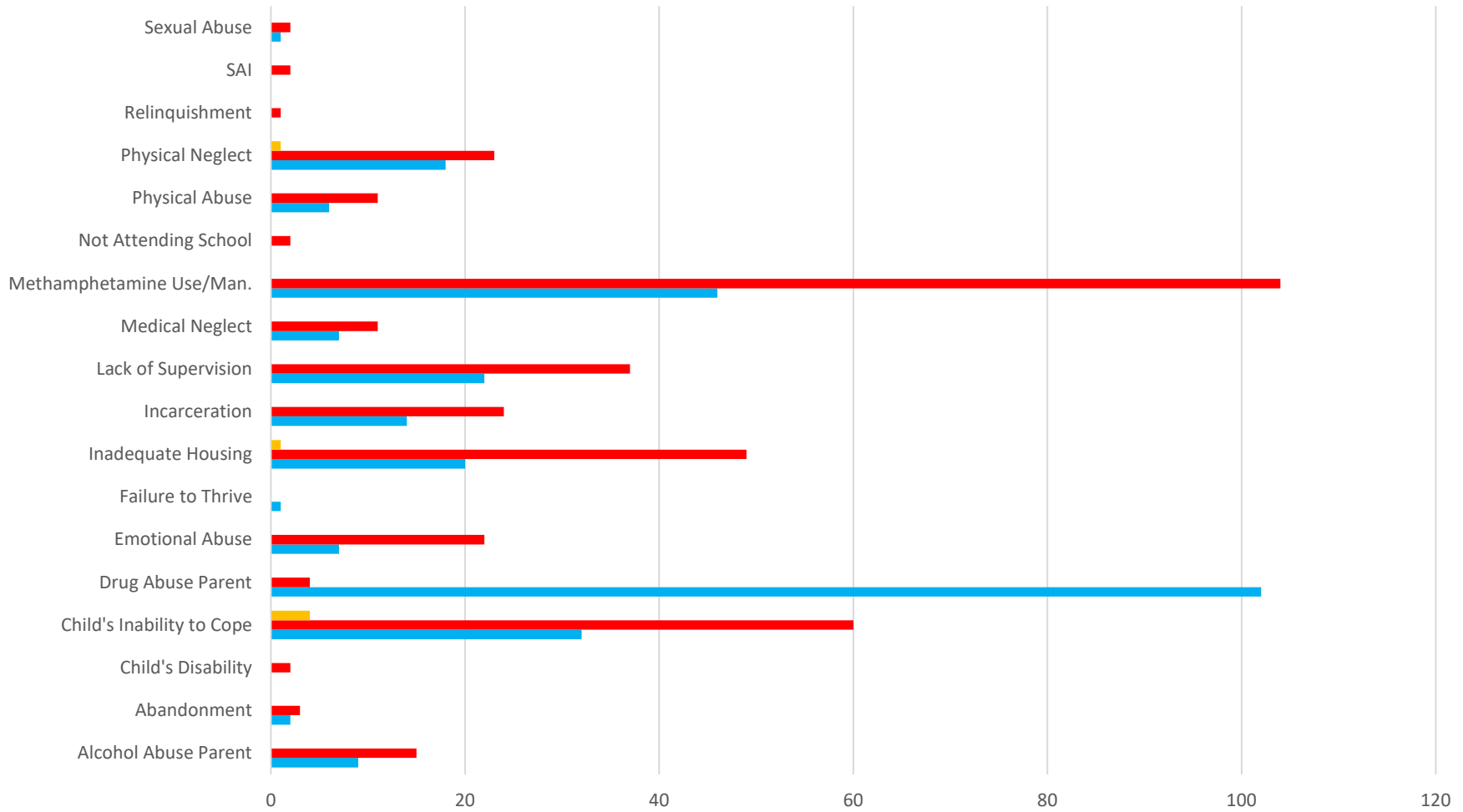
Additionally, 811 randomized children had a secondary reason for removal and 355 children had a tertiary reason for removal. Similar results were found, across assignment groups, for both secondary and tertiary reasons for removal. *Charts 3.13 and 3.14* provide more detail of all secondary and tertiary reasons for removals and the associated frequency for control group, treatment group, and aftercare/family preservation cases. *Charts 3.15 and 3.16* provide more information on out-of-home (OOH) end reason and Discharge reason for KSSAF Families.

Chart 3.12 Primary Reason for Removal by Group Assignment (N=1106)



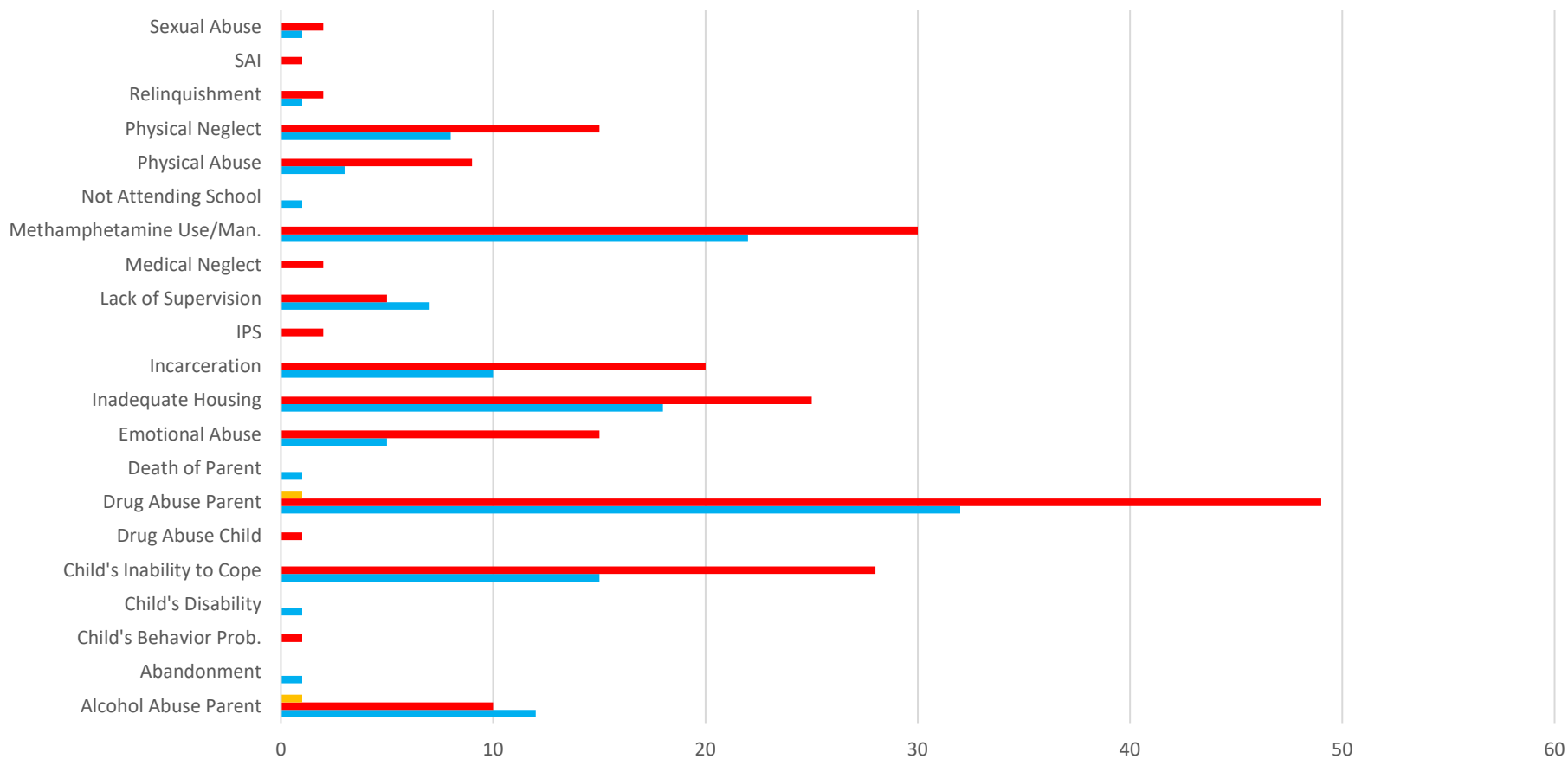
	Alcohol Abuse Parent	Abandonment	Child Behavior Prob.	Child's Disability	Child's Inability to Cope	Drug Abuse Child	Drug Abuse Parent	Death of Parent	Emotional Abuse	Inadequate Housing	Incarceration	IPS	Lack of Supervision	Medical Neglect	Methamphetamine Use/Man.	Neglect	Physical Abuse	Physical Neglect	Relinquishment	Runaway	SAI	Sexual Abuse
■ AC/FP (n=10)	0	1	0	0	0	0	1	0	1	0	0	0	2	0	1	0	0	0	0	0	0	0
■ Treatment (n=712)	7	19	1	0	45	0	160	0	36	26	27	4	102	15	83	1	71	109	1	0	1	4
■ Control (n=384)	4	18	0	1	20	1	81	1	21	7	16	2	57	12	48	0	38	51	1	1	1	3

Chart 3.13. Secondary Reason for Removal by Group Assignment (n=811)



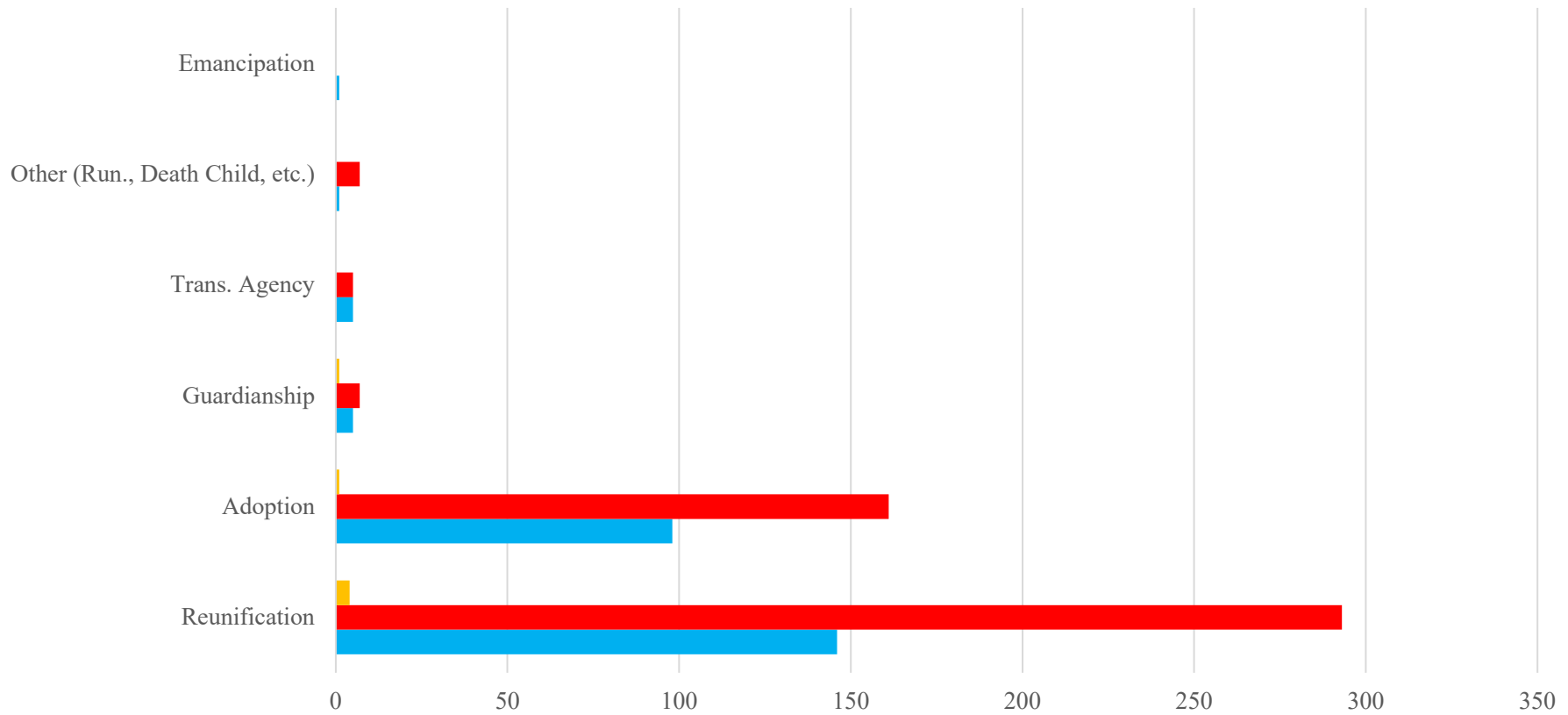
	Alcohol Abuse Parent	Abandonment	Child's Disability	Child's Inability to Cope	Drug Abuse Parent	Emotional Abuse	Failure to Thrive	Inadequate Housing	Incarceration	Lack of Supervision	Medical Neglect	Methamphetamine Use/Man.	Not Attending School	Physical Abuse	Physical Neglect	Relinquishment	SAI	Sexual Abuse
■ AC/FP (n=10)	0	0	0	4	0	0	0	1	0	0	0	0	0	0	1	0	0	0
■ Treatment (n=518)	15	3	2	60	4	22	0	49	24	37	11	104	2	11	23	1	2	2
■ Control (n=287)	9	2	0	32	102	7	1	20	14	22	7	46	0	6	18	0	0	1

Chart 3.14. Tertiary Reason for Removal by Group Assignment (n=355)



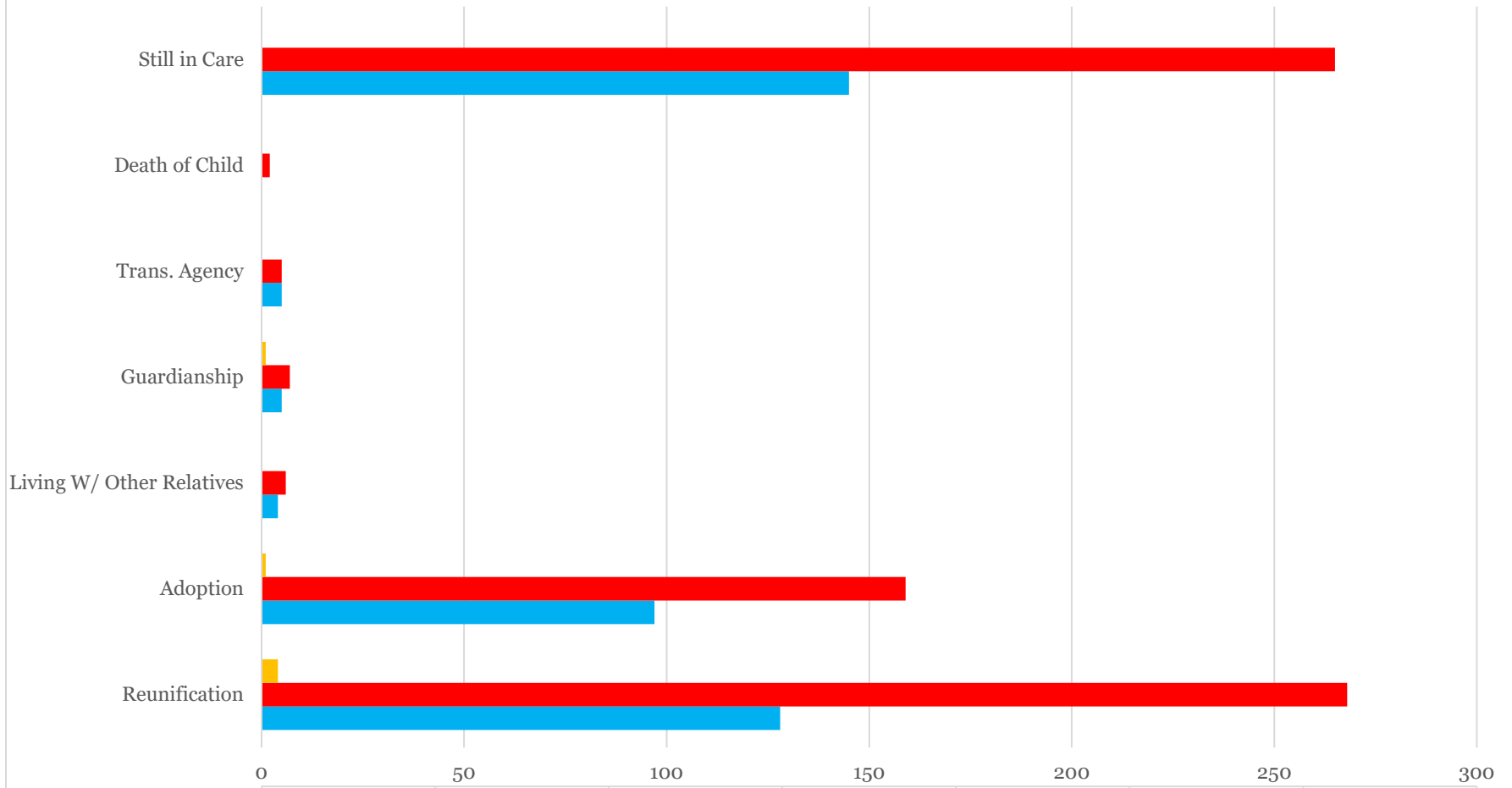
	Alcohol Abuse Parent	Abandonment	Child's Behavior Prob.	Child's Disability	Child's Inability to Cope	Drug Abuse Child	Drug Abuse Parent	Death of Parent	Emotional Abuse	Inadequate Housing	Incarceration	IPS	Lack of Supervision	Medical Neglect	Methamphetamine Use/Man.	Not Attending School	Physical Abuse	Physical Neglect	Relinquishment	SAI	Sexual Abuse
■ AC/FP (n=2)	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
■ Treatment (n=215)	10	0	1	0	28	1	49	0	15	25	20	2	5	2	30	0	9	15	2	1	2
■ Control (n=138)	12	1	0	1	15	0	32	1	5	18	10	0	7	0	22	1	3	8	1	0	1

Chart 3.15. *Out of Home End Reason (n=735)*



	Reunification	Adoption	Guardianship	Trans. Agency	Other (Run., Death Child, etc.)	Emancipation
■ AC/FP (n=6)	4	1	1	0	0	0
■ Treatment (n=473)	293	161	7	5	7	0
■ Control (n=256)	146	98	5	5	1	1

Chart 3.16. *Discharge Reason (n=1102)*



	Reunification	Adoption	Living W/ Other Relatives	Guardianship	Trans. Agency	Death of Child	Still in Care
■ AC/FP (n=6)	4	1	0	1	0	0	0
■ Treatment (n=712)	268	159	6	7	5	2	265
■ Control (n=384)	128	97	4	5	5	0	145

Six-hundred and ninety-two children have been discharged from the foster care episode that was associated with the KSSAF randomization while 410 children remain in out-of-home placement across randomization groups. Of the 692 children discharged from care, 400 have reunified: 268 children in the treatment group, 128 in the control group, and 4 (of the 6 with available DCF data) children who were receiving aftercare/family preservation service. Adoption was the second most common reason for discharge from care, with 257 children being discharged due to adoption.

Discharge Reasons – Treatment vs. Control Group

Comparing the 712 treatment group children to the 384 control group child on associated child welfare discharge reasons, 38% of the treatment group cases (n=268) have reunified, whereas only 34% of the control group cases (n=128) have reunified. Twenty-two percent of the treatment group children (n=159) have been adopted, compared to 25% of the control group children (n=97). Similar percentages for both the treatment group and control group were observed for children still in foster care, 37% and 38%, respectively. All other discharge reasons for both the treatment and control group were included less than 1% of the respective samples. *Chart 3.17* illustrates the percentage of the sample for each discharge reason for the treatment group, and *Chart 3.18* illustrates the percentage of the sample for each discharge reason for the control group.

Chart 3.17. Treatment Group Exits

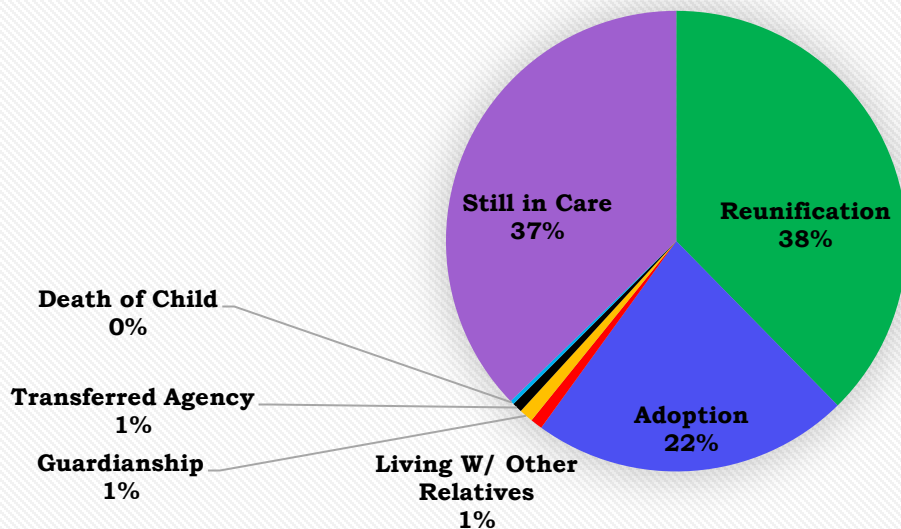
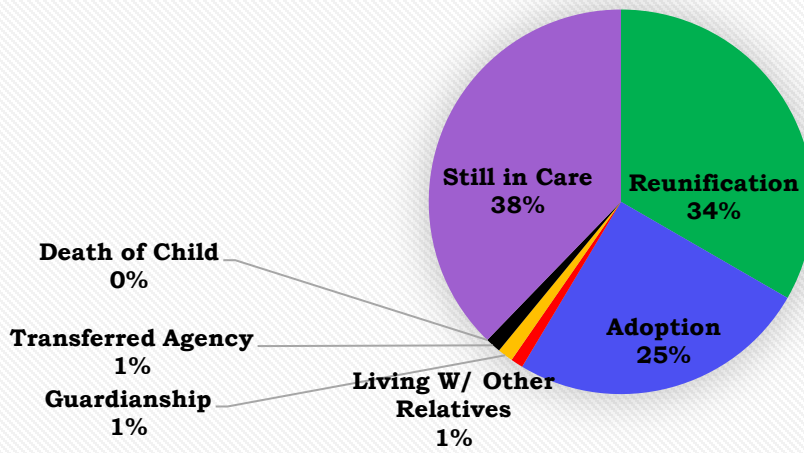


Chart 3.18. Control Group Exits



IV. Project Implementation/ Program Strategies

Based on assessed community needs and risk factors, the University of Kansas School of Social Welfare (KUSSW) chose to implement the *Strengthening Families Program (SFP)* for families with children ages birth to three (*SFP B-3*) as the evidence informed practice to affect the intended outcomes in the project's parent, child, and family skills training and education. *SFP B-3* was designed to reduce environmental risk factors and to increase personal resilience and improve protective factors to drug use in high-risk youth. Research confirms that *SFP B-3* is also effective in reducing risk precursors for mental disorders and juvenile delinquency. *SFP B-3* has been adapted, translated, and implemented in a variety of cultures and communities including the type of families served by this project (Ahearn Greene, 2019).

KSSAF families participated in an educational family skills training program called '*Strengthening Families Program*' (SFP), to positively impact the following domains: parenting, family attachment, parental substance use, understanding risk and protective factors to avoid substance use, and child behavior. It was predicted that through participation in the SFP program, participants, their children, and caregivers, using the combined interventions would have improved permanency, safety, and increased well-being (Ahearn Greene, 2019). Specific skills and topics that were covered during the 16-week (14 content sessions) program included: basic caretaking, forming attachments, creating goals, giving directions, setting limits, play activities, and empathy building.

Implementation guidelines were established throughout the KSSAF project as a direct response to the implementation needs and issues posed by each implementation site. Established guidelines included the following: group capacity guidelines; eligibility criteria; data collection requirements; family dyad fidelity guidelines; SFP B-3 family practice guidelines; substance use impairment response; make-up session guidelines; dropout/"grace period" guidelines; pre-school and child care guidelines; and re-recruitment information. KSSAF Guidelines were included with the project's Semi-Annual Progress Reports, if applicable.

Site coordinators, Steering Committee members, Jeanie Greene (SFP B-3 implementation specialist), KUSSW's implementation team coordinator, and KUSSW's implementation team were essential to the successful implementation of KSSAF and the project's continued sustainability. One essential strategy utilized by the implementation staff was monthly technical assistance phone calls with Jeanie Greene (Implementation Specialist), Site Coordinators, agency implementation staff, and KU's Implementation Team Coordinator. The technical assistance (TA) calls allowed for cross-partner communication, any questions staff had regarding curriculum to be addressed, discussion on how to combat low engagement, implementation, and encouraged discussion about adaptations and site-specific circumstances. TA calls provided an opportunity for site coordinators to give an update on their implementation site (e.g., how many adults, how many children, current session, dropout cases, make-ups sessions, etc.).

Another essential component to successful implementation of the KSSAF project was the KUSSW's implementation team coordinator (ITC). The ITC maintained weekly contact with site coordinators to address immediate implementation issues, monitor participant attendance, make-up sessions, dropout cases, weekly fidelity, and help problem solve any issues that may have arisen during cycle implementation. Further, the ITC coordinated site data collection, data entry, and validation along with project coordination of multiple SFP B-3 Basic/Advanced Trainings with Jeanie Greene, the Implementation Specialist, at Ahearn Greene Associates. The ITC was in charge of training additional research staff that were hired at The University of Kansas (e.g. student hourlies, new project coordinator, new graduate research assistants). *Table 4.1*, below details the essential functions of the implementation team coordinator.

Table 4.1. Implementation Team Coordinator Job Duties by Domain

Duty	Activity	Domain
Data Collection	Administered all baseline and program exit instruments and forms.	Evaluation
Data Validation	Supervise data validation and validate data.	Evaluation
Data Entry	Supervise data entry and student hourlies	Evaluation
Weekly contact with Site Coordinators at six Implementation sites.	Discuss any immediate implementation issues or questions regarding data instruments or missing/incomplete data.	Fidelity Monitoring/Coordination
Documentation of Dropouts and No shows	Track all drop-outs and no shows	Data Monitoring/Coordination
Weekly Monitoring of attendance	Monitor parent attendance and make-up completion	Data/Fidelity Monitoring
KSSAF TA Calls	Technical Assistance Calls with Jeanie Greene, the Implementation Specialist, with the 5 Site Coordinators. Discussed implementation issues, curriculum questions, parent/group issues.	Monitor Fidelity/Coordination
Documentation of all missing data	Track missing or incomplete data from participants across all five sites.	Data Monitoring
Documentation of participant's recruitment, enrollment, completion of program, dosage, and dropouts.	Track all of these on the KSSAF Tracking Table.	Data Monitoring
Implementation Guidelines	Edit/Create/Disperse to implementation Teams	Implementation and Evaluation
Steering Committee Meeting	Write meeting minutes	Documentation/Dissemination
Training Coordination	Set up SFP B-3 Basic/Advanced Trainings (e.g. printing, catering, materials, equipment, location, attendees, etc.)	SFP B-3 Training
Trainer to additional KSSAF Staff	Train incoming staff members on KSSAF project.	KSSAF Training/Orientation

V. RPG Partnerships Collaborative Challenges and Successes

The Wilder Collaborative Factors Inventory was used annually to measure 6 domains: 1) quality of collaboration 2) change in environment 3) member characteristics 4) communication 5) shared purpose & process and 6) collaboration resources. This 40-item tool (5-point scale) has been used by the Children's Bureau's National Quality Improvement Center on the Privatization of Child Welfare Services. This tool has demonstrated strong reliability (James Bell Associates, 2012; Mattessich, Murray-Close, & Monsey, 2001; Ziff et al., 2010).

The Wilder Collaborative Factors Inventory (Wilder Survey) was anonymously administered yearly to the KSSAF Steering Committee members. Identifying information (i.e., role within agency, agency affiliation, etc.) was not gathered; rather the survey was used to gain insight on strengths of the KSSAF partnership/collaboration across the 6 domains of collaboration. The Wilder Survey included 40 Likert-style collaboration questions that ranged from strongly disagree (0) to strongly agree (5), participants rated each of the 40 items in reference to the KSSAF collaboration.

The sample included 47 surveys completed by the Kansas Serves Substance Abuse (KSSAF) Steering Committee members between 2015 and 2019. Individuals in attendance would complete paper copies of the Wilder survey; members not in attendance would complete an electronic copy of the Wilder survey. All surveys were voluntary and anonymous. In total, 47 Wilder surveys were completed by KSSAF Steering Committee members at a designated steering committee meeting. Data were entered, imported and analyzed in SPSS (version 24). It is important to note that although administration to the KSSAF Steering Committee members was constant, partners and individuals in attendance may have changed due to organizational operations. Additionally, the 47 surveys are not all independent, rather, members who severed on the committee all five years and attendees Steering Committees regularly will have multiple anonymous surveys.

Wilder survey scores were interpreted using the following guidelines:

- ≥ 4 : Area of strength, probably does not need special attention
- 3.0 – 3.9: Borderline, should be discussed to see if issues warrant attention
- ≤ 2.9 : Area of concern, should be addressed

Figure 5.1 demonstrates the highest average scores for the project were observed in the process structure (4.6) and communication (4.5) categories; the lowest average score was observed in the environment category (4.3) over the duration of the project. These annual data indicate growing scores in the categories of environment, process structure, and resources. The other categories of collaboration including member characteristics and communication demonstrated minimal change over all four years. Further, while process structure and purpose have been one of the highest category scores in the last two years, the 2019 results show a positive shift in scores on resources. That is, in 2015 and 2017, resources was one of the lowest categories at 3.9 and 3.8, respectively; but in 2019 resources increased to 4.3 (>4 , a possible area of strength) and is the next to lowest, not the lowest category for 2017.

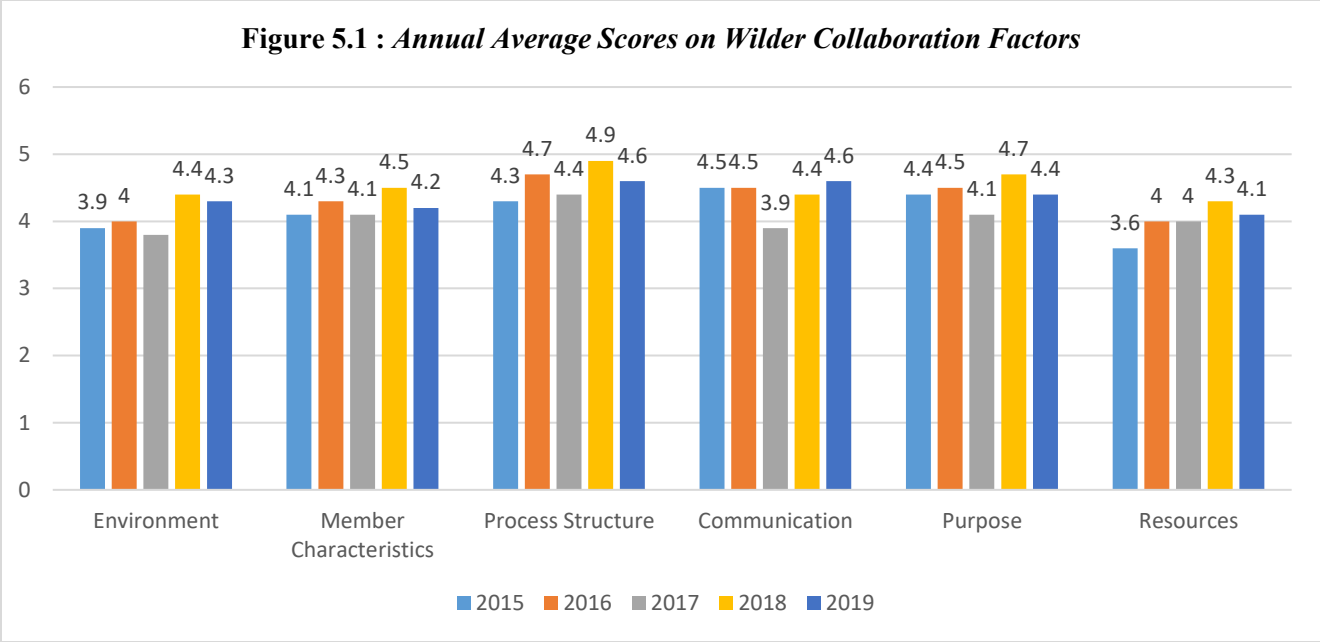


Table 5.2 presents the item level results with factor category and average scores. Using the guidelines for interpreting scores, all items between 3.0 and 3.9 are shaded in green indicating borderline issue that may warrant attention. No items were observed at or below 2.9 (area of concern, should be addressed). Among all items, the lowest scored item was: The political and social climate seems to be "right" for starting and implementing a collaborative project like this one. However, by the end of the project, all six items scored in the area of strength category and are shaded in blue. Our results as categorized by the Wilder Inventory, along with our subcategories for the "borderline" scores, are described and analyzed below.

Table 5.2 Factor Category and Factor Average Scores: KSAFF Steering Committee 2015-2019					
	2015	2016	2017	2018	2019
Environment	3.9	4.0	3.85	4.4	4.3
<i>History of collaboration or cooperation in the community</i>	4.5	4.5	4.2	4.5	4.3
<i>Collaborative group seen as a legitimate leader in the community</i>	4.3	4.1	4.1	4.5	4.2
<i>Favorable political and social climate</i>	3.0	3.1	3.4	4.2	4.1
Member Characteristics	4.1	4.3	4.1	4.5	4.2
<i>Mutual respect, understanding, and trust</i>	4.0	4.0	3.7	4.5	4.4
<i>Appropriate cross-section of members</i>	4.0	4.4	4.0	4.4	4.3
<i>Members see collaboration as in their self-interest</i>	4.8	4.5	4.5	4.8	4.6
<i>Ability to compromise</i>	4.2	4.1	4.3	4.6	4.0
Process & Structure	4.3	4.7	4.4	4.9	4.6
<i>Members share a stake in both process & outcome</i>	4.7	4.7	4.5	5.0	4.7
<i>Multiple layers of participation</i>	4.0	4.2	3.9	4.2	4.1
<i>Flexibility</i>	4.1	4.5	4.2	4.6	4.6
<i>Development of clear roles & policy guidelines</i>	3.7	4.4	4.2	4.5	4.5
<i>Adaptability</i>	3.7	4.2	4.0	4.6	3.7
<i>Appropriate pace of development</i>	4.0	4.4	3.7	4.2	4.2
Communication	4.5	4.5	3.9	4.4	4.6
<i>Open & frequent communication</i>	4.1	4.5	4.2	4.4	4.4
<i>Established informal relationships & communication links</i>	4.4	4.7	4.0	4.7	4.6
Purpose	4.4	4.5	4.1	4.7	4.4
<i>Concrete, attainable goals & objectives</i>	4.8	4.5	4.2	5.0	4.6
<i>Shared vision</i>	4.2	4.4	4.0	4.8	4.5
<i>Unique purpose</i>	4.7	4.5	4.1	4.6	3.8
Resources	3.6	4.0	4.0	4.3	4.1
<i>Sufficient funds, staff, materials, & time</i>	3.2	3.6	4.1	4.4	3.8
<i>Skilled leadership</i>	4.5	4.5	4.3	4.5	4.6

Notes. Blue Font = Strengths; Green Font = Borderline/Discuss.; Yellow Fill = Concern to address

Environment

Environmental characteristics describe how effectively groups have worked together in the past, the current political and social climate in which groups work, and the community’s perception of the legitimacy of the collaboration’s leadership. According to KSAAF participants, past collaborative ability is cause for concern (the factor score for “favorable political and social climate” was initially a 3.0, but the current environment was perceived as having a lot of potential (the overall factor score was 4.1).

5.3a	2015	2016	2017	2018	2019
Environment	3.9	4.0	3.8	4.4	4.3
History of collaboration or cooperation in the community	4.5	4.5	4.2	4.5	4.3
Collaborative group seen as a legitimate leader in the community	3.8	3.9	3.6	4.3	4.3
Favorable political and social climate	3.0	3.1	3.4	4.2	4.1

Membership Characteristics

Membership characteristics relate to perceptions and attributes of collaborative group members, ability of members to compromise, and members’ level of self-interest and investment in the group. The first factor addresses mutual trust and understanding, which are key components of a successful collaboration. Stakeholders who feel that others are willing to compromise and deem others’ efforts to be genuine will be more likely to commit to the goals of the collaboration and to support their implementation. Survey respondents rated mutual respect, understanding, and trust as an area of strength (an overall score of 4.2).

5.3b	2015	2016	2017	2018	2019
Member Characteristics	4.1	4.3	4.1	4.5	4.2
Mutual respect, understanding, and trust	4.0	4.0	3.7	4.5	4.4
Appropriate cross-section of members	4.0	4.4	4.0	4.4	4.3
Members see collaboration as in their self-interest	4.8	4.5	4.5	4.8	4.6
Ability to compromise	4.2	4.1	4.3	4.6	4.0

Process and Structure

Process and structure factors include layers of participation and decision-making, tools for developing consensus, adaptability, and pace. All of these factors were rated as strengths. The highest ranking of these factors was flexibility in decision-making and the groups’ willingness to share a stake in both process and outcome (4.7 score of strength) of the project. Flexibility is important in the collaborative process not only because it provides members with an incentive to join and remain committed to the group, but also because codified structures and behaviors can stifle new attempts at problem solving and outreach to new members. Participants also provided positive ratings (a score of 3.7, approaching strength) of members’ adaptability within the project. Participants’ responses indicated that the collaboration assumed the right amount of work at the right

pace and that the project team was able to keep up with all coordinating aspects of the project (an overall score of 4.6).

5.3c	2015	2016	2017	2018	2019
Process & Structure	4.3	4.7	4.4	4.9	4.6
Members share a stake in both process & outcome	4.7	4.7	4.5	5.0	4.7
Multiple layers of participation	4.0	4.2	3.9	4.2	4.1
Flexibility	4.1	4.5	4.2	4.6	4.6
Development of clear roles & policy guidelines	3.7	4.4	4.2	4.5	4.5
Adaptability	3.7	4.2	4.0	4.6	3.7
Appropriate pace of development	4.0	4.4	3.7	4.2	4.2

Communication

Communication is essential to effective collaboration; group efforts require open exchange of ideas between leadership and members and among members. The focus of the communication factors is on inter-participant communication, information dissemination by leadership, and leadership-participant communication. Here, KSSAF received an overall factor score of 4.4 (approaching strength). To achieve effective collaboration, the leadership must consistently inform participants about project developments and meetings and must encourage participants to work together, inside and outside the structured framework of scheduled meetings.

5.3d	2015	2016	2017	2018	2019
Communication	4.5	4.5	3.9	4.4	4.6
Open & frequent communication	4.1	4.5	4.2	4.4	4.4
Established informal relationships & communication links	4.4	4.7	4.0	4.7	4.6

Purpose

Having articulated goals that are understood and formulated by collaboration members and commitment to the collaboration itself as a means of attaining goals contribute to fulfilling the collaboration's purpose. Members will devote time and effort to the collaboration only if they are convinced that the goals are reasonable and concrete and that other members share them. Moreover, they must be committed to the general goal of creating the collaboration, understanding that its purpose is to achieve what no organization could achieve alone. A vision for the collaboration that is shared by its members, whether it is developed inside or outside the collaboration, will motivate participants to realize that vision. KSSAF received factor scores of 4.5 (strength) for goals and shared vision. The factor score for unique purpose also approached strength (3.8). The overall score for purpose was 4.4 for the project in its entirety.

5.3e	2015	2016	2017	2018	2019
Purpose	4.4	4.5	4.1	4.7	4.4
Concrete, attainable goals & objectives	4.8	4.5	4.2	5.0	4.6
Shared vision	4.2	4.4	4.0	4.8	4.5
Unique purpose	4.7	4.5	4.1	4.6	3.8

Resources

Resources such as a dedicated funding source are necessary for an on-going collaboration such as KSSAF. The KSSAF scores for funds and staffing fell within the borderline area approaching strengths (3.8). The project received higher scores when participants were asked to evaluate whether KSSAF leaders were skilled at working with people and organizations, that is, whether they had experience in the subject area, were able to minimize power struggles and turf issues, and were able to create a balance between group process and task activities. For this factor, KSSAF received an overall score of 4.0 approaching strength.

5.3f	2015	2016	2017	2018	2019
Resources	3.6	4.0	4.0	4.3	4.1
Sufficient funds, staff, materials, & time	3.2	3.6	4.1	4.4	3.8
Skilled leadership	4.5	4.5	4.3	4.5	4.6

Table 5.4 presents all forty Wilder survey questions and the mean score for all five administration time points. The survey results indicate that collaboration in the KSSAF project, after its first year of formal operations, went very well; particularly in regard to its leadership, vision, purpose, goals, communication, mutual respect, understanding, and trust that were being experienced between members. The Steering Committee also identified the primary area of collaboration in which the project was found to be weaker were surrounding the increase and stabilization of resources.

Table 5.4 Wilder Collaboration Factors Inventory Mean Values by Time Point and Overall (N=47)

Factor	Statement	Summer 2015 (n=7)	Summer 2016 (n=12)	Fall 2017 (n=10)	Fall 2018 (n=9)	Summer 2019 (n=9)	Overall (N=47)
<i>History of collaboration or cooperation in the community</i>	1. History of working together	4.5	4.5	4.2	4.5	4.3	4.4
	2. Solve problems through collaboration	4.3	4.1	4.1	4.5	4.2	4.2
<i>Collaborative group seen as a legitimate leader in the community</i>	3. Community seems hopeful about our group	3.8	3.9	3.6	4.3	4.3	4.0
	4. Organizations involved are the “right” organizations to make this work.	4.1	4.1	3.9	4.5	3.8	4.1
<i>Favorable political and social climate</i>	5. The political and social climate seems to be “right”.	3.0	3.1	3.4	4.2	4.1	3.5
	6. The time is right for this collaborative project.	3.5	3.8	3.5	4.5	4.6	4.0
<i>Mutual respect, understanding, and trust</i>	7. People involved in our collaboration always trust one another.	4.0	4.0	3.7	4.5	4.4	4.1
	8. I have a lot of respect for the other people involved.	4.7	4.5	4.4	4.8	4.7	4.6
<i>Appropriate cross section of members</i>	9. People involved represent a cross section of those who have a stake in what we are trying to accomplish.	4.0	4.4	4.0	4.4	4.3	4.3
	10. All organizations needed have become members.	3.5	4.2	3.8	3.5	3.2	3.7
<i>Members see collaboration as in their self-interest</i>	11. My organization will benefit from being involved with the group.	4.8	4.5	4.5	4.8	4.6	4.6
<i>Ability to compromise</i>	12. People are willing to compromise on important aspects.	4.2	4.1	4.3	4.6	4.0	4.2

<i>Members share a stake in both process and outcome</i>	13. Members invest the right amount of time in our group.	3.5	4.0	3.9	4.5	4.1	4.0
	14. Everyone in our group wants this project to succeed.	4.7	4.7	4.5	5.0	4.7	4.7
	15. Everyone is highly committed to this project.	4.2	4.4	4.1	4.8	4.5	4.4
<i>Multiple layers of participation</i>	16. When the group makes major decisions, there is time for members to take information back to confer with colleagues.	4.0	4.0	4.3	4.1	4.1	4.1
	17. Each member is able to speak for the entire organization they represent.	4.0	4.2	3.9	4.2	4.1	4.1
<i>Flexibility</i>	18. People are open to discussing different options.	4.4	4.5	4.3	4.6	4.5	4.4
	19. Members are willing to consider different ways of working.	4.1	4.5	4.2	4.6	4.6	4.4
<i>Development of clear roles and policy guidelines</i>	20. Members have a clear sense of their roles and responsibilities.	3.7	4.4	4.2	4.5	4.5	4.3
	21. There is a clear process for making decisions.	4.0	4.3	3.9	4.7	4.3	4.2
<i>Adaptability</i>	22. Adapt to changing conditions.	3.7	4.2	4.0	4.6	3.7	4.1
	23. Ability to survive even if it had to make major changes in its plans.	3.5	4.4	4.1	4.8	4.1	4.2
<i>Appropriate pace of development</i>	24. Members have tried to take on the right amount of work.	4.0	4.3	4.1	4.5	4.4	4.3

	25. We are currently able to keep up with the work necessary to coordinate this project.	4.0	4.4	3.7	4.2	4.2	4.1
<i>Open and frequent communication</i>	26. Members communicate openly.	4.1	4.5	4.2	4.4	4.4	4.3
	27. I am informed as often as I should be on the collaboration.	4.7	4.5	4.2	4.5	4.5	4.5
	28. Leaders of project communicate well with members.	4.7	4.7	4.2	4.7	4.5	4.6
<i>Established informal relationships and communication links</i>	29. Communication happens both at formal meetings and in informal ways.	4.4	4.7	4.0	4.7	4.6	4.5
	30. I personally have informal conversations with other group members.	4.4	4.2	3.5	4.0	4.8	4.1
<i>Concrete, attainable goals and objectives</i>	31. I have a clear understanding of what our group is trying to accomplish.	4.8	4.5	4.2	5.0	4.6	4.6
	32. People in our collaboration know our goals.	4.2	4.5	4.2	4.7	4.7	4.5
	33. People in our collaboration have established reasonable goals.	4.2	4.5	4.3	4.7	4.8	4.5
<i>Shared vision</i>	34. This collaboration is dedicated to the idea that we can make this project work.	4.5	4.6	4.2	4.8	4.6	4.6
	35. My ideas seem to be the same as the ideas of others.	4.2	4.4	4.0	4.8	4.5	4.4

<i>Unique purpose</i>	36. Our group’s goals would be difficult for any single organization to accomplish by itself.	4.7	4.5	4.3	4.7	4.5	4.5
	37. No other organization in the community is trying to do what we are.	4.7	4.5	4.1	4.6	3.8	4.3
<i>Sufficient funds, staff, materials, and time</i>	38. Our collaboration had adequate funds to be successful.	3.2	3.6	4.1	4.4	3.8	3.8
	39. Our collaboration has adequate “people power “to accomplish goals.	3.2	4.0	3.7	4.1	4.1	3.8
<i>Skilled leadership</i>	40. The leaders of this collaboration have good skills working with other organizations.	4.5	4.5	4.3	4.5	4.6	4.5
Total Mean Wilder Score		4.16	4.325	4.043	4.572	4.378	4.298

Table 5.5. Steering Committee Partners by Agency		
Organization	Role	# of Individuals
St. Francis	Implementation Agency (2014-2019)	2
KVC	Implementation Agency (2014-2019)	2
KS Head Start	SC Member (2015 – 2019)	1
DCF	SC Member (2014-2017)	1
KDADS	SC Member (2014-2019)	1

The authors of this report do not believe there were consistent missing partners. Intermittently, there were gaps in support from different agencies as turnover occurred, but this is within expected parameters for the field.

The only suggestion these authors have for other sites considering implementation of SFP B-3 is that it would have been beneficial to have SFP B-3 site coordinators at the steering committee meetings early on, and the communication from them proved to be an invaluable asset throughout the project. There is no substitute for their on the ground experience with the families each week.

VI. Cross-Site and Local Evaluation Outcomes

The KSSAF evaluation design consisted of the following (see *Section III, Tables 3.1 & 3.2*):

1. Cross-site Evaluation
2. Local Evaluation
3. Outcome Evaluation
 - a. Screening and Assessment Tools
 - b. Child Welfare and Recovery Administrative Data
4. Implementation/ Process Evaluation
 - a. ESL Forms
 - b. SFP B-3 Fidelity Forms

Evaluation & Analyses - Overview

Four cross-site standardized psychometric instruments (ASI, AAPI-2, TSC-40, and CESD) and two local standardized psychometric instruments (e.g., ASQ-3 and ASQ-SE-2) were analyzed and the separate sub-study results are provided below. In addition to the standardized instrument analyses, ESL data analyzed includes: participant engagement scores for pre- and post-test differences; descriptives for dropout cases and intervention dosage.

Adherence to fidelity (analyzed by AGA, the implementation specialist) results are presented in the Implementation/Process Evaluation section of this report, *Section VII*.

Other implementation data being analyzed: Wilder Collaboration Inventory, see *Section V. Section VII* reports on staff retention and descriptives associated with implementation by contracted agency.

Further, utilizing Intent-to-Treat (ITT) design, a survival analysis was conducted to observe differences in reunification between participants in the respective random assignment groups in addition to other child welfare outcome; results are presented in *Section VIII, Impact Evaluation*.

This section describes the KSSAF sample used for the sub-studies, presents descriptive statistics for both the KSSAF adults and children included in the analytic sample, and presents five (of the six) sub-studies and the associated findings.

Data collection procedures, a list of standardized instruments, and timing of collection was illustrated in *Section III*. Current and future analyses along with associated research questions are detailed in *Table 6.1*.

Table 6.1. Current and Future Analyses with Associated Research Questions

Instrument/Analysis	Current/Future	Research Question
Trauma Symptoms Checklist – 40 (TSC-40)	Current (Presented in Final Report)	<ol style="list-style-type: none"> 1. Do SFP B-3 adult-participants have a decrease in trauma symptomology at program exit? 2. Do SFP B-3 adult-participants have a decrease in the likelihood of being identified as “heightened symptomology” compared to other high-risk samples (indicated by computed variable), at program exit?
Adult-Adolescent Parenting Inventory – 2 (AAPI-2)	Current (Presented in Final Report)	<ol style="list-style-type: none"> 1. Did SFP B-3 adult-participants improve on their parenting and child-rearing attitudes as measured by the AAPI-2 five subscales? 2. Did SFP B-3 adult-participants have a decrease in the likelihood of being identified as “high risk for child maltreatment” compared to other national samples (indicated by computed variables), at program exit?
Addiction Severity Index – Self Report (ASI)	Current (Presented in Final Report)	<ol style="list-style-type: none"> 1. Do SFP B-3 adult-participants have a decrease in self-reported substance use issues at program exit, as measured by the ASI? 2. Do SFP B-3 adult-participants have a decrease in the likelihood of being identified as “high level of use” on the three ASI risk indicators at program exit?
Center for Epidemiologic Studies – Depression (CES-D)	Current (Presented in Final Report)	<ol style="list-style-type: none"> 1. Did SFP B-3 adult-participants have a decrease in self-reported depressive symptoms at program exit, as measured by the CES-D? 2. Do SFP B-3 adult-participants have a decrease in the likelihood of being identified as “severely depressed” at program exit?
Ages & Stages Questionnaire – Third Edition (ASQ-3)	Current (Presented in Final Report)	<ol style="list-style-type: none"> 1. Did SFP B-3 focal children improve on their developmental functioning, as measured by the ASQ-3?
Ages & Stages Questionnaire – Social Emotional: Second Edition (ASQ-SE-2)	Current (Presented in Final Report)	<ol style="list-style-type: none"> 1. Did SFP B-3 focal child improve on their social-emotional functioning, as measured by the ASQ-SE-2?
Participant Engagement Scores	Current (Presented in Final Report, Section VII)	<ol style="list-style-type: none"> 1. Did adult-participants who completed the SFP B-3 intervention become more engaged in the SFP B-3 curriculum over the course of the intervention?

Cost Analysis of SFP B-3 Intervention	Future	1. Did implementation of the SFP B-3 intervention result in cost savings for the implementing child welfare agencies?
Reunification Impact Analysis	Current (Presented in Section VIII)	<ol style="list-style-type: none"> 1. Did children in the treatment group reunify at significantly faster rates than children in the control group? (ITT Design) 2. Did children who attended at least one SFP B-3 session reunify at significantly faster rates than all other children who did not attend at least one SFP B-3 session? (TOT Design) 3. Did children who attended SFP B-3 to fidelity (i.e., at least 10 SFP B-3 sessions) reunify at significantly faster rates than all other children who did not complete SFP B-3 to fidelity? (Treatment to Fidelity)
Supplemental, Point-in-Time Analyses (LPMs & CACE Analysis)	Current (Presented in Section IX)*	<ol style="list-style-type: none"> 1. What was the incidence of reunification at 365 days (1 year) after study randomization and did reunification statistically differ between group designations (ITT, TOT, and Treatment to Fidelity) as defined by treatment group indicator? 2. What was the incidence of reunification at 548 days (18 Months) after study randomization and did reunification statistically differ between group designations (ITT, TOT, and Treatment to Fidelity) as defined by treatment group indicator? 3. What was the incidence of reunification at 730 (2 years) after study randomization and did reunification statistically differ between group designations (ITT, TOT, and Treatment to Fidelity) as defined by treatment group indicator? 4. <i>CACE Analysis</i>: What is the causal effect of receiving any of the SFP B-3 sessions on the probability of reunification?
Substance Use Treatment Patterns and Characteristics of SFP B-3 Adult Participants	Current (Presented in Section X)*	<ol style="list-style-type: none"> 1. What is the prevalence of substance use treatment episodes among parents with young children (0 -3 years) placed out-of-home due to parental substance abuse? 2. What are the substance use behavior patterns among parents with young children (0 - 3 years) placed out-of-home due to parental substance abuse?
<i>Note.</i> * = Study was completed in 2020 and results were added to the final report after initial submission to the Children’s Bureau in December 2019.		

Cross-site Instrument Analytic Sample

The KSSAF cross-site instrument analytic sample includes Cycles 1 -8 participants who were eligible for upload during the last required cross-site evaluation upload process (March 2019). Cycle 9 participants were excluded for two main reasons: 1) due to the timing of Cycle 9 enrollment and the limited data upload window, only a portion of the Cycle 9 families completed pre-test data collection, and 2) no post-test data for cycle 9 participants would have been received, uploaded, or scored, therefore these cases would have been excluded from all pre/post-test analyses. Consequently, all cycle 9 families (n=41) were excluded from the following analyses. It is important to note that this analytic sample varies from the sample utilized in the impact analysis in the forthcoming section, for reasons detailed in that section.

Participants eligible for upload to the cross-site evaluation were the individuals identified as the FFA and RDA within a given case. All FFAs and RDAs were identified at enrollment in an electronic service log (ESL) data portal created and monitored by the Regional Partnership Grants Technical Assistance team. If the FFA and/or RDA switched between program enrollment and program exit, then only the forms associated with the original Case ID at baseline were eligible for upload. Therefore, the number of families enrolled for Cycles 1 – 8 (n=273) does not equal the number of uploaded and scored cases for each of the cross-site measures. Additionally, some cross-site measures were never completed/received for some individuals and therefore were never uploaded to the cross-site evaluation for scoring.

The final sample size for Cycles 1-8 is 266 adults and 266 focal children; *Table 6.2* below details the number of participants uploaded and scored for each cross-site measure and who the reporting individual was.

Table 6.2. Summary of Cross-site Instruments, Reporting Individual, and Associated Sample		
Cross-Site Instrument	Reporter	Sample Scored/Analyzed (N)
Adult – Adolescent Parenting Inventory – Second Edition (AAPI-2)	Family Functioning Adult (FFA)	266
Center for Epidemiologic Studies – Depression (CESD) 12 –Item	FFA	263
Addiction Severity Index – Self Report (ASI)	Recovery Domain Adult (RDA)	262
Trauma Symptoms Checklist – 40 Item (TSC-40)	RDA	263
Ages & Stages Questionnaire – Third Edition (ASQ-3)*	FFA was respondent for Focal Child (FC)	263
Ages & Stages Questionnaire: Social Emotional – Second Edition (ASQ-SE-2)*†	FFA was respondent for Focal Child (FC)	238

Note. * indicates local measure; † ASQ-SE-2 was collected for Cycles 2-9, ASQ-SE- First Edition was collected for Cycle 1 participants (ASQ-SE was not included in the analysis).

Included in the **descriptives** below are the 266 adult-respondents and the 266 KSSAF focal children; included in the **pre/post analyses** are individuals who completed both the respective baseline and program exit measures. The final sample size for each of the pre/post analyses will be identified in each of the subsequent analyses, and are detailed in the following *Table 6.3*.

Instrument	Pre-test Completers (n)	Post-test Completers (n)
ASI	262	206
TSC-40	263	205
CES-D	263	205
AAPI-2	266	213
ASQ-3*	263	205
ASQ-SE-2*†	238	183

Note. * indicates local measure; † ASQ-SE-2 was collected for Cycles 2-9, ASQ-SE- First Edition was collected for Cycle 1 participants (ASQ-SE was not included in the analysis).

Five sub-study analyses are included in this section below.

Adult Descriptives (N=266):

All 266 individuals were identified as the FFA; 265 individuals were identified as both the FFA and RDA. Only one individual identified as the FFA was not identified as the RDA. Therefore, for all but one of the participants included in the analyses the same individual was the reporter for all four of the cross-site measures.

The majority of the adult-participants were single (54%), White (74%) females (86%), of non-Hispanic or Latino origin (85%), English-speaking (99%), with the mean age of 27.76 years (SD: 5.96). Thirty-nine percent of the adult-participants (n=101) were between 24 and 30 years old, 30% (n=77) were between 18 and 24 years old, 22% (n=56) were between 30 and 35 years old. The most frequently reported annual income level of the KSSAF adult participants was \$0 - \$9,999 (62.3%), followed by \$10,000 - \$19,000 (22.6%). Forty-two percent (n=110) reported being currently unemployed, 36% (n=94) reported full-time employment, and 17% reported being employed part-time. Thirty-six percent (n=95) of the adult-participants were high-school educated/had their GED, 34% (n=89) reported they had some high school, 16% (n=41) attended some college, and under 4% reported the following categories: Up to 8th grade (3.8%), Associates degree (3.8%), vocational/technical diploma (3.4%), and some technical/vocational schooling (3.0%). The majority of adult-respondents indicated they lived at their own house/apartment (75%, n=198), 14.7% (n=39) reported “other” living arrangements, 8.3% (n=22) reported homelessness/living in a shelter, and 2.3% reported living at a treatment facility.

To see if there were any statistically significant differences between adults who completed the parenting-skills intervention and those who did not, bivariate cross-tabulations with chi-square analyses were conducted. Of the 266 adult-participants who were enrolled in the KSSAF program and completed pre-test measures, 77.4% (n=206) successfully completed the parenting-skills intervention and the respective post-test measures. Sixty (23%) individuals dropped out of the KSSAF program (hereinafter referred to as a “dropout”). Females (92%) were more likely than males (8%) to drop out, although this difference is not statistically significant ($\chi^2=.79, p=.181$). Race, ethnicity, education level, residence-type, income level, employment status, and current relationship status were also not statistically significantly related to whether or not an adult-participant dropped out of the SFP B-3 intervention.

Reasons for dropouts were examined using univariate (i.e., descriptives and frequencies) and bivariate (i.e., cross-tabulation) analyses. The following *Table 6.4* illustrates dropout reasons and associated frequencies of the 60 KSSAF adult-participant dropouts.

Reason	Frequency (%)
Unresponsive	20 (33%)
Multiple Factors	7 (12%)
Other	6 (10%)
Family Declined Further Participation	6 (10%)
Unable to Locate	5 (8%)
Family Moved	3 (5%)
Transferred	1 (2%)

Variables were examined to see if there were any statistically significant differences among the 60 individuals who dropped out, by dropout reasons. An individual’s biological sex, race, ethnicity, highest level of education, primary place of residence, income level, employment status, and relationship status all were not statistically significantly related to any of the aforementioned dropout reasons. It is important to note that biological sex was approaching significance ($p=.053$).

Adult Sample by Instrument: Significant differences

Cross-tabulation with Chi-Square was utilized to observe differences in adult-participants on completing both pre-test and post-test measures and those who dropped out (i.e., did not complete post-test measures) for each of the four separate cross-site instruments. Cross-tabulation with Chi-Square test statistic is reported when all groups had more than 5 participants per variable group; Fisher’s exact test statistic is reported when examining variables in instances where groups had less than 5 participants. *Table 6.5* below illustrates that individuals who completed the cross-site measures at both time points varied significantly on income level across all four measures, and varied significantly on relationship status for the CESD and TSC-40.

Variable (Dichotomous)	Cross-Site Instrument			
	AAPI-2 $\chi^2(p)$	CESD $\chi^2(p)$	ASI $\chi^2(p)$	TSC-40 $\chi^2(p)$
Biological Sex	2.03 (.16)	.925 (.34)	1.79 (.18)	1.92 (.17)
Ethnicity	.584 (.45)	.397 (.53)	.468 (.47)	1.07 (.32)
Variable (2+ categories)	AAPI-2 $\chi^2(p)$	CESD $\chi^2(p)$	ASI $\chi^2(p)$	TSC-40 $\chi^2(p)$
Race	5.47 (.14)	4.40 (.22)	4.65 (.20)	5.74 (.13)
Highest Level of Education	8.38 (.50)	13.41 (.15)	12.25 (.20)	12.83 (.17)
Income Level	9.39 (.05)*	11.27 (.02)*	12.39 (.02)*	11.95 (.02)*
Employment Status	6.86 (.14)	7.09 (.13)	9.73 (.05)*	7.20 (.13)
Relationship Status	7.69 (.17)	11.45(.04)*	8.82 (.12)	11.45 (.04)*

* p -value <.05

Child Descriptives (N=266)

The 266 KSSAF focal children were primarily White (66.2%), non-Hispanic/Latino (80.7%) males (53.8%). The mean age for KSSAF focal children was 1.38 years (SD= 1.04). Infants (less than 1 year) were the largest age category served (45.8%). Nearly a quarter of the KSSAF focal children were under 6 months of age (24.4%). Children between the ages of 1-2 years old comprised 28.6% of the analytic child sample with children 3 years and older comprising 25.6%.

With regards to child welfare descriptives, 35.7% had a primary removal reason associated with parental substance use (e.g., alcohol abuse parent [.4%], drug abuse parent [23.3%], or methamphetamine use or manufacturing [12%]). Other primary removal reasons included: physical neglect (16.5%), lack of supervision (13.9%), physical abuse (7.9%), inadequate housing (5.6%), child's inability to cope (5.6%), and emotional abuse (4.5%). It should be noted that the evaluation team believes that child's inability to cope is likely a data entry error on the part of DCF data entry staff. All other categories had less than 3%. One-hundred and ninety-six (73.7%) KSSAF focal children had a secondary reason for removal. Of the children who had a secondary removal reason identified, substance-related removal reasons equated to 50.5% of the secondary removal reasons (alcohol abuse parent [1.5%], drug abuse parent [30.1%], and methamphetamine use or manufacturing [18.9%]). Sixty-seven percent (n=179) of the KSSAF focal children have been discharged from child welfare care. Of the 179 focal children who have discharged from care, 64.2% (n=115) have reunified with their primary caregiver, 30.7% (n=55) have been adopted, 2.8% (n=5) have discharged to guardianship, 1.7% (n=3) have discharged for "other" reasons, and <1% (n=1) transferred agencies.

Sub-Studies: Results

The Mathematica-scored measures returned to the grantees were used for pre/post-test analyses. Only cross-site instruments (i.e., AAPI-2, ASI, CESD, and TSC-40) and local instruments (i.e., ASQ-3 and ASQ-SE-2) with a sufficient sample size were analyzed. This final report will present the findings for pre/post difference for KSSAF participants for the AAPI-2, ASI, CESD, TSC-40, ASQ-3 and ASQ-SE-2.

Included in the analyses are 266 adult-reporters who participated in the Strengthening Families Program, Birth-to-Three (SFP B-3) between August 2015 and December 2018. Adults were identified as reporters if they were either: the Family Functioning Adult (FFA) or the Recovery Domain Adult (RDA). The FFA was defined as the primary caregiver of the focal child who had the case plan goal of reunification, and the RDA was individual participating in the case who was substance-affected. If no individual participating in the case was substance-affected or if that individual was not participating in services, then the FFA would also fulfill the role of the RDA reporter. Of the four cross-site instruments uploaded to the cross-site evaluation that had a sufficient sample size to be analyzed, two instruments were completed by the FFA (i.e., Adult-Adolescent Parenting Inventory – 2 [AAPI-2] and the Center for Epidemiologic Studies Depression – 12 Item [CES-D 12]), and two instruments were completed by the RDA (i.e., Addiction Severity Index – Self Report [ASI] and Trauma Symptoms Checklist – 40 [TSC-40]).

Detailed descriptive statistics for the adult and child sample were presented above; a brief description of adult-responders for each of the respective instruments is presented within each of the sub-studies below.

Trauma Symptom Checklist - 40 (Sub-Study #1)

The Trauma Symptom Checklist – 40 (TSC-40) standardized instrument is used to assess trauma symptomology in adults who have experienced childhood or adult trauma (Briere & Runtz, 1989). This self-reported, Likert-style instrument (0=never; 3=often) consists of 40 questions pertaining to post-traumatic stress indicators and other trauma cluster symptomology experienced in the past 2 months. The TSC-40 has six sub-scales (1] dissociation; 2] anxiety; 3] depression; 4] Sexual Abuse Trauma Index (SATI); 5] sleep disturbance; 6] sexual problems) and a total score; no norm scores are associated with the TSC-40 scale scores. Low scores on the six sub-scales and total score indicate low trauma symptomology; individuals with high scores experience greater trauma symptomology. Additionally, a computed risk indicator is also reported; this indicator signified whether an adult has heightened symptoms of significant childhood or adult trauma. This criterion was met when the TSC-40 Total Score exceeds an average level computed across several studies of high-risk populations (Elliott et al. 1992; Zlotnick et al. 1996; Heffner et al. 2011; Whiffen et al. 1997). This variable was calculated using a TSC-40 score of 33 or greater for men and 46 or greater for women. An adult who met the threshold for heightened trauma symptomology was labeled as “1” and an adult who did not meet this threshold was labeled as “0”.

The dissociation scale assesses symptoms associated with dissociation, such as experiencing flashbacks or “spacing out”. Anxiety is measured by questions associated with “feelings of tension” or fear of other people. Depression symptoms include questions on frequency of sadness, insomnia, and desire to hurt themselves, and so on. The SATI scale inquires about the frequency of memory issues and sexual problems. Sleep disturbance is measured by how often an individual reports disrupted sleep. Lastly, the sexual problems scale assesses symptoms such as “low sex drive” and sexual over activity.

Elliot and Briere (1992) found the TSC-40 to display predictive validity and be reliable; the researchers reported psychometric properties for the TSC-40 sub-scales with alpha coefficients ranging from .62 on the SATI scale to .77 on the sleep disturbance scale. The alpha coefficient associated with the total score was .90 (Elliot & Briere, 1992).

As reported earlier in this report, the TSC-40 was administered at both baseline and program exit and was self-reported by the Recovery Domain Adult (RDA). The RDA was the individual identified, prior to enrollment, as the adult who is substance-affected. The individual identified as the RDA completed this measure at both baseline and program exit. At pre-test, a total of 263 KSSAF adults completed the TSC-40; at post-test, a total of 203 individuals completed the post-test. Sixty individuals dropped out of the KSSAF program and therefore did not have program exit data available and were not included in the analyses.

Research Questions – TSC-40:

1. Do SFP B-3 adult-participants have a decrease in trauma symptomology at program exit?
2. Do SFP B-3 adult-participants have a decrease in the likelihood of being identified as “heightened symptomology” compared to other high-risk samples (indicated by computed variable), at program exit?

Analyses

Univariate analyses were conducted on the KSSAF analytic sample (N=266) and the individuals who completed both the baseline and program exit TSC-40 measure (n=203). Bivariate analyses were utilized to examine changes from baseline to program exit. Bivariate analyses included cross-tabulation, t-tests, and binary logistic regressions. Paired t-tests were conducted on all sub-scales variables and the total score variable for the TSC-40. Paired t-tests analyses were conducted to determine if there was a statistically significant mean difference between participant trauma symptomology scores (total score and sub-scale scores) at baseline compared to program-exit. A binary logistic regression was utilized to see if participation and completion of the parenting intervention (i.e., SFP B-3) was predictive in a decreased odds of being identified at “heightened risk” on the dichotomous trauma symptomology variable, compared to other high risk samples. Paired t-tests were used to answer research question #1 and binary logistic regression was used to answer research question #2.

The completers of the TSC-40 were examined against the dropouts to see if there were any statistically significant differences between the individuals who completed the parenting-skills intervention and those who dropped out of the parenting-skills program. The results were presented in the above *Table 6.5*. Statistically significant differences were found on income level and relationship status of individuals who completed the TSC-40 at baseline and program-exit compared to those who dropped out.

Results

Descriptive, univariate statistics for the analytic sample (N=266) are described further here. Regarding the 203 KSSAF adults who completed both the pre-test and post-test TSC-40 instrument, they were primarily single (54%), White (73%), non-Hispanic/Latino (86%), English-speaking (99%), females (85%). *Table 6.6* presents the descriptive statistics for KSSAF adults who completed both the baseline and post-test TSC-40 assessments. Similar descriptive statistic results were found for the entire 266 adult sample.

Category	Frequency (%)
Sex	
Female	172 (85)
Male	30 (15)
Race/Ethnicity	
White	148 (73)
Black/African-American	23 (11)
Multi-Racial	29 (14)
American Indian/Alaskan Native	2 (1)
Ethnicity	
Non-Hispanic/Latino	172 (86)
Hispanic/Latino	29 (14)
Employment Status	
Unemployed	76 (38)
Part-Time Employment	36 (18)

Full-Time Employment	76 (38)
Self-Employed	8 (4)
Not in Labor Force	5 (3)

Paired t-test results indicated statistically significant differences on the following: dissociation scale, anxiety scale, depression scale, SATI scale, sleep disturbance scale, and the total score. The only scale that did not have statistically significant results was the sexual problems scale. *Table 6.7* below details the results for the paired t-tests and associated effect size for each indicator.

Indicator	T (SE)	Confidence Interval	Mean Difference	Effect Size (Cohen's <i>d</i>)
Dissociation Scale	-2.454 (0.213)*	(-0.942, -0.103)	-0.522	.172
Anxiety Scale	-2.648 (0.281)**	(-1.298, -0.19)	-0.744	.186
Depression Scale	-3.731 (0.33)***	(-1.882, -0.581)	-1.232	.262
SATI Scale	-2.149 (0.225)*	(-0.926, -0.04)	-0.483	.151
Sleep Disturbance Scale	-2.787 (0.295)**	(-1.405, -0.241)	-0.823	.196
Sexual Problems Scale	-0.737 (0.227)	(-0.615, 0.28)	-0.167	Not statistically significant
Total Score Scale	-3.286 (1.103)**	(-5.801, -1.45)	-3.626	.231

* denotes $p < 0.05$

** denotes $p < 0.01$

*** denotes $p < 0.001$

For the binary logistic regression, the dichotomous trauma risk dependent variable was regressed on a dummy coded variable with a participant's post-test score. The binary logistic regression model indicated a decent model fit ($\chi^2=7.16, p<.05$). Binary logistic regression results revealed a statistically significant decrease in the probability (i.e., odds) that a participant would meet the threshold of being identified as experiencing "heightened trauma symptomology" at program exit, compared to other high-risk samples ($\beta=-.547, p<.01, OR: .579$). The predictive probability of meeting the threshold for "at risk" (i.e., a value of 1) was reduced from .337 at baseline to .227 at program exit. *Table 6.8* details the logistic regression output.

Table 6.8. Logistic Regression Results for TSC-40 Risk Indicator (n=495)				
Indicator	Intercept (S.E.)	Post β (S.E.)	Deviance (-2 Log Likelihood)	Odds Ratio [exp (log. Coefficient)]
TSC-40, Variable ES	-.130 (.300)	-.547 (.208)**	589.779	.579

** denotes $p < 0.01$

Discussion/Conclusion: TSC-40

Comparisons between a participant’s trauma symptomology at baseline and after program completion of the SFP B-3 intervention suggest significant improvement in several trauma symptom domains. The t-test and binary logistic regression results suggest that participants had a decrease in dissociation, anxiety, depression, sexual abuse trauma, sleep disturbance, and overall trauma symptomology. However, non-significant results were found on the sexual problem symptomology. Additionally, there was a statistically significant decrease in the likelihood that a participant would meet the threshold of being identified as experiencing “heightened trauma symptomology” at program exit, compared to baseline. Indicating that after participating in a 16-week (14 content sessions) parenting skills intervention, their trauma symptoms, experienced in the past 30 days had significantly decreased, this is evidenced by the significant result on five of the six subscales, the participant’s total score, and the risk indicator.

It was hypothesized that participation in the SFP B-3 parenting skills intervention would decrease trauma symptomology for each sub-scale and an individual’s total score, and that adults who participated in the intervention would be less likely to be considered as experiencing “heightened trauma symptomology”, as identified by the indicator variable because of the known effects of the SFP intervention for parents of older children (Kumpfer, Alvarado, Smith, & Bellamy, 2002).

The SFP B-3 curriculum has sessions specifically dedicated to child attachment and bonding, communicating with young children, problem solving, empathy, and addiction. For parents with young children in out-of-home placement learning skills on such parenting topics, along with spending time with their out-of-home child could help elevate feelings of anxiety, sadness, loneliness, uncontrollable crying, feelings of guilt and tenseness—all items measured on the TSC-40. The additional visitation time with their out-of-home young child as a result of participation in the SFP B-3 intervention may have increased their overall confidence in their parenting abilities, in turn having a positive impact on their trauma symptomology. It is also promising that results revealed a significant decrease in the sample’s risk for being considered as experiencing “heightened trauma symptomology” compared to other high-risk samples. Although, we cannot assume causality that the intervention was the reason for these positive changes, it is promising to see that after participation in SFP B-3 parents experienced less overall trauma symptomology, less dissociative episodes, anxiety, sleep disturbance, sexual trauma symptoms, and depressive symptomology.

Further research is needed on families participating in the SFP B-3 intervention to test the moderating effects of the sense of parenting attachment and the impact on trauma symptomology, specifically on the scales of anxiety and depression.

Adult-Adolescent Parenting Inventory – 2 (Sub-Study #2)

The Adult-Adolescent Parenting Inventory (AAPI-2) instrument was used to examine the parenting and child rearing attitudes of program participants. This brief 40-item inventory provides an index of risk for practicing abusive and neglectful behavior; thus, providing insight regarding an assessment of any changes in parenting skills and family functioning for participants within the KSSAF population. Items are based on the known parenting and child-rearing beliefs of abusive parents, and responses to the inventory provide an index of risk for practicing abusive and neglectful behavior. This instrument leads to standardized assessments of levels of parenting competence, family functioning, parenting capacity to keep children safe, and the ability to manage stress and child behaviors. Based on the known parenting and child rearing behaviors of abusive parents, responses to the inventory provide an index of risk for practicing behaviors known to be attributable to child abuse and neglect.

Several studies report strong psychometric properties for the AAPI-2 (Cronbach's Alpha for both forms = .80-.93; correlations between forms A-B = .80-.92; factorial validity confirmed; diagnostic and discriminant validity for abusive parents; concurrent validity with Parenting Style-Harsh Control = -.36 to -.45) (Bavolek & Keene, 1999; Conners, et al., 2006).

The AAPI-2 includes five subscales: 1) realistic expectations of children; 2) parental empathy; 3) alternative discipline methods; 4) parent-child role reversal; and 5) supporting children's power and independence. The *expectations scale* measures the degree to which apparent has a realistic understanding of the developmental capability of children, including the extent to which parents accept the child's limitations. The *empathy scale* measures the extent to which a parent is empathetic and values children's needs. The *corporal punishment scale* measures the extent to which a parent values alternatives to corporal punishment. The degree to which a parent appropriately views a child as a child and *not* a caregiver or peer is assessed by the *role reversal scale*. Lastly, the *power/independence scale* measures the extent to which a parent supports a child's power and independence. Parents with high scores on the five scales represent more adaptive and nurturing parenting beliefs. In addition to the scaled scores, norm scores were calculated, referenced off a national sample, to compare scores between program participants and parents and caregivers of the same gender, age group, and ethnicity. Norm scores ranged from 1 to 10 with low scores suggesting that a parent is at high risk for child neglect or abuse, while high scores reflect a nurturing parenting style.

Further, for each of the five scales, a dichotomous risk indicator was created to demonstrate whether or not the adult-participant met criteria for being at high risk for child maltreatment (coded 1) based on their scale scores for each of the five domains. For instance, if an adult the criterion for demonstrating inappropriate or unrealistic expectations for a child's development (scale 1), then they would meet the threshold for "high risk for child maltreatment" as described in the AAPI-2 manual.

The AAPI-2 was administered at both baseline and program exit and was self-reported by the Family Functioning Adult (FFA) at both time points. The FFA completed a pretest and posttest survey as a mechanism to measure treatment effectiveness and to assess the parenting and child rearing attitudes of participants prior to and after the completion of SFP B-3 (14 content sessions over 16 weeks). At pre-test, a total of 266 KSSAF adults completed the AAPI-2; at post-test, a total of 213 individuals completed the post-test.

Research Questions –AAPI-2:

1. Did SFP B-3 adult-participants improve on their parenting and child-rearing attitudes as measured by the AAPI-2 five subscales?
2. Did SFP B-3 adult-participants have a decrease in the likelihood of being identified as “high risk for child maltreatment” compared to other national samples (indicated by the five computed variables), at program exit?

Analyses

Univariate analyses were conducted on the entire KSSAF analytic sample (N=266) and the individuals who completed both the baseline and program exit AAPI-2 measure (n=213). Bivariate analyses were utilized to examine changes from baseline to program exit in a parents’ risk of practicing behaviors known to be connected to child abuse and neglect. Bivariate analyses included cross-tabulation, t-tests, and binary logistic regressions. Paired t-tests were conducted on all sub-scales variables and the norm score variables for the AAPI-2. Paired t-tests analyses were conducted to determine if there was a statistically significant mean difference between adult-participants parenting beliefs on each of the five sub-scales (e.g., realistic expectations of children; parental empathy; alternative discipline methods; parent-child role reversal; and supporting children’s power and independence) at baseline compared to program-exit. A binary logistic regression was utilized to see if participation and completion of the parenting intervention (SFP B-3) was predictive of the indicator variables for each of the five risk indicators of child maltreatment, compared to other national samples. Paired t-tests were used to answer research question #1 and binary logistic regression was utilized to answer research question #2.

The completers of the AAPI-2 were examined against the dropouts to see if there were any statistically significant differences between the individuals who completed the parenting-skills intervention and those who dropped out of the parenting-skills program. The results were presented in the above *Table 6.5*. Statistically significant differences were only found on an individual’s income level for those who completed the AAPI-2 at baseline and program-exit compared to those who dropped out.

Results

A total of 266 FFAs were provided the AAPI-2 during this study, and 213 adult-participants completed both the measure at both time-points. More than half of the adult-participants were women (85%) and most were employed (59.6%). At the beginning of SFP B-3, majority of the participants were living in their own residence (73.7%). *Table 6.9* below lists the characteristics of adult-respondents for the AAPI-2.

Table 6.9. Characteristics of Adult-Respondents for the AAPI-2 (n=213)	
Category	Frequency (%)
Sex	
Female	181 (85)
Male	32 (15)
Race/Ethnicity	
White	159 (75)
Black/African-American	23 (11)
Multi-Racial	29 (14)
American Indian/Alaskan Native	2 (<1)
Employment Status	
Unemployed	80 (38)
Part-Time Employment	38 (18)
Full-Time Employment	80 (38)
Self-Employed	8 (4)
Not in Labor Force	6 (3)

A paired t-test was run to determine whether there was a statistically significant mean difference between participant behaviors from the beginning of SFP B-3 compared to at the conclusion of the intervention within the five domains of parenting, including: expectations, empathy, corporal punishment, role reversal, and power/independence. A total mean score of the five items was calculated for comparison over time for the FFA. Significant improvements were seen on attitudes associated with child abuse and neglect baseline to program completion based on four AAPI-2 scales, indicating more positive child-rearing attitudes.

Examining each of the five scales separately, the *expectations scale* indicated that participants knowledge on the developmental capabilities of children was found to be statistically significant as a result of the increase within the understanding of realistic expectations for children (mean difference = -0.831 [95% CI: -1.52 - -0.13], $t(219) = -2.359, p < .05$). The paired t-test results for the *empathy scale*, which identified the extent to which a parent is empathetic and values children's needs, were statistically significant with a mean difference of -3.39 (95% CI, -4.05 to -2.72), $t(219) = -10.03, p > .05$. Significant results were found on the *corporal punishment scale* as well (mean difference = -0.904 [95% CI, -1.76 to -0.047], $t(219) = -2.08, p < .05$) indicating that participants' valued alternatives to corporal punishment more at program exit than at baseline. Non-significant results were found on both the *role reversal scale* and the *power/independence scale*. The *role reversal scale*, which measured the degree to which a parent appropriately views the role of a child as a child, had a non-significant mean difference of -.131 (95% CI, -0.70 to 0.44), $t(219) = -0.449, p > .05$. The *power/independence scale*, which measured the extent to which a parent supports a child's power and independence was also non-significant with a mean score difference of -0.045 (95% CI, -0.52 to 0.43), $t(219) = -0.187, p > .05$ between baseline and program exit. Additionally, for both the *expectations* and *corporal punishment scales* the effect size was small (Cohen's $d = .159$ and $.140$, respectively); however, for the *empathy scale* the effect size was medium with a Cohen's d of $.676$ (Cohen, 1988).

When comparing the KSSAF adult-respondents' scores to a national sample (i.e., using the norm scores), KSSAF adults had significant improvements on the *empathy* and *role reversal scales*, when

compared to a normative sample at baseline. Both the empathy and role reversal scale had medium effects when interpreting Cohen’s d (Cohen’s d = .339 and .296, respectively). Paired t-test results are presented below, *Table 6.10*, for both the scale and norm variables.

Table 6.10. Paired T-Test Results for AAPI-2 Scale and Norm Variables and Associated Effect Size (n=220)

Indicator	T (SE)	Confidence Interval	Mean Difference	Effect Size (Cohen’s d)
Expectations Scale	2.36 (.353)*	(.137 – 1.527)	.832	.159
Empathy Scale	10.03 (0.338)***	(2.725 – 4.057)	3.391	.676
Corporal Punishment Scale	2.081 (.435)*	(.048 – 1.761)	.905	.140
Role Reversal Scale	.45 (.293)	(-0.446-0.709)	.132	Not Significant
Power/Independence Scale	-.187 (.243)	(-0.433 -0.524)	.045	Not Significant
Expectations Scale Norm	.802 (.137)	(-.16 - .379)	.110	Not Significant
Empathy Scale Norm	5.015 (.146)***	(.443 – 1.018)	.731	.339
Corporal Punishment Scale Norm	-.268 (.119)	(-0.267 – 0.203)	-.032	Not Significant
Role Reversal Scale Norm	4.379 (.126)***	(.304 - .801)	.553	.296
Power/Independence Scale Norm	1.536 (.181)	(-0.079 - .636)	.279	Not Significant

Five separate binary logistic regressions were conducted utilizing a dummy-coded independent variable of a participant’s post-test score and the risk indicator variable as the dependent variable for the following 5 scales: expectations, empathy, corporal punishment, role reversal, and power/independence. Results are reported on all FFA’s who completed the AAPI-2 at the beginning and ending of the SFP B-3, 16-week intervention. Chi-square results varied across the five separate logistic regression models from $\chi^2=.392$ to $\chi^2 = 3.350$, all chi-square results were insignificant. Additionally, all five risk indicators revealed non-significant differences in a participants’ risk for child maltreatment, in all five domains, between baseline and program exit. *Table 6.11* presents the logistic regression output for all five analyses.

However, it is important to note for three out of the five risk indicators, the intercept was statistically significant, which indicates that there was a statistically significant difference in the distribution of participants who met the criteria for being “at risk” for that respective criteria at baseline (i.e., the distribution was not 50% were identified as "0"/50% were identified as "1", at baseline). The negative intercept indicates the direction and the higher intercept value (e.g., 1+) means that more participants were identified as “0” (did not met criteria for at risk) at baseline than as “1” (met criteria for at-risk). Therefore, this is perceived as a good finding, because the majority of the sample, at baseline, was considered not “at risk”, and a non-significant finding is a meaningful finding, from a programmatic

standpoint. The sample, at program exit, maintained good outcomes (i.e., not “at risk” for child maltreatment).

Table 6.11. Logistic Regression Results for AAPI-2 Risk Indicators (n=517)

Indicator	Intercept (S.E.)	Post β (S.E.)	Deviance (-2 Log Likelihood)	Odds Ratio [exp (log. Coefficient)]
AAPI-2, Variable IEC	-1.934 (.377) ***	.154 (.246)	441.68	1.116
AAPI-2, Variable LEC	-.585 (.309)	-.384 (.212)	573.11	.681
AAPI-2, Variable VCP	-2.072 (.480)***	-.234 (.329)	295.67	.791
AAPI-2, Variable TCA	-1.214 (.345)***	-.206 (.234)	489.48	.814
AAPI-2, Variable OCI	-.541 (.299)	-.313 (.203)	603.469	.731

Discussion/Conclusion: AAPI-2

Comparisons of participants’ functioning at prior to and after the SFP B-3 intervention suggest significant improvements in a number of parenting domains. Results suggested that participants demonstrated positive changes in expectations, empathy, and role reversal when compared to the KSSAF sample’s baseline scores. When compared to a national sample, the KSSAF adult-respondents had significant improvements in empathetic attitudes and role reversal beliefs with medium effects. Further, the non-significant binary logistic regression results, from a programmatic perspective are positive finding for at least three of the computed risk variables (i.e, LEC, VCP, and TCA). These three risk variables correspond with empathy, corporal punishment, and role reversal, respectively. The results reveal that at baseline the KSSAF adult sample started with good scores (i.e., weren’t “at high risk for child maltreatment”); at baseline there was no statistical difference found in these scores, indicating that the KSSAF adults maintained positive scores. This is a key finding from a programmatic standpoint.

In terms of empathy, parents demonstrated an increase in understanding the capabilities of their child. One of the primary emphases within the SPF B-3 curriculum includes information regarding what is developmentally appropriate for children at different ages. This suggests that though problems with role reversal are common for FFAs and children, perhaps the focus on younger children within the curriculum increases the knowledge regarding child capabilities. The data suggests that though there may have been situations where children have taken on some of the responsibilities of caring for their younger siblings when their FFA may have been preoccupied with problems related to their addiction, a positive transition towards understanding appropriate roles for children occurred with the FFAs in this study. In other words, an increase in empathy can also be connected to understanding the proper role of a child within the family unit.

Results from the study also indicate that adult-respondents had increased levels of power/independence towards their children, thereby valuing the child's need to problem solve or encouraging the child to express their views more. This is important, as it demonstrates the FFA's increase in parental self-sufficiency. Being able to empower a child to make good choices, suggest that FFA's are able to promote a child's health differentiation of self, which increases parental support and engagement throughout the development of the child.

It is interesting that other parenting attitudes did not change, including attitudes about corporal punishment, although the importance of positive discipline is a strong focus of the parenting education curriculum.

Addiction Severity Index – Self Report (Sub-Study #3)

The Addiction Severity Index (ASI) instrument was used to assess current and lifetime alcohol and drug use, poly-substance use, primary substance use, age of initial use, and history of injection drug use. The ASI provides information regarding physical health, employment/financial support, illegal or criminal activity, family/social relations, and psychiatric symptoms. The self-report measure provides a general overview of substance-abuse problems rather than a focus on one particular area. This instrument allows an assessment of self-reported substance use problems experienced over a 30-day period that are common with substance additions. Based on the behaviors identified, responses to the inventory provide an index of substance abuse risk indicators experienced individually or concomitantly.

The ASI includes subscales related to: 1) medical status; 2) employment status; 3) legal status; 4) family/social status; 5) psychiatric status; 6) alcohol use; and 7) drug use. All seven scales measured the severity of the respective issues within the past 30 days. For each of the seven scales, scores ranged from 0 (least severe) to 1 (most severe). Although, there are no norm scores associated with the ASI scale scores, there are three calculated risk indicators which measured for 1) high level of alcohol use (ASI_HAU), 2) high level of drug use (ASI_HDU), and 3) high level of alcohol or drug use, or both (ASI_HU). The ASI HAU indicator points to a high level of alcohol use, which was defined as excessive alcohol use, frequent intoxication, and problems caused by alcohol use. These criteria are met when the Alcohol Use score is above the national average for people in addiction treatment settings described in McClellan et al. (2006). The ASI HDU indicator points to a high level of drug use, which was defined as excessive drug use and problems caused by drug use. These criteria are met when the Drug Use score is above the national average for people in addiction treatment settings described in McClellan et al. (2006). The ASI HU indicator points to a high level of alcohol use or drug use or both (as defined above for ASI_HAU and ASI_HDU). The three risk indicators were coded “1” for individuals who met the high use threshold for the respective indicator and “0” for individuals who did not meet the given threshold. Further, the ASI instrument is widely used in the addiction field due to the strong psychometric properties with clients from varying demographics, features, and problems (Cronbach’s alpha = .62-.87, convergent validity of composite scores with ASI-standard interview = .47-.87) (McLellan et al., 1992; Rosen, Henson, Finney, & Moos, 2000).

The Recovery Domain Adult (RDA), the individual identified as the adult who was substance-affected completed the ASI measure at both baseline and program exit as a mechanism to assess the change in self-reported substance use problems prior to and after the completion of SFP B-3. Specifically, the survey was administered at two data points using a constant sampling frame; 75% participation was noted at each time point. As detailed in *Table 6.3*, at pre-test, a total of 262 KSSAF adults completed the ASI; at post-test, a total of 206 individuals completed the post-test.

Research Questions – ASI:

1. Do SFP B-3 adult-participants have a decrease in self-reported substance use issues at program exit, as measured by the ASI?
2. Do SFP B-3 adult-participants have a decrease in the likelihood of being identified as “high level of use” on the three ASI risk indicators at program exit?

Analyses

Univariate analyses were conducted on the entire KSSAF analytic sample (N=266) and the individuals who completed both the baseline and program exit ASI measures (n=206). Univariate results were presented previously under *Analytic sample*. Bivariate analyses were utilized to examine changes from baseline to program exit. Bivariate analyses included cross-tabulation, t-tests, and binary logistic regressions. Paired t-tests were conducted on all seven sub-scale variables for the ASI. Paired t-tests analyses were conducted to determine if there was a statistically significant mean difference between participant scores at baseline compared to program-exit. Simple binary logistic regressions were utilized to see if participation and completion of the parenting intervention (SFP B-3) was predictive in a decreased odds of being identified as “high level of use” (i.e., alcohol, drug, or both) on the three dichotomous risk indicator variables. For the binary logistic regressions, a dummy independent variable was created that represented the post-test indicator (i.e., allowed researchers to differentiate between pre/post); the dependent variables, the three separate dichotomous risk indicator variables, were regressed on the dummy coded independent variable. Paired t-tests were used to answer research question #1 and binary logistic regression was utilized to answer research question #2.

The completers of the ASI were examined against the dropouts to see if there were any statistically significant differences between the individuals who completed the parenting-skills intervention and those who dropped out of the parenting-skills program. The results were presented in the above *Table 6.5*. Statistically significant differences were found on income level and relationship status of individuals who completed the ASI at baseline and program-exit compared to those who dropped out.

Results

The majority of the adult-participants who completed the ASI measure at both time points were White (75%), non-Hispanic/Latino (85%) women (85%), who were employed (56%) with an annual income of \$0 - \$9,999 (59%). At the beginning of SFP B-3, the majority of the participants were living in their own residence (73.3%). Sample characteristics for the adult-participants who completed the ASI at both baseline and program exit are detailed in *Table 6.12* below.

Category	Frequency (%)
Sex	
Female	172 (85)
Male	30 (15)
Race/Ethnicity	
White	151 (75)
Black/African-American	22 (11)
Multi-Racial	27 (13)
Employment Status	
Unemployed	75 (37)
Part-Time Employment	37 (18)
Full-Time Employment	76 (38)
Self-Employed	8 (4)
Not in Labor Force	5 (3)

Paired t-tests were conducted to determine whether there was a statistically significant mean difference between participant-reported substance use problems in the past 30 days baseline compared to program exit within the areas of medical status, employment status, legal status, family/social status, psychiatric status, alcohol use, and drug use. Results revealed a statistically significant decrease in participant-reported substance use problems in two of the seven domains: legal status scale (mean difference = - 0.069, 95% CI: 0.026 - 0.111, $t [200] = 3.21, p < .05$) and psychiatric status scale (mean difference = - 0.036, 95% CI: 0.012 - 0.059, $t [193] = 3.02, p < .05$). Therefore, when compared to the participant's baseline legal and psychiatric issues, participant's had significantly less legal and psychiatric issues at program exit. Additionally, for both the *legal status* and *psychiatric status scales* the effect size was medium (Cohen's $d = .226$ and $.217$, respectively) (Cohen, 1988).

The remaining five scales did not reveal statistically significant improvements, although the mean differences for the remaining five scales were all negative, indicating a decrease in the adult-reported substance use problems for the respective scale when comparing baseline and program exit scores; however, such improvements did not reach the *statistically significant* threshold. For the Medical Status Scale, results indicated adult-participants' experiences with medical problems was not statistically significant with a mean difference of - 0.024 (95% CI, -0.008 to 0.574), $t (196) = 1.46, p > .05$. The Employment Status Scale results indicated that experiences with employment status was not statistically significant with a mean difference of - 0.017 (95% CI, -0.016 to 0.051), $t (194) = 1.02, p > .05$. The Alcohol Use Scale that measures the severity of alcohol use in the previous 30 days was found to not be statistically significant with a mean difference of -0.002 (95% CI, -0.007 to 0.011), $t(201) = .462, p > .05$. The Drug Use Scale, which measures the severity of drug use in the past 30 days was not statistically significant with a mean difference of -0.004 (95% CI, -0.007 to 0.017), $t(190) = .767, p > .05$. Lastly, the Family/Social Status Scale, which measures the severity of family and social problems in the past 30 days, was found to not be statistically significant with a mean difference of - 0.008 (95% CI, -0.013 to 0.029), $t(199) = .768, p > .05$.

Table 6.13 details the paired t-test results for all seven scales of the ASI.

Indicator	T (SE)	Confidence Interval	Mean Difference	Effect Size (Cohen's <i>d</i>)
Medical Status (n=197)	-1.46 (.017)	(-0.057, 0.009)	-0.024	Not Significant
Employment Status (n=195)	-1.026 (.017)	(-0.052, 0.016)	-0.018	Not Significant
Alcohol Use (n=202)	-.463 (.005)	(-0.012, 0.007)	-0.002	Not Significant
Drug Use (n=191)	-.768 (.006)	(-0.017, 0.008)	-0.005	Not Significant
Legal Status (n=201)	-3.12 (.022)**	(-0.112, -0.027)	-0.069	.226
Family/Social Status (n=200)	-.768 (.011)	(-0.03, 0.013)	-0.008	Not Significant
Psychiatric Status (n=194)	-3.02 (.012)**	(-0.06, -0.013)	-0.036	.217

** denotes $p < .01$

Three separate binary logistic regressions were utilized to determine if SFP B-3 adult-participants had a significant decrease in the likelihood of being identified as "high level of use" on the three ASI risk indicators at program exit, compared to baseline. All three regression results were insignificant, see Table 6.14 below. However, it is important to note that for all three binary logistic regressions, the intercepts were statistically significant, which indicates that the distribution at baseline was not normal between those who were identified as "high level users" and those who were not (i.e., the distribution was not 50% were identified as "0"/50% were identified as "1", at baseline). The significant intercept results show that at baseline, the majority of adult-participants reported as *not* high level users,

compared to a national sample. Therefore, these non-significant results for all three logistic regressions is a positive finding, indicating that the SFP B-3 participants at least maintained and did not worsen on their likelihood of being identified as a “high level user” for all three risk indicators at program exit. The sample at program exit maintained good outcome (i.e., not meeting the threshold of being identified as “high level usage”).

Table 6.14. Logistic Regression Results for ASI Risk Indicators

Indicator	Intercept (S.E.)	Post β (S.E.)	Deviance (-2 Log Likelihood)	Odds Ratio [exp (log. Coefficient)]
ASI HAU (High Alcohol Use) (n=490)	-3.829 (1.074)***	-.193 (.736)	81.638	.824
ASI HDU (High Drug Use) (n=475)	-1.118 (.390)**	-.461 (.273)	394.266	.631
ASI HU (High Alcohol or Drug Use or Both) (n=474)	-1.103 (.381)**	-.422 (.266)	408.059	.656

Discussion/Conclusion – ASI:

The Addiction Severity Index (ASI) is a widely used assessment instrument for assessment of substance abuse, inclusive of current status in seven problem areas, including: medical status, employment status, legal status, family/social status, psychiatric status, alcohol use, and drug use. Comparisons of participant-reported substance use problems as they relate to the aforementioned seven subscales, at baseline and after the SFP B-3 intervention suggest improvements in two domains: legal status issues and psychiatric status issues. Results suggested that SFP B-3 participants had positive changes in legal and psychiatric status.

With regard to the psychiatric status scale, the findings of this study are significant, because they identify that SFP B-3 participation positively impacted psychiatric status. Monitoring co-occurring conditions is an important part of clinical intake and ongoing assessment at treatment centers for substance use. Furthermore, the findings may have important implications for improvement of services, or for state-level interventions interested in monitoring outcomes in populations of parents after interventive treatment for drug use problems.

The legal status scale also held significance within this study, which suggests that participation in SFP B-3 has an impact on the decrease of criminal or illegal activity. This is important, as it demonstrates that a change in the area of legal problems may well represent program completion demonstrating an effect on legal issues that are not easily resolved even when someone is recovering. In other words, the RDA’s increase in focusing on the curriculum and knowledge provided within SFP B-3 has the potential to not only impact their overall well-being and health, but other external factors, such as legal status, that may further support their ability to successfully parent.

Center for Epidemiologic Studies – Depression (Sub-Study #4)

The Center for Epidemiologic Studies (CES-D) short form screening tool includes 12 items that assess the presence and severity of depressive symptoms in respondents in the past seven days. The CES-D 12 items target major facets of depression, including: depressed mood, feelings of guilt and worthlessness, feelings of helplessness and hopelessness, psychomotor retardation, loss of appetite, and sleep disturbance. The self-report measure provides a general overview of depressive symptoms rather than a focus on one particular area. This instrument allows an assessment of self-reported depressive symptomology experienced in the past seven days.

All 12 items are Likert-style ranging from 0 (experienced rarely or never in the past week) to 3 (experienced most or all of the time in the past week). Participants scores were summed to create a total score ranging from 0 (not depressed) to 36 (severely depressed). Using the adult-participants total score, a depression severity category variable was created which indicated if a participant was not depressed (coded “1”) to severely depressed (coded “4”). Additionally, a dichotomous risk indicator was calculated which identified whether the participant exhibited symptoms of severe depression (coded “1”) using the threshold identified in the CES-D manual.

The CES-D has been shown to be a reliable instrument for assessing the number, types, and duration of depressive symptoms across racial, gender, and age categories (Knight, Williams, McGee & Olaman, 1997; Roberts, Vernon, & Rhoades, 1989; Radloff, 1977). High internal consistency has been reported with Cronbach’s alpha coefficients ranging from .85 to .90 across studies (Radloff, 1977). Concurrent validity by clinical and self-report criteria, as well as substantial evidence of construct validity have been demonstrated (Radloff, 1977) making it a useful tool for assessing depression in the general population.

The Family Functioning Adult (FFA) completed the CES-D as a mechanism to measure program participation impact and to assess the depressive symptoms participants were experiencing prior to and after the completion of SFP B-3 (16 weeks covering 14 content sessions). Data were collected at the start-up and conclusion of each cycle of implementation. Specifically, the survey was administered at two data points using a constant sampling frame; 75% participation was noted at each time point. As detailed in *Table 6.3*, at pre-test, a total of 263 KSSAF adults completed the CE-D; and a total of 205 individuals completed CES-D at program exit.

Research Questions –CES-D:

1. Did SFP B-3 adult-participants have a decrease in self-reported depressive symptoms at program exit, as measured by the CES-D?
2. Do SFP B-3 adult-participants have a decrease in the likelihood of being identified as “severely depressed” at program exit?

Analyses

Univariate analyses were conducted on the entire KSSAF analytic sample (N=266) and the individuals who completed both the baseline and program exit CES-D measures (n=205). Univariate results were presented previously under *Analytic Sample*. Bivariate analyses were utilized to examine changes from baseline to program exit. Bivariate analyses included cross-tabulation, t-tests, and binary logistic regressions. Paired t-tests were on two CES-D variables: 1) total score and 2) depression severity categories. Paired t-tests analyses were utilized to determine if there was a statistically significant mean difference between participant scores at baseline compared to program-exit. Simple binary logistic regressions were utilized to see if participation and completion of the parenting intervention (SFP B-3) was predictive in a decreased odds of exhibiting severe depressive symptomology on the

dichotomous risk indicator. For the binary logistic regressions, a dummy independent variable was created that represented the post-test indicator (i.e., allowed researchers to differentiate between pre/post); the dependent variable, the dichotomous risk indicator was regressed on the dummy coded independent variable. Paired t-tests were used to answer research question #1 and binary logistic regression was utilized to answer research question #2.

The completers of the CES-D were examined against the dropouts to see if there were any statistically significant differences between the individuals who completed the parenting-skills intervention and those who dropped out of the parenting-skills program. The results were presented in the above *Table 6.5*. Statistically significant differences were found on income level and relationship status of individuals who completed the CES-D at baseline and program-exit compared to those who dropped out.

Results

A total of 265 FFAs were provided the CES-D during this study, and 205 completed both the pre-posttest (See *Table* below). More than half of the participants were single (53%), White (74%) females (86%), who reported some form of employment (60%) with an annual income of \$0 - \$9,999 (59%). At the beginning of SFP B-3, the majority of the participants were living in their own residence (73.3%). See *Table 6.15* for more details.

Table 6.15. Characteristics of Adult-Participants for the CES-D (n=202)	
Category	Frequency (%)
Sex	
Female	173 (86)
Male	29 (14)
Race/Ethnicity	
White	149 (74)
Black/African-American	23 (11)
Multi-Racial	28 (14)
Employment Status	
Unemployed	76 (38)
Part-Time Employment	36 (18)
Full-Time Employment	77 (38)
Self-Employed	8 (4)
Not in Labor Force	4 (2)

Paired t-tests were conducted to determine whether there was a statistically significant mean difference between participant-reported depressive symptomology in the past 7 days at baseline compared to program exit. Results revealed a statistically significant decrease in participant-reported depression severity from baseline to program exit, as measured by the participant's total score. Results indicated a statistically significant decrease in a participants experiences with the severity of depressive symptoms with a mean difference of -1.068 (95% CI: -2.135 to -0.001), $t(196) = -1.97 (.541)$, $p < .05$. For the categorical variable computed from the total score, results were insignificant with a mean of the difference at of -0.121 (95% CI: -.278 to .036), $t(205) = -1.52 (.08)$, $p > .05$. Therefore, when using the continuous variable, total score, there was a statistically significant decrease in depressive symptoms experienced by participants at program exit compared to baseline; however, when transformed into a categorical variable, this statistical significance did not maintain.

Additionally, for the total score continuous variable, using Cohen’s guidelines (1988), the effect was small (Cohen’s $d = .137$). See *Table 6.16* for further details.

Table 6.16. Paired T-Test Results for CES-D and Associated Effect Size (n=202)

Indicator	T (SE)	Confidence Interval	Mean Difference	Effect Size (Cohen’s d)
PICESDST (total score)	-1.97 (.541)*	(-2.13, -.001)	-1.068	.137
PICESDSC (depression severity category)	-1.524 (.08)	(-0.278, 0.036)	-0.121	Not Significant

* denotes $p < .05$

A binary logistic regression was conducted using a dummy coded post-test indicator; the dependent variable (i.e., the dichotomous depression score indicator) was regressed on the dummy-coded independent variable. Not significant results were found in the likelihood of decreased odds of being identified as experience severe depressive symptoms at post-test, compared to baseline, as measured by the risk indicator. It is important to note, as detailed in *Table 6.17* below, that even though the beta value was non-significant, the intercept is significant. A significant intercept value indicates that at baseline, the SFP B-3 participants were not evenly distributed between being considered as exhibiting severe depressive symptomology and not exhibiting severe depressive symptomology. The results show that there were significantly more individuals at baseline who were not considered "severely depressed" and these results were maintained at program exit, which is a positive outcome. Therefore, the sample, at program exit, maintained good outcomes (i.e., not experiencing severe depression) when compared to baseline. From a program evaluation standpoint: over the course of the intervention a participant's CES-D risk indicator maintained and did not worsen (nor increase).

Table 6.17. Logistic Regression Results for CES-D and Associated Effect Size (n=502)

Indicator	Intercept (S.E.)	Post β (S.E.)	Deviance (-2 Log Likelihood)	Odds Ratio
CESD, Variable SC_SSD	-.676 (.305)*	-.230 (.206)	583.259	.795

* denotes $p < .05$

Depression has become a major public health concern affecting a large portion of the general population and the Center for Epidemiologic Studies Depression Scale (CES-D) is one of the most desired instruments to assess the severity of depression being experienced by individuals. There is an increasing amount of recognition and concern regarding the connection between substance usage and its connection to individual’s experiences with depressive symptoms. Within this study, comparisons of participants’ functioning at prior to and after the SFP B-3 intervention suggest participants experiences regarding their total score on the severity of depressive symptoms significantly improved; however, when their total score was used to designate them into four categories ranging from not depressed to severely depressed, significant results were not found. Therefore, it can be concluded that adult-participants, at program exit, improved slightly with regards to symptomology, but maintained their depressive categories (i.e., were still moderately or severely depressed).

Literature has demonstrated that a loss of interest and decrease of enjoyment in activity can impact the individual's successful completion of treatment (Park et al., 2015). Results from this study suggests that the intervention included participants with depressive symptoms that may impact their daily quality of life and emotional well-being, as well as their participation within treatment. However, despite the level of severity of depression symptoms, 75% of participants successfully completed SFP-B3.

The motivating feature for introducing parental substance use treatment interventions in child welfare has been, and continues to be, a basic belief that integrating interventions for a target population that have been specifically designed to increase parenting capacities will improve child and family functioning and well-being. This type of a coordinated intervention has the capacity to enhance parental engagement with services and facilitate familial success, which improves the quality of life for parents and children. Results from this study indicate that individual experiences with depressive symptoms who participate within this type of intervention can successfully complete the program.

Child Well-being Outcomes - Ages & Stages Questionnaires (Sub-Study #5):

This study includes two local evaluation child well-being measures: the Ages & Stages Questionnaire – Third Edition (ASQ-3) and the Ages & Stages Social-Emotional Questionnaire – Second Edition (ASQ-SE-2). Both the ASQ-3 and the ASQ-SE-2 are research-based, rigorously reviewed, and provide insights into a child’s strengths and potential delays. Both measures allow for researchers to account for prematurity. The purpose of this study was to assess the physical development, as measured by the ASQ-3, and the social-emotional development, as measured by the ASQ-SE-2, of the SFP B-3 focal children. Extensive research has demonstrated that children enter foster care with psychological issues (Clausen, Landsverk, Ganger, Chadwick & Litrownik, 1998; Goemans, van Geel & Vedder, 2015; Landsverk & Garland, 1999) and that such problems continue to emerge throughout the child’s foster care experience (Lloyd & Barth, 2011). In order to tailor and develop child welfare interventions targeted at enhancing a child’s well-being researchers must examine the child’s development at baseline and program exit. The goal of this sub-study was to examine pre-test and post-test differences in a child’s physical development (ASQ-3) and social-emotional development (ASQ-SE-2) among children, 1-47 months, in out-of-home placement with the goal of reunification who were affected by parental substance use.

The ASQ-3 is the most widely used developmental screening tool for children ages 1 – 66 months worldwide (Brookes Publishing, 2019a). The ASQ-3 is a caregiver-reported measure that screens for potential developmental delays in five domains: 1) communication; 2) gross motor; 3) fine motor; 4) problem solving; 5) personal-social. The ASQ-3 consists of twenty-one, 30-question questionnaires, separated by monthly intervals (e.g., 2 month, 4 month, 6 month, etc.). Each of the 5 developmental domains consists of 6 separate Likert-style questions; answers include: yes (10 points), sometimes (5 points), not yet (0 points). Five raw scores are computed for each of the respective developmental domains. The child’s raw scores are compared to standardized cutoff points (provided in the manual and scoring guides) for each of the five areas to determine if the child is development well, or if they may need further assessment, monitoring or to be rescreened (Squires & Bricker, 2017). Though cutoff scores vary based on the respective monthly interval, higher scores indicate that the child’s development, for that respective category, appears to be on schedule, lower scores indicate that the child may need further professional assessments. The ASQ-3 boasts very strong psychometric properties with validity ranging from .82 to .88, test-retest reliability at .92, inter-rater reliability at .93, sensitivity at .86, and specificity at .85 (Squires & Bricker, 2017).

The ASQ-SE-2, modeled after the ASQ-3, was specifically designed to screen for social and emotional behaviors in children between the ages of 1 – 72 months old. The ASQ-SE-2 is a caregiver-reported measure that screens for strengths and concerns in a child’s ability to self-regulate, interact with people, and their compliance, social-communication, autonomy, adaptive functioning, and affect (Brookes Publishing, 2019b). The ASQ-SE-2 consists of nine questionnaires separated by monthly intervals (e.g., 2 month, 6 month, 12 month, etc.). Each questionnaire has approximately 30, Likert-style questions with reverse-scoring built-in to the questionnaires. Answers include: often or always, sometimes and rarely or never. Individuals can score 0, 5, or 10 points per question, and if a parent designates “this is a concern” an additional 5 point are added to each question that is a concern. One raw cumulative score is provided per questionnaire; this score is then compared to standardized cutoff points (provided in the manual and scoring guides) and indicates whether a child is faring well or may

need to be rescreened, monitored, or referred to further assessment (Squires, Bricker, Twombly, 2017). Although cutoff points vary by monthly intervals, contrary to the ASQ-3, lower scores indicate that the child's development appears to be on schedule, while high scores are an indication that further assessment with a professional may be warranted. Psychometric properties for the ASQ-SE-2 are strong with reliability at .89, validity at .84, sensitivity at .81 and specificity at .83 (Squires, Bricker, Twombly, 2017).

Together the ASQ-3 and ASQ-SE-2 allow for a comprehensive assessment of a young child's overall development (e.g., physical and social-emotional) and accurately identify areas in need of additional assessments, ongoing monitoring or specialized intervention.

Both of the local child well-being measures were reported by the Family Functioning Adult (FFA) at baseline and program exit. It is important to note that for the majority of focal children participating in SFP B-3 the children were living in out-of-home placement, and therefore, the FFA, as the parent with the goal of reunification, answered the ASQ-3 and ASQ-SE-2 questions to the best of their ability. Certain questions in the ASQ-3 and ASQ-SE-2 are geared towards caregivers living with their children (e.g., "does your child sleep through the night?"); such questions were difficult for FFAs to answer because of their current living arrangement. When possible, researchers allowed parents to attempt certain activities/tasks, asked in the ASQ-3 questions, with their child. For example, several questions in the ASQ-3 ask if a child is able to trace or draw an object. If the opportunity was available, researchers would allow the FFA to observe these activities with their child to best answer the ASQ-3 questions. However, it should be noted, that certain questions (i.e., sleeping through the night) may not be accurate due to the living arrangements of our target population and study criteria. Below are the two research questions for this sub-study.

Research question – ASQ-3:

1. Did SFP B-3 focal children improve on their developmental functioning, as measured by the ASQ-3?

Research question – ASQ-SE-2:

1. Did SFP B-3 focal child improve on their social-emotional functioning, as measured by the ASQ-SE-2?

Analysis

Since the ASQ-3 and ASQ-SE-2 were both local measures and were not required to be uploaded to the cross-site evaluation nor needed scoring by Mathematica, the evaluators were able to include cycle 9 participants in this sub-study. For the ASQ-3, 308 focal children had a completed ASQ-3 at baseline and 234 focal children had a completed ASQ-3 at post-test. For the ASQ-SE-2, 277 focal children had a completed ASQ-SE-2 at baseline and 209 had a completed ASQ-SE-2 at post-test. It is important to note that the sample for the ASQ-SE-2 does not include cycle 1 SFP B-3 participants because the first edition of the ASQ-SE was administered to all cycle 1 participants (n=25). See *Table 6.18* for details regarding ASQ-SE first edition.

Table 6.18. Baseline and Program Exit Completion Numbers by ASQ Questionnaire		
Instrument	Baseline	Post-Test
ASQ-3	308	234
ASQ-SE-2	275	209
ASQ-SE (First Edition, Cy. 1)	27	27

Note. Cycle 1 participants completed the ASQ-SE version 1, and were not included in this sub-study

Bivariate analyses were utilized to examine a child’s developmental changes from baseline to program exit, as reported by their primary caregiver, the FFA. Bivariate analyses included cross-tabulation, t-tests, and binary logistic regressions. For the ASQ-3, paired t-tests were conducted on the five developmental subscales (e.g., communication, gross motor, fine motor, problem solving, and personal-social). Paired t-tests analyses were utilized to determine if there was a statistically significant mean difference between a child’s scores, on each of the five developmental domains, at program exit, compared to baseline. For the ASQ-SE-2, a paired t-test was conducted on the child’s total score to determine if there was a statistically significant mean difference between a child’s social-emotional score at program exit, compared to baseline.

Paired t-tests were used to answer both research questions #1 and #2.

For both the ASQ-3 and the ASQ-SE-2, children with a completed post-test were examined against the children without a completed post-test (i.e., dropped out) to see if there were any statistically significant demographic differences between the children who completed the intervention and those who dropped out of the program. For both the ASQ-3 and ASQ-SE-2 no significant differences were found between children who completed the intervention and those who dropped out of the intervention on the following variables: biological sex, race, and ethnicity.

Results

A total of 308 children were administered the ASQ-3 during the study period, 232 children had completed ASQ-3 measures at both baseline and program exit. More than half of the children who had completed ASQ-3s at both time points were White (67%), non-Hispanic/Latino (79%) males (53%), living with foster parents (72%) at enrollment with a mean age of 1.36 years. See *Table 6.19* for more details.

Table 6.19. Sample Characteristics for ASQ-3 Questionnaire (n=308)	
<i>Categorical Variables</i>	
Biological Sex	Frequency (%)
Female	144 (47)
Male	164 (53)
Race	
White	207 (67)
Black/AA	32 (10)
American Indian/Alaskan Native	4 (1)
Multi-Race	65 (21)
Ethnicity	
Not Hispanic/Latino	243 (79)
Hispanic/Latino	63 (21)
Residence @ Baseline	
Foster Parent's	222 (72)
Kinship	54 (18)
Foster/Group Home	18 (6)
Primary Residence of FFA	13 (4)
Treatment Facility	1 (<.5)
<i>Continuous Variables</i>	Mean (SD)
Child's Age at RPG Enrollment (Years)	1.36 (1.02)

Sample characteristics were similar for the ASQ-SE-2. A total of 275 children were administered the ASQ-SE-2 during the study period, 209 children had completed ASQ-SE-2 measures at both baseline and program exit. More than half of the children who had completed ASQ-SE-2s at both time points were White (67%), non-Hispanic/Latino (80%) males (55%), living with foster parents (71%) at program enrollment with a mean age of 1.35 years. See *Table 6.20* for more details.

Table 6.20. Sample Characteristics for ASQ-SE-2 Questionnaire (n=275)	
<i>Categorical Variables</i>	
Biological Sex	Frequency (%)
Female	123 (45)
Male	152 (55)
Race	
White	185 (67)
Black/AA	30 (11)
American Indian/Alaskan Native	4 (2)
Multi-Race	56 (20)
Ethnicity	
Not Hispanic/Latino	220 (80)
Hispanic/Latino	54 (20)
Residence @ Baseline	
Foster Parent's	194 (71)
Kinship	50 (18)
Foster/Group Home	18 (7)
Primary Residence of FFA	12 (4)
Treatment Facility	1 (<.5)
<i>Continuous Variables</i>	
Child's Age @ RPG Enrollment (years)	Mean (SD)
	1.35 (1.02)

Paired t-tests were conducted to determine whether there was a statistically significant mean difference between caregiver-reported developmental functioning, as measured by the ASQ-3, and social-emotional functioning, as measured by the ASQ-SE-2, at program exit, compared to baseline. For the five developmental domains measured by the ASQ-3, results revealed a statistically significant improvement in four of the five domains: communication, gross motor, fine motor, and problem solving. Non-significant results were found on the personal-social scale of the ASQ-3. Calculated effect sizes reveal small to medium effect sizes for the four statistically significant developmental domains, ranging from .178 to .223 (Cohen's *d*). See Table 6.21 for the ASQ-3 paired t-test results and associated effect sizes.

Table 6.21. Paired T-Test Results for ASQ-3 and Associated Effect Size				
Indicator	T (SE)	Confidence Interval	Mean Difference	Effect Size (Cohen's <i>d</i>)
Communication (n=232)	2.919 (.954)**	(.905, 4.664)	2.784	.192
Gross Motor (n=232)	3.392 (.919)***	(1.306, 4.927)	3.116	.223
Fine Motor (n=231)	2.711 (1.068)**	(.791, 5.001)	2.896	.178
Problem Solving (n=231)	3.149 (1.058)**	(1.248, 5.419)	3.333	.207
Personal-Social (n=231)	1.771 (0.867)	(-0.172, 3.245)	1.536	Not Significant

* denotes $p < 0.05$

** denotes $p < 0.01$

*** denotes $p < 0.001$

Results revealed non-significant improvements in focal children's overall social-emotional development. Although not examined in this report, it is important to note that non-significant results were also found for all cycle 1 (n=25) participants on overall social-emotional development as well, see Table 6.22.

Indicator	T (SE)	Confidence Interval	Mean Difference	Effect Size (Cohen's d)
Social – Emotional, <i>Second Edition</i> Total Score	.449 (3.176)	(-4.836, 7.688)	1.426	Not Significant

* denotes $p < 0.05$

** denotes $p < 0.01$

*** denotes $p < 0.001$

Discussion/Conclusion – ASQ-3 & ASQ-SE-2

The goal of this sub-study was to examine pre-test and post-test differences in a child’s physical development (ASQ-3) and social-emotional development (ASQ-SE-2) among substance-affected children, 1-47 months, in out-of-home placement who completed the SFP B-3 intervention. Although causality cannot be inferred from the results, children who participated in the SFP B-3 intervention improved in several areas of physical development, including: communication, gross motor, fine motor, and problem solving. Non-significant results were found on the ASQ-3 sub-scale personal-social and on the ASQ-SE-2 total score.

The enhancements to several areas of physical development is a noteworthy finding indicating that for children in out-of-home placement who visited with their parent at least once a week to work on skills learned in the SFP B-3 group, the intervention had a positive influence on their development. Specifically for the SFP B-3 intervention, this parent-skills program is comprised of lessons that directly relate to the domains screened for with the ASQ-3, including lessons such as *communicating with infants and toddlers, solving problems, giving directions*, and others.

Two considerations for the non-significant findings in the social-emotional development of children who completed the intervention are: 1) the young age of the target population, and 2) the caregiver-report. Assessing for social emotional developmental concerns and/or milestones may be more difficult in younger children. The SFP B-3 intervention was specifically for children birth through three years of age. For young children in out-of-home placement, expressing certain emotional cues and social expression may not be as apparent as an older child’s cues or expressions. Additionally, the caregiver-report is another potential reason for the non-significant findings. The FFA as the reporter, as mentioned previously, does create limitations when attempting to answer questions about their child’s development who currently lives out-of-home. Although the ASQ-3 questions could primarily be addressed by completing certain tasks, in the moment, with their child, the ASQ-SE-2 questions could not. For instance, the questions “does your child sleep through the night?” could not be answered in the moment by the FFA. Another third possibility for consideration is that the SFP B-3 curriculum needs to be modified to meet the needs of children in the social-emotional domain. The evaluators of this program note that every other curriculum of SFP contains specific information targeted at the child in the actual course delivery, delivered in the sessions. In SFP B-3, the content is aimed at the parent participant, and it is hoped that the child will benefit through this increased skill and knowledge level of the parent. Perhaps this is not true, and the curriculum needs further refinement.

VII. Implementation/Process Evaluation

The Strengthening Families Program Birth-to-three (SFP B-3) is a 16-week adaptation of the evidence-based Strengthening Families Program 3-12 years. SFP B-3 is a family skills training program designed for at-risk families. The SFP B-3 program was developed specifically to address the unique developmental needs of young children ages birth-to-three. (See *section IV* for more details on SFP program). The KSSAF program implemented 14 SFP B-3 sessions over 16-weeks to account for baseline and program exit data collection. Detailed below are the KSSAF activities by week and the corresponding SFP B-3 Session.

Table 7.1. KSSAF Activities by Week and Corresponding Session		
Week #	SFP B-3 Session #	SFP B-3 Session Title
Week 1	Session 1A	Introductions and Group Building & Week 1 data collection.
Week 2	Session 1B	Introductions and Group Building continued & Week 2 data collection.
Week 3	Session 2	What Kids Can Do & Handling Stress
Week 4	Session 3	Attachment & Bonding
Week 5	Session 4	Rewards
Week 6	Session 5	Goals & Objectives
Week 7	Session 6	Communicating with Infants & Toddlers
Week 8	Session 7	Empathy
Week 9	Session 8	Alcohol, Tobacco, Drugs & Families
Week 10	Session 9	Solving Problems
Week 11	Session 10	Giving Directions
Week 12	Session 11	Setting Limits II for Infants & Toddlers
Week 13	Session 12	Disciplining Without Physical Punishment
Week 14	Session 13	Making and Using Behavior Change Plans
Week 15	Session 14	Putting It All Together
Week 16	No session	Post-test/Exit Data collection

Participant Engagement Analysis (Sub-Study #6)

Participant engagement was assessed at baseline by the lead Parent Group Leader at baseline (week 2/Session 1B) and program exit/graduation (Week 15/Session 14). Group leaders rated each SFP B-3 group participant’s engagement on a Likert scale. A rating of “1” corresponded to “participants were minimally or not involved at all”, to “4”, which corresponded to “participants were consistently highly involved in services”. Participant engagement was recorded in the RPG-created electronic service log (ESL) system and was analyzed by the KUSSW evaluation team and the SFP B-3 implementation specialist. This sub-study was guided by the following research question.

Research Question:

1. For KSSAF adult-participants who completed the SFP B-3 intervention, did participant engagement scores improve between baselines and program exit?

Analysis

Both univariate and bivariate analyses were utilized to examine participant engagement scores. Univariate analyses were used to observe means and frequencies of engagement scores at baseline and program exit for the 302 KSSAF adult-participants included in the analysis. Paired t-tests analyses were utilized to determine if there was a statistically significant mean difference between participant engagement scores at baseline compared to program-exit. This study included participant engagement scores for all adult-participants who fulfilled the same reporter role at both baseline and program exit (i.e., in a dual-adult case, if FFA dropped out of study, then second parent would fulfill the role of FFA). Participant engagement scores were not required for bi-annual upload to the cross-site evaluation and were not scored by Mathematica, given this, each grantee was able to score and analyze participant engagement on their own. Therefore, once the KSSAF project concluded, participant engagement scores across all nine KSSAF cycles were able to be included in this analysis, hence why the sample size is larger than analyses conducted on the standardized instruments.

Results

Univariate results revealed 19% (n=61) of KSSAF adults at baseline had a rating of “1”, 10% (n=32) had a rating of “2”, 29% (n=92) had a rating of “3”, and 41% (n=129) had the highest rating of “4”; at program exit 11% (n=33) of adult participants had a rating of “1”, 16% (n=48) had a rating of “2”, 33% (n=100) had a rating of “3”, and 40% (n=121) had the highest rating of “4”. The mean baseline rating was 2.92 (SD: 1.14) and the mean program exit rating was 3.02 (SD: 1.00).

Paired t-test results did not reveal statistically significant differences between adult-participants’ engagement scores at baseline and program exit. The following *Table 7.2* details the results for the paired t-tests and associated effect size for the engagement rating.

Indicator	T (SE)	Confidence Interval	Mean Difference	Effect Size (Cohen’s d)
Engagement Rating	.366 (.072)	(-0.116, 0.169)	0.026	.021

Discussion

KSSAF adult-participants' engagement scores did not significantly differ between baseline and program exit, however, there was a slight increase in group-leader rated participant engagement between baseline and program exit, although not reaching the level of statistical significance. One reason for this may be due to the group-leaders rating of the participant's engagement. An introverted participant may have quietly been engaged, but to the group leader may not have perceived them as vocally involved. Another reason may be due to the potential inflation of baseline engagement scores; baseline engagement scores were collected during week 2, SFP B-3 session 1B, when the group leaders conducted group after participants concluded baseline data collection. The group leaders may not have had an accurate idea of engagement levels given the limited time spent with KSSAF participants, therefore, scores may have been inflated at baseline. Additionally, participant engagement scores were included for the majority of dropout families; there were 71 total dropouts in KSSAF from cycles 1-9, 59 of those dropouts were included in this analyses since. It is highly likely that the families who dropped out had low program exit engagement scores and therefore diluted the potential of significant findings. Lastly, it is very possible, that participants' maintained varied involvement (a rating of "3" corresponded to participant involvement varied) between baseline and program exit, as evidenced by the two means.

Adherence to SFP B-3 Program Fidelity

The following information was presented in the KSSAF SFP B-3 Year 05 Strengthening Families Program Fidelity Report, written by Ahearn Greene & Associates. The KSSAF SFP B-3 funding was sufficient all five years to provide fidelity support in all aspects of the program implementation, thus making it a reasonable expectation that fidelity will be achieved in all domains and across all cycles. The five domains of fidelity are: environment/context, population, program, staffing, and curriculum. Each domain is described fully below.

Implementation is rated in each of the five fidelity domains based on a 5-point measurement scale:

- 5 - Exemplary Implementation (Range 4.75-5.00)
- 4 - Exceeds Program Standards (Range 3.75-4.74)
- 3 - Meets Program Standards (Range 2.75-3.74)
- 2 - Below Program Standards (Range 1.75-2.74)
- 1 - Does Not Meet Program Standards (Range 0.00-1.74)

"As the "KSSAF SFP(B-3) Year 05 Strengthening Families Program Fidelity Rating by Cycle by Domain with Comparison to Years 02, 03, & 04" see Table 7.3 below, KSSAF SFP(B-3) exceeds SFP(B-3) fidelity standards for all cycles and for the Year 05 reporting period with an overall fidelity score of 3.94, "above program standards." Additionally, this represents a Year 05 mean fidelity score that is consistent with Year 02 (m = 3.89), Year 03 (m = 3.96), and Year 04 (m=3.90). Regarding the

five domains, the aggregate KSSAF Year 05 domain fidelity scores for Environment and Context (m = 4.25), Staffing Fidelity (m = 3.83) and Curriculum (m = 4.55) are all above program standards, and exceed or are consistent with the Year 03 and Year 04 scores. Population Fidelity (m = 3.65) and Program Fidelity (m = 3.40) "met program standards" for Year 05. Of note is that there was a large decrease in Population Fidelity from Year 03 (m = 4.05) and year 04 (m = 4.20) and in Program Fidelity from Year 03 (m = 3.85) and year 04 (m = 3.55), which was largely due to low enrollment and completion rates for Year 05. Overall, it is important to note that all sites and all domains scored "meeting program standards" or above and there were no safety or fidelity concerns noted for any site or for KSSAF as a whole (Ahearn Greene, 2019).

Table 7.3. KSSAF SFP(B-3) Year 05 Fidelity Rating by Cycle by Domain with Comparison to Years 02, 03, & 04

Cycle	Environment/ Context	Population	Program	Staffing	Curriculum	Mean Cycle Fidelity
KVC Overland Park #1	4.00	4.00	4.25	4.25	4.25	4.15
KVC Topeka #1	3.50	4.00	4.25	3.75	3.75	3.85
SFCS Hutchinson #1	3.50	3.00	3.50	4.00	4.00	3.60
SFCS Wichita #1	3.25	4.00	4.25	4.00	4.00	3.90
KVC Kansas City #2	3.25	4.00	3.75	4.00	3.75	3.75
KVC Topeka #2	3.75	4.25	3.50	3.75	3.75	3.80
SFCS Salina #2	4.25	3.75	3.75	4.25	4.25	4.05
SFCS Wichita #2	3.25	4.00	4.25	4.25	4.25	4.00
KSSAF Year 02 Mean (N=8)	3.59	3.88	3.94	4.03	4.00	3.89
KSSAF Year 02 SD	0.38	0.38	0.35	0.21	0.23	0.18
KVC Overland Park #3	4.00	4.00	4.50	3.75	3.75	4.00
KVC Topeka #3	4.00	4.25	4.25	3.75	4.00	4.05
SFCS Hutchinson #3	4.00	4.25	4.00	4.25	4.00	4.10
SFCS Wichita #3	4.00	4.25	4.00	4.25	4.00	4.10
KVC Kansas City #4	4.00	3.75	4.00	4.25	3.75	3.95
KVC Olathe #4	4.00	4.00	3.25	4.00	3.75	3.80
KVC Topeka #4	4.00	4.25	3.25	4.00	4.00	3.90
SFCS Salina #4	4.00	3.75	4.00	4.00	3.75	3.90
SFCS Wichita #4	4.00	3.75	3.25	3.75	4.00	3.75
SFCS Wichita #5	4.00	4.25	4.00	3.75	4.00	4.00
KSSAF Year 03 Mean (N=10)	4.00	4.05	3.85	3.98	3.90	3.96
KSSAF Year 03 SD	0.00	0.23	0.44	0.22	0.13	0.12
KVC Kansas City #6	4.00	4.25	4.00	4.00	4.00	4.05
KVC Olathe #6	4.00	4.25	3.25	3.75	4.00	3.85
KVC Topeka #6	4.00	4.25	4.50	3.75	4.00	4.10
SFCS Hutchinson #6	4.00	4.25	3.50	3.50	4.00	3.85
SFCS Wichita #6	4.00	4.25	3.75	3.00	4.00	3.80

KVC Kansas City #7	3.50	4.25	3.00	4.00	4.00	3.75
KVC Olathe #7	4.00	4.25	3.25	3.75	4.00	3.85
KVC Topeka #7	4.00	3.75	4.00	4.00	4.00	3.95
SFCS Salina #7	4.00	4.25	2.75	4.00	4.00	3.80
SFCS Wichita #7	4.00	4.25	3.50	4.00	4.00	3.95
KSSAF Year 04 Mean (N=10)	3.95	4.20	3.55	3.78	4.00	3.90
KSSAF Year 04 SD	0.16	0.16	0.52	0.32	0.00	0.11
KVC Kansas City #8	4.00	4.25	3.75	4.00	4.50	4.10
KVC Olathe #8	4.00	3.25	2.75	3.75	4.50	3.65
KVC Topeka #8	4.00	4.00	3.50	4.25	4.50	4.05
SFCS Hutchinson #8	4.00	3.50	4.00	3.50	4.50	3.90
SFCS Wichita #8	4.00	3.75	2.75	3.50	4.50	3.70
KVC Kansas City #9	4.50	2.50	3.25	4.25	4.75	3.85
KVC Olathe #9	4.50	4.00	3.50	3.75	4.75	4.10
KVC Topeka #9	4.50	3.25	3.25	4.25	4.00	3.85
SFCS Salina #9	4.50	4.00	3.25	3.25	4.75	3.95
SFCS Wichita #9	4.50	4.00	4.00	3.75	4.75	4.20
KSSAF Year 05 Mean (N=10)	4.25	3.65	3.40	3.83	4.55	3.94
KSSAF -Year 05 SD	0.26	0.53	0.44	0.35	0.23	0.18

“With regards to the performance of the 10 Year 05 cycles, eight were "above program standards" with scores of 3.85 to 4.20. Two Year 05 cycles scored "meeting program standards" with scores of 3.65 and 3.70. The KSSAF SFP(B-3) range of mean cycle fidelity scores for Year 05 was 3.65 - 4.20, with a very small standard deviation of SD = 0.18. Of note is that there were large increases by sites and by agencies from Year 02 to Year 03, and a decrease in Year 04 followed by a small increase from Year 04 to Year 05, with resulting similar means for overall fidelity in Year 02, Year 04 and Year 05. More notable is the relatively consistent mean fidelity for KSSAF as a whole over the four years with a total of 38 cycles. For the four implementation years, all cycles, domain and yearly means have either "met program standards" or been "above program standards." Therefore, KSSAF's fidelity is notable and this is considered a top rating for the Year 05 cycles with scores above program standards due to sustained enrollment of a high-risk population, adequate completion rates, strong staff selection and training, and high adherence to the curriculum. Additionally, the staff continued to deliver a curriculum with adaptations implemented in Year 03 that were responsive to the experience of the first cycles and found to be more effective, engaging, and better received by the participants and staff. Key is that this means that the outcome results reflect program effectiveness when the program is done strictly adhering to the fidelity standards and the curriculum as written, which is what we want to see

when we are testing a curriculum and will use the results of these cycles to suggest changes and adaptations for future cycles (Ahearn Greene, 2019, p. 51).

“The total enrollment for KSSAF Year 05 was 76 families, with a mean of 7.40 families per cycle. This has resulted in a Year 05 total of 108 adult participants and 96 children aged birth to 47 months, with a total of 204 Year 05 participants. The mean number of adult participants per cycle was 10.60, with a range of 5-16 parents/cycle. The mean number of children per cycle was 8.60, with a range of 3-14 children age birth to 47 months per cycle. All the participant levels in terms of number of families, adults, and children met or exceeded fidelity standards. The minimum number of participants in the parents’ group is six, in order to conduct a skills training. Group family skills training is reliant on the process of skills training that includes the interaction by participants (Ahearn Greene, 2019, p. 18).

“KSSAF achieved an overall Program Fidelity mean rating of 3.40 for the 10 Year 05 cycles, "meeting program standards." This Year 05 mean is a decrease from the Year 04 mean of 3.55 and the Year 03 mean of 3.85. This rating is further described as a Program Fidelity "above program standards" for three cycles, with Program Fidelity scores ranging from 3.75 to 4.00. Seven cycles "met program standards," with Program Fidelity scores ranging from 2.75 to 3.50. (Ahearn Greene, 2019, pp. 25-26).

“Program Fidelity measures the fidelity to the program structure and components that support skill development taught in the curriculum. Based on the Site Information Surveys and the site visits, all 10 KSSAF SFP B-3 Year 05 cycles provided all the benchmark fidelity components aligned with Program Fidelity. They are providing dinner attended by families and staff during which staff has the opportunity to observe and meet with families informally to support skill development and role model skills. The sites have varied weekly incentives to reinforce positive participation and behavior and provide tools for the adult participants to practice the family skills with their children. Particularly, with a higher risk population that has more barriers to participation, requiring the program to be responsive and adaptive (e.g., children in out-of-home placement, parental substance abuse), the KSSAF level of implementation fidelity and quality is notable and at all of the implementation benchmarks meets or exceeds fidelity (Ahearn Greene, 2019, pp. 25-26).

An important benchmark for overall program implementation fidelity is the level of organization and the programs' provision of the meal, groups, incentives and referrals to recourses that is culturally congruent with the needs and any limits of the participating families. For all KSSAF sites, the program implementation with regards to organization, the provision of all program components, the providing of incentives, and the meeting family needs that pose barriers to participation (e.g., childcare, transportation, referrals to services) meet or exceed expectations for a veteran program, particularly in later years of implementation. KSSAF is noted for articulating and recognizing needs of and developing best practices in serving the identified population as defined by enrollment criteria. These criteria were enrollment of families involved with child welfare with a history of substance abuse and children in out-of-home placement requires accommodations and assurance that the program responds to their needs and situations (Ahearn Greene, 2019, pp. 25-26).

“All Year 05 cycles were considered “subsequent cycles,” and therefore subject to the 75% completion benchmark. Additionally, SFP B-3 best practices recommend that the completion benchmark in terms of dosage for number of families completing be defined as having at least six families that attend at least 10 sessions of the 14-session curriculum. These two measures inform the fidelity score in terms of “success in program retention and completion” (Ahearn Greene, 2019).

Table 7.4 reports the retention/completion rates for the families for the five Mid-Year 05 cycles completed during the reporting period, with comparison data from the Years 02, 03, & 04 cycles.

Table 7.4. KSSAF SFP B-3 Year 05 Family Retention Rate with Comparison to Years 02, 03, & 04

Cycle	# Families Enrolled	# Families Completed	Family Retention Rate
KVC Olathe #1	8	8	100.00%
KVC Topeka #1	10	9	100.00%
SFCS Hutchinson #1	4	3	75.00%
SFCS Wichita #1	9	8	88.89%
KVC Kansas City #2	8	6	75.00%
KVC Topeka #2	9	6	66.67%
SFCS Salina #2	7	4	57.14%
SFCS Wichita #2	10	9	90.00%
KSSAF Year 02 Total	65	53	81.53%
KSSAF Year 02 Mean/Cycle (N=8)	8.00	6.63	82.81%
KVC Olathe #3	8	8	100.00%
KVC Topeka #3	12	11	91.67%
SFCS Hutchinson #3	8	7	87.50%
SFCS Wichita #3	8	7	87.50%
KVC Kansas City #4	7	6	85.71%
KVC Olathe #4	8	5	62.50%
KVC Topeka #4	13	9	61.54%
SFCS Salina #4	7	6	100.00%
SFCS Wichita #4	7	4	57.14%
SFCS Wichita #5	9	7	77.78%
KSSAF Year 03 Total	87	70	80.45%
KSSAF Year 03 Mean/Cycle (N=10)	8.60	6.90	80.23%
KVC Kansas City #6	8	6	85.71%
KVC Olathe #6	8	5	62.50%
KVC Topeka #6	12	11	100.00%
SFCS Hutchinson #6	7	5	71.43%
SFCS Wichita #6	7	6	100.00%
KVC Kansas City #7	7	6	57.14%
KVC Olathe #7	7	5	62.50%
KVC Topeka #7	14	9	76.92%
SFCS Salina #7	8	6	60.00%
SFCS Wichita #7	8	5	83.33%
KSSAF Year 04 Total	86	65	75.58%
KSSAF Year 04 Mean/Cycle (N=10)	7.80	6.00	76.92%
KVC Kansas City #8	9	6	60.00%
KVC Olathe #8	5	3	60.00%
KVC Topeka #8	12	8	58.33%
SFCS Hutchinson #8	8	6	85.71%
SFCS Wichita #8	8	4	50.00%
KVC Kansas City #9	6	3	100.00%
KVC Olathe #9	7	4	62.50%

KVC Topeka #9	6	5	66.67%
SFCS Salina #9	6	4	66.67%
SFCS Wichita #9	9	7	77.78%
KSSAF Year 05 Total	76	50	65.78%
KSSAF Year 05 Mean/Cycle (N=10)	7.40	4.90	66.22%

“The overall KSSAF Year 05 retention rate was 65.78%, with a range of 50% to 100% for the 10 cycles. Of note is that this is lower than the Years 02, 03, & 04 completion rates of 81.53%, 80.45%, and 75.58% respectively. The three previous years met the SFP Fidelity Benchmark for completion of 75%. Year 05 did not meet the completion rate benchmark. However, probably more notable is the consistency between Year 02, Year 03, and Year 04, with only a narrow range of completion rates of 75.58% to 81.53% as compared to the wide Year 05 range. In considering the low completion rate, a review of the numbers of families per cycle was considered. As stated previously, the benchmark for enrollment is a minimum of eight families, allowing for 2-2.5 families to dropout. In Year 05, five of the 10 cycles enrolled less than eight families, so that if they had two families drop out, then they would necessarily not meet the rate or numeric completion rates. The strategy for increasing the completion rate to meet the benchmark starts with enrolling the requisite 8-12 families. This is particularly important for families involved with child welfare where other outside factors, such as transport of out-of-home children, pending legal charges, waits for substance abuse treatment and medical services, and relocation are likely to impact attendance at SFP (Ahearn Greene, 2019, pp. 28-29).

“When considering retention and completion in terms of numbers of families, a total of 50 families completed the program in Year 05 with a mean of 4.90 families/cycle, below the fidelity benchmark of six families completing per cycle. Two cycles had six families enroll, meaning they would have to have a 100% completion rate, which is unlikely based on the KSSAF three years of completion rate data. Finally, two cycles recruited 8-12 families and had six families complete, while four cycles had enough families enrolled (n = 8-12) but very high dropout rates. Again, this points to the need to track dropouts, particularly in regards to the identified population. It is therefore more important to track the reasons for the dropouts, barriers to attendance, incentives for attending, and competing issues that impact participation, both in terms of the individual families and also in consideration of program delivery at the sites. The variability between sites and the variability between cycles for individual sites indicates that overall KSSAF is meeting or exceeding program standards for completion in some cycles, and even in some years, yet not so much in other cycles and years. This should continue to be tracked as the KSSAF agencies move to sustainability to try to get an understanding of the overriding impact of the research and randomization (Ahearn Greene, 2019, p. 29).

“With regards to the overall Year 05 reporting period KSSAF achieved an overall fidelity score of 3.94, "above program standards." Additionally, this represents a Year 05 mean fidelity score that is consistent with Year 02 (m = 3.89), Year 03 (m = 3.96), and Year 04 (m = 3.90). Regarding the five domains, the aggregate KSSAF Year 05 domain fidelity scores for Environment and Context (m = 4.25), Staffing Fidelity (m = 3.83) and Curriculum (m = 4.55) are all above program standards, and exceed or are consistent with the Year 03 and Year 04 scores. Population Fidelity (m = 3.65) and

Program Fidelity (m = 3.40) "met program standards" for Year 05. Of note is that there was a large decrease in Population Fidelity from Year 03 (m = 4.05) and Year 04 (m = 4.20) and in Program Fidelity from Year 03 (m = 3.85) and Year 04 (m = 3.55), which was largely due to low enrollment and completion rates for Year 05. Overall, it is important to note that all sites and all domains scored "meeting program standards" or above and there were no safety or fidelity concerns noted for any site or for KSSAF as a whole (Ahearn Greene, 2019, p. 51).

"Overall, the project established and has maintained strong fidelity indicators with a large number of referrals of eligible families, a high enrollment rate, a highly trained staff that is expert in working with the identified population, and evidence that all the program and curriculum components are being provided and skills are being learned and implemented by the attending families that exceed what is normative for SFP fidelity standards" (Ahearn Greene, 2019).

The external SFP B-3 implementation specialist, Jeanie Ahearn Greene, provided the following overview for staffing and curriculum fidelity (Ahearn Greene, 2019):

Staffing Fidelity:

- *KSSAF provided SFP B-3 Group Leader Training as certified by the program developer as part of this initiative in July 2015, February 2016, January 2017, January 2018 and February 2019 to assure ongoing availability of trained staff.*
- *KSSAF staff training included Advanced Training in August 2016, August 2017 and July 2018 further their skills, get technical assistance and receive updates on changes to the SFP B-3 curriculum.*
- *The nine of the 10 Year 05 cycles had the required site coordinator and the two-parent group leaders for each Parent Skills Training Groups. One cycle, SFCS Salina #9, did not have a dedicated site coordinator that was not also leading a skills group.*
- *There was a range of 3-8 childcare staff for the 10 cycles, with at least two Childcare Leaders that were trained in the model for each of the 10 cycles.*
- *Five of the 10 Parent Skills Groups were staffed by both female and male group leaders. Two cycles had male childcare staff. Five cycles (50%) were staffed by 100% female staff.*
- *All parent group leaders and site coordinators had completed the SFP B-3 Group Leader Training.*

Curriculum Fidelity:

- *The AGA adapted SFP B-3 curriculum was implemented with fidelity in all 10 KSSAF Year 05 cycles.*
- *There is fidelity across the sites with regards to implementing the same content and number of sessions.*
- *The parent and family skills training program provides all 14 sessions for 14 weeks, with additional sessions in order to allow for data collection.*
- *All cycles were conducted in English with English speaking parents.*
- *Adult participants were observed to be engaged and participating in the discussions and activities at site visits, which is supported by data from the Group Leader Fidelity Checklists.*

- *Adult participants and their children were observed and reported to be developing the core SFP B-3 skills of parent/child bonding, parent/child communication, and parental supervision.*
- *A mean of 97.57% of curriculum activities were delivered for the 10 Year 05 cycles, indicating very high adherence.*
- *On a 5-point scale with 5 being high score, Program Quality measured a mean score of 4.67 and Participant Responsiveness a mean score of 4.45.*
- *Suitability of the Curriculum measured a mean score of 4.83 in Year 05, a strong increase from the Year 02 score of 4.58.*
- *There were minimal curriculum content adaptations or deletions, although the curriculum used since Year 03 is an adaptation published and distributed in August 2016. These adaptations were in response to the experience and challenges from prior cycles and across other SFP B-3 implementations.*

Other Implementation Characteristics

KSSAF Staff Capacity

As mentioned previously, the successful implementation of the KSSAF program was by-in-large due to the committed child welfare agency workers who worked, 16-nights per cohort to implement an SFP B-3 cycle. In order to combat the foreseeable issue of child welfare staff turnover, KSSAF planned for an annual basic SFP B-3 training and a separate Advanced SFP B-3 training (i.e., targeted to implementation staff that had already attended a basic training). As a part of the implementation evaluation, the KU evaluation team collected data on: the number of staff trained within each agency; their implementation role for each cycle; whether or not they left their respective agency; if they were paid staff, interns, volunteers, or contractors; and the data of their SFP B-3 basic training attendance. This information was collected throughout the duration of project implementation to identify any patterns, by cycle, site, or agency, in staff turnover.

The KSSAF project had a total of 151 implementation staff across the two agencies (e.g., KVC and SFCS). Since August 2015 through September 2019, St. Francis Community Services had 78 implementation staff and KVC had 73 implementation staff. The *Table 7.5* below details the number of implementation staff per implementation site, for each agency, across the duration of the KSSAF project.

Table 7.5. Number of Implementation Staff by Site (N=151)	
Implementation Site	Number of Staff
KVC (n=73)*	
Kansas City	20
Olathe	17
Topeka	33
St. Francis Comm. Services (n=78)	
Hutchinson	23
Salina	16
Wichita	39

Note. KVC had 3 individuals that never implemented SFP B-3, and therefore are not included in the site count.

Of the 151 implementation staff, 122 attended and completed a Strengthening Families Birth-to-Three (SFP B-3) basic training. SFP B-3 basic trainings were offered once per calendar year in the spring of each year. The only exception to this was in 2019 when two SFP B-3 basic trainings were provided (February 2019 and September 2019) to increase the agency’s and community’s provider capacity to enhance sustainability efforts.

All site coordinators, parent group leaders, and child group leaders must have attended and completed a basic training to fulfil their roles and implement the SFP B-3 curriculum to fidelity. Although not required, the majority of SFP B-3 child aids, parent aids, and volunteers also attended a SFP B-3 basic training. Of the 29 individuals that participated in SFP B-3 implementation that did not attend an SFP B-3 basic training, 15 (52%) were KVC employees and 14 (48%) were St. Francis employees.

At the end of the KSSAF project (September 2019), of the total of 151 implementation staff:

- 92 (61%) individuals were still employed at their respective agencies;
- 45 (30%) individuals had left their respective agency;
- 6 (4%) individuals were volunteers;
- 4 (3%) individuals were contracted;
- 1 (<1%) individual was an intern;
- 3 (<1%) individuals were “other”

For details regarding site-specific implementation, see *Table 2.5, Implementation Sites Detailed by Cycle* in *Section II*. St. Francis Community Services implemented SFP B-3 at two sites in every cycle—except Cycle 5. Cycle 5 was offered over the summer and only implemented in Wichita. KVC implemented at two sites in cycles 1 and 3, and 3 sites in cycles 4-9. No KVC sites implemented during the Summer Cycle 5. The following *Tables 7.6 & 7.7* detail the number of implementation staff, by agency, per cycle.

Table 7.6. St. Francis Implementation Staff by Cycle

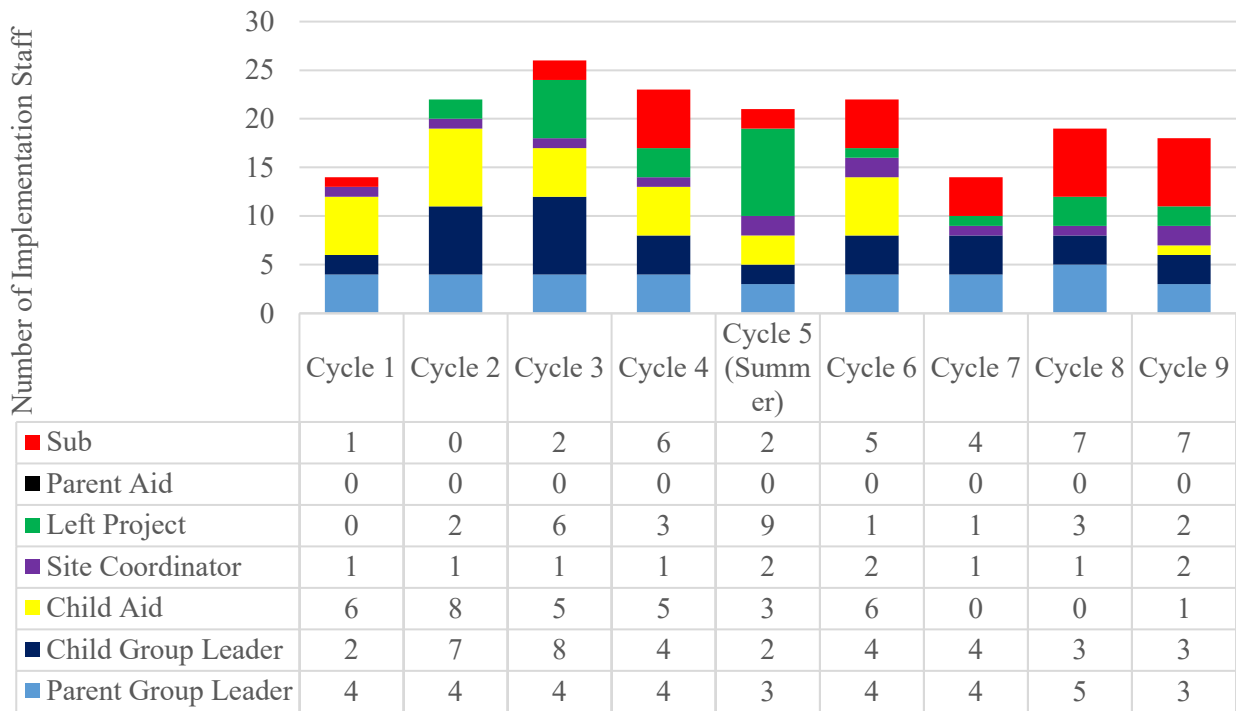
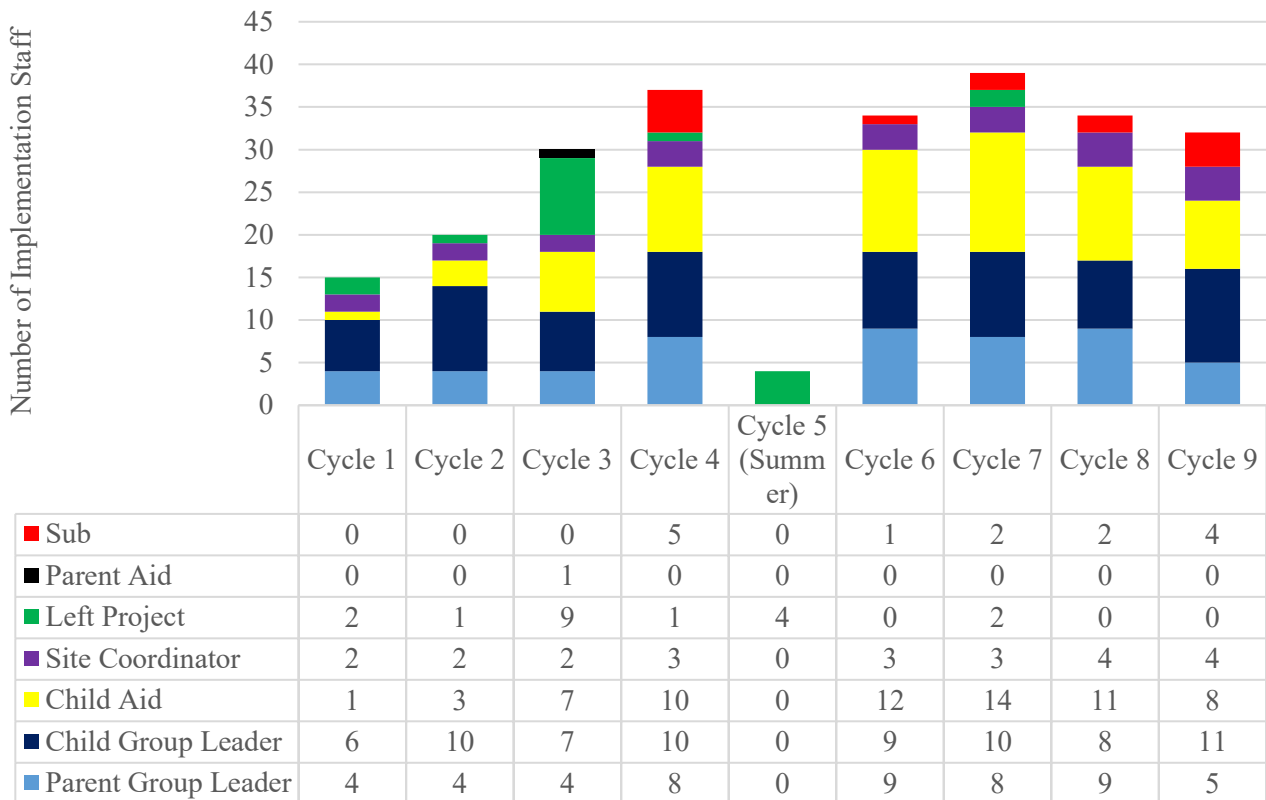


Table 7.7. KVC Implementation Staff by Cycle



For each implementation site, a site coordinator and additional staff, (e.g., childcare/aid, food preparation, transportation) all trained in SFP B-3, were present. In addition, depending on each site’s needs, there were 2-4 group leaders for each implementation site. The number of staff at each site varied based on multiple factors (e.g., how many children, how many parents, location, availability, and interest within the program). Although, all sites continuously met program standards for implementation and staff capacity.

While working within Child Welfare agencies, staff turnover is often high. Once new staff were hired, they were trained in SFP, if interested, and became a part of the SFP B-3 implementation teams. As the grant continued, staffing became more limited due to turnover, and there was a decline in training attendees. Site Coordinators expressed this as a challenge to find implementation team members towards the end of the grant. Steering Committee leaders agreed to hold an SFP B-3 Basic Training every year to ensure enough trained providers for SFP B-3 implementation.

In addition to the trainings that have been budgeted for every year of the grant, the KSSAF Steering Committee members scheduled an additional Basic Training for September 2019. This training was to help support community partners to start implementing SFP B-3. Partners within the Steering Committee were consistent in their participation and work with the KSSAF grant. The team showed an immense amount of passion for these families affected by substance abuse and worked hard to not only address, but also find solutions to all issues that effected the project from being successful.

KSSAF SFP B-3 Sessions

Average Session Length

KSSAF SFP B-3 sessions varied in length depending upon curriculum sessions, scheduled data collection, and graduation events. SFP B-3 sessions ranged from 30 minutes to 190 minutes. Fidelity recommends that SFP B-3 sessions last two hours and 15 minutes. Based upon this recommendation, the majority of sessions lasted 135 minutes. The mean length session time was 130.59 minutes (SD: 19.70). Skewness: -2.889 (SE: .040), Kurtosis: 11.347 (SE: .080).

The following *Table 7.8*, details the mean length of session time for all six implementation sites. To calculate the mean, service logs for all attendees were entered into SPSS. The total number of service logs per site is detailed in the table below. Note, all sessions under 30 minutes were considered make-up sessions and were not included in the following means.

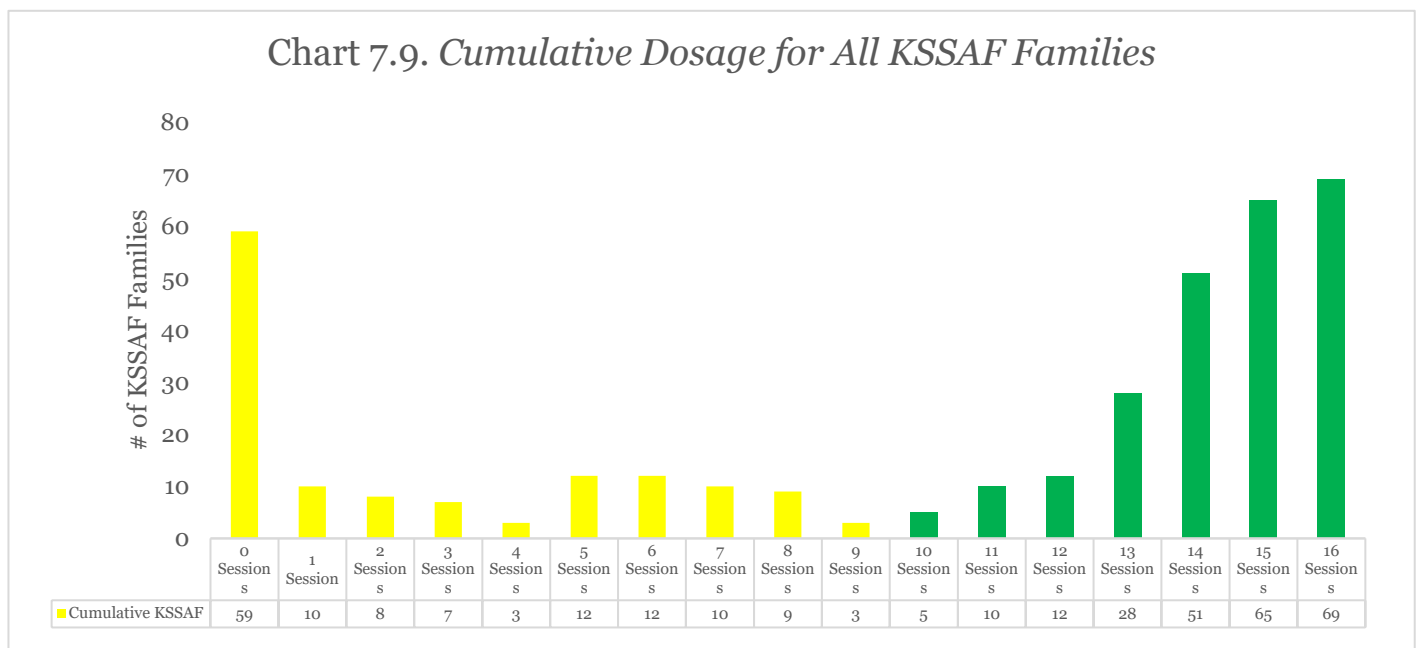
Table 7.8. SFP B-3 Cumulative (Cycles 1-9) Mean Session Length by Implementation Site	
Implementation Site	Mean Length of SFP B-3 Session Time (SD)
Kansas City (n=478)	136.79 (14.76)
Olathe(n=648)	139.95 (12.97)
Topeka (n=1104)	126.38 (21.33)
Hutchinson (n=322)	126.83 (23.28)
Salina (n=314)	127.68 (18.18)
Wichita (n=882)	128.04 (20.06)

With regards to make-up sessions, families that were unable to/did not attend the regularly scheduled SFP B-3 session were offered immediate opportunities to complete a make-up session. Make-up

session guidelines were instituted during the early cycles in a proactive attempt to keep continued family engagement and “catch” a dropout case before it occurred. Make-up sessions ranged in length from 5 minutes to 25 minutes, and varied by site on administration. The KSSAF program allowed for sites to determine how they wished to provide make-up sessions based on their staffing resources. Some site coordinators held group make-up sessions scheduled at the same time each week, which provided a routine for families. Other site coordinators scheduled individual make-up sessions on a family-by-family basis. Therefore, the variation in administration yielded variation in the length of make-up sessions.

Dosage

To meet SFP fidelity, Ahearn Greene Associates, states: “SFP (B-3) best practices recommend that the completion benchmark in terms of dosage for number of families completing be defined as having at least six families that attend at least 10 sessions of the 14-session curriculum. These two measures inform the fidelity score in terms of “success in program retention and completion.” (Ahearn Greene, 2019). The Chart 7.9 below illustrates the frequency of number of SFP B-3 sessions attended. The columns highlighted in green represent the total number of families that completed the SFP program, per SFP B-3 fidelity guidelines (n=240). Excluding the “no show” families (n=59), 240 families of 314 families attended 10 or more sessions (77%). Including the 59 no-show families (i.e., attended “0” sessions), 240 of 373 families attended 10 or more sessions (64%).



The external SFP B-3 implementation specialist, Jeanie Ahearn Greene, provided the following overview for Program Completion (Ahearn Greene, 2019, pp. 29-30):

- Overall retention was 65.78% for the 10 Year 05 cycles, with a range of 50% to 100%.
- A total of 50 families completed the program with a mean of 4.90 families/cycle completing, below the fidelity benchmark of 6-8 families completing per cycle

- The range of family completion rates for the 10 cycles was 3-7 families completing per cycle, with four (40%) of the cycles meeting or exceeding the benchmark of six or more families completing/cycle.
- A total of 239 families completed the SFP (B-3) program of the 314 families enrolled.
- A total of 78 families dropped-out; meaning they were enrolled and participated, but dropped out in the course of the SFP (B-3) program.
- A total of 57 no shows; meaning they were contacted and agreed to participate verbally, but never showed up to the program or for informed consent/data collection.

Enrollment began in August 2015 and ran through June 2019, yielding nine implementation cycles, at six sites across the state of Kansas. Cycles 1, 2, and 3 had four implementation sites (three urban sites and one rural site); Cycles 4, 6, 7, 8, and 9 consisted of five implementation sites (four urban sites and one rural site); and Cycle 5 (summer 2017) was implemented at one urban site. *Table 7.10* below details, per cycle, the number of implementation sites and the total number of families enrolled.

Table 7.10. Cycle, Implementation Sites, and Total Families Enrolled		
Cycle Number	Number of Implementation Sites	Total # of Families Enrolled
Cycle 1 (Fall 2015)	4 Sites	38
Cycle 2 (Spring 2016)	4 Sites	43
Cycle 3 (Fall 2016)	4 Sites	42
Cycle 4 (Spring 2017)	5 Sites	51
Cycle 5 (Summer 2017)	1 Site	13
Cycle 6 (Fall 2017)	5 Sites	47
Cycle 7 (Spring 2018)	5 Sites	52
Cycle 8 (Fall 2018)	5 Sites	48
Cycle 9 (Spring 2019)	5 Sites	41

Total enrollment for the KSSAF program, between August 2015 and June 2019 was 314 families. Below in *Table 7.11*, details by implementation cycle, the number of families, adults and children recruited, enrolled, completed pre-test and post-test measures, and the total number of dropouts per cycle.

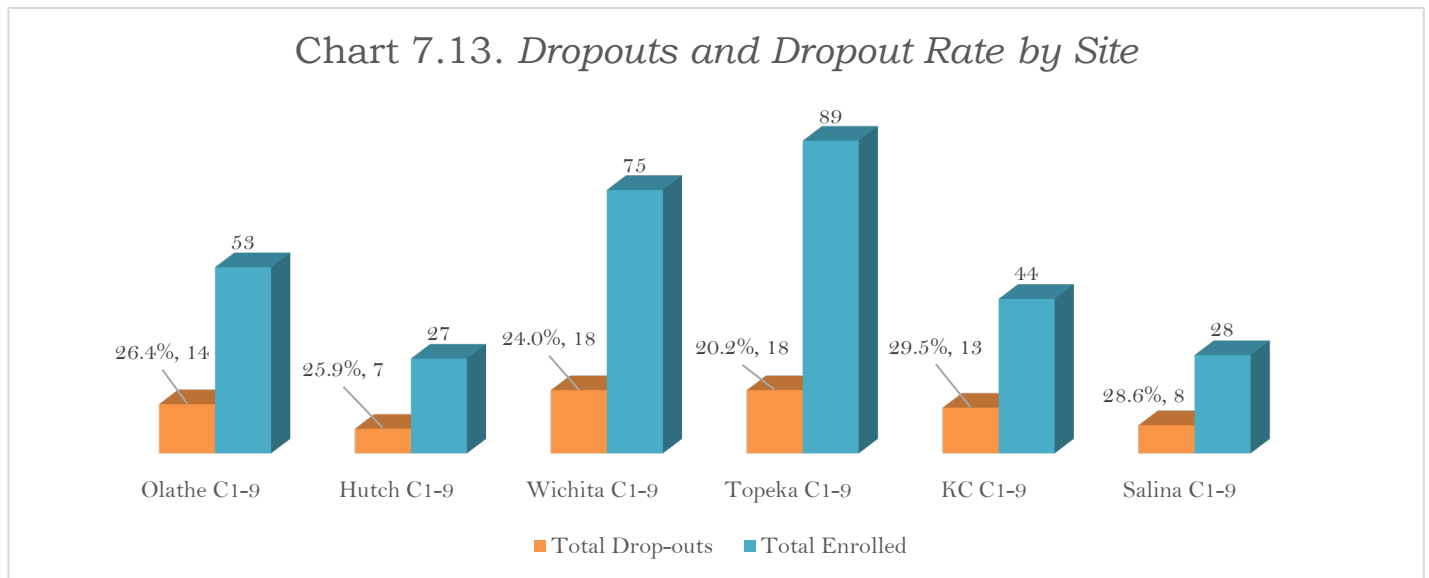
Table 7.11. KSSAF Tracking Table

Cycle #	A. Recruited			B. Enrolled			C. Pre-test Completed			D. Post-test Completed			E. SFP B-3 Completed			D/O Fam
	Fam	Child	Adts	Fam	Child	Adts	Fam	Child	Adts	Fam	Child	Adts	Fam	Chd	Ad	
Cycle 1 Total	38	50	61	31	38	46	29	29	34	27	27	32	27	36	44	3
Cycle 2 Total	43	60	63	34	48	52	32	32	36	29	29	31	25	34	33	9
Cycle 3 Total	42	50	62	36	46	59	36	36	36	35	35	35	32	38	47	5
Cycle 4 Total	51	74	78	42	64	62	42	42	42	31	31	31	32	53	49	10
Cycle 5	13	16	25	9	11	14	9	9	9	9	9	9	8	10	16	2
Cycle 6 Total	47	68	74	41	61	68	40	40	40	33	33	33	33	48	55	8
Cycle 7 Total	52	66	81	45	60	68	43	43	43	29	29	29	32	41	47	14
Cycle 8 Total	48	63	69	42	56	61	42	42	58	27	27	37	26	25	31	16
Cycle 9	41	47	59	34	40	47	34	34	46	23	23	31	24	26	31	11
Cumulative	375	496	572	314	424	477	307	307	344	243	243	268	239	311	353	78

The following *Table 7.12* details the cumulative enrollment for the KSSAF project by individual implementation site. *Chart 7.13* details the cumulative dropouts and dropout rate by each implementation site.

Table 7.12. Cumulative Family Enrollment by Implementation Site	
Implementation Site	Number of Families Served
Hutchinson*	27
Salina*	28
Wichita	74
Kansas City	45
Olathe	52
Topeka	88
Total	314

* Hutchinson and Salina alternated implementation every-other-cycle.



Patterns influencing dropout:

Transportation to group and participants actively using were the most dominant patterns observed by the team that influenced the dropout rate. *Transportation* was a consistent and strong barrier to attending class (i.e. lack of public options, no car, broken car, staff transporting). Site coordinators worked extremely hard to make sure their parents could attend class every week. They provided weekly incentives of gas cards or free bus passes to parents each week to consistently attend class. Some agencies were able to have extra staff pick up parents, but this was not feasible across all sites.

Many parents participating were suspected of *actively using* due to behavior exhibited during SFP B-3 classes. This became an issue, as parents must attend class sober. Guidelines were created to ensure the safety of the parents, children, and staff. Of the parents who were actively using, many had low participation and lacked motivation to continue the program. Parents would drop out of the program to attend inpatient treatment or serve jail sentences. Others stopped their visits with their case workers

and children and were unresponsive to both the SFP team and child agency teams. Often times, *unresponsiveness* and *declining further participation* can be due to parents actively using. The participant was only marked as a dropout due to active drug use if the implementation team knew of active use. If the team was unsure, they were marked either unresponsive or declined further participation, depending on how the parent was responding to the team.

Section VI, Table 6.4 provides more details for the sub-study sample dropouts (n=60).

In sum, the KSSAF implementation and process evaluation had positive outcomes with 314 families receiving the SFP B-3 intervention, 239 families of 314 completed the program (76%), with a dropout rate between 20-29% over the nine cycles. KSSAF had high staff capacity through the duration of the grant. KSSAF's success was due to the strong collaboration between our partnering agencies and their hard work in recruiting agency staff and community members to attend the SFP B-3 trainings. Having high staff capacity through the duration of the grant helped in the sustainability conversations with having community partners and church members previously apart of the implementation process.

Participant Satisfaction Survey:

At the end of each SFP B-3 cycle, during SFP B-3 week 15, parents who completed the SFP B-3 program were asked to anonymously complete a participant satisfaction survey. This satisfaction survey was administered by the site coordinator/parent group leader and then sent to the KUSSW evaluation team and entered into REDCap. Results were sent electronically to Ahearn Greene & Associates to analyze. The following was reported by Ahearn Greene & Associates (Ahearn Greene, 2019) in the *Year 05 Fidelity Evaluation Report*:

“Based on the responses to the nine questions by 66 Year 05 KSSAF SFP(B-3) reporting program participants, KSSAF SFP(B-3) Year 05 participants were very well satisfied with the program with a mean score of 4.48 on a 5-point scale, with 89.39% of participants reporting being well/very well satisfied. Overall Satisfaction was similar to Year 04, when the mean was 4.58 and 91.11% were well satisfied/very well satisfied. 100% of participants indicated that the program had helped their family with 75.76% of the parents indicating that the class helped “a lot,” the highest level of satisfaction for this measure. 95.45% percent of the parents wanted to participate in boosters/ refreshers, with 31.82% wanting to continue to come weekly and an additional 30.30% wanting to continue to come monthly, noting an increase from the Year 02, Year 03, and Year 04 interest in continuing to attend. Confirming the positive experience, satisfaction, and helpfulness of the skills taught, 98.48% of the parents would recommend the program to other parents, with 86.36% indicating they would “definitely” recommend the program to other families (Ahearn Greene, 2019, pp.48-49).

With regards to the parents reporting on the quality of the program, 100% reported that they understood the material presented, with 98.48% reporting that they understood the material “mostly”/“a lot.” 100% reported that the handouts were helpful, with 84.85% reporting that they were helpful “a lot.” 100% reported that they had used the skills taught by the end of the program with 74.24% reporting that they had used them “a lot.” This is particularly notable since the children did not live with them, so they were using the skills at the program, on visits and/or with other children that they may have continuous contact with. Finally, regarding parenting efficacy, 98.48% reported

that their confidence as a parent has increased since they attended SFP(B-3), with 78.79% reporting that their confidence had increased "a lot," the highest rating (Ahearn Greene, 2019, pp.48-49).

Based on the responses to these questions, parent satisfaction is extremely high with regards to the program and skills developed as a result of attending the program. Also of note is that these findings triangulate and provide confirmation that the Fidelity Checklist scores for participant engagement, program quality, and suitability of the curriculum are high and recommend little adaptations or changes (Ahearn Greene, 2019, pp.48-49).

In sum, the KSSAF program “met” or “exceeded” program fidelity standards at all implementation sites across the duration of the grant. Reasons for lower fidelity scores were indirectly related to the SFP B-3 curriculum and directly related to low-recruitment and high dropouts. Further, and perhaps most notably, is the sustained parental satisfaction across all nine implementation cycles at 33 different sites. These exceptional results speak volumes about the quality of staff hired and maintained at all implementation cycles, especially the Site Coordinators who were an essential part of successful implementation *and* implementation to fidelity standards.

VIII. Local Evaluation - Impact Evaluation

Sample

The analytic sample examined for the impact analyses includes 1,043 children of the 1,096 children who were randomized during the KSSAF project between August 2015 and March 2019 (implementation cycles 1-9). Fifty-three cases were removed in the data cleaning process (see below for additional information).

For the impact analyses presented in this section, of the 1,043 children, 673 children were allocated to the treatment group while 370 children were allocated to the control group. Below is a brief description of the full randomization sample (N=1,096) for methodological purposes. In the full randomization sample: 712 children were allocated to the treatment condition, while 384 children were allocated to the control condition (i.e., treatment as usual). Of the original 712 children allocated to the treatment condition, only 304 children were enrolled in the SFP B-3 intervention and attended at least one SFP B-3 session. Of the additional 408 children allocated to the treatment group:

- 58 cases were recruited, verbally agreed (phone), and never showed up to the SFP B-3 group.
- 178 cases were contacted and declined (see Appendix F for further details on reasons for declining participation)
- 172 cases were never contacted

The evaluation flowchart (see Appendix F) provides further details on randomization and recruitment.

All 1,096 children randomized, using their unique child identifier, were matched to the Kansas state administrative child welfare data (DCF data) received September 7th, 2019. The last date of observation in the DCF dataset for this respective study was September 7th, 2019. Children were linked to their child welfare episode that was associated with their respective round of randomization. For instance, if a child had several foster care episodes in the available DCF database, the episode included in this analysis was the episode associated with the RPG project's randomization. Therefore, the KSSAF randomization date/cycle of randomization must have fallen between the respective episodes' start and end dates. For 53 children in the data set, their randomization date fell outside of their episode start date or episode end date, resulting in negative values on two critical variables needed for the impact analysis. These negative values are attributed to: 1) a Kansas DCF data entry practice that allows for back-dating "trial home visits"; and 2) to the RPG project's memorandum of understand (MOU) with DCF that included receipt of DCF bi-annually, therefore, randomization may have occurred using a data base that was up to 6 months old. If a case had negative values for number of days in OOH care prior to randomization *or* number of days in OOH care after randomization, they would have initially been ineligible for random assignment, per study criteria, and only eligible for the "aftercare/family preservation" assignment. Given these two reasons, 53 cases were removed from the impact analysis.

Forty-seven of the 1,096 (4.3%) randomized children, between the ages of 0-47 months, had multiple foster care episodes. Fourteen children had a foster care episode prior to their episode associated with randomization. For additional information on demographics and case characteristics of the children in the treatment and control group see *Table 8.1*, below.

It is important to note since the aftercare and family preservation families (n= 10) were not eligible for randomization and were only included in the SFP B-3 intervention to help meet group capacity fidelity guidelines, these ten cases were not included in the impact analyses. These cases were excluded given the guidelines put forth for a randomized control trial (RCT) in the *What Works Clearinghouse (WWC) Standards Handbook* (version 4.0, 2017): “to be valid random assignment, subjects must be assigned entirely by chance and have a nonzero probability of being assigned to each group.” (p. 6). The 10 aftercare/family preservation cases *only* had a P (T) =1.00 and a P(C) =0.00, and in order to not compromise the integrity of the RCT, these ten non-randomized cases were excluded (What Works Clearinghouse Standards Handbook Version 4.0). To examine the aftercare/family preservation descriptives and case characteristics compared to the treatment and control group samples, please refer to *Table 3.9, Descriptive Statistics: Entire Sample and by Random Assignment*.

Table 8.1 below, presents descriptive statistics on the treatment (n=712) group, control (n=384) group, and the full analytic sample (N=1,096) below. In sum, the control group and treatment group children had similar results being primarily composed of non-Hispanic, White males with a mean age slightly over 12 months, further details are provided below.

Treatment Indicators:

To thoroughly examine the impact of treatment effects on the analytic sample (n=1,043), compared to individuals who did not receive treatment, three separate treatment indicators were utilized. The first indicator examined was guided by the *intent to treat model* (ITT) and provides the most conservative estimates of treatment effects. The second treatment indicator was influenced by the *treatment on the treated model* (TOT), and the third treatment indicator identified cases who completed treatment to fidelity (Fidelity). All three treatment indicators were analyzed on five case variables: 1) race; 2) biological sex; 3) dichotomized age at episode start; 4) dichotomized primary reason for removal; and 5) days in OOH placement *prior* to randomization. Descriptions and rationale for each treatment indicator are provided below.

The cornerstone of an **ITT analysis** is that all individuals who were randomly assigned to the treatment condition, regardless of program enrollment or participation are included in the analysis. Therefore, in an ITT model all individuals are analyzed based on their initial group assignment (i.e., treatment or control condition). Once an individual is randomized, they are included in the analysis. According to Gupta (2011), ITT analysis “...ignores noncompliance, protocol deviations, withdrawal, and anything that happens after randomization. ITT analysis maintains prognostic balance generated from the original random treatment allocation” (p. 1). Although critics of ITT posit that this method is too cautious, program effects may be diluted, and analyses become more susceptible to type II error (Fergusson, Aaron, Guyatt & Hebert, 2002; Gupta, 2011; Hollis & Campbell, 1999), creating an ITT treatment indicator provides conservative effects of the respective treatment, and is the required to meet the highest research standard threshold put forth by the WWC (2017). For the KSSAF project, the most conservative treatment indicator was an ITT indicator; all analyses using the ITT indicator are the formal impact analyses that will be published in the future and used to help influence policy surrounding interventions for families with young children in OOH placement. Therefore, 673 individuals were included in the treatment group (1) and 370 individuals were included in the control group (0). Included in the 673 cases allocated to the treatment condition were 296 cases (of the original 304) that actually participated in the intervention. *Note that 8 cases that participated in the intervention were removed due to back-dating circumstances (this is to say that there were indications*

in the DCF administrative file that indicated back dating had occurred, therefore the case was dropped because important dates could not be verified).

Researchers also examined the treatment effects of the SFP B-3 intervention using a less conservative treatment indicator, an indicator grounded in **TOT analysis**. This indicator allowed for examination between the 296 individuals who enrolled in the offered intervention and attended at least one SFP B-3 session compared to the 747 individuals who never attended (i.e., declined or never showed up) or were never offered the treatment intervention (i.e., never contacted or allocated to control condition). TOT analyses compare outcomes between individuals who comply with the treatment condition (in this case, enrolled in the intervention and attended at least one SFP B-3 session) and those who never received the intervention.

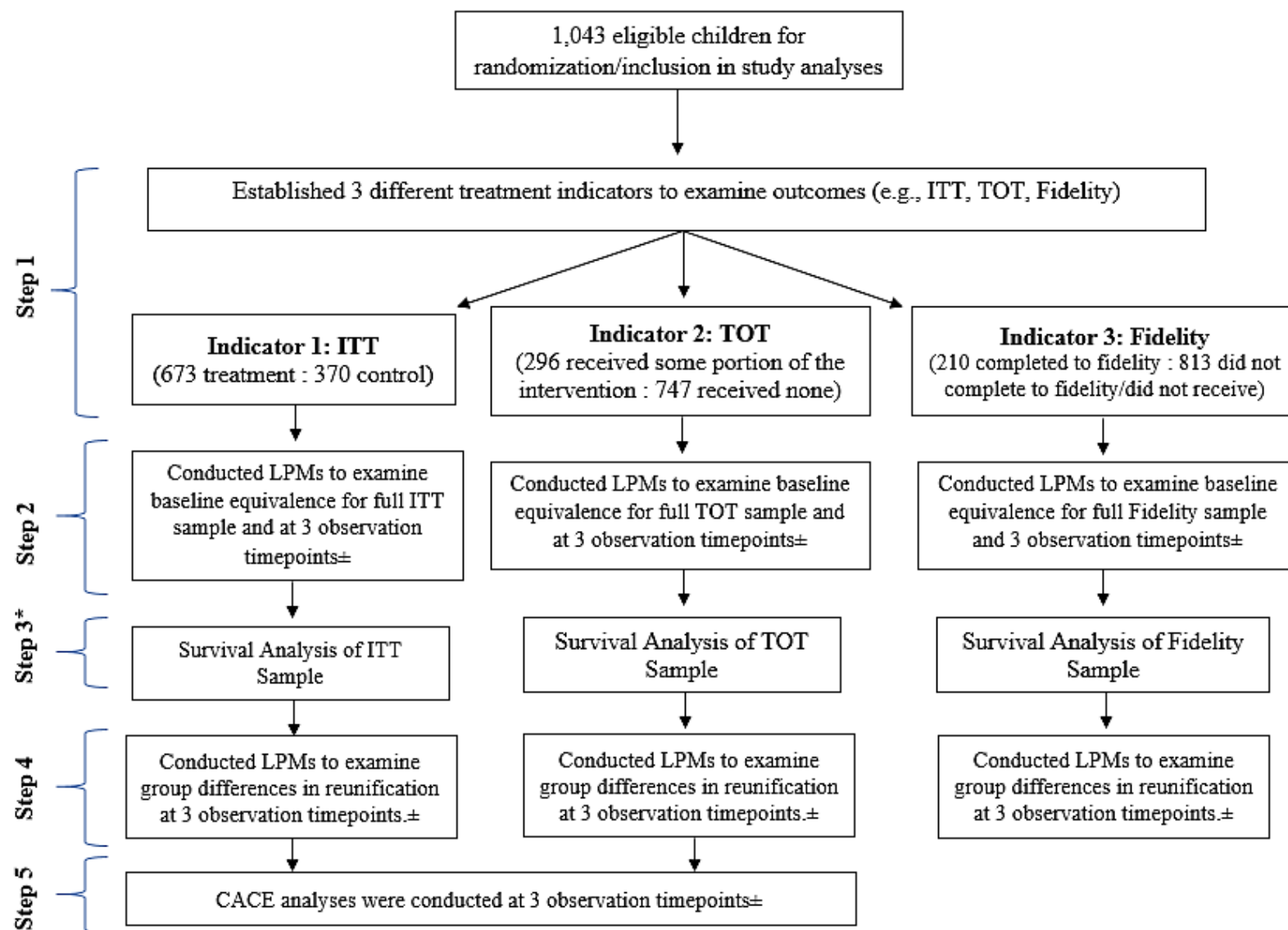
Lastly, researchers examined the treatment effects of the SFP B-3 intervention for individuals who completed treatment to **fidelity** (i.e., attended 10 or more SFP B-3 sessions, per fidelity guidelines), compared to all other individuals in the randomization pool. Two-hundred and thirty individuals completed the treatment condition to fidelity, 813 individuals either did not complete the program to fidelity, declined the intervention, or were never offered the intervention. Including the third treatment indicator, Treatment to Fidelity, allowed researchers to examine differences between SFP B-3 individuals who completed the intervention to fidelity compared to individuals who attended at least one SFP B-3 session.

Methods

To evaluate the impact of SFP B-3 program participation on child reunification, a longitudinal randomized control trial design was employed. The study utilized a postrandomization consent procedure known as Zelen's design (1979). Due to the fact that non-compliance is an issue with this service population, employment of the Zelen's design allows for the inclusion of eligible participants, not just those who are willing to consent to the randomization. Adamson, Cockayne, Puffer & Torgerson (2006) point out that the use of this protocol allows for a more accurate estimate of impact when introducing an intervention to a large population with high non-compliance rates, thereby increasing external validity. Randomization occurred at the family level at a rate of 1:1 (1 treatment, 1 control) for the first two implementation cycles, but was increased to 2:1 (2 treatment, 1 control) for cycles three through nine due to low project enrollment numbers initially.

Using the three treatment indicators, three separate models were conducted for each respective indicator (e.g., ITT, TOT, and Fidelity indicators). All three models were tested for baseline equivalence prior to conducting the survival analysis, as required by the WWC (2017). Please note the most conservative, primary model, is the ITT indicator model. Please see the Flowchart below for additional details (Figure 8.0). Steps 4 and 5 of the impact evaluation are presented in *Section IX*.

Figure 8.0. *Flowchart of Multivariate Analytic Processes*



Note. ITT = Intent-to-Treat; TOT = Treatment-on-the-Treated; Fidelity = Treatment to Fidelity; LPM = Linear probability models; ± = 3 observation windows for the study included: 1 year, 18 months, and 2 years after initial randomization. Sample size varied for each observation window, see report for additional details; * = Impact Analysis

Univariate, bivariate and multivariate analysis were conducted on the impact analysis sample (n=1,043). Univariate analyses were utilized to observe child demographic and case characteristics; all univariate results will be presented on the ITT group categorization (i.e., original random assignment conditions). Bivariate analyses included bivariate survival analyses to examine the equality of survivor functions based on group allocation for each treatment indicator. Multivariate analyses included linear probability modeling to establish baseline equivalence, as required by the *WWC Guidelines*, and the Cox proportional hazard models (hereinafter referred to as survival analysis) to determine treatment effects for all three treatment indicators. As mentioned previously, the formal, primary impact analysis model is the ITT model.

Presented below are the results, by treatment indicator model, for baseline equivalence on five variables: 1) child's race; 2) child's biological sex; 3) child's dichotomized age at episode removal date; 4) child's dichotomized reason for removal; and 5) continuous days in out-of-home (OOH) placement *prior to* random assignment. All five variables were extracted from the Kansas DCF database, and all 1,043 children included in the impact analyses had complete data on the five variables. Therefore, for this respective study, no missing data nor attrition occurred since all study participants had complete data for all study variables.

Race was dichotomized into White (0, reference group) and non-White (1). *Biological sex* was dichotomized into female (0) and male (1). *Primary reason for removal* was dichotomized into substance use disorder (SUD)-related removal reasons (1) and non-SUD related reasons (0). Three removal reasons were considered SUD-related removal reasons, including: drug abuse parent, alcohol abuse parent, and methamphetamine use or manufacturing. There were nineteen other primary reasons for removal (i.e., abandonment, child behavior problem, death of parent, inadequate housing, incarceration of parent, medical neglect, neglect, physical abuse, sexual abuse, relinquishment, etc.). *Child's age at episode removal* was dichotomized into children 12 months and younger at date of removal (0) and children 1 year and older at date of removal (1). The cutoff point for child's age was based on group percentages: 58.9% of the randomized sample was 12 months or younger when placed in out-of-home care, and 41.1% of the sample was 1 year and older at the time of removal. Lastly, the number of days in OOH placement *prior to* project randomization was calculated using the cycle start date associated with the implementation cycle the child was eligible for minus their OOH start date. This variables was the only covariate examined continuously.

For the survival analysis, the child's OOH end date was utilized for two *length of time in OOH care* study variables. For children who were still in care at the end of the study period, the last date of observation for this study period was imputed (i.e., September 7th, 2019). Two *length of time in OOH care* variables were calculated using the censored OOH end date:

- 1) Number of days in OOH care *after* project randomization [referred to as days in OOH care after randomization]; and
- 2) Number of days in OOH care total for the given episode (i.e., number of days from initial removal to episode end date) [referred to as total days in OOH care].

Given the imputation for censored cases (date: Sept. 7th, 2019), all children had a value, in days, for both length of time OOH study variables.

Additional variables created for the subsequent analyses included:

- Six dummy variables for each implementation site. These 6 dummy coded variables allowed researchers to examine baseline differences, if any, between sites.
- Nine dummy variables for each cycle of implementation during the study period. These 9 dummy coded variables allowed research to examine baseline differences, if any, across cycles.

These 15 dummy coded variables were included in all baseline equivalence models and the three multivariate survival analysis as covariates, as required by the WWC guidelines.

Research Questions:

1. Did children in the treatment group reunify at significantly faster rates than children in the control group? (ITT Design)
2. Did children who attended at least one SFP B-3 session reunify at significantly faster rates than all other children who did not attend at least one SFP B-3 session? (TOT Design)
3. Did children who attended SFP B-3 to fidelity (i.e., at least 10 SFP B-3 sessions) reunify at significantly faster rates than all other children who did not complete SFP B-3 to fidelity? (Treatment to Fidelity)

Results

Univariate results – Impact Analytic Sample

For the analytic sample (n=1,043), the median total days in out-of-home (OOH) placement was 562.00 days (1.54 years) with a maximum of 1,670 days (4.58 years) in OOH care for the young child sample at the end of the study period (September 2019). Prior to randomization, the mean number of days in OOH care was 127.00 (.34 years). After a child had been randomized, the mean number of days in OOH care was 391.00 days (1.07 years) with a maximum of 1,479 days in OOH care.

Children in the full analytic sample were primarily White (74.5%) males (53.4%) with a mean age of 12.6 months who had a primary reason of removal not related to parental substance use (64.6%). Similar to the full analytic sample descriptives, both the treatment group and control group were primarily White who had a primary reason of removal not related to parental substance use. The children assigned to the treatment condition were more likely to be male (55.6%) than control group children (49.5%). A greater percentage of children in the treatment group (34.3%) have reunified than in the full analytic sample (33.2%) and control group (31.1%), and treatment group children had a lower median total number of days in OOH placement (553.0 days) than the full sample (562.0 days) and control group (576.0 days). Children in the control group were slightly younger with a mean age of 11.98 months, compared to the treatment group 12.9 months and the full sample 12.6 months; though, all three groups had similar distribution of children birth to 12 months and greater than one year. *Table 8.1* below presents the univariate results for the full analytic sample and both random assignment conditions.

Table 8.1. Univariate Results for Study Variables by Impact Sample and Random Assignment			
	Full Sample (n=1043)	Treatment (n=673)	Control (n=370)
<i>Categorical Variables</i>	Frequency (%)	Frequency (%)	Frequency (%)
Race			
White	777 (74.5)	507 (75.3)	270 (73.0)
Non-White	266 (25.5)	166 (24.7)	100 (27.0)
Biological Sex			
Female	486 (46.6)	299 (44.4)	187 (50.5)
Male	557 (53.4)	374 (55.6)	183 (49.5)
Primary Removal Reason			
SUD – Related	369 (35.4)	239 (35.5)	130 (35.1)
Non-SUD Related	674 (64.6)	434 (64.5)	240 (64.9)
Site Location			
Hutchinson	78 (7.5)	50 (7.4)	28 (7.6)
Kansas City	182 (17.4)	116 (17.2)	66 (17.8)
Olathe	216 (20.7)	136 (20.2)	80 (21.6)
Salina	60 (5.8)	37 (5.5)	23 (6.2)
Wichita	323 (31.0)	208 (30.9)	115 (31.1)
Topeka	184 (13.5)	126 (18.7)	58 (15.7)
Cycle Randomized			
Cycle 1	141 (13.5)	76 (11.3)	65 (17.6)
Cycle 2	115 (11.0)	58 (8.6)	57 (15.4)
Cycle 3	130 (12.5)	87 (12.9)	43 (11.6)
Cycle 4	104 (10.0)	75 (11.1)	29 (7.8)
Cycle 5 (Wichita)	38 (3.6)	26 (3.9)	12 (3.2)
Cycle 6	117 (11.2)	78 (11.6)	39 (10.5)
Cycle 7	141 (13.5)	96 (14.3)	45 (12.2)
Cycle 8	148 (14.2)	103 (15.3)	45 (12.2)
Cycle 9	109 (10.5)	74 (11.0)	35 (9.5)
Reasons for Exit			
Reunification	346 (33.2)	231 (34.3)	115 (31.1)
Still in Care	409 (39.2)	265 (39.4)	111 (30.0)
All Other Exits Reasons	286 (27.6)	177 (26.3)	144 (38.9)
Age at Removal (Dich.)			
0 – 12 Months	614 (58.9)	390 (57.9)	224 (60.5)
1 yr. +	429 (41.1)	283 (42.1)	146 (39.5)
<i>Continuous Variables</i>	Median	Median	Median
Total Days in Out-of-Home Care	562.0	553.0	576.0
Days in Out-of-Home Care prior to Randomization	127.0	128.0	126.0
Days in Out-of-Home Care after Randomization	391.0	389.0	413.5
	Mean	Mean	Mean
Age (Months)	12.57	12.90	11.98

Bivariate results

First, equivalence of the intervention and control groups were examined on the five variables measurable at baseline (e.g., race, biological sex, age at episode start, days in OOH care prior to randomization [continuous], and primary reason for removal). To examine baseline equivalence, the 15 dummy coded variables and the respective treatment indicator for the given model were separately regressed on the five dichotomous baseline dependent variables using a linear probability model. Linear probability models (LPM) is the application of ordinary least squares (OLS) utilizing a binary outcome variable instead of continuous (Deke, 2014). As detailed in the WWC guidelines, regression covariate adjustments using OLS models are acceptable methods for examining baseline variables (2017, p. 16). Deke (2014) contends that the advantage of using a LPM is the direct interpretation of the parameter estimates as the “mean marginal effect” of a given covariate on the dependent/outcome variable of interest, whereas, if researchers used logistic regression instead, the output would be presented in log odds ratios, making interpretation more complex. Additionally, in order to meet other guidelines set forth by the WWC for RCTs, baseline equivalence was assessed separately for each treatment indicator *and* each outcome variable (i.e., 15 baseline LPM analyses were conducted; 5 LPMs for each of the 3 treatment indicators).

Further, standardized effect sizes were calculated for all baseline analyses, as dictated by the WWC guidelines. The WWC guidelines require that absolute values of the standardized effect size for a given baseline equivalence analysis must be $<.05$, otherwise, if greater than $.05$ and $<.25$, statistical adjustments must be made to account for the potential inequivalence on a given variable. Thirteen of the 15 baseline analyses revealed that no statistical adjustment was needed to move forward with an impact analysis. Despite the results indicating that only two analyses required a statistical adjustment, researchers adjusted for all five baseline variables in all subsequent analyses to exceed the WWC’s minimum requirement.

Baseline Equivalence

ITT Model

The ITT model included 673 individuals in the treatment group and 370 individuals in the control group. To determine equivalence on the four baseline variables four separate linear probability models, using a dichotomous dependent variable.

Race Model: 16 dummy coded variables (ITT treatment indicator, 6 site dummy coded variables, and 9 cycle dummy coded variables) were regressed on the dichotomous race dependent variable (0-White; 1-non-White) using a linear probability model. The overall model was statistically significant ($F(14, 1042) = 2.76, p < .01$) with an R^2 value of $.036$. When all 16 dummy variables were included in the model, no statistical differences in racial composition were found across treatment conditions ($\beta = -.028, p = .328$). Statistically significant differences in racial composition were found among two of the six sites: 1) Hutchinson ($\beta = -.185, p = .001$), and 2) Kansas City ($\beta = .120, p = .005$). Hutchinson participants were significantly more likely to be White, while Kansas City participants were more likely to be non-White. Indicating that both Hutchinson and Kansas City varied significantly, in terms of racial composition, while holding the other dummy variables constant. No statistical differences were found on racial composition across implementation cycles.

Biological Sex Model: 16 dummy coded variables (ITT treatment indicator, 6 site dummy coded variables, and 9 cycle dummy coded variables) were regressed on the dichotomous biological sex

variable (0-female; 1-male) using a linear probability model. The overall model was not statistically significant ($F(14, 1042) = 1.673, p = .056$) with an R^2 value of .022. When all 16 dummy variables were included in the model, statistically significant differences in terms of biological sex were found across treatment conditions ($\beta = .065, p = .048$). Indicating that children in the treatment condition were statistically more likely to be male than their control group counterpart. No statistically significant differences in biological sex were found between the six sites, while holding the other dummy variables constant. Across cycles, statistically significant differences in biological sex composition were found only among cycle 6 individuals ($\beta = .131, p = .034$). Cycle 6 individuals were significantly more likely to be male, while holding the other dummy variables constant.

Age at Episode Removal Date Model: 16 dummy coded variables (ITT treatment indicator, 6 site dummy coded variables, and 9 cycle dummy coded variables) were regressed on the dichotomous age at episode removal variable (0= 12 months and younger; 1= 1 year and older) using a linear probability model. The overall model was not statistically significant ($F(14, 1042) = 1.625, p = .067$) with an R^2 value of .022. When all 16 dummy variables were included in the model, no statistical differences in terms of age at removal were found across treatment conditions ($\beta = .040, p = .213$). Statistically significant differences in terms of age at episode removal were found for one of the six implementation sites: Olathe ($\beta = .101, p = .025$) with children more likely to be older than one year at episode removal. No statistical differences were found on a child's age at episode removal across implementation cycles.

Reasons for Removal Model: 16 dummy coded variables (ITT treatment indicator, 6 site dummy coded variables, and 9 cycle dummy coded variables) were regressed on the dichotomous SUD-related primary removal reasons (0-all other reasons; 1-SUD-related removal) using a linear probability model. The overall model was statistically significant ($F(14, 1042) = 2.155, p = .008$) with an R^2 value of .029. When all 16 dummy variables were included in the model, no statistical differences in terms of primary removal reason were found across treatment conditions ($\beta = .013, p = .669$). Statistically significant differences in terms of SUD-related primary removal reason were found at one of the six sites, while holding the other dummy variables constant. Hutchinson ($\beta = -.135, p = .032$) participants were significantly more likely to be younger than 12 months at episode start than participants at the other 5 implementation sites. Across cycles, statistically significant differences in SUD related primary removal reason were found only among cycle 1 participants ($\beta = .126, p = .028$) and cycle 2 participants ($\beta = .123, p = .045$). Cycle 1 and cycle 2 individuals were significantly more likely to have a SUD-related primary removal reason, while holding the other dummy variables constant compared to cycles 3-9, while holding the other dummy variables constant. It is important to note that Cycles 1, 2, and 3 utilized a 1:1 randomization ratio.

Days in Out-of-Home (OOH) Care prior to Randomization Model: 16 dummy coded variables (ITT treatment indicator, 6 site dummy coded variables, and 9 cycle dummy coded variables) were regressed on the continuous variable *days in OOH care prior to randomization* using a linear probability model. The overall model was statistically significant ($F(14, 1042) = 2.449, p < .002$) with an R^2 value of .032. When all 16 dummy variables were included in the model, no statistical differences in terms of length of time in OOH care were found across treatment conditions ($\beta = -5.41, p = .345$). Statistically significant differences in terms of length of time in OOH care prior to randomization were found for two of the six implementation sites: Olathe ($\beta = -20.712, p = .010$) and Topeka ($\beta = -30.245, p = .000$). Children in the Olathe and Topeka randomization pools were in OOH

care for fewer days prior to randomization, than all other implementation sites. No statistically significant differences across cycle cohorts were found.

TOT Models (747 Never Participated in Treatment; 296 attended at least one SFP B-3 session)

Race Model: 16 dummy coded variables (TOT treatment indicator, 6 site dummy coded variables, and 9 cycle dummy coded variables) were regressed on the dichotomous race dependent variable (0-White; 1-non-White) using a linear probability model. The overall model was statistically significant ($F(14, 1042) = 2.869, p < .01$) with an R^2 value of .038. When all 16 dummy variables were included in the model, no statistical differences on racial composition were found between participants who were enrolled in treatment and attended at least one SFP B-3 session and those participants who were either never recruited/enrolled (including control group participants) ($\beta = -.045, p = .136$). Statistically significant differences in racial composition were found among two of the six sites: 1) Hutchinson ($\beta = -.183, p = .001$), and 2) Kansas City ($\beta = .119, p = .005$). Indicating that both Hutchinson and Kansas City varied significantly, in terms of racial composition, while holding the other dummy variables constant. Hutchinson participants were significantly more likely to be White, while Kansas City participants were more likely to be non-White. No statistical differences were found on racial composition across implementation cycles.

Biological Sex Model: 16 dummy coded variables (TOT treatment indicator, 6 site dummy coded variables, and 9 cycle dummy coded variables) were regressed on the dichotomous biological sex variable (0-female; 1-male) using a linear probability model. The overall model was not statistically significant ($F(14, 1042) = 1.397, p = .147$) with an R^2 value of .019. When all 16 dummy variables were included in the model, no statistical differences in terms of biological sex were found between individuals who participated in at least one SFP B-3 session versus individuals who were never recruited or allocated to the control group condition ($\beta = .013, p = .713$). No statistically significant differences in biological sex among individuals who attended at least one SFP B-3 compared to individuals who did not attend any SFP B-3 sessions (including control group individuals) were found between the six sites, while holding the other dummy variables constant. Additionally, no statistically significant differences in biological sex among individuals who attended at least one SFP B-3 compared to individuals who did not attend any SFP B-3 sessions (including control group individuals) were found across cycles, while holding the other dummy variables constant.

Age at Episode Removal Date Model: 16 dummy coded variables (TOT treatment indicator, 6 site dummy coded variables, and 9 cycle dummy coded variables) were regressed on the dichotomous age at episode removal variable (0= 12 months and younger; 1= 1 year and older) using a linear probability model. The overall model was not statistically significant ($F(14, 1042) = 1.512, p = .100$) with an R^2 value of .020. When all 16 dummy variables were included in the model, no statistical differences in terms of age at removal were found among participants who attended at least one SFP B-3 session and all other individuals (including control group individuals) ($\beta = .001, p = .981$). Statistically significant differences in terms of age at episode removal were found for one of the six implementation sites: Olathe ($\beta = .101, p = .026$) with children who attended at least one SFP B-3 session more likely to be older than one year at episode removal compared to children who never attended an SFP B-3 session. No statistical differences were found on a child's age at episode removal across implementation cycles.

Reasons for Removal Model: 16 dummy coded variables (TOT treatment indicator, 6 site dummy coded variables, and 9 cycle dummy coded variables) were regressed on the dichotomous SUD-related primary removal reasons (0-all other reasons; 1-SUD-related removal) using a linear probability model. The overall model was statistically significant ($F(14, 1042) = 2.147, p=.008$) with an R^2 value of .028. When all 16 dummy variables were included in the model, no statistical differences in terms of primary removal reason were found among participants who attended at least one SFP B-3 session and all other individuals (including control group individuals) ($\beta=.009, p=.799$). Statistically significant differences in terms of SUD-related primary removal reason were found at one of the six implementation sites: Hutchinson ($\beta= -.136, p=.031$), while holding the other dummy variables constant. Across cycles, statistically significant differences in SUD related primary removal reason were found only among cycle 1 participants ($\beta=.141, p=.011$) only; cycle 1 individuals were significantly more likely to have a SUD-related primary removal reason, while holding the other dummy variables constant. It is important to note that Cycles 1, 2, and 3 utilized a 1:1 randomization ratio.

Days in Out-of-Home (OOH) Care prior to Randomization Model: 16 dummy coded variables (TOT treatment indicator, 6 site dummy coded variables, and 9 cycle dummy coded variables) were regressed on the continuous variable *days in OOH care prior to randomization* using a linear probability model. The overall model was statistically significant ($F(14, 1042) = 2.574, p<.001$) with an R^2 value of .034. When all 16 dummy variables were included in the model, no statistical differences in terms of length of time in OOH care were found between individuals who attend at least one SFP B-3 session and all other individuals ($\beta= -9.893, p=.108$). Statistically significant differences in terms of length of time in OOH care prior to randomization were found for two of the six implementation sites: Olathe ($\beta= -20.513, p=.011$) and Topeka ($\beta= -28.116, p=.001$). Children in the Olathe and Topeka randomization pools were in OOH care for fewer days prior to randomization, than all other implementation sites. Further, statistically significant differences in terms of days in OOH care prior to randomization were observed cycle 1 participants ($\beta= -32.399, p=.003$). Children in the cycle 1 cohort were in care, on average, 32.39 days less than children in all other implementation cycles, when all other covariates are held constant.

Fidelity Models (813 Never Participated in Treatment or did not complete to fidelity; 230 completed SFP B-3 to fidelity)

Race Model: 16 dummy coded variables (Treatment to fidelity indicator, 6 site dummy coded variables, and 9 cycle dummy coded variables) were regressed on the dichotomous race dependent variable (0-White; 1-non-White) using a linear probability model. The overall model was statistically significant ($F(14, 1042) = 2.891, p<.01$) with an R^2 value of .038. When all 16 dummy variables were included in the model, no statistical differences on racial composition were found between participants who completed SFP B-3 to fidelity and those who did not complete the intervention to fidelity or never attended (including control group participants) ($\beta= -.052, p=.113$). Statistically significant differences in racial composition were found among two of the six sites: 1) Hutchinson ($\beta= -.182, p=.001$), and 2) Kansas City ($\beta=.119, p=.005$). Indicating that the Hutchinson and Kansas City implementation sites varied significantly, in terms of racial composition for participants who completed SFP B-3 to fidelity, while holding the other dummy variables constant, compared to those individuals who did not complete SFP B-3 to fidelity. Hutchinson participants were significantly more

likely to be White, while Kansas City participants were more likely to be non-White. No statistical differences were found on racial composition across implementation cycles.

Biological Sex Model: 16 dummy coded variables (Treatment to fidelity indicator, 6 site dummy coded variables, and 9 cycle dummy coded variables) were regressed on the dichotomous biological sex variable (0=female; 1=male) using a linear probability model. The overall model was not statistically significant ($F(14, 1042) = 1.391, p=.150$) with an R^2 value of .019. When all 16 dummy variables were included in the model, no statistical differences in terms of biological sex were found between individuals who completed the SFP B-3 intervention to fidelity compared to all other individuals who either did not complete SFP B-3 to fidelity, were never recruited, or allocated to the control group condition ($\beta = -.008, p=.824$). No statistically significant differences in terms of biological sex among individuals who completed SFP B-3 to fidelity compared to all other individuals (including control group individuals) were found between the six sites, while holding the other dummy variables constant. Across cycles, statistically significant differences in biological sex composition were observed for cycle 6 individuals ($\beta = .130, p=.037$) who completed SFP B-3 to fidelity (i.e., attended 10 or more SFP B-3 sessions). Cycle 6 participants who completed SFP B-3 to fidelity were significantly more likely to be male, while holding the other dummy variables constant.

Age at Episode Removal Date Model: 16 dummy coded variables (Treatment to fidelity indicator, 6 site dummy coded variables, and 9 cycle dummy coded variables) were regressed on the dichotomous age at episode removal variable (0= 12 months and younger; 1= 1 year and older) using a linear probability model. The overall model was not statistically significant ($F(14, 1042) = 1.551, p=.087$) with an R^2 value of .021. When all 16 dummy variables were included in the model, no statistical differences in terms of age at removal were found among participants who completed SFP B-3 to fidelity and all other individuals (included control group individuals) ($\beta = .027, p=.463$). Statistically significant differences in terms of age at episode removal were found for one of the six implementation sites: Olathe ($\beta = .100, p=.026$) with children who completed SFP B-3 to fidelity more likely to be older than one year at episode removal compared to children who did not complete SFP B-3 to fidelity, never attended an SFP B-3 session, and children in the control group. Across cycles, no statistically significant differences in age at episode removal were observed.

Reasons for Removal Model: 16 dummy coded variables (Treatment to Fidelity indicator, 6 site dummy coded variables, and 9 cycle dummy coded variables) were regressed on the dichotomous SUD-related primary removal reasons (0=all other reasons; 1=SUD-related removal) using a linear probability model. The overall model was statistically significant ($F(14, 1042) = 2.164, p=.008$) with an R^2 value of .029. When all 16 dummy variables were included in the model, no statistical differences in terms primary removal reason were found among participants who completed the SFP B-3 intervention to fidelity and all other individuals (included control group individuals) ($\beta = -.020, p=.584$). Statistically significant differences in terms of SUD-related primary removal reason were observed for one of the six implementation sites: Hutchinson ($\beta = -.134, p=.033$), while holding the other dummy variables constant. Hutchinson participants were significantly more likely to have a non-SUD related primary reason for removal, compared to all other individuals. Across cycles, statistically significant differences in SUD related primary removal reason were found only among cycle 1 ($\beta = .124, p=.030$) and cycle 2 ($\beta = .121, p=.047$) participants. Cycle 1 and cycle 2 individuals were significantly more likely to have non-SUD-related primary removal reason, while holding the other dummy variables constant.

Days in Out-of-Home (OOH) Care prior to Randomization Model: 16 dummy coded variables (Treatment to Fidelity indicator, 6 site dummy coded variables, and 9 cycle dummy coded variables) were regressed on the continuous variable *days in OOH care prior to randomization* using a linear probability model. The overall model was statistically significant ($F(14, 1042) = 2.642, p < .001$) with an R^2 value of .035. When all 16 dummy variables were included in the model, no statistical differences in terms of length of time in OOH care were found between individuals who completed SFP B-3 to fidelity and all other individuals ($\beta = -12.44, p = .061$). Statistically significant differences in terms of length of time in OOH care prior to randomization were found for two of the six implementation sites: Olathe ($\beta = -20.540, p = .010$) and Topeka ($\beta = -28.190, p = .001$). Children who completed SFP B-3 to fidelity in the Olathe and Topeka were in OOH care for fewer days prior to randomization, than all other implementation sites. No statistically significant differences in terms of days in OOH care prior to randomization were observed across cycle cohorts for individuals who completed SFP B-3 to fidelity and all other individuals.

Bivariate Survival Analysis

After baseline equivalence was examined on the five baseline variables, separate bivariate survival analyses were conducted on the three indicator variables, the five baseline variables, the combined site variable, the combined cycle variable, and the dichotomized agency variable to observe differences in reunification. It is important to note days in OOH care *prior* to randomization was dichotomized for the Kaplan Meier analysis and all Cox proportional hazard models. Days in OOH care *prior* to randomization was dichotomized: 0-120 days in OOH care (0); 120+ days in OOH care (1). The cutoff threshold was determined based on the median number of days in OOH care *prior* to randomization (median = 128.00 days).

The number of days in OOH care *after* study randomization occurred (i.e., number of days between child's random assignment and OOH end date, or study end date, whichever came first) was used at the *time* variable. Specifically, the Kaplan-Meier method was utilized to examine equality of survivor functions between two or more groups. Statistical significance of each relationship was assessed using the log-rank χ^2 statistic and the associated *p*-value (See *Table 8.2*). Please note, that the agency variable was only included to examine the bivariate survival analysis to observe differences between agencies on "risk" of reunification. This analysis was conducted for steering committee members and community partners and is not included in the multivariate survival analysis because it is redundant with the more fine-grained site variables; therefore, the agency variable would be excluded due to collinearity with other variables. Additionally, the combined cycle cohort and combined implementation site variables were only used to examine reunification "risk" across cycles and implementation sites.

Among the 1,043 children included in the KSSAF randomization sample, 346 children (33.2%) had been discharged from foster care to reunification by the end of the study period (September 7, 2019). When each of the treatment indicators was examined independently, statistically significant differences were observed for only one of the three treatment indicators:

Examining the ITT indicator, using the original random assignment for 1,043 children, 31.0% of the children allocated to the control group ($n=115$) and 34.3% of the children allocated to the treatment group ($n=231$) had reunified; this difference was not statistically significant in the bivariate model. For the TOT indicator, 31.7 % of the cases that never participated in the intervention, including those

randomized to the control group, had exited foster care to reunification (n=237); for families that attended 1 or more SFP B-3 sessions, the reunification rate was slightly higher 36.8% (n=109), however, this difference was not statistically significant in the bivariate model. Lastly, the treatment to fidelity indicator was statistically significant with reunification at the bivariate level ($\chi^2=5.98$, $df = 1$, $p<.05$); children who completed SFP B-3 to fidelity were significantly more likely to reunify (41.3%) than all other children, including children in the control group (30.1%). *Table 8.2*, below, presents the proportion of exits to reunification for each treatment indicator.

Table 8.2. Proportion of Exits to Reunification by Treatment Indicator and Bivariate Survival Analysis.					
	Treatment Indicator	Reunified (n=346)	Reunified (%)	Log-rank χ^2 (df)	p-value
ITT Model - Primary	ITT Indicator			1.31 (1)	.253
	Control (n=370)	115	31.0		
	Treatment (n=673)	231	34.3		
TOT Model	TOT Indicator			1.83 (1)	.176
	Never Participated (incl. Control) (n=747)	237	31.7		
	Attended 1+ SFP B-3 Sessions (n=296)	109	36.8		
Fidelity Model	Fidelity Indicator			5.98 (1)	.015
	Did not meet Fidelity, Never Participated (n=813)	251	30.1		
	Completed SFP B-3 to Fidelity (n=230)	95	41.3		

Kaplan-Meier analyses were also conducted on the five baseline variables, the combined implementation site variable, the combined implementation cycle variable, and the dichotomous implementation agency variable to examine independent reunification rates across groups. *Table 8.3, Proportion of Exits to Reunification by Independent Variable and Bivariate Survival Analysis*, details the percent of reunification, by category, for each independent variable examined.

With regards to the five baseline variables, race did not have a statistically significant bivariate association with reunification ($\chi^2 = 1.02$, $df = 1$, $p=.313$), although, a slightly higher percentage of White children (34%) in the study had reunified at the end of the study period compared to non-White children (30.8%). Biological sex was not significantly associated with reunification at the bivariate level ($\chi^2 = .73$, $df = 1$, $p=.392$). Though not significant, a slightly higher percentage of female children (34%) have exit care to reunification compared to their male counterpart (32.5%). Bifurcated age at removal was significantly associated with reunification ($\chi^2 = 15.08$, $df = 1$, $p<.000$); children older than one year at the time of their initial removal from home date (40.6%) were significantly more likely to have exited care to reunification at the end of the study period than their younger-than-12-month counterpart (28%). Bifurcated primary reason for removal was not statistically significantly related to reunification at the bivariate level ($\chi^2 = 0.00$, $df = 1$, $p=.965$). Children who had a primary removal reason related to parental SUD had a higher percentage of reunification (34.4%) at the study end

period compared to their counterpart who had a primary reason for removal that was non-SUD related (32.5%). Dichotomized days in OOH care prior to randomization was not statistically significantly related to reunification at the bivariate level ($\chi^2 = 1.52$ $df=1$, $p=.218$). Though not statistically significant, children who were in OOH care longer (120+ days) prior to being randomized for study participation had a slightly higher percentage of reunification (33.8%) than their equal counterpart who had been in OOH care for less than 120 days at randomization (32.5%).

Among the three implementation variables examined, reunification was statistically significantly related to all three independent variables at the bivariate level. Implementation site was statistically related to reunification at the bivariate level ($\chi^2 = 17.47$, $df= 5$, $p<.01$). Implementation site reunification rates ranged from 27.7% (Topeka, KVC) to 46.7% (Salina, SFCS). “Risk” of reunification was also statistically significantly related to implementation agency ($\chi^2 = 8.56$, $df= 1$, $p<.01$). St. Francis Community Services (SFCS) cases were significantly more likely to reunify (36.7%) by the end of the study period than their KVC counterpart (30.4%).

Lastly, implementation cycle was statistically significantly related to “risk” of reunification ($\chi^2 = 25.82$, $df= 8$, $p<.01$). As to be expected with survival analysis, the children who were randomized in the earlier implementation cycles were more likely to experience reunification by the end of the study period, due to the extended length of observation, compared to their latter cycle counterparts. For instance, cycle 9 implemented in the spring of 2019 which allowed for only a short window of observation until the study ended in September 2019. Therefore, cycle 1 participants (August 2015) had significant difference in the length of time under observation and thus, they were more likely to experience the event of interest: reunification. For this study, reunification rates ranged from 7.3% (cycle 9) to 46.2% (cycle 3). It is important to note that although the reunification rates are drastically different for the latter cycles (i.e., cycles 7, 8, and 9) does not mean that there are insignificant results, this simply means that cases in these cycles haven’t had the same amount of time to experience the event of interest. The researchers conducting this survival analysis plan to re-conduct follow-up survival analyses in the future.

Table 8.3. Proportion of Exits to Reunification by Independent Variable and Bivariate Survival Analysis

Indicator	Full Sample (N=1,043)	Reunified (n)	Reunified (%)	Log-rank χ^2 (df)	p-value
Race				1.02 (1)	.313
White	777 (74.5)	264	34.0		
Non-White	266 (25.5)	82	30.8		
Biological Sex				.73 (1)	.392
Female	486 (46.6)	165	34.0		
Male	557 (53.4)	181	32.5		
Age at Removal (Dich.)				15.08 (1)	.000
0 – 12 Months	614 (58.9)	172	28.0		
1 yr. +	429 (41.1)	174	40.6		
Primary Removal Reason				0.00 (1)	.965
SUD-Related	369 (35.4)	127	34.4		
Non-SUD Related	674 (64.6)	219	32.5		
Days in OOH Care prior to Randomization				1.52 (1)	.218
0-120 days	492 (47.2)	160	32.5		
120+ days	551 (52.8)	186	33.8		
Site Location				17.47 (5)	.004
Hutchinson	78 (7.5)	30	38.5		
Kansas City	182 (17.4)	55	30.2		
Olathe	216 (20.7)	71	32.9		
Salina	60 (5.8)	28	46.7		
Wichita	323 (31.0)	111	34.4		
Topeka	184 (13.5)	51	27.7		
Cycle Randomized				25.82 (8)	.001
Cycle 1	141 (13.5)	63	44.7		
Cycle 2	115 (11.0)	41	35.7		
Cycle 3	130 (12.5)	60	46.2		
Cycle 4	104 (10.0)	43	41.3		
Cycle 5 (Wichita)	38 (3.6)	17	44.7		
Cycle 6	117 (11.2)	47	40.2		
Cycle 7	141 (13.5)	38	27.0		
Cycle 8	148 (14.2)	29	19.6		
Cycle 9	109 (10.5)	8	7.3		
Agency				8.56 (1)	.003
KVC	582	177	30.4		
SFCS	461	169	36.7		

Lastly, life tables and medians were examined to observe the difference in reunification by examining the number of days a child was in OOH placement *after* they were randomized, for each respective treatment indicator. Variables used in these three separate analyses were: *time* in OOH care *after* a child was randomized; reunification (yes/no); treatment indicator.

Table 8.4 presents the median number of days in OOH care *after* randomization occurred until a given percentage of the respective group reunified. Cells with no values indicate that not enough children had reunified (i.e., the event had not occurred for the given percentage) in the given time frame to accurately estimate the value. When examining the ITT treatment indicator, 30% of the children allocated to the treatment group had reunified 388 days *after* their original randomization. For children in the control group, 30% had reunified *after* their original randomization by 439 days. However, this difference was not statistically significant (see bivariate Kaplan Meier result above).

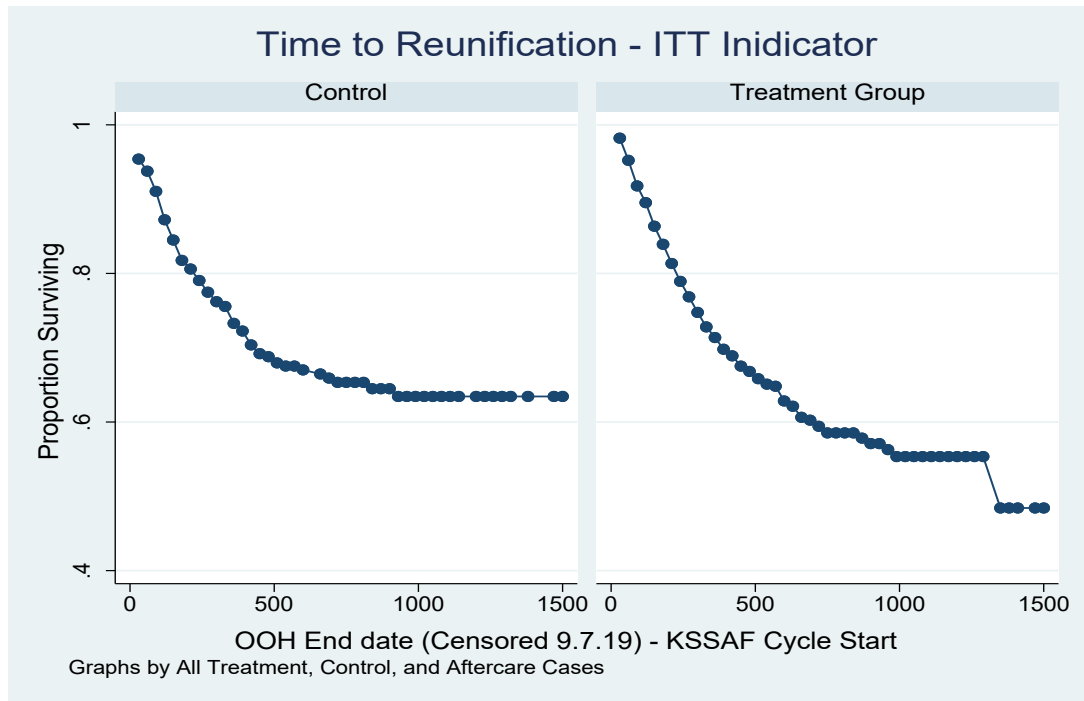
The TOT indicator shows that for children who attended at least one SFP B-3 session, 30% of the group had reunified just under a year (348 days) *after* their randomization. For children who never attended SFP B-3 (including children in the control group), 30% had reunified by 438 days *after* randomization. However, this difference was not statistically significant (see bivariate Kaplan Meier result above).

Observing the Treatment to Fidelity indicator revealed that 30% of the children who completed SFP B-3 to fidelity had reunified by 318 days *after* their initial randomization. Whereas children who did not complete SFP B-3 to fidelity (including children in the control group), 30% of the group had reunified in 449 days *after* their initial random assignment. This difference was statistically significant at the bivariate level (see bivariate Kaplan Meier result above).

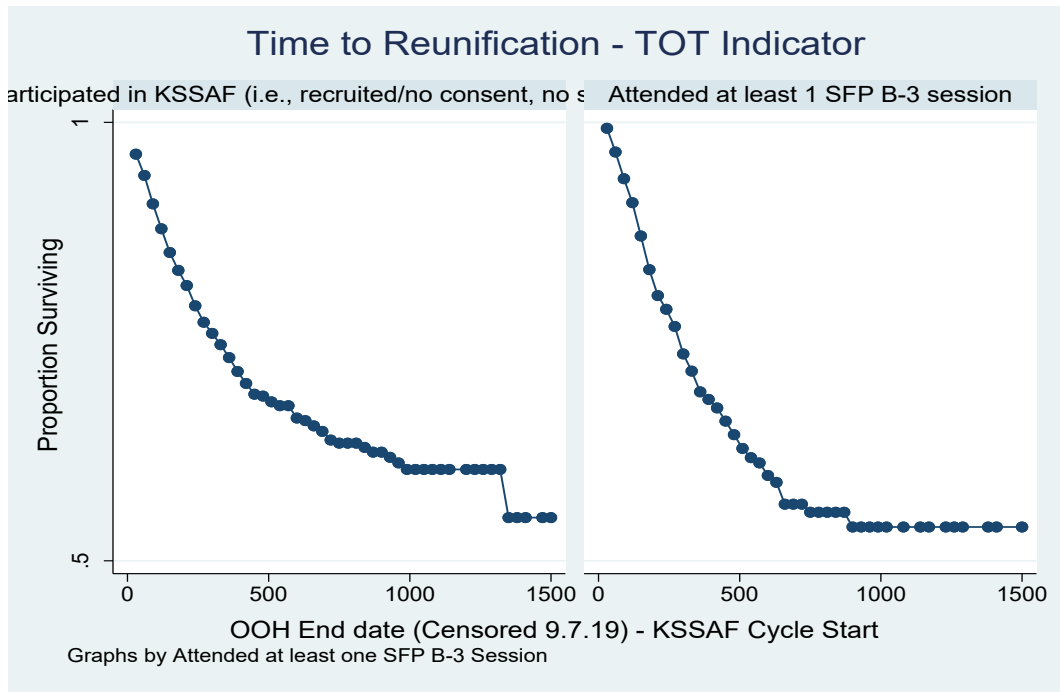
Table 8.4. Time (Days) to Reunification by Percentage for each Treatment Indicator			
Variable	30% of Group Reunified (days)	40% of Group Reunified (days)	50% of Group Reunified (days)
ITT Indicator			
Treatment Group (n=673)	388	701	1337
Control Group (n=370)	439	--	--
TOT Indicator			
Attended 1+ SFP B-3 sessions (n=296)	348	575	--
Never attended (n=747)	438	1337	--
Treatment to Fidelity			
Completed SFP to Fidelity (n=230)	318	485	--
Did not completed SFP B-3 to fidelity (n=813)	449	1337	--

Survival graphs are presented below for each of the three treatment indicators. Each graph presents the proportion of the respective groups' reunification over time, in 30 day increments. *Graph 8.5* plots the time to reunification for the two ITT groups (e.g., treatment group vs. control group). *Graph 8.6* plots the time to reunification for the two TOT groups (e.g., individuals who completed at least one SFP B-3 session vs. all other individuals). *Graph 8.7* plots the time to reunification for the two Treatment to Fidelity groups (e.g., individuals who completed SFP B-3 to fidelity vs. all other individuals).

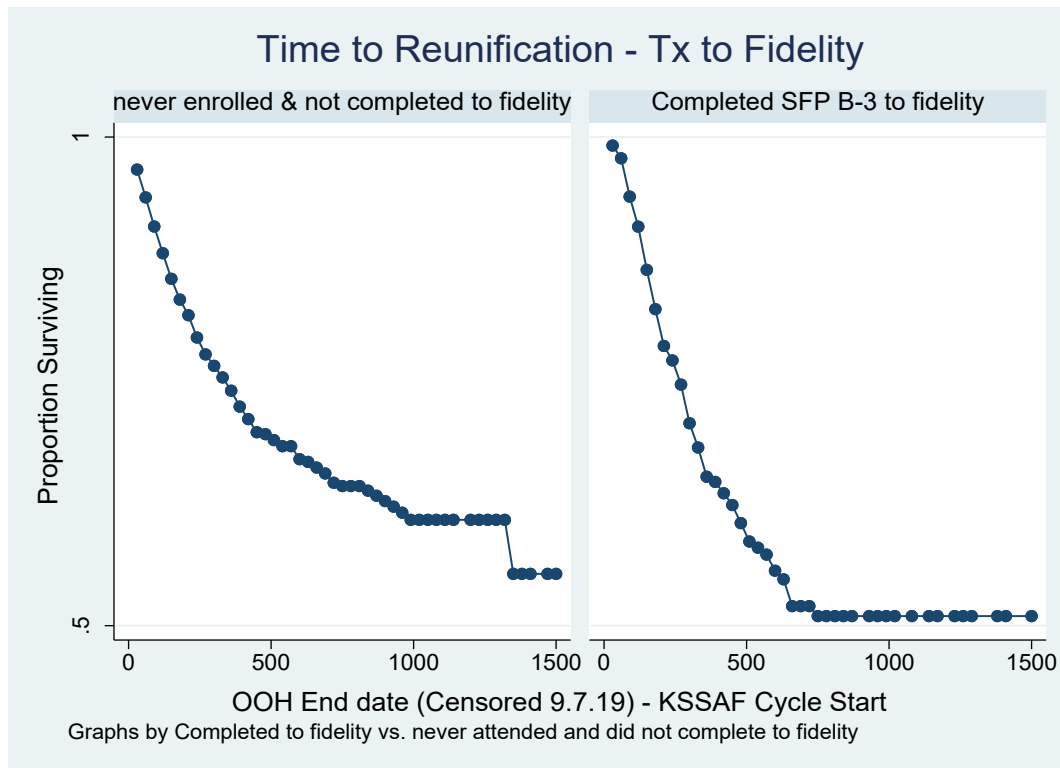
Graph 8.5. Time to Reunification – ITT Indicator



Graph 8.6. Time to Reunification – TOT Indicator



Graph 8.7. Time to Reunification – Treatment to Fidelity



Multivariate Survival Analysis

Reunification rates for all three treatment indicators were examined using Cox proportional hazards models (hereinafter referred to as survival analysis). Survival analysis allows researchers to examine if children in the specific treatment/group condition (i.e., ITT indicator, TOT indicator, and Treatment to fidelity indicator) were at significantly greater “risk” of reunification compared to their counterpart. Each of the three treatment indicators was examined in two separate ways:

1. **Baseline model:** the dependent *time* variable was days in OOH care *after* random assignment occurred. This allowed researchers to examine the “risk” of reunification from the time the child participated (or was eligible for participation) in treatment (i.e., SFP B-3 intervention or treatment as usual) until their OOH end date. In effect, the treatment could not have had an effect prior to the start of treatment.
2. **Sub-model:** the dependent *time* variable was calculated by using the OOH start date subtracted from the censored OOH end date (censored date for children still in OOH placement was September 7th, 2019). In other words, the grand total number of days the child had been in OOH placement for the respective episode.

Independent/predictor variables included in all models include: the respective treatment indicator; 6 site dummy variables; and 9 cycle dummy variables. Subsequent sensitivity models that adjusted for race, biological sex, primary removal reasons related to SUD, days in OOH placement *prior* to random assignment, and dichotomized age at removal were also examined. Results are presented first for the baseline model (i.e., examining the “risk” of reunification *after* a child was randomized). Results of each Cox regression model are presented in tables that provide the overall model χ^2 statistic, degrees of freedom, p-values, as well the hazard ratio for each variable and associated: standard errors, regression coefficients, p-values, and 95% confidence intervals for the hazard ratios. Hazard ratios indicate the percentage change in the hazard rate for a given value of the respective variable relative to the reference category for the given variable, while holding all other variables constant. All reference categories, if applicable, are presented in parentheses in the following tables.

Due to space considerations, tables for each model of ITT will be presented (i.e., ITT baseline model without covariates, ITT baseline model with covariates, ITT sub-model without covariates, ITT sub-model with covariates). Results presented will be based on the models with covariates included. However, only written results for the TOT and Treatment to Fidelity models will be presented. Tables for the TOT and Treatment to Fidelity indicators are available upon request.

Hazard ratios significantly less than one represents a statistically significant decrease in the probability of exiting to reunification for the value, compared to the reference category. Hazard ratios significantly greater than one indicate a statistically significant increase in the probability of achieving reunification for the given value relative to the reference category. A hazard ratio equal to one indicates that there is no difference between a given value and the reference category in terms of probability of exiting care to reunification. As previously mentioned, results for the baseline models, with and without covariates (for sensitivity), will be presented for each of the following treatment indicators: 1) ITT indicator; 2) TOT indicator; 3) Treatment to fidelity indicator. Interpretation of results will be presented for only the baseline model with covariates to decrease redundancy.

Baseline Model Results

ITT Indicator analyses.

Results of the Cox regression model revealed that inclusion of the five baseline covariates improved the overall model fit (with covariates: $\chi^2=72.34$, $df = 19$, $p<.001$). When all other model variables were held constant, several statistically significant relationships were observed between implementation and child characteristics and the outcome variable: reunification. *Table 8.9* presents the baseline ITT model with covariates. Important for the ITT impact analysis, when using time (days) *after* a child was initially randomized, there was not a statically significant difference in probability of exiting to reunification for the children in the treatment group ($n=673$) compared to children in the control group ($n=370$). Although, it is worth mentioning that although not significant, the hazard ratio indicates ($HR=1.188$, $p=.137$) that the children in the treatment group had a higher probability of exiting to reunification during the given study period.

With regards to the baseline covariates, no statistically significant differences in probability of exiting to reunification were found four of the five baseline variables (Race: $HR= .925$, $p= .547$; Biological sex: $HR= .873$, $p=.217$; SUD-related removal reason: $HR= 1.058$, $p=.628$; Days in OOH care prior to randomization: $HR=1.193$, $p=.110$). Age at episode start had a statistically significant hazard ratio ($HR=1.513$, $p<.001$), indicating that children who were older than one year at episode start, were 51.3% more likely to exit care to reunification during the study period, while all other variables were held constant, compared to their less than one counterpart.

For the implementation variables, Salina children had a statistically significant increased likelihood of exiting foster care to reunification ($HR=3.407$, $p<.001$). Children randomized in the Salina pool were 3.4 times as likely to reunify during to the study period, compared to all other children, while all other covariates are equal. Cycles 1-7 all were statistically significantly associated with reunification. Indicating that children who were randomized in cycles 1, 2, 3, 4, 5, 6 or 7 were between 2.1 (Cycle 7) times and 4.6 (Cycle 5) times more likely to reunify, while all other variables were held constant. *Table 8.8* presents the ITT baseline model without covariates, and *Table 8.9* presents the ITT baseline model with covariates, which were reported above.

Table 8.8. ITT Baseline Model Without Covariates						
					Hazard Ratio 95% CI	
	Hazard Ratio	Std. Error	Regress. Coeff.	<i>p</i>	Lower	Upper
ITT Indicator						
(Control)						
Treatment	1.183	.137	.168	.145	.934	1.481
Hutchinson	1.379	.324	.321	.172	.869	2.186
Kansas City	1.479	.303	.392	.056	.990	2.211
Olathe	1.080	.200	.077	.678	.751	1.554
Salina	3.505	.889	1.25	.000	2.13	5.761
Wichita	1.366	.239	.312	.074	.970	1.925
Topeka	Omitted from Analyses					
Cycle 1	4.393	1.717	1.480	.000	2.042	9.451
Cycle 2	2.480	.976	.908	.021	1.147	5.362
Cycle 3	4.545	1.775	1.514	.000	2.114	9.769
Cycle 4	3.450	1.344	1.238	.001	1.607	7.403
Cycle 5	4.624	2.060	1.531	.001	1.931	11.069
Cycle 6	3.707	1.457	1.310	.001	1.715	8.009
Cycle 7	2.17	.850	.773	.049	1.004	4.675
Cycle 8	2.125	.870	.753	.066	.952	4.740
Cycle 9	Omitted from Analyses					
Model Indices	-2 Log <i>L</i>		χ^2 (df)		<i>p</i>	
ITT without Covariates	-2245.06		54.58 (14)		.000	
Note. Number of censored cases = 365; number of events = 678; Total n = 1,043						

Table 8.9. ITT Baseline Model With 5 Baseline Covariates						
	Hazard Ratio	Std. Error	Regress. Coeff.	<i>p</i>	Hazard Ratio 95% CI	
					Lower	Upper
ITT Indicator						
(Control)						
Treatment	1.188	.138	.173	.137	.946	1.492
Race						
(White)						
Non-White	.925	.120	-.078	.547	.716	1.194
Biological Sex						
(Female)						
Male	.873	.096	-.135	.217	.705	1.083
Age @ Episode Start						
(0-12 Months)						
12+ Months	1.513	.169	.414	.000	1.216	1.884
SUD Removal Reason						
(Non-SUD Removal)						
SUD Removal	1.058	.124	.057	.628	.842	1.33
Days in OOH prior to Randomization						
(0-120 days)						
120+ days	1.193	.132	.176	.110	.961	1.481
Hutchinson	1.305	.311	.266	.265	.817	2.082
Kansas City	1.470	.305	.386	.063	.980	2.207
Olathe	1.018	.191	.018	.925	.705	1.470
Salina	3.407	.868	1.226	.000	2.067	5.615
Wichita	1.327	.234	.283	.109	.939	1.874
Topeka	Omitted from Analyses					
Cycle 1	4.270	1.679	1.452	.000	1.975	9.229
Cycle 2	2.353	.930	.856	.030	1.085	5.105
Cycle 3	4.338	1.699	1.467	.000	2.013	9.345
Cycle 4	3.437	1.341	1.234	.002	1.599	7.386
Cycle 5	4.617	2.059	1.530	.001	1.937	11.065
Cycle 6	3.805	1.499	1.336	.001	1.759	8.234
Cycle 7	2.119	.833	.751	.056	.981	4.579
Cycle 8	2.120	.869	.751	.067	.949	4.734
Cycle 9	Omitted from Analyses					
Model Indices	-2 Log <i>L</i>		χ^2 (df)		<i>p</i>	
ITT without Covariates	-2236.17		72.34 (19)		.000	

Note. Number of censored cases = 365; number of events = 678; Total n = 1,043

TOT Indicator analyses.

Results of the Cox regression model revealed that inclusion of the five baseline covariates improved the overall model fit (with covariates: $\chi^2=72.77$, $df = 19$, $p<.001$). When all other model variables were held constant, several statistically significant relationships were observed between implementation and child characteristics and the outcome variable: reunification. When using time (days) after a child was initially randomized, there was not a statically significant difference in probability of exiting to reunification for the children who attended at least one SFP B-3 session ($n=296$) compared to children who never attended an SFP B-3 session ($n=747$). Although, it is worth mentioning that although not significant, the hazard ratio indicates ($HR=1.219$, $p=.098$) that the children who attended one or more SFP B-3 sessions had a higher probability of exiting to reunification during the given study period.

With regards to the baseline covariates, no statistically significant differences in probability of exiting to reunification were found four of the five baseline variables (Race: $HR= .932$, $p= .591$; Biological sex: $HR= .884$, $p=.261$; SUD-related removal reason: $HR= 1.064$, $p=.598$; Days in OOH care prior to randomization: $HR=1.190$, $p=.115$). Age at episode start had a statistically significant hazard ratio ($HR=1.517$, $p<.001$), indicating that children who were older than one year at episode start, were 51.7% more likely to exit care to reunification during the study period, while all other variables were held constant, compared to their less than one counterpart.

For the implementation variables, Salina children had a statistically significant increased likelihood of exiting foster care to reunification ($HR=3.392$, $p<.001$). Children randomized in the Salina pool were 3.4 times as likely to reunify during to the study period, compared to all other children, while all other covariates are equal. Cycles 1-6 all were statistically significantly associated with reunification. Indicating that children who were randomized in cycles 1, 2, 3, 4, 5 or 6 were between 2.7 (Cycle 2) times and 4.5 (Cycle 5) times more likely to reunify, while all other variables were held constant.

Treatment to Fidelity Indicator analyses.

Results of the Cox regression model revealed that inclusion of the five baseline covariates improved the overall model fit (with covariates: $\chi^2=75.44$, $df = 19$, $p<.001$). When all other model variables were held constant, several statistically significant relationships were observed between implementation and child characteristics and the outcome variable: reunification. When using time (days) after a child was initially randomized, there was a statically significant difference in probability of exiting to reunification for the children who completed the SFP B-3 intervention to fidelity ($n=813$) compared to children who did not complete SFP B-3 to fidelity ($n=813$, inclusive of control group). The hazard ratio indicates ($HR=1.340$, $p=.018$) that children who completed SFP B-3 to fidelity were 34% more likely to exit foster care to reunification during this study period than their counterpart who did not complete SFP B-3 to fidelity, while all other variables are held constant.

With regards to the baseline covariates, no statistically significant differences in probability of exiting to reunification were found four of the five baseline variables (Race: $HR= .934$, $p= .602$; Biological sex: $HR= .884$, $p=.260$; SUD-related removal reason: $HR= 1.068$, $p=.571$; Days in OOH care prior to randomization: $HR=1.184$, $p=.126$). Age at episode start had a statistically significant hazard ratio ($HR=1.514$, $p<.001$), indicating that children who were older than one year at episode start, were 51.4% more likely to exit care to reunification during the study period, while all other variables were held constant, compared to their less than one counterpart.

For the implementation variables, Salina children had a statistically significant increased likelihood of exiting foster care to reunification (HR=3.43, $p<.001$). Children randomized in the Salina pool were 3.4 times as likely to reunify during to the study period, compared to all other children, while all other covariates are equal. Cycles 1-6 all were statistically significantly associated with reunification. Indicating that children who were randomized in cycles 1, 2, 3, 4, 5 or 6 were between 2.3 (Cycle 2) times and 4.5 (Cycle 5) times more likely to reunify, while all other variables were held constant.

Sub-Model Results

All analyses conducted for the sub-models utilized a different *time* variable for the survival analyses. Time was calculated as the total number of days in OOH placement. Therefore, time was examined from the point the child entered care until they exited care or the end of the study period, whichever came first. Randomization time point was not taken into consideration for this *time* variable. Similar to the baseline models, all models that include the covariates will be presented. Only tables of the ITT models are included, due to space considerations.

ITT Indicator analyses.

Results of the Cox regression model revealed that inclusion of the five baseline covariates improved the overall model fit (with covariates: $\chi^2=70.54$, $df = 19$, $p<.001$). When all other model variables were held constant, several statistically significant relationships were observed between implementation and child characteristics and the outcome variable: reunification. Table 8.11 presents the ITT sub-model model with covariates. Important for the ITT impact analysis, when using the total time (days) a child had been in care, there was not a statically significant difference in probability of exiting to reunification for the children in the treatment group ($n=673$) compared to children in the control group ($n=370$). Although, it is worth mentioning that although not significant, the hazard ratio indicates (HR=1.20, $p=.117$) that the children in the treatment group had a higher probability of exiting to reunification during the given study period.

With regards to the baseline covariates, no statistically significant differences in probability of exiting to reunification were found four of the five baseline variables (Race: HR= .927, $p= .559$; Biological sex: HR= .877, $p=.234$; SUD-related removal reason: HR= 1.062, $p=.605$; Days in OOH care prior to randomization: HR=.982, $p=.870$). Age at episode start had a statistically significant hazard ratio (HR=1.54, $p<.001$), indicating that children who were older than one year at episode start, were 55% more likely to exit care to reunification during the study period, while all other variables were held constant, compared to their less than one counterpart.

For the implementation variables, Salina children had a statistically significant increased likelihood of exiting foster care to reunification (HR=3.35, $p<.001$). Children randomized in the Salina pool were 3.35 times as likely to reunify during to the study period, compared to all other children, while all other covariates are equal. Cycles 1-8 all were statistically significantly associated with reunification. Indicating that children who were randomized in cycles 1, 2, 3, 4, 5, 6, 7 or 8 were between 2.2 (Cycle 7) times and 4.6 (Cycle 3) times more likely to reunify, while all other variables were held constant. Table 8.10, presents the ITT baseline model without covariates, and table 8.11 presents the ITT baseline model with covariates, which were reported above.

Table 8.10. ITT Sub-model Without Covariates						
					Hazard Ratio 95% CI	
	Hazard Ratio	Std. Error	Regress. Coeff.	<i>p</i>	Lower	Upper
ITT Indicator						
(Control)						
Treatment	1.20	.139		.119	.954	1.50
Hutchinson	1.34	.315		.218	.842	2.12
Kansas City	1.45	.298		.069	.972	2.17
Olathe	1.08	.200		.679	.751	1.55
Salina	3.34	.847		.000	2.03	5.49
Wichita	1.33	.233		.102	.945	1.87
Topeka	Omitted from Analyses					
Cycle 1	4.69	1.83		.000	2.18	10.08
Cycle 2	2.56	1.00		.016	1.19	5.53
Cycle 3	4.79	1.87		.000	2.23	10.29
Cycle 4	3.64	1.42		.001	1.70	7.80
Cycle 5	4.53	2.01		.001	1.90	10.79
Cycle 6	3.88	1.52		.001	1.80	8.38
Cycle 7	2.22	.868		.042	1.03	4.78
Cycle 8	2.29	.934		.043	1.03	5.09
Cycle 9	Omitted from Analyses					
Model Indices	-2 Log <i>L</i>		χ^2 (df)		<i>p</i>	
ITT without Covariates	-2242.94		53.64 (14)		.0000	
Note. Number of censored cases = 365; number of events = 678; Total n = 1,043						

Table 8.11. ITT Baseline Model With 5 Baseline Covariates						
					Hazard Ratio 95% CI	
	Hazard Ratio	Std. Error	Regress. Coeff.	<i>p</i>	Lower	Upper
ITT Indicator						
(Control)						
Treatment	1.20	.139	.822	.117	.956	1.50
Race						
(White)						
Non-White	.927	.121	-.076	.559	.718	1.20
Biological Sex						
(Female)						
Male	.878	.096	-.130	.234	.708	1.09
Age @ Episode Start						
(0-12 Months)						
12+ Months	1.54	.171	.429	.000	1.23	1.91
SUD Removal Reason						
(Non-SUD Removal)						
SUD Removal	1.06	.124	.060	.605	.845	1.34

Days in OOH prior to Randomization						
(0-120 days)						
120+ days	.982	.109	-.018	.870	.790	1.22
Hutchinson	1.30	.311	.262	.273	.813	2.08
Kansas City	1.48	.307	.391	.059	.95	2.22
Olathe	1.04	.195	.037	.846	.718	1.50
Salina	3.35	.856	1.21	.000	2.03	5.53
Wichita	1.33	.234	.282	.110	.938	1.87
Topeka	Omitted from Analyses					
Cycle 1	4.42	1.74	1.486	.000	2.04	9.56
Cycle 2	2.40	.945	.877	.026	1.11	5.21
Cycle 3	4.49	1.80	1.524	.000	2.13	9.88
Cycle 4	3.59	1.40	1.279	.001	1.67	7.72
Cycle 5	4.49	2.00	1.502	.001	1.88	10.73
Cycle 6	4.00	1.57	1.386	.000	1.85	8.65
Cycle 7	2.21	.865	.791	.044	1.02	4.75
Cycle 8	2.27	.928	.819	.045	1.02	5.06
Cycle 9	Omitted from Analyses					
Model Indices	-2 Log L		χ^2 (df)		p	
ITT without Covariates						
Note. Number of censored cases = 365; number of events = 678; Total n = 1,043						

TOT Indicator analyses.

Results of the Cox regression model revealed that inclusion of the five baseline covariates improved the overall model fit (with covariates: $\chi^2=71.43$, $df = 19$, $p<.001$). When all other model variables were held constant, several statistically significant relationships were observed between implementation and child characteristics and the outcome variable: reunification. When using total time (days) a child was in OOH care, there was not a statically significant difference in probability of exiting to reunification for the children who attended at least one SFP B-3 session ($n=296$) compared to children who never attended an SFP B-3 session ($n=747$). Although, it is worth mentioning that although not significant, the hazard ratio indicates ($HR=1.250$, $p=.062$) that the children who attended one or more SFP B-3 sessions had a higher probability of exiting to reunification during the given study period, and this relationship was approaching significance.

With regards to the baseline covariates, no statistically significant differences in probability of exiting to reunification were found four of the five baseline variables (Race: $HR= .935$, $p= .607$; Biological sex: $HR= .888$, $p=.279$; SUD-related removal reason: $HR= 1.068$, $p=.573$; Days in OOH care prior to randomization: $HR=.980$, $p=.856$). Age at episode start had a statistically significant hazard ratio ($HR=1.540$, $p<.001$), indicating that children who were older than one year at episode start, were 54% more likely to exit care to reunification during the study period, while all other variables were held constant, compared to their less than one counterpart.

For the implementation variables, Salina and Kansas City children had a statistically significant increased likelihood of exiting foster care to reunification ($HR=3.346$, $p<.001$; $HR=1.557$, $p<.05$,

respectively). Children randomized in the Salina pool were 3.4 times as likely to reunify during to the study period, compared to all other children, while all other covariates are equal. Children randomized in the Kansas City pool were 1.5 times as likely to reunify during to the study period, compared to all other children, while all other covariates are equal. Cycles 1-7 all were statistically significantly associated with reunification. Indicating that children who were randomized in cycles 1, 2, 3, 4, 5, 6 or 7 were between 2.2 (Cycle 7) times and 4.5 (Cycle 3) times more likely to reunify, while all other variables were held constant.

Treatment to Fidelity Indicator analyses.

Results of the Cox regression model revealed that inclusion of the five baseline covariates improved the overall model fit (with covariates: $\chi^2=74.50$, $df = 19$, $p<.001$). When all other model variables were held constant, several statistically significant relationships were observed between implementation and child characteristics and the outcome variable: reunification. When using total time (days) a child was in OOH placement, there was a statically significant difference in probability of exiting to reunification for the children who completed the SFP B-3 intervention to fidelity ($n=813$) compared to children who did not complete SFP B-3 to fidelity ($n=813$, inclusive of control group). The hazard ratio indicates ($HR=1.380$, $p=.009$) that children who completed SFP B-3 to fidelity were 38% more likely to exit foster care to reunification during this study period than their counterpart who did not complete SFP B-3 to fidelity, while all other variables are held constant.

With regards to the baseline covariates, no statistically significant differences in probability of exiting to reunification were found four of the five baseline variables (Race: $HR= .936$, $p= .618$; Biological sex: $HR= .887$, $p=.276$; SUD-related removal reason: $HR= 1.074$, $p=.854$; Days in OOH care prior to randomization: $HR=.975$, $p=.817$). Age at episode start had a statistically significant hazard ratio ($HR=1.537$, $p<.001$), indicating that children who were older than one year at episode start, were 53.7% more likely to exit care to reunification during the study period, while all other variables were held constant, compared to their less than one counterpart.

For the implementation variables, Salina and Kansas City children had a statistically significant increased likelihood of exiting foster care to reunification ($HR=3.384$, $p<.001$; $HR=1.582$, $p<.05$, respectively). Children randomized in the Salina pool were 3.4 times as likely to reunify during to the study period, compared to all other children, while all other covariates are equal. Children randomized in the Kansas City pool were approximately 1.6 times as likely to reunify during to the study period, compared to all other children, while all other covariates are equal. Cycles 1-8 all were statistically significantly associated with reunification. Indicating that children who were randomized in cycles 1, 2, 3, 4, 5, 6, 7 or 8 were between 2.2 (Cycle 7) times and 4.4 (Cycle 3) times more likely to reunify, while all other variables were held constant.

Discussion

Results revealed that SFP B-3 participants who completed the curriculum to fidelity reunified at significantly faster rates compared to all other children (including the control group) who did not complete SFP B-3 to fidelity when examining length of time to reunification both ways (i.e., number of total days in OOH placement and number of days *after* initial randomization). This finding is extremely important, indicating that the program has positive impacts for families who attend and complete the program to fidelity. Given that the families who participated in SPF B-3 had more

interaction with their respective child welfare agencies, it is plausible (and often very common) that given the increased exposure to agency workers while attending an intervention, that time to reunification could have been greater (i.e., the children spent longer time in care). These findings provide evidence in support of the effectiveness of completing SFP B-3 with regards to significantly decreasing a child's time to reunification when examined two ways, having significant implications for the child welfare field.

IX. Local Evaluation – Supplemental Analyses (June 2020, Sub-Study 7)

This section presents supplemental impact analysis results. The researchers were intentional in conducting impact analyses using a tiered analytic approach (see *Figure 8.0*). This section presents the results of steps 4 and 5 presented in *Figure 8.0*, above. For the secondary, supplemental linear probability model (LPM) and complier average causal effects (CACE) analyses were conducted to produce a more interpretable estimate of the TOT impact. It is important to note, these analyses were intentionally conducted given certain clearinghouse standards and guidelines for RCTs. For each point-in-time and CACE analysis, different samples with varying windows of observation were used to provide multiple perspectives of reunification for young children in out-of-home placement.

First, LPMs were used to observe the incidence of reunification, for three treatment indicator group designations, at specific timeframes after randomization allocation. LPM analyses apply ordinary least squares (OLS) technique using a binary outcome variable (e.g., reunification) instead of continuous. Deke (2014) contends that the advantage of using a LPM is the direct interpretation of the parameter estimates as the mean marginal effect of a given covariate on the dependent/outcome variable of interest, whereas, if researchers used logistic regression instead, the output would be presented in log odds ratios, making interpretation more complex. Therefore, LPM output allowed for an enhanced pragmatic interpretation of the results.

Additionally, three complier average causal effects (CACE) analyses were conducted. As required for the point-in-time CACE analyses, a two-stage least squares (TSLS) analysis was used to leverage the random assignment instrument and identify the effect of receiving any exposure to the intervention. CACE analyses allow researchers to estimate an unbiased treatment average effect of taking up the offered intervention among all compliers (i.e., those who complied with the original randomization conditions assigned). The researchers were confident: 1) treatment conditions were random; 2) control group participants did not have access to the intervention offered; 3) attrition was zero, by study construction; and 4) violation of the *stable unit treatment value* (SUTVA; i.e., the random assignment outcome was not influenced by the treatment assignment of others) was highly improbable. For more detailed information on CACE analyses please see Luca & Cole (2017), and Peugh, Strotman, McGrady, Raush & Kashikar-Zuck (2017). In effect, the structural modeling of a TSLS analysis allow researchers to observe the effect of receiving any exposure to the SFP B-3 intervention. Both the first and second stage results of the TSLS will be presented.

In sum, the multivariate analyses included in this study examine the likelihood of reunification for varying observation windows across different treatment definitions (e.g., ITT, TOT, Treatment to fidelity). The analyses leverage both the respective study's randomization processes (i.e., testing the effect of the original random assignment) *and* acknowledge that there was noncompliance with the random assignment process resulting in only a subset of the individuals randomized to the treatment group actually taking up the intervention.

LPM - Research Questions:

1. What was the incidence of reunification at 365 days (1 year) after study randomization and did reunification statistically differ between group designations as defined by treatment group indicator?
2. What was the incidence of reunification at 548 days (18 Months) after study randomization and did reunification statistically differ between group designations as defined by treatment

group indicator?

3. What was the incidence of reunification at 730 (2 years) after study randomization and did reunification statistically differ between group designations as defined by treatment group indicator?

CACE – Research Question:

1. What is the causal effect of receiving any of the SFP B-3 sessions on the probability of reunification?

For all supplemental impact analyses, the outcome variable of interest was reunification, examined in several ways. First, reunification was examined dichotomously: if the child had achieved reunification or not (yes/no). Consistent with the federal definition, “reunification” included all children who discharged from foster care and legally reunified with their birth caregiver with the exclusion of trial home visits (Administration on Children and Families [ACF], 2005, 2015). A child’s discharge reason was dichotomized to indicate if a child had reunified (1) or remained in foster care or all other discharge reasons (0). Second, time to reunification was continuously measured by the total number of days a child was in foster care *after* random assignment occurred and until they achieved reunification. Children who had not yet reunified were included in the main survival analyses as “censored cases” by imputing the last date of study observation (September 7th, 2019, see *Section VIII* for more information on censored cases). If a child had reunified and re-entered foster care during the study period, only the episode associated with study randomization was included.

Point-in-time, LPM analyses were conducted to examine if reunification occurred within three unique windows of observation. Specifically, researchers examined whether or not (yes/no) children had reunified within: 1) 365 days after study randomization; 2) 548 days (e.g., 18 months) after study randomization; and 3) 730 days (e.g., 2 years) after study randomization. These timeframes were intentionally selected to allow a sufficient amount of time for children to reunify. A child was excluded from the analyses if they did not meet the threshold of days in out-of-home care after randomization. For instance, if a child was randomized 200 days before the last date of study observation, September 7th, 2019, then they were excluded from each of the three analyses since they did not meet the observation day threshold. Therefore, the point-in-time analyses utilized three different sized samples for each possible observation period.

Extensive discussion between authors and external consultants led to the decision to examine the effectiveness of SFP B-3 utilizing three different treatment indicators to answer separate research questions. Informed by study design and current research standards, each treatment indicator examined the full, eligible analytic sample in a unique way, and was analyzed as a dichotomous variable independent of the other treatment indicators. The three treatment indicators, ITT, TOT, and Treatment to Fidelity, are detailed extensively in *Section VIII*, please refer to that section for additional detail.

To decrease redundancy and given space considerations, only CACE analysis results for the two-year observation window will be presented. Patterns for the one year and 18 month observation windows were trending in a similar direction. Further, to decrease redundancy, point-in-time LPM results will not be presented since findings reveal similar results as the survival analyses (*Section VIII*) and CACE analysis.

Results - Complier Average Causal Effect (CACE) Analyses

Conducting the supplemental CACE analyses allowed researchers to examine the probability of reunification for three separate timeframes by providing a causal estimate of children who received some portion of the intervention. Results will only be discussed for the 2 year observation window, however, Table 9.1 provides the second-stage results for the treatment effects for all three observation windows.

9.1. Complier Average Causal Effects (CACE) Model Output by Observational Window

Treatment Variable	Observational Window								
	365 Days (1 Year)			548 Days (18 Months)			730 Days (2 Years)		
	N = 934			N = 786			N = 645		
	β	SE	p	β	SE	p	β	SE	p
TOT Indicator	0.055	0.08	0.466	0.112	0.08	0.167	0.160	0.09	0.072
Model Indices	χ^2 (df)	R ²	p	χ^2 (df)	R ²	p	χ^2 (df)	R ²	p
2 nd Stage	55.75 (18)	0.06	0.000	47.92 (17)	0.06	0.000	40.19 (16)	0.06	0.000

Notes. SE = standard error; This study's instrument variable was the ITT treatment indicator, the endogenous independent variable was the TOT treatment indicator (i.e., identifies if a participant took up any portion of the intervention) and these indicators were defined similarly across treatment and control groups, the same set of covariates utilized are identical for the first and second stage.

For children who were randomized two years prior to the end of the study, CACE analysis results showed that children who had received any portion of the intervention were 16 percentage points more likely to experience reunification ($\beta = 0.16$, $SE = 0.09$, $p = .072$) when compared to children who did not receive any portion of the intervention, after controlling for all other study variables. This result was non-significant, though, the p -value was approaching significance at the $p < .05$ level. The magnitude of the CACE estimate was smaller, however still positive, for the 18 month and 1-year observation windows with larger p -values for these periods. All analyses suggested that receiving any portion of SFP B-3 increased the likelihood of reunification though the p -value did not reach the .05 significance level. In sum, the point-in-time CACE findings suggest a similar result as the TOT analyses from Table 4, with the finding for the two-year period being nearly statistically significant.

X. Substance Use Treatment Prevalence and Patterns (Fall 2020, Sub-Study 8)

Little is known about the substance use disorder treatment patterns (e.g., substance of choice, administration route, treatment episodes, usage, and discharge reasons) among parents with young children in care. This study sought to describe the prevalence and patterns of substance use and treatment episodes among parents with young children (0 -3 years) placed out-of-home due to parental substance abuse.

We conducted a descriptive, exploratory study to examine the treatment patterns of SFP B-3 participants who consented to allow researchers access to their substance use treatment records through the substance use treatment record organization (Kansas Department of Aging and Disability Services). Records were requested for all participants that consented to allow access to their treatment records, if any, between August 2015 and March 2019.

Data Analysis

Data analysis consisted of univariate and bivariate analyses to examine the sample demographics and case and treatment characteristics. Analyses were conducted using IBM SPSS. Univariate analyses included running descriptives and measures of central tendencies. Additionally, univariate analyses were examined by number of treatment episodes (1 treatment episode vs. 2+ treatment episodes).

For individuals who had multiple treatment records, we created combined variables to look at substance use behaviors across multiple treatment episodes. Results of these univariate and bivariate analyses are presented in the following tables.

Results

Matched substance abuse treatment records were available for 216 unique adult-participants from the substance use treatment record organization. The 216 individuals were nested within 182 unique families; therefore, 34 participating families had two caregivers with matched treatment records. Sample characteristics were examined for the full sample (N = 216) and by treatment episode categories (i.e., 1 treatment episode and 2+ treatment episodes).

For the full sample, individuals with matched treatment episode records were primarily White (75.9%), non-Hispanic/Latino (86.1%) females (71.8%) with a mean age of 28.3 (SD = 6.1) years old. The majority reported having a high school diploma/GED or higher education (62.8%), and being single (45.1%) at the time of enrollment. Further, the participants primarily reported being unemployed (45.6%) followed by full-time employment (33.5%) with the majority reporting an annual income of \$0 - \$9,999 (65.1%). These patterns were similar across the full sample and individuals with 1 treatment episode and individuals with 2 or more treatment episodes. Table 10.1 provides further information.

Table 10.1. Sample Characteristics by Full Sample and Treatment Episode Records

	Total Sample N = 216	1 Tx Episode n = 91	2+ Tx Episodes n = 125
Variable	Frequency (%)	Frequency (%)	Frequency (%)
Biological Sex			
Female	155 (71.8)	67 (73.6)	88 (70.4)

	Total Sample N = 216	1 Tx Episode n = 91	2+ Tx Episodes n = 125
Variable	Frequency (%)	Frequency (%)	Frequency (%)
Male	61 (28.2)	24 (26.4)	37 (29.6)
Ethnicity			
Non-Hispanic/Latino	186 (86.1)	76 (83.5)	110 (88.0)
Hispanic/Latino	30 (13.9)	15 (16.5)	15 (12.0)
Race			
White	164 (75.9)	69 (75.8)	95 (76.0)
Black	20 (9.3)	10 (11.0)	10 (8.0)
American Indian/Alaskan Native	5 (2.3)	2 (2.2)	3 (2.4)
Multi-Racial	27 (12.5)	10 (11.0)	17 (13.6)
Age			
16 – 19 Years Old	9 (4.2)	5 (5.5)	4 (3.2)
20 – 25 Years Old	67 (31.0)	34 (37.4)	33 (26.4)
26 – 29 Years Old	55 (25.5)	16 (17.6)	39 (31.2)
30 – 39 Years Old	76 (35.2)	34 (37.4)	42 (33.6)
40 + Years Old	9 (4.2)	2 (2.2)	7 (5.6)
Highest Education Level			
Up to 8 th Grade	12 (5.6)	2 (2.2)	10 (8.1)
Some High School	68 (31.6)	30 (33.0)	38 (30.6)
High School Diploma/GED	69 (32.1)	34 (37.4)	35 (28.2)
Associate's Degree	4 (1.9)	1 (1.1)	3 (2.4)
Some College or Some Vocational	58 (27.0)	23 (25.3)	35 (28.2)
Bachelor's Degree or Higher	4 (1.9)	1 (1.1)	3 (2.4)
Employment Status			
Unemployed	98 (45.6)	36 (39.6)	62 (50.0)
Not in Labor Force	7 (3.3)	5 (5.5)	2 (1.6)
Self-Employed	13 (6.0)	8 (8.8)	5 (4.0)
Part-Time Employment	25 (11.6)	11 (12.1)	14 (11.3)
Full-Time Employment	72 (33.5)	31 (34.1)	41 (33.1)
Income Level			
\$0 - \$9,999	140 (65.1)	60 (65.9)	80 (64.5)
\$10,000 - \$19,000	48 (22.3)	18 (19.8)	30 (24.2)
\$19,001 - \$24,999	15 (7.0)	5 (5.5)	10 (8.1)
\$25,000 - \$34,999	7 (3.3)	4 (4.4)	3 (2.4)
\$35,000 - \$49,999	4 (1.9)	3 (3.3)	1 (0.8)
\$50,000 or Higher	1 (0.5)	1 (1.1)	0 (0.0)
Relationship Status			
Single (Unmarried/Not Cohabiting)	97 (45.1)	53 (58.2)	44 (35.5)
Cohabiting with Focal Child's Biological Parent	54 (25.1)	17 (18.7)	37 (29.8)
Cohabiting with Other Individual	13 (6.0)	3 (3.3)	10 (8.1)
Divorced/Separated/Widowed	15 (7.0)	4 (4.4)	11 (8.9)
Married to Focal Child's Biological Parent	31 (14.4)	12 (13.2)	19 (15.3)
Married to Other Individual	5 (2.3)	2 (2.2)	3 (2.4)
Current Residence			
Primary Residence	164 (75.9)	74 (81.3)	90 (72.0)
Homeless/Shelter	15 (6.9)	5 (5.5)	10 (8.0)

	Total Sample N = 216	1 Tx Episode n = 91	2+ Tx Episodes n = 125
Variable	Frequency (%)	Frequency (%)	Frequency (%)
Treatment Facility	4 (1.9)	0 (0.0)	4 (3.2)
Other	33 (15.3)	12 (13.2)	21 (16.8)
<i>Notes.</i> Tx = Treatment			

Treatment Episode Characteristics

When examining sample characteristics by treatment episode categories, there was minimal deviation from the full sample characteristics. The most notable differences were observed between individuals with 1 treatment episode and 2 or more treatment episodes and: age at enrollment, employment status, and relationship status. Specifically, when compared to individuals with 1 treatment record, individuals who had 2 or more treatment records experienced greater unemployment rates (50.0% verse to 39.6%), were more likely to be between the ages of 26-29 years old (31.2% verse to 17.6%), and less likely to be single (35.5% verse to 58.2%).

Among the 216 adult participants were 496 treatment episode records dating between November 2005 and October 2018. The number of treatment episodes ranged from 1 to 12 with the median being 2 (IQR: 2) treatments episodes. See Table 10.2, below, for number frequency of treatment episodes.

10.2. Frequency Distribution by Number of Treatment Episodes	
Number of Treatment Episodes	Frequency (%)
1 Treatment Episode	91 (42.1)
2 Treatment Episodes	47 (21.8)
3 Treatment Episodes	40 (18.5)
4 Treatment Episodes	17 (7.9)
5 Treatment Episodes	13 (6.0)
6 Treatment Episodes	4 (1.9)
7 Treatment Episodes	2 (0.9)
8 Treatment Episodes	1 (0.5)
9 Treatment Episodes	0 (0.0)
10 Treatment Episodes	0 (0.0)
11 Treatment Episodes	0 (0.0)
12 Treatment Episodes	1 (0.5)

Substance Use Patterns at Intake

Substance use patterns were examined in multiple ways. First, since all individuals included in the study had at least one treatment episode, substance use behaviors were examined for each individual's first treatment episode available. All individuals (N = 216) identified a primary substance use problem at intake; 130 (60.2%) identified a secondary substance use problem and 47 (21.8%) individuals

identified a tertiary substance use problem at intake. Table 10.3 illustrates the substance use type and frequency of the primary, secondary, and tertiary substances reported at intake.

10.3. Substance Use Type and Frequency at First Treatment Episode Intake			
Identified Substance	Primary Substance (N = 216)	Secondary Substance (n = 130)	Tertiary Substance (n = 47)
	Frequency (%)	Frequency (%)	Frequency (%)
Alcohol	28 (13.0)	39 (30.0)	15 (31.9)
Marijuana/Hashish	81 (37.5)	48 (36.9)	11 (23.4)
Methamphetamine	77 (35.6)	19 (14.6)	5 (10.6)
Other Opiates & Synthetics	16 (7.4)	8 (6.2)	3 (6.4)
Heroin	6 (2.8)	1 (0.8)	0 (0.0)
Cocaine/Crack	4 (1.9)	7 (5.4)	7 (14.9)
Other	4 (1.9)	8 (6.2)	6 (12.8)
<i>Notes.</i> Other category includes the following: Phencyclidine (PCP), Other Amphetamines, Benzodiazepine, Barbiturates, Other non-barbiturate sedatives of hypnotics, Inhalants, Other			

Researchers observed the three most common reported substances at intake, for primary, secondary, and tertiary substances identified, were alcohol, marijuana/hashish, and methamphetamine. Cross-tabulations examining combinations of primary and secondary substances revealed that 70% of the 130 individuals ($n = 90$), identified some combination of alcohol, marijuana/hashish, and methamphetamine use at intake. In other words, 70% of the individuals who identified their primary substance use issue as either alcohol, marijuana/hashish, or methamphetamine at intake, also identified one of the three substances as their secondary substance use problem, if applicable.

Other variables examined for participant's first chronological treatment episode included route of administration and frequency of use for the primary, secondary, and tertiary substances identified at intake for the participants' first treatment episode. Table 10.4 illustrates the type of administration and frequency of use for primary, secondary, and tertiary substance reported during the participants' first chronological treatment episode.

10.4. Characteristics of Substance Use at First Treatment Episode Intake			
Variable	Primary Substance (N = 216)	Secondary Substance (n = 130)	Tertiary Substance (n = 47)
	Frequency (%)	Frequency (%)	Frequency (%)
Route of Administration			
Oral	48 (22.2)	54 (41.5)	24 (51.1)
Smoking	136 (63.0)	63 (48.5)	13 (27.7)
Injection	23 (10.6)	4 (3.1)	2 (4.3)
Inhalation	7 (3.2)	8 (6.2)	8 (17.0)
Other	2 (0.9)	1 (0.8)	0 (0.0)
Frequency of Use			
No Use in the Past Month	95 (44.0)	74 (56.9)	26 (55.3)

1-3 Days in the Past Month	27 (12.5)	23 (17.7)	7 (14.9)
1-2 Days in the Past Week	20 (9.3)	2 (1.5)	6 (12.8)
3-6 Days in the Past Week	26 (12.0)	8 (6.2)	2 (4.3)
Daily	48 (22.2)	23 (17.7)	6 (12.8)

For an individual’s primary substance use identified at intake, researchers conducted cross-tabulations to observe the primary route of administration and frequency of use. Results revealed for the three most common primary substances reported (i.e., alcohol, marijuana/hashish, and methamphetamine) that oral administration (e.g., drinking) was the most common form of alcohol consumption ($n = 28$, 100%); smoking was the most common form of marijuana/hashish ($n = 78$, 96.3%) and methamphetamine ($n = 55$, 71.4%) consumption.

Over half ($n = 15$, 53.6%) of the participants who reported alcohol as their primary substance use problem reported no alcohol use in the past month at intake, followed by 21.4% ($n = 6$) reporting use 1-3 days in the past month and 14.3% ($n = 4$) reporting daily alcohol use. Individuals who reported marijuana/hashish and methamphetamine as their primary substance use problem had similar frequency of use patterns. Nearly half of marijuana/hashish users (48.1%, $n = 39$) and one-third of methamphetamine users (36.4%, $n = 28$) reported no substance consumption in the past month upon intake. The next most common usage response was “daily” for marijuana/hashish (18.5%, $n = 15$) and methamphetamine (23.4%, $n = 18$) users.

Similar route of administration and frequency of use behaviors were observed among individuals who reported a secondary and tertiary substance use problem at intake for the three most commonly reported substances.

When examining the type of service received and self-reported co-occurring mental health issues at intake for an individual’s first treatment episode, results revealed that the majority of participants received “ambulatory non-intensive” substance use treatment ($n = 96$, 44.4%) and 72.2% ($n = 156$) reported a co-occurring mental health issue.

Multiple Substance Use Treatment Episodes.

Over half of the participants ($n = 125$, 57.9%) had two or more matched treatment records. Researchers were interested in observing substance use patterns and behaviors for individuals with multiple treatment episodes. Specifically, the researchers wanted to observe if an individual’s primary substance use of choice at intake varied across treatment episodes. Table 10.5 below details if an individual with multiple treatment episodes reported the same substance of abuse at intake for each treatment episode, regardless of the number of treatment episodes. Additionally, the table also illustrates the percent of participants with multiple treatment episodes who report (yes/no) co-occurring mental health issues at intake.

10.5. Individuals with Multiple Treatment Episodes, Mental Health and Primary Substance Use	
Variable	Frequency (%)
Co-Occurring Mental Health Issues	
Yes	89 (71.2)

No	23 (18.4)
Both	13 (10.4)
Primary Substance Use Issue	
Same Substance	59 (47.2)
2 Substances	52 (41.6)
3 Substances	12 (9.6)
4 + Substances	2 (1.6)
<i>Notes. n = 125</i>	

For individuals with two or more treatment episodes, 47.2% ($n = 59$) reported the same primary substance use problem at intake; 41.6% ($n = 52$) reported two different substances and only 11.2% ($n = 14$) reported a combination of three or more substances across treatment episodes. Of the individuals who sought treatment for the same substance multiple times, methamphetamine was the most commonly reported substance (52.5%, $n = 31$). Additionally, it is worth noting that 71.2% of participants, longitudinally indicated that they had co-occurring mental health issues at treatment intake.

Researchers examined individuals with multiple treatment episodes ($n = 125$) based on the number of substances reported at intake across treatment records (i.e., one substance, 2 substances, 3+ substances), presented in Table 10.6, researchers found similar patterns across categories. The most notable deviations from the full sample, across categories, are highlighted in light yellow for visual clarity. Otherwise, patterns were similar for the full sample and for individuals with multiple treatment episodes. Please note that statistical significance was not tested across groups or between groups, researchers, at the time of this writing, only conducted descriptive analyses.

10.6. Comparison of Sample Characteristics Between Full Sample and Individuals with Multiple Treatment Episodes by Number of Substances Reported Across Treatment				
	Total Sample $N = 216$	1 Substance $n = 59$	2 Substances $n = 52$	3+ Substances $n = 14$
Variable	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)
Biological Sex				
Female	155 (71.8)	42 (71.2)	35 (67.3)	11 (78.5)
Male	61 (28.2)	17 (28.8)	17 (32.7)	3 (21.4)
Ethnicity				
Non-Hispanic/Latino	186 (86.1)	50 (84.7)	48 (92.3)	12 (85.7)
Hispanic/Latino	30 (13.9)	9 (15.3)	4 (7.7)	2 (14.3)
Race				
White	164 (75.9)	40 (67.8)	44 (84.6)	11 (78.5)
Black	20 (9.3)	7 (11.9)	2 (3.8)	1 (7.1)
American Indian/Alaskan Native	5 (2.3)	2 (3.4)	1 (1.9)	0 (0.0)
Multi-Racial	27 (12.5)	10 (16.9)	5 (9.6)	2 (14.3)
Age				
16 – 19 Years Old	9 (4.2)	1 (1.7)	2 (3.8)	1 (7.1)
20 – 25 Years Old	67 (31.0)	12 (20.3)	15 (28.8)	6 (42.9)
26 – 29 Years Old	55 (25.5)	19 (32.2)	18 (34.6)	2 (14.3)

10.6. Comparison of Sample Characteristics Between Full Sample and Individuals with Multiple Treatment Episodes by Number of Substances Reported Across Treatment				
	Total Sample N = 216	1 Substance n = 59	2 Substances n = 52	3+ Substances n = 14
Variable	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)
30 – 39 Years Old	76 (35.2)	23 (39.0)	15 (28.8)	4 (28.6)
40 + Years Old	9 (4.2)	4 (6.8)	2 (3.8)	1 (7.1)
Highest Education Level				
Up to 8 th Grade	12 (5.6)	6 (10.2)	3 (5.9)	1 (7.1)
Some High School	68 (31.6)	18 (30.5)	15 (29.4)	5 (35.7)
High School Diploma/GED	69 (32.1)	17 (28.8)	15 (29.4)	3 (21.4)
Associate’s Degree	4 (1.9)	0 (0.0)	3 (5.9)	0 (0.0)
Some College or Some Vocational	58 (27.0)	18 (30.5)	12 (23.5)	5 (35.7)
Bachelor’s Degree or Higher	4 (1.9)	0 (0.0)	3 (5.9)	0 (0.0)
Employment Status				
Unemployed	98 (45.6)	31 (52.5)	25 (49.0)	6 (42.9)
Not in Labor Force	7 (3.3)	1 (1.7)	1 (2.0)	0 (0.0)
Self-Employed	13 (6.0)	3 (5.1)	1 (2.0)	1 (7.1)
Part-Time Employment	25 (11.6)	6 (10.2)	7 (13.7)	1 (7.1)
Full-Time Employment	72 (33.5)	18 (30.5)	17 (33.3)	6 (42.9)
Income Level				
\$0 - \$9,999	140 (65.1)	40 (67.8)	30 (58.8)	10 (71.4)
\$10,000 - \$19,000	48 (22.3)	10 (16.9)	17 (33.3)	3 (21.4)
\$19,001 - \$24,999	15 (7.0)	6 (10.2)	3 (5.9)	1 (7.1)
\$25,000 - \$34,999	7 (3.3)	2 (3.4)	1 (2.0)	0 (0.0)
\$35,000 - \$49,999	4 (1.9)	1 (1.7)	0 (0.0)	0 (0.0)
\$50,000 or Higher	1 (0.5)	0 (0.0)	0 (0.0)	0 (0.0)
Relationship Status				
Single (Unmarried/Not Cohabiting)	97 (45.1)	19 (32.2)	16 (31.4)	9 (64.3)
Cohabiting with Focal Child’s Biological Parent	54 (25.1)	16 (27.1)	17 (33.3)	4 (28.5)
Cohabiting with Other Individual	13 (6.0)	6 (10.2)	4 (7.8)	0 (0.0)
Divorced/Separated/Widowed	15 (7.0)	4 (6.8)	7 (13.7)	0 (0.0)
Married to Focal Child’s Biological Parent	31 (14.4)	12 (20.3)	6 (11.8)	1 (7.1)
Married to Other Individual	5 (2.3)	2 (3.4)	1 (2.0)	0 (0.0)
Current Residence				
Primary Residence	164 (75.9)	40 (67.8)	39 (75.0)	11 (78.5)
Homeless/Shelter	15 (6.9)	7 (11.9)	2 (3.8)	1 (7.1)
Treatment Facility	4 (1.9)	1 (1.7)	2 (3.8)	1 (7.1)
Other	33 (15.3)	11 (18.6)	9 (17.3)	1 (7.1)
<i>Notes.</i> Table includes only individuals with multiple treatment episodes (n = 125)				

XI. Sustainability

From November 2014 - September 2019, the state of Kansas was divided into four service regions by the Department of Children and Families (DCF) (e.g., Kansas City, East, Wichita, and West). The KSSAF project contracted with two privatized foster care agencies throughout the duration of the program, which included KVC Behavioral HealthCare, Inc. (KVC) and Saint Francis Community services (SFCS).

Beginning on October 1, 2019, Kansas now has four providers of foster care and adoption, two of which are new. The two current and continuing providers include KVC Behavioral HealthCare, Inc. (KVC) and Saint Francis Community Services (SFCS). The two new providers are Cornerstones of Care and TFI Family Services.

A critical component in sustaining SFP was the successfulness in getting the SFP purveyor to agree to allow the Saint Francis Community Services (SFCS) Site Coordinator, to complete their train-the-trainer orientation for the Strengthening Families Program. This will allow the agency to be self-sufficient by the end of the grant period. This was a tremendous achievement for increasing sustainability for the SFCS organization and rural communities in Western Kansas. KVC Behavioral HealthCare, Inc. (KVC) previously had individuals within their organization complete train-the-trainer orientation as part of the Regional Partnership Grants, Round I funding.

In regards to sustainability, our Site Coordinators did an incredible job at making connections and partnerships with the community members within their locations. All five of the Site Coordinators were able to consistently receive food for the family mealtime and the churches wanted to be more involved with the program. Volunteers could help with transportation, set up/clean up, child aid, or volunteering. Site coordinators started participating in KSSAF Steering Committee meetings in April of 2018 and the focus greatly shifted toward sustainability. In addition, we held two Site Coordinator meetings (June 2017 and June 2018) to discuss strengths and challenges related to implementation, recruitment, retention, and sustainability.

XII. Dissemination

Several levels of dissemination occurred throughout the KSSAF grant. Table 10.1, below, details dissemination efforts and the associated audience.

Table 10.1 Dissemination Activities and Associated Audience					
	Federal Partners	Steering Committee Members	KSSAF Implementation Staff	Professional Dissemination	Other
KSSAF Internal Website		X	X		
Dissemination Memorandum		X	X		
KSSAF Guidelines		X	X		
Webinars		X	X		X
Conference Presentations	X	X		X	X
Reporting	X	X		X	
Publications (Future)	X	X	X	X	X
News Release (2018)	X	X	X	X	X

The KSSAF internal website (password protected) was established and maintained by KUSSW evaluation staff to allow all KSSAF partners and implementation staff access to: important documents (i.e., program brochures, recorded webinars, lists of community resources, age-appropriate developmental activities, Steering Committee meeting minutes, Steering Committee meeting Dissemination memorandum, etc.); the Strengthening Families Birth to Three curriculum; updated and adapted SFP B-3 sessions, if applicable; and data collection instruments (e.g., Fidelity sets, standardized instruments, cross-site instruments, etc.). The internal website allowed for secure, easy dissemination of and access to important project information and documents. The website was primarily accessed by site coordinators and implementation staff.

During the heart of KSSAF implementation, the Steering Committee meeting Dissemination Memorandum was a very useful tool for summarizing important happenings and decisions made during the monthly KSSAF Steering Committee meetings. KSSAF Steering Committee meetings were primarily for agency leaders and other community partners therefore implementation staff did not attend. In order to concisely disseminate Steering Committee ideas and decisions, the Dissemination Memorandum was created and distributed by the Implementation Team Coordinator, to all KSSAF implementation staff. The Dissemination Memorandum enhanced channels of communication between the KSSAF Steering Committee and implementation teams at each of the participating sites in Olathe, Kansas City, Topeka, Wichita, Salina, and Hutchinson. Implementation

staff's feedback was welcomed and encouraged. The memorandum provided the implementation staff a snapshot of: new/updated guidelines; partner updates; the KSSAF Tracking Table; and upcoming events (e.g. Basic/Advanced Trainings, data collections, reminders, and due dates).

Another strategy used for dissemination was the Steering Committee Meeting minutes. Meeting minutes were recorded for every Steering Committee meeting that was scheduled (approximately 50 meetings throughout the KSSAF grant). Partners met monthly (bi-monthly starting July 2018) to discuss any project components, implementation and evaluation issues, and future project planning (e.g., trainings, dates for future cycles, sustainability, etc.). Meeting minutes were distributed via e-mail to all Steering Committee members. This practice allowed partners who were unable to attend to maintain engagement and be kept up-to-date on KSSAF happenings and decisions.

Other items that were disseminated to implementation staff were curriculum modifications and KSSAF guidelines. Curriculum adaptations (made by Jeanie Ahearn Greene, Implementation Specialist) and KSSAF guidelines included: age-appropriate parent-child activities; child aid guidelines; space suggestions; group capacity guidelines; eligibility criteria; data collection requirements; family dyad fidelity guidelines; SFP B-3 family practice guidelines; substance use impairment response; make-up session guidelines; dropout/ "grace period" guidelines; pre-school and child care guidelines; and re-recruitment information. All KSSAF guidelines were uploaded with the Semi-Annual Progress Reports, if applicable.

In an attempt to increase the KSSAF implementation staffs' knowledge of how parental substance use impacts a child's development, the KUSSW staff facilitated one webinar (Early childhood webinar: The impact of trauma on a child's development and behavior) and disseminated two additional webinars. Information on the three webinars is included below:

1. Early Childhood Webinar: The Impact of Trauma on Development and Behavior
 - Attached to this report is the PowerPoint slide presentation of the *Early Childhood Webinar: The Impact of Trauma on Development and Behavior* facilitated by Pam Cornwell, MS, LCMFT, St. Francis Community Services.
 - The webinar focused on clarifying *trauma* related to child development. A child's behavior can be an indicator that their experience of their world is being shaped by traumatic situations and circumstances leading to caregiver challenges in knowing how to effectively respond to the child's needs. The webinar helped participants make distinctions between typical, out-of-sync, and abnormal behavior(s), and provided strategies to address developmental needs in situations.
 - Link: https://mediahub.ku.edu/media/t/1_qjeryzgl
2. Supporting Families Affected by Opioid and Other Substance Use Disorders
 - Attached to this report is the PowerPoint slide presentation of the *Supporting Families Affected by Opioid and Other Substance Use Disorders* webinar, developed by Sharon Amatetti, MPH and Elaine Voces Stedt, MSW, facilitated by Nancy K. Young, PhD, MSW.

- This webinar was an additional resource for our implementation staff that KUSSW provided through our Dissemination Memorandum. KUSSW did not develop this webinar.
 - Link: <https://www.youtube.com/watch?v=ZUWLUoaxfcw>
3. Shame, Guilt, and Fear: Understanding and working with the complex feelings of mothers of substance-exposed newborns
- Attached to this report is the PowerPoint slide presentation of the *Shame, Guilt, and Fear: Understanding and working with the complex feelings of mothers of substance-exposed newborns* webinar, created by Eda Spielman, PsyD and Amy Sommer, LICSW.
 - This webinar was an additional resource for our implementation staff that KUSSW provided through our Dissemination Memorandum. KUSSW did not develop this webinar.

Other dissemination efforts included conference presentations on several aspects of the KSSAF project, including: implementation science, implementation “lessons learned”, substance use patterns of parents involved in the child welfare system, among others. National and statewide presentations included:

- Child Welfare League of America (CWLA)
- Society of Social Work Research (SSWR)
- Kansas Governor’s Conference
- RPG Annual Program Meeting

Additionally, future dissemination efforts include peer-reviewed publications of the sub-studies included in this report and the forthcoming impact analysis.

XIII. Conclusions, Implications, Lessons Learned and Key Recommendations

The Kansas Serves Substance-Affected Families (KSSAF) was a success on my levels. From a programmatic perspective: families who received the intervention were extremely satisfied, would recommend the program to other parents, improved on several adult-recovery domains, family-functioning domains, and child well-being domains;

From an implementation perspective, KSSAF successfully piloted an adaptation of the SFP curriculum to a new, high-risk population with positive effects. Additionally, staff administered the curriculum to fidelity (see *section VII*).

To gauge the experiences of the KSSAF implementation staff, three staff surveys, throughout the KSSAF project, were administered to implementation staff. The summer 2019 KSSAF Staff Survey was sent to all implementation team members, across all implementing sites. The survey was administered through REDCap and inquired about KSSAF implementation, successes experienced, suggestions for improvement, and continued program sustainability. The responses were anonymous and the survey took between 10 - 15 minutes. Several comments from the KSSAF staff survey are included below:

- “We had a good space in the community, community partners willing to help with meals, technical assistance was helpful, KSSAF team was helpful, and agency staff that participated in the program were engaged and worked hard”.
- “There were open lines of communication, [which] helped in understanding my role in the process, [I] felt the support of the KSSAF KU team”.
- “Our site coordinator is fantastic. She steps in whenever other staff is lacking. She is empathetic with parents and really creates a great working relationship with them to where they feel they can come to her with personal issues”.
- “We developed a great partnership with the Church where we facilitate SFP”.

Staff suggestions for future sustainability and program implementation included:

- “Provide more items geared towards baby and infants to teach with the session”.
- “Provide more community education and awareness of SFP”.
- “Provide more frequent training for staff in case of attrition while the cycle is occurring”.
- “Collect all pre-test data in one week”.
- “Provide more than one site coordinator at a site”.
- “The curriculum is not very user friendly for a lot of the parents. It was challenging to help parents tie the lessons with real life examples/practice. For example, the discipline lesson. How are you to really apply discipline to any child under 18 months of age? I found it challenging! Imagine how the parents felt”.
- “Improve activities with kids”

Enrollment challenges that KSSAF experienced were specific to the eligibility criteria. The criteria that children had to meet in order to be considered for enrollment made enrolling enough families challenging. It limited the pool of participants, specifically when it came to the 0-47 month’s age range and the case-plan-goal of reunification. If children’s case-plan-goal was not reunification, then

the children were not eligible for SFP (B-3). Site Coordinators struggled with the low number of families to recruit from, both rural and urban areas. All sites struggled with receiving responses from case managers. This was frustrating to the site coordinators because they felt the families were missing opportunities due to the unresponsiveness of case managers.

KSSAF had difficulties collecting follow-up data after the initial exit data collection was complete. If a family dropped out, collecting exit/follow-up data was challenging. Site Coordinators would contact the participants and schedule times to meet and complete the data, but this was often unsuccessful. If a family was not able to make it to our exit data collection due to some unforeseen circumstance, the site coordinator would collect their exit paperwork within three weeks of the initial data collection and mail it to KUSSW.

Evaluation Lessons Learned

The major lessons learned with regards to the evaluation design are around the randomized design. Randomizing eligible children before recruitment was troublesome when it came to utilizing an ITT design because more children were eligible for the study than there were treatment spots available. In other words, KSSAF randomized *all* children who were eligible, based on child welfare data at a given time, instead of randomizing an equal number of children for the available SFP B-3 treatment spots. In effect, since fidelity guidelines state no more than 8-10 children, depending on age of children enrolled for SFP B-3, only 12-15 children per site should have been randomized (using a 2 treatment group: 1 control group ratio). Therefore, at the end of the project, researchers would not end up with hundreds of children randomized to the control group who were *never* contacted (essentially, these children who were never contacted received the same services as those in the control group).

Another lesson learned was the mid-project modification of the randomization ratio after implementation. From an implementation perspective, this modification was beneficial; however, from an evaluation perspective, utilizing two different randomization ratios required extra analyses to confirm that the children randomized at a 1:1 ratio were not statistically significantly different from those children randomized at a 2:1 ratio.

Finally, the way that the data collection was set up for the project was very labor intensive—but did result in comprehensive data collection. KUSSW collected all of the data onsite, and then hand entered the data into REDCap, and also monitored all aspects of the evaluation. This resulted in the need for an extensive amount of evaluation support—3 student hourlies and a PhD level student evaluation manager. The final project director (Brook) believes that the sites administering the intervention could have had some of the responsibility for collecting the data, thereby lessening the burden of data collection on the evaluation team.

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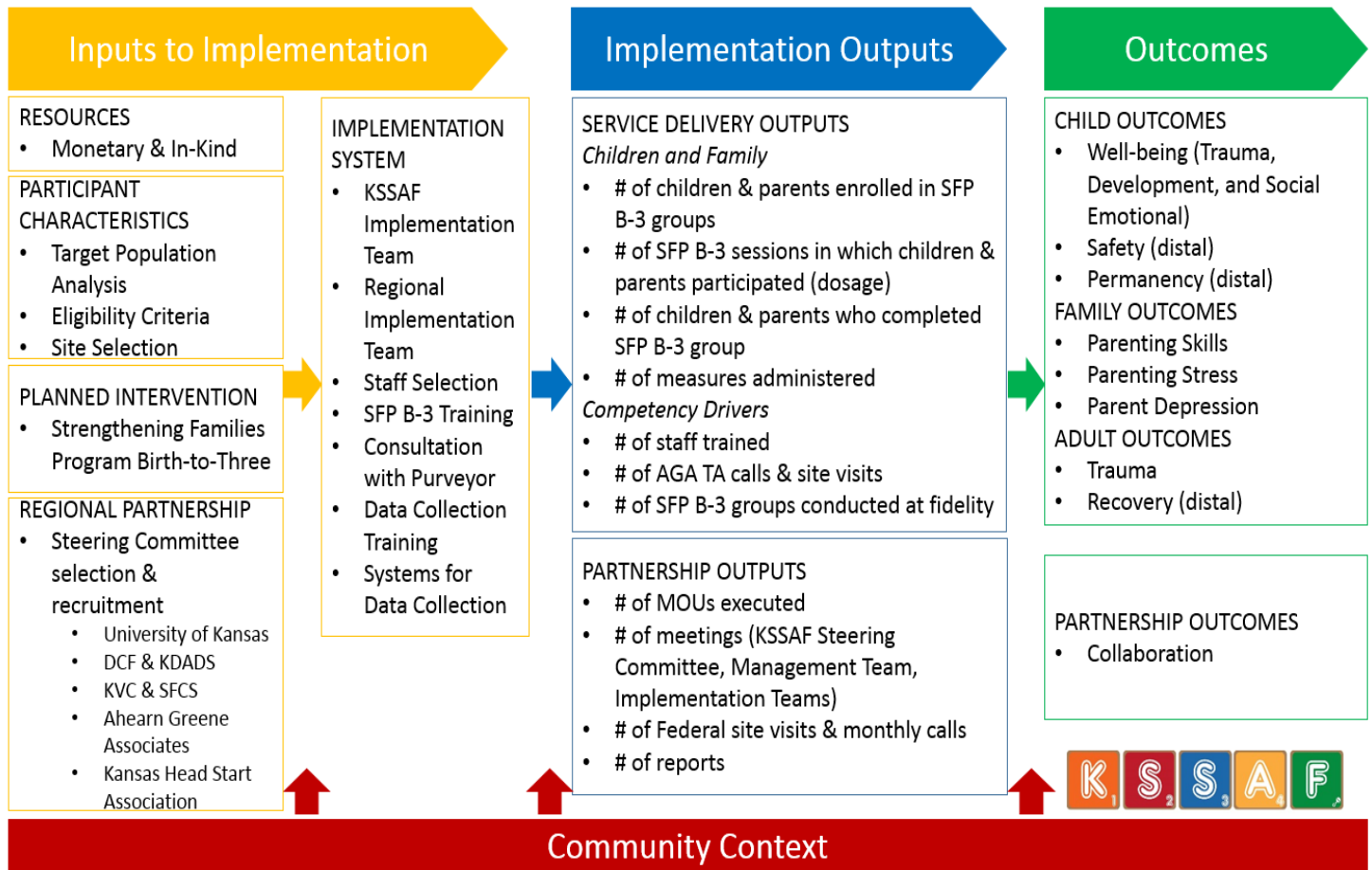
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Appendix A

Kansas Serves Substance-Affected Families (KSSAF) Logic Model



Appendix B

Kansas Serves Substance-Affected Families (KSSAF) Summary of Activities

KSSAF Activity	Who	KSSAF Enter	W1-SFP Session 1a	Week 2- Session 1b	Week 3- Session 2	Week 4- Session 3	Week 5- Session 4	Week 6- Session 5	Week 7- Session 6	Week 8- Session 7	Week 9- Session 8	Week 10- Session 9	W11-S10	W12-S11	W13-S12	W14-S13	W15-S14	W16	KSSAF Exit
KSSAF Fidelity																			
Initial Contact Information	SC	X																	
Oral Consent Script																			
Initial Contact Sheet (Number of family members, basic dem.)	SC	X																	
Info from Case Managers	SC	→																	
Set 1 Form 1 (Demographic info for each family member)	SC & KU		X																
Set 1 Form 2 (Enrollment)	SC		X															X	
Set 1 Form 2 (Attendance)	SC		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Set 2 (Forms 2 & 3 & SFP Site Information Survey)	SC																		X (SFP 16 or dropout)
Set 3 (Forms 4 & 5 & SFP Fidelity Checklist)	GL		X		X	X	X	X	X	X	X	X	X	X	X	X		X	
Set 4 (Forms 4, 5 & 6 & SFP Fidelity Checklist)	GL			X													X		
Cross-site Instruments	SC & KU		50-85 min	45-60 min														75-125 min	
Informed Consent	FFA/ RDA		X																
TSCYC	FFA		X																
ASQ-3	FFA		X																X
ASQ-SE	FFA			X															X
AAPI-A(pre)	FFA		X																
AAPI-B(post)	FFA																		X
PSI-SF	FFA			X															X
CES-D	FFA		X																X
ASI	RDA			X															X
TSC-40	RDA			X															X
Gift cards				\$30															\$50



Strengthening Families Program Birth-to-Three

GL= Group Leader SC=Site Coordinator KU=KSSAF Evaluation Team FFA=Family Functioning Adult RDA= Recovery Domain Adult

TSCYC= Trauma Symptom Checklist for Young Children ASQ-3=Ages & Stages Questionnaire-3rd Ed ASQ:SE=Ages & Stages Questionnaire: Social Emotional

AAPI-2=Adult-Adolescent Parenting Index PSI-SF=Parenting Stress Index-Short Form CES-D=Center for Epidemiological Studies- Depression ASI=Addiction Severity Index TSC-40=Trauma Symptom Checklist

Appendix C

Fidelity Questions (Set 3)

KSSAF - SFP Fidelity Checklist
Week _____

KSSAF Fidelity Set 3
Strengthening Families Program Facilitator Fidelity Checklist©

4

S.12. Key topic or activity for session (you can use the Title of the Session or for Sessions with data collection indicate that as key topic)

SFP Session Fidelity Scoring

The following are questions used to rate the fidelity and quality of the session you lead. They assess the content, quality and appropriateness of the session

S.13. Indicate how much you covered of the overall content of the session	Not covered				Covered Completely
	0%	25%	50%	75%	100%
Overall session content/objectives covered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Review home practice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Role play/ experiential activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lecture/ "talk"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Discussion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

S.14. Rate the overall quality of the program session.	1-Poor	2	3-Average	4	5-Excellent
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

S.15. How well do you think participants responded to the session on a scale of 1 to 5?	1-Not at all	2	3	4	5- Completely
OVERALL, how well did participants respond to session?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Participants were engaged.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Participants actively listened.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Participants readily participated in discussion & activities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Participants acted respectfully towards the group leaders.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Participants acted respectfully towards each other.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rate overall enthusiasm of participants to content	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rate overall appropriateness of content for participants "comprehension/ literacy" levels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

S.16. How well do you think you were prepared and conducted the session on a scale of 1 to 5?	1-Not at all	2	3	4	5- Completely
I was prepared for this session in terms of materials and equipment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I was prepared for and had a thorough understanding of the discussion topics.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I was able to respond to and/or answer the questions the participants had.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rate your level of enthusiasm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rate your level of poise and confidence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rate your rapport and communication with participants.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Participants can explain basic concept by the end of the session.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Participants were able to understand and complete the worksheets.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How suitable do you think this lesson was for the participants?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

S.17. Describe the amount of changes you made in the session.	0% No changes	25%	50%	75%	100% Completely changed
Amount of additions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Amount of deletions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Amount of modifications.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Qualitative notes and assessment of session quality and fidelity

S.18. Were there any outside disruptions that affected the delivery of the session content today, including if session was cancelled?

Yes

No

If yes, describe briefly

S.19. If any, what content was not covered during the session being of time (including disruptions)? Why?

S.20. If any, what purposive adaptations did you make for this session (deletions and additions)?

S.21. Other Comments: Use the space below for additional comments regarding strengths or weaknesses of the session, particularly if there is anything that affected your ratings above.

Appendix D

Fidelity Questions (Set 4)

KSSAF - SFP Fidelity Checklist

KSSAF Fidelity Set 4

GL Name: _____

1

Week _____

Strengthening Families Program Facilitator Fidelity Checklist©

SFP Session #					
Date of Service					
Where were these services provided?	<input type="checkbox"/> KVC Olathe	<input type="checkbox"/> Saint Francis Wichita			
	<input type="checkbox"/> KVC Wyandotte County	<input type="checkbox"/> Saint Francis Salina			
	<input type="checkbox"/> KVC Topeka	<input type="checkbox"/> Saint Francis Hutchinson			
S.12. Key topic or activity for session (you can use the Title of the Session or for Sessions with data collection indicate that as key topic)					
SFP Session Fidelity Scoring					
The following are questions used to rate the fidelity and quality of the session you lead. They assess the content, quality and appropriateness of the session					
S.13. Indicate how much you covered of the overall content of the session	Not covered				Covered Completely
	0%	25%	50%	75%	100%
Overall session content/objectives covered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Review home practice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Role play/ experiential activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lecture/ "talk"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Discussion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1-Poor	2	3-Average	4	5-Excellent
S.14. Rate the overall quality of the program session.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S.15. How well do you think participants responded to the session on a scale of 1 to 5?	1-Not at all	2	3	4	5- Completely
OVERALL, how well did participants respond to session?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Participants were engaged.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Participants actively listened.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Participants readily participated in discussion & activities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Participants acted respectfully towards the group leaders.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Participants acted respectfully towards each other.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rate overall enthusiasm of participants to content	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rate overall appropriateness of content for participants "comprehension/ literacy" levels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S.16. How well do you think you were prepared and conducted the session on a scale of 1 to 5?	1-Not at all	2	3	4	5- Completely
I was prepared for this session in terms of materials and equipment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I was prepared for and had a thorough understanding of the discussion topics.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I was able to respond to and/or answer the questions the participants had.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rate your level of enthusiasm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rate your level of poise and confidence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rate your rapport and communication with participants.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Participants can explain basic concept by the end of the session.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Participants were able to understand and complete the worksheets.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How suitable do you think this lesson was for the participants?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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S.17. Describe the amount of changes you made in the session.

Amount of additions.

0% No changes 25% 50% 75% 100% Completely changed

Amount of deletions.

Amount of modifications.

Qualitative notes and assessment of session quality and fidelity

S.18. Were there any outside disruptions that affected the delivery of the session content today, including if session was cancelled?

Yes No

If yes, describe briefly

S.19. If any, what content was not covered during the session being of time (including disruptions)? Why?

S.20. If any, what purposive adaptations did you make for this session (deletions and additions)?

S.21. Other Comments: Use the space below for additional comments regarding strengths or weaknesses of the session, particularly if there is anything that affected your ratings above.

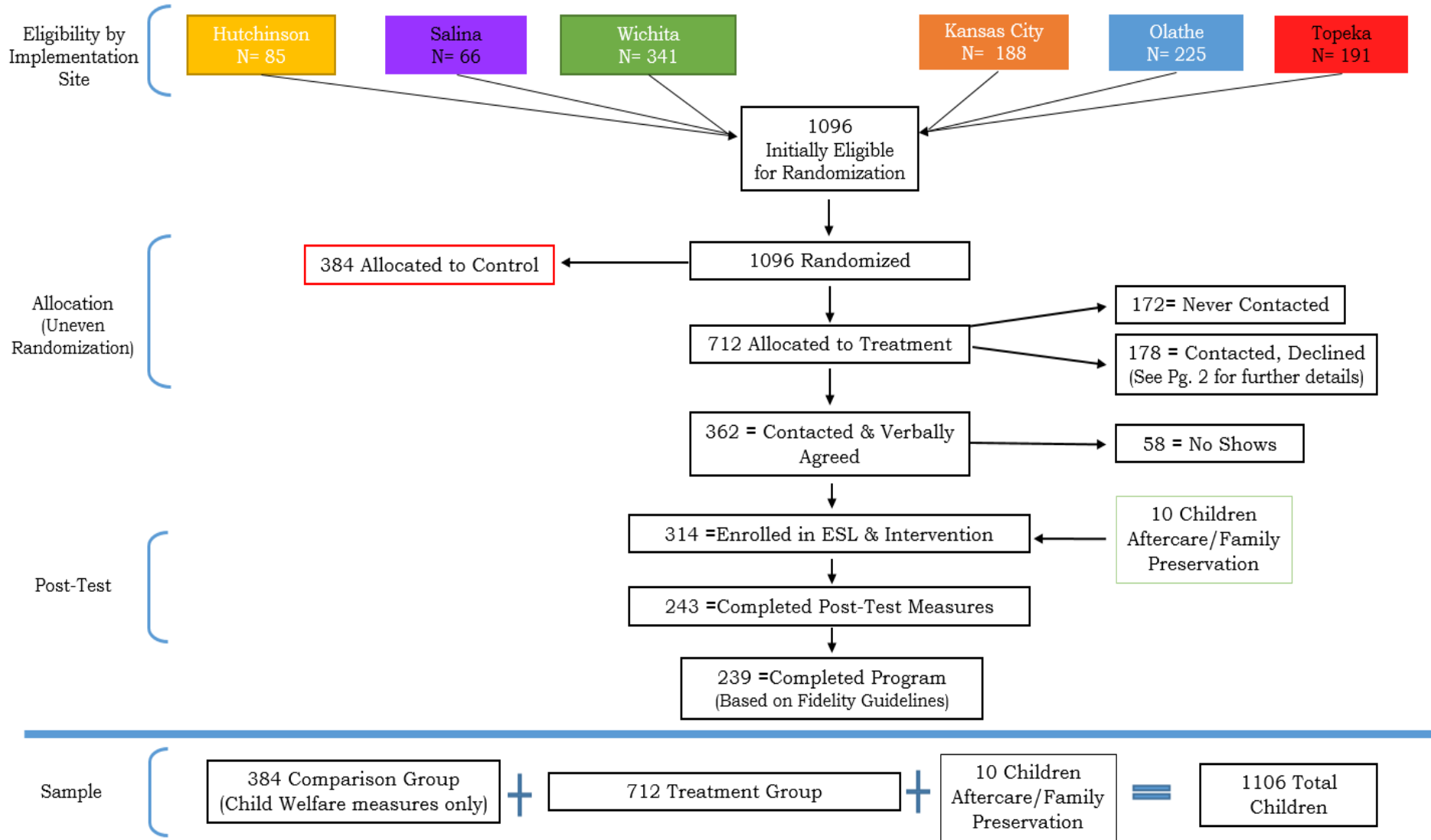
Appendix E

KSSAF Final Randomization Process

What	Criteria	Who	When
<ul style="list-style-type: none"> • Use agency data & clean list following eligibility criteria • Contact case workers to: <ul style="list-style-type: none"> ○ Verify eligibility ○ Ask about new cases ○ Ask about previously randomized cases (previous cycle) 	<p>Eligibility</p> <ul style="list-style-type: none"> • Children in OOH care with reunification as case plan goal • Who entered OOH 12 months before group start for any reason associated with parental substance use • Who are 0-47 months before group start <p>Elimination</p> <p>1=Outside the geographical eligibility area (60 miles) 2=Court order of no contact 3=Parent incarceration 4=Parent whereabouts unknown 5=Parent non-participation in the treatment plan 6=Parent or Child Death 7=Therapeutic restriction 8=Other (please, specify)</p>	<p>Site Coordinators</p>	<p>60 days before group starts *ongoing until eligibility is verified for identified children</p>
<ul style="list-style-type: none"> • Verify eligibility for re-recruitable families • Start recruitment of verified re-recruit able families 	<p>Families who were randomized in the previous cycle Who still meet eligibility criteria Who meet re-recruitability criteria:</p> <ul style="list-style-type: none"> • No attempt was previously made to recruit them in the past • They were not reached • They were reached but refused due to schedule conflict (showed interest) • They were reached and agreed to participate but it was too late to join or there was no space • They were reached and agreed but did not show 	<p>Site Coordinators</p>	<p>60 days before group starts *ongoing until eligibility is verified for this cycle</p> <p>*ongoing until all verified re-recruitable families are invited to participate</p>
<ul style="list-style-type: none"> • Send clean/verified list to KU 	<p>To prevent delays with questions around eligibility (e.g., control group) the following additional information about the focal child is helpful :</p> <ul style="list-style-type: none"> • Removal date • Siblings' names • Caregiver/s' names • Any additional relevant information 	<p>Site Coordinators</p>	<p>As soon as there are 3+ cases verified *ongoing until all verified children are randomized or group is full</p>
<ul style="list-style-type: none"> • Starts randomization if there are 3+ verified cases per site • Sends SFP randomized list to site coordinators 		<p>KU</p>	

<ul style="list-style-type: none"> Starts recruitment 		Site coordinators	As soon as there is any case allocated to SFP *ongoing until all verified children are randomized or group is full
<ul style="list-style-type: none"> Send questions about eligibility to Site Coordinators (e.g. siblings, etc.) if information is not available 	Eligibility and elimination criteria Sibling of a randomized participant	KU	If there is pending eligibility information
<ul style="list-style-type: none"> Send clean/verified list to KU 		Site Coordinators	*ongoing until all verified children are randomized or group is full
<ul style="list-style-type: none"> Randomization continues 		KU	
<ul style="list-style-type: none"> Recruitment continues 		Site Coordinators	
<ul style="list-style-type: none"> Identify eligible aftercare cases and family preservation cases Send clean/verified list to KU KU verifies & Oks recruitment 	Eligibility and elimination criteria Sibling of a randomized participant	Site Coordinators	3 weeks before the beginning of the group if 8 or fewer families agreed to participate
<ul style="list-style-type: none"> Recruitment continues to include aftercare and family preservation cases who meet eligibility criteria and who are not in the control group 		Site Coordinators	*ongoing until group is full

Appendix F



Note: The total sample is N=1106; 1096 were randomized; 10 families were aftercare/family preservation families (4 in Hutchinson; 4 in Salina; 1 Wichita; 1 in Kansas City). These families are included in the flowchart in the N=314 Enrolled in ESL and Intervention

