Published in final edited form as:

Eval Program Plann. 2014 December ; 47: 91–99. doi:10.1016/j.evalprogplan.2014.08.006.

Development and Feasibility of a Sibling Intervention for Youth in Foster Care

Brianne H. Kothari^a, Bowen McBeath^{a,b}, Emilie Lamson-Siu^a, Sara Jade Webb^a, Paul Sorenson^a, Hannah Bowen^a, Jeff Waid^a, Lew Bank^{a,b}

^aPortland State University, School of Social Work, 1600 SW 4th Ave., Ste. 400, Portland, OR 97201

^bOregon Social Learning Center, 10 Shelton McMurfhey Blvd., Eugene, OR 97401

Abstract

Due to their ubiquity and possible influence on youth mental health, academic, and other outcomes, sibling-focused intervention strategies may be important for the development and implementation of evidence-based practices (EBPs) in child welfare. However, there is no rigorous evidence as to either the best methods for, or feasibility of, incorporating the sibling link within existing clinical treatments for foster youth. This paper applies the literature on evidence-based practices (EBP) and implementation research in child welfare to sibling-focused intervention; and presents data concerning the development, delivery, cost, and feasibility of a novel sibling-focused intervention program, Supporting Siblings in Foster Care (SIBS-FC). Results suggest that despite the challenges and costs involved with delivering SIBS-FC, the program catered to the diverse needs of pre-adolescent and adolescent siblings living together and apart, was viewed positively by youth, and was implemented with a high degree of fidelity. These findings underscore the importance of attending to the early-stage development of psychosocial interventions in child welfare and highlight the role of interagency collaboration, program planning, staff training and supervision, and fidelity tracking for EBP development in child welfare. Implications for prevention research and sibling-focused intervention programming in child welfare are discussed.

Keywords

sibling intervention; feasibility; costs; child welfare; early stage implementation

Roughly 440,000 children are living in foster care in the United States (U.S. Department of Health and Human Services (USDHHS, 2010), and international statistics suggest that the number of children in substitute living situations is growing (Fernandez & Barth, 2011). Once placed into foster care, these youth may encounter challenges (e.g., separation from family members, friends, and teachers, difficulty integrating into new foster placements,

Corresponding author: Brianne H. Kothari (briannek@pdx.edu), Portland State University, School of Social Work, 1600 SW 4th Ave., Suite 400, Portland, OR 97201, (503) 725-2786.

Publisher's Disclaimer: This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

changes in living situation, insufficient social support) that are often associated with poorer outcomes including substance use, academic difficulties, and involvement with the juvenile justice system (USDHHS, 2010).

Relationships between siblings are often critical in providing foster youth with a sense of connection, natural support, and emotional continuity as they are removed from much that is familiar to them (e.g., their home, biological parent(s), school, and peers). Roughly 70% of youth in foster care nationally have at least one sibling also in care (Shlonsky et al., 2005) with many of these youth placed in separate residences throughout their time in foster care. Many states have prioritized the placement of foster youth with siblings in the same physical residence in order to sustain and strengthen available sibling bonds. These state policies are premised on research suggesting that siblings are powerful and universal vehicles of socialization (Author et al., 2004) and that sibling relationships can be one element of continuity in the face of familial and peer change (East & Khoo, 2005; Patterson, 1986).

Child welfare researchers, practitioners, and policymakers are becoming increasingly interested in evidence-based practices (EBPs), defined as clinical interventions that have been found to be efficacious through experimental research and that have established fidelity and implementation protocols (Leve et al., 2012). Given their social and psychological prominence, siblings may be an important part of the agenda of developing, testing, improving, and diffusing EBPs in child welfare. Investigations have demonstrated the importance of the sibling bond in normative and at-risk populations, with evidence suggesting that siblings can strongly influence youth mental health, academic, and other social outcomes (Author et al., under review; Feinberg et al., 2012; Feinberg et al., 2013b; Kennedy & Kramer, 2008; Linares et al., in press). Research suggests that given the unique nature and therapeutic potential of the sibling relationship, sibling-based interventions may strengthen existing familial bonds while delivering treatments that facilitate prosocial development and other desired outcomes for universal and at-risk populations, including foster youth (Author et al., 2014; Feinberg et al., 2013a; Feinberg et al., 2013b; Linares et al., in press).

Despite the potential benefits of sibling-focused therapeutic interventions, there is no rigorous evidence as to either the best methods for or the feasibility of incorporating the sibling link within existing clinical treatments for foster youth. As suggested by Author and colleagues (2014), sibling-based intervention in child welfare may necessitate additional staff and fiscal resources in order to serve sibling dyads and larger groups; and also may involve the gathering and analysis of yoked, non-independent data from sibling groups. These programmatic and research challenges may be associated with additional demands for prevention scientists in designing, implementing, and testing sibling-based interventions in child welfare. Identifying the extent of these challenges and demands is important to be able to plan and implement sibling-focused interventions.

In response to these challenges, this paper will review the current literature and describe the development and feasibility of a sibling-focused intervention for youth in foster care designed to improve their sibling relationships. This paper has four primary aims: 1) to apply the literature on EBPs and implementation research in child welfare to sibling-focused

intervention development and implementation; 2) to describe the development and delivery of a specific sibling intervention program for pre-adolescent and adolescent youth in foster care (Supporting Siblings in Foster Care; SIBS-FC); 3) to present results from analyses of the fidelity and feasibility of SIBS-FC; and 4) to discuss implications of these findings for implementation research and for the design and delivery of group-based psychosocial interventions with child welfare populations. These efforts support an intervention research program focused on improving sibling relationships for foster youth.

Challenges and Opportunities of EBP Testing and Implementation in Child Welfare

Understanding how to best develop and implement EBPs in child welfare is of strong interest to prevention scientists (Horwitz, Chamberlain, Landsverk, & Mullican, 2010). In their systematic review of 20 interventions that have been empirically assessed within foster care, Kinsey and Schlosser (2013) noted challenges associated with delivering interventions to child welfare-involved children and families deriving from the well-documented negative outcomes often associated with this group (e.g., trauma and high prevalence of mental health disorders in the aftermath of maltreatment) but found support for relational interventions and wraparound services. A recent review of intervention research (Leve et al., 2012) focused on eight efficacious, primarily parenting-based interventions as well as other promising practices for foster families. Leve and colleagues concluded by stating that children's outcomes improve when families receive support from efficacious programming; implementation of EBPs is often difficult and complex; and implementation research is needed to spur development and adoption of EBPs for children and youth in foster care.

Considerably more research is available on the implementation of efficacious interventions than the initial, exploratory stage of EBP development and piloting. As suggested by Horwitz and colleagues (2010), “surprisingly little is known about the early stages of the implementation process, specifically the initiation of the process to adopt an evidence-based program or service” (p. 31). Aarons and colleagues (2011) proposed a multi-level four phase model (i.e., Exploration, Adoption/Preparation, Implementation, Sustainment) to better understand the EBP development and dissemination process and the outer (i.e., system-level) and inner (i.e., within organization-level) contextual features that are important at each stage.

Pilot and feasibility studies may provide critical information on early-stage EBP development processes. Such studies highlight important factors that advance EBP development, including staff training, fidelity tracking, and cost considerations that are critical for intervention sustainment (Aarons, Hurlburt & Horwitz, 2011). Recent studies of the implementation of parenting-based child welfare EBPs have highlighted the importance of capturing and monitoring pre-implementation interagency collaboration, program modification, staff training and supervision, and fidelity (Andrews & McMillan, 2013; Cotter et al., 2013; Shapiro et al., 2011). Studies have also demonstrated that accurate and comprehensive cost estimates are critical for the adoption and sustainment of EBPs (Aarons, Hurlburt, & Horowitz, 2011; Damschroder & Hagedorn, 2011; Foster et al., 2007; Goldhaber-Fiebert et al., 2011; Proctor, Landsverk, Aarons, Chambers, Glisson et al., 2009).

Despite the fact that methodology is available and continues to improve, economic evaluations of child welfare programs are rare and few random assignment studies in child welfare evaluate costs and outcomes (Kaplan, 2012).

Given the paucity of sibling intervention research with foster children and families, it is important to document the early-stage fiscal, staff, and interorganizational resources and planning needed for sibling-focused EBP testing in child welfare. Two studies have collected data identifying the resources needed to develop, test, and implement sibling interventions. In the general sibling literature, Author and colleagues (under reviewb) examined the explicit monetary costs associated with ongoing program delivery of parent training alone vs. parent training alongside an adjunctive sibling component for at-risk families. Data related to direct costs (e.g., personnel costs and participant incentives) were compared for the two intervention models as well as where staff spent their time (e.g., sibling sessions, parent sessions, contact with families, scheduling, planning, no-shows, etc.). Results indicated that the addition of the sibling component increased costs by approximately 50% but also raised parental engagement levels.

Feinberg and colleagues (2013a) reported feasibility and implementation fidelity data in their school-based preventive intervention for sibling youth. The provision of skilled and trained facilitators, tracking intervention fidelity, and monitoring levels of sibling engagement and positive relationships with school administrators were deemed essential for successful implementation. In addition, the three “family fun night” sessions evenly dispersed between the 12 after-school sibling sessions enhanced buy-in from parents by providing parents an opportunity to learn ways to be supportive of what their children were learning. Feinberg and colleagues concluded by stating that sibling interventions are feasible if supported through a commitment to rigorous implementation, including staff training, ongoing communication and administrative support, and family engagement.

These two studies highlight the value of tracking early-stage program testing and implementation efforts for sibling interventions. Yet no study to date has systematically documented the training, fidelity tracking, and cost parameters associated with delivery of sibling interventions in child welfare. Siblings in foster care may be living together in the same placement or apart in different placements and each youth's living situation may change over time in care. A systematic review of dissemination and implementation of EBPs in child and adolescent mental health (Novins, Green, Legha, & Aarons, 2013) revealed that program fidelity and supervision were the two inner contextual factors with the most empirical evidence to increase the likelihood of intervention effects. The current study reviews the development, delivery, and feasibility of a relational intervention for siblings in foster care and presents descriptive data concerning contextual factors (e.g., fidelity, training, and supervision) and logistical issues (i.e., time and costs) related to implementation.

Development and Description of the Supporting Siblings in Foster Care Project

The *Supporting Siblings in Foster Care* (SIBS-FC) project is an NIMH-funded randomized, community-based evaluation of a sibling relationship development intervention for youth in

foster care between the ages of 7-15. This study utilized a universal recruitment strategy targeting pre-adolescent and adolescent youth in care with a younger sibling also in foster care. Siblings were living either together with or apart from their older siblings at the time of enrollment. The project spanned three of the largest counties in Oregon and involved a research partnership between Portland State University (PSU), the Oregon Social Learning Center (OSLC), and the Oregon Department of Human Services (DHS). The partnership with DHS had been developed and nurtured for decades prior to the initiation of the SIBS-FC program through a series of collaborative foster care studies.

The SIBS-FC study integrated the research efforts of the study investigators. For more than 10 years, the investigatory team has been engaged in research focused on increasing protective factors and changing the high-risk trajectory for specific populations of youth. Key components of a first-generation sibling intervention (SIBS; Author, Snyder, Prescott, & Rains, 2002) were merged with self-determination-based interventions for youth in foster care (Geenen, Powers et al., 2007; Powers, Turner, Ellison, & Matuszewski et al., 2001; Powers, Turner, Matuszewski et al., 2001). Specifically, the SIBS protocol had been successfully implemented among Medicaid-eligible families and resulted in reductions in conduct problems for grade-school-aged older and younger siblings across contexts (Author & Snyder, 2004; Author et al., under review). Other project investigators had conducted a series of intervention studies with adolescent youth in foster care targeting educational supports and self-determination skills development (Geenen, Powers, Hogansen, & Pittman, 2007). These efforts were merged to create a strong developmental fit for preadolescent and adolescent siblings in foster care who lived either together or apart. Youth were found to enjoy many of the same activities used with younger children—for example, creating a photo album and playing games together—but also benefited from self-determination opportunities such as planning joint activities in the community and developing relationship with “adult allies” who could help facilitate the siblings' collaborative plans. These research efforts highlighted the importance of sibling relationships, the viability of a sibling intervention for youth, and the impediments to sibling relationship development in foster care.

Pilot Testing and Program Refinement

Prior to study implementation, pilot testing was conducted with 3 families to ensure that the sibling program could be implemented with fidelity, to make necessary adjustments based on family needs, to help refine the intervention protocol and procedures, and to fine-tune overall study procedures. Coaches focused on implementing the program and experimented with slightly longer or shorter sessions as well as taking additional time between sessions or meeting with siblings one-on-one to provide individualized support when sibling-specific challenges arose. These considerations also shaped the development of fidelity tracking procedures. The research team witnessed the challenges that arose for siblings who lived apart and did not have frequent contact with each other. Coaches learned that they needed to plan more extensively and creatively with siblings in these situations in order for siblings to be successful with activity planning and mid-week contact. Coaches found that eliciting support from adult allies (e.g., foster parents, DHS caseworkers) was particularly helpful for these youth.

Additionally, two focus groups were conducted to elicit the perspectives of key community stakeholders regarding study procedures and intervention protocols. One focus group was made up of 8 siblings in care and the other consisted of foster parents and caseworkers. These groups offered enthusiastic support as well as valuable information which led to the introduction of three major supplemental elements to the sibling intervention curriculum: 1) planning for and engagement in community activities; 2) creating alliances with supportive adults; and 3) self-advocacy and advocating for one's sibling. It was also discovered that because placement changes as well as changes in caseworkers were common among youth in foster care, it would be important to develop a flexible curriculum to allow program staff to maintain contact with parents, siblings, and caseworkers. These considerations led to the development of the SIBS-FC curriculum in a way that allowed coaches to cover program components with fidelity, but also allowed for the flexibility to adapt the curriculum to best meet each youth's needs.

Intervention Components

The 12-session intervention curriculum was developed to enhance sibling relationships for foster youth by supporting socially skilled behavior in individual siblings and reducing sibling dyad-based conflict. The SIBS-FC intervention was designed to be delivered in neighborhood offices, foster homes, project offices, and community locations convenient for siblings and their foster families. As can be seen in Figure 1, the 12-session curriculum included 8 skill-building sessions and 4 community-based activities providing opportunities for skills-based practice in real world settings. Activity-based sessions were designed to introduce social and self-regulatory skills that operate in sibling relationships and that may be critical for development (e.g., cooperation, communication, emotional self-regulation, problem solving, conflict abatement, and social relationship repair strategies). Two sessions provided specific practice in approaching adults for support (e.g., foster parents, caseworkers, relatives, attorneys, judges) to facilitate the youth-adult ally relationship and creating opportunities for the siblings to problem-solve collaboratively.

Intervention activities were designed to be age-appropriate and to emphasize discovery and learning about specific behavior change strategies through active engagement rather than talking and listening. MSW-level coaches would describe, model, and reinforce critical social relational skills during natural sibling interactions. Typically a skill would be introduced in one session and then revisited in future sessions and during community activities, to provide siblings with additional skill-based practice. When introducing new skills, coaches would introduce the general idea of the skill, then relate the skill to the lives of youth by asking them to explain how they have used the skill in the past and the ways in which they might use the skill in the future. The coaches would then create supervised games or role plays in which the youth practiced the skill with their sibling.

To facilitate youth generalization of skills to home and peer environments, weekly home activities and tracking assignments (with parental collaboration) were assigned to siblings at the end of each session. A common home activity was to ask youth to play a board game together and track the number of times they performed the pro-social behavior that was learned during the weekly skill building session. These activities were relatively easy to

complete for youth who lived in the same home. For youth who lived in separate homes, the weekly activity was often either done on the phone or as a part of their DHS supervised visits with their family. Coaches checked in weekly with youth and parents/caregivers to answer questions and promote completion of these assignments.

The SIBS-FC program included four additional sessions with community activities that were planned by the siblings, with assistance from project coaches. Coaches would accompany the youth and facilitate the community activity. These activities were designed to take place in a suitable location (e.g., bowling alley, amusement park, ice skating rink, the mall) to allow siblings to actively practice new skills. Moreover, community activities provided opportunities for the project enrolled youth to invite one or more of their other brothers and sisters to also participate.

Participant Recruitment

Recruitment of siblings into the SIBS-FC study was conducted by an individual who was both an employee of DHS and a project staff member. This position was developed through a subcontract with DHS to allow this person to devote time identifying and recruiting eligible foster youth into the study. The recruitment coordinator had access to the DHS administrative database which included information (i.e., age, living situation, sibling and contact information) on youth involved in the foster care system. Recruitment began by identifying individual youth in foster care who met age inclusion criteria (i.e., older siblings between the ages of 11 and 15 years of age with a younger sibling within four years of age), spoke English, and were in the three-county region. When an eligible dyad was identified, their caseworker was notified and consent to participate requested. The State of Oregon acts as legal guardian for youth in foster care; therefore, their caseworker would assess whether there were any concerns for involving the particular youth in the study.

Following DHS consent, foster parents were sent an informational packet through the mail, followed by a phone call several days later inviting the foster parents and youth to participate in a formal orientation to the study. The orientation provided a description of the project in terms of the intervention and the design of the research study including its potential risks and benefits, and was generally conducted for foster parents of identified youth in their homes. Youth were able to get questions answered during this time. For, children living apart, a separate orientation was held for each family. Occasionally a foster youth would have a sibling who was age-eligible for the program but was not in foster care (e.g., sometimes one youth had been adopted); this did not preclude the sibling living with a birth parent from participating. Similar orientation procedures were taken in these cases with minor adaptations in language reflecting the nature of the biological parent-child relationship. Families that decided to participate completed consent and assent forms as well as authorizations for obtaining and releasing information to the youths' schools. During the orientation, enrolled families were informed of upcoming sibling community events and caregivers were invited to participate in the parent management training sessions.

Intervention Delivery and Ongoing Training

The SIBS-FC intervention curriculum was implemented by pairs of highly-trained, MSW-level lead coaches supported by graduate-level interns pursuing degrees in Social Work, Psychology, and other related human service fields. This co-coaching model allowed experiential learning for student interns until they could obtain necessary credentials and sufficient project-based experience and skills. In turn, the study was able to work with twice as many coaches while only employing a few lead staff. MSW interns were required to complete 10 hours of intervention training before working with youth in formal support roles. Supervision was provided by two MSW staff in one-on-one and group formats. MSW interns met in person with their supervisor for an hour every other week throughout the course of their internship, providing a protected time for interns to discuss their project activities as well as troubleshoot challenges. Group supervision for the coaching team took place two hours per week with rotating assigned coaches presenting case-related challenges and successes with group discussion of intervention strategies to maintain fidelity in challenging contexts. All coaching sessions were videotaped and used as a supervision tool to allow coaches to review their work with supervisors and receive support from the team.

Methods

Participants

160 youth participated in the SIBS-FC intervention program. Data were gathered from 80 older (mean age=13.1, SD=1.4) and 80 younger (mean age=10.6, SD=1.7) siblings. The majority of youth were full siblings (60%), lived together in the same placement (74%) and identified as non-White (56% of older siblings and 59% of younger siblings; African American/Black, Hispanic, and Multi-racial reported in roughly equal numbers). Approximately equal numbers were male and female and approximately half of youth lived in non-relative foster care settings, as can be seen in Table 1.

This universally selected sample is representative of same-age youth in foster care in the Portland, Oregon, Metro area. Data reported from the 2012 fiscal year indicated that 39% of Oregon foster youth were in this 7-15 year age range and 42% were White (USDHHS, 2012). While sibling-focused data are not readily available or reported in statewide and national reports of foster youth, in 2008—just prior to study start-up—roughly 68% of youth were placed together with one or more of their siblings (Oregon DHS child welfare database analysis conducted at our request).

Measures

The SIBS-FC study collected descriptive data related to intervention delivery from multiple agents germane to the following elements of program implementation.

Program fidelity—A specific program fidelity form was developed to measure *coaches' perceptions of content coverage* and older and younger siblings' *level of comprehension and degree of engagement*. The instrument was completed after each session and community activity and included an assessment of the degree to which specific skill(s) were covered using a 6-point response scale (0-*Not Addressed* to 5-*Completely Covered*). In addition, a 5-

point scale (1-*Barely* to 5-*Completely*) was used to record the extent to which each skill was comprehended and the degree to which youth engaged in learning the skill(s). Comprehension levels for the youth were evaluated based on the extent to which a youth could explain and demonstrate session skills while engagement ratings were evaluated based on how interested each youth appeared to be in each skill. Youth demonstrated engagement by listening and paying attention, introducing few or no distractions or interruptions when reviewing the skill, and showing a willingness to engage in conversation and role-playing of the skill. Comprehension and engagement responses were recorded separately for older and younger siblings for each intervention component.

Program costs and time spent—The *Intervention Cost Disbursement Form (ICDF)* was adapted from the prior sibling intervention study (Author et al., under reviewb) to track the fiscal and temporal costs associated with delivering the SIBS-FC intervention. The ICDF captured the time coaches spent in preparing, delivering, documenting activities and completing forms for each session,, transportation in terms of mileage and time, time spent in following-up with participants, and session and activity dollars spent. Coaches completed these forms after each session and activity for each dyad enrolled in the sibling intervention.

Coaches' logs and notes—Qualitative data were gathered in the form of coaches' logs and session notes. At the conclusion of each session, lead coaches documented progress made in regards to session objectives, the level of work done by youth based on their report of home practice, specific strengths and challenges of the session, and needed follow-up efforts such as contact with foster parents and caseworkers.

Youth perceptions—A 9-question survey was completed by intervention participants at the conclusion of the last coaching session concerning their perceptions of the sibling program. The brief survey provided an overall picture of the level of participant satisfaction from the perspective of older and younger siblings. Each youth was asked how much: they liked their SIBS-FC coaches, fun they had at the sessions and activities, the program helped them spend more time together, they learned to get along better, plan fun activities and find adults to support them and their sibling, and if they would recommend the program to other siblings in foster care. Youth rated each of these experiences on a 4-point scale (1-*Not at All* to 4- *Very Much*). This information was available for only a subsample (n=62; 39% of the full sample) of the youth that participated in the intervention because the survey was not administered in the early part of the project.

Results

Delivery and Fidelity-to-Curriculum of the SIBS-FC Intervention

Skill-building sessions—The SIBS-FC program lasted 14 weeks on average and for most youth included 7-8 skill building sessions (mean number of sessions completed was 7.22). Table 2 reports the coverage, comprehension, and engagement of older and younger siblings across curriculum skill building sessions as reported by coaches. All of the core skills (e.g., cooperation, problem solving) were covered in three or four sessions. The only

skill that was covered slightly less than three times on average was developing relationships with adult allies ($M=2.94$, $SD=1.40$).

The coverage of each skill across the intervention curriculum (i.e., the maximum content reported of each skill) was high (range: 4.77-5 on a 5-point scale across skills). In addition, high comprehension of the material in all skill areas was reported for both older and younger siblings (4.7 or above). Engagement with the material was reported to be slightly higher for the older siblings (range: 3.77-4.16) than younger siblings (range: 3.62-4.07), although the general level of engagement was reasonably high for all youth.

Community activities—Siblings in the SIBS-FC intervention had the opportunity to plan up to four community activities; mean activities completed was 3.24. Table 3 reports the skills that older and younger siblings demonstrated and the level of engagement of those skills (as reported by coaches) across the four possible community activities. As seen in the table, some skills were demonstrated more often than others during the activities (e.g., cooperation, managing feelings). Engagement was relatively high across skill areas for both older and younger siblings. However, there was often more variation in the demonstration of skills and level of engagement in the community activities as compared to skill building sessions.

Coaching logs—Some of the challenges highlighted by coaches in their weekly coaching logs included unpredictable and frequent moves in living arrangements, phone numbers that were regularly disconnected, disruption of coaching while youth were put on new medication routines, a difficult adjustment to seeing a sibling whom the youth had not seen in a long time, and learning how to relate as a sibling instead of as a parent figure. The strengths highlighted by the coaches included that the siblings enjoyed participating in both the skill building sessions and the community activities, that both the younger and older siblings were engaged in and showed comprehension of the content, and that youth demonstrated improvement in using the pro-social behavior skills in their interactions with sisters and brothers.

Youth perceptions—From the subsample of surveys ($n=62$) collected at intervention completion, youth reported overwhelmingly liking and having fun at the coaching sessions and activities (means ranged from 3.73 to 3.85 on a 4-point scale) and that they spent more time with and learned skills with their sibling (mean ranging from 3.52 to 3.58 on a 4-point scale). In addition, 98% of the youth reported that they would recommend the program to other youth in foster care (either ‘very much’ or ‘quite a bit’).

Intervention Delivery Time and Costs

Table 4 displays information on time spent (i.e., average hours per dyad) and costs (i.e., hourly costs for one coach) across various activities of the SIBS-FC intervention. Each skill building session lasted 72 minutes and each community activity lasted 97 minutes on average. The total average staff time for a sibling dyad was about 51 hours, with (1) slightly more than 1/3 of the hours (42%) used to prepare, conduct, and debrief sessions, and

somewhat less than 1/3 each for (2) supervision and staff meetings (31%) and (3) transportation (27%).

With respect to the cost data,

1. *Implementation costs.* Each coach (i.e., lead and support) spent an average of 21.31 hours per dyad preparing for, conducting, and debriefing after the sessions and activities. Almost 14 hours of this total time was spent implementing the curriculum with youth while preparation work took 3.2 hours per dyad (i.e., 19 minutes per session/activity) and post-session work took 1.85 hours per dyad (i.e., 11 minutes per session/activity). In addition, 2.4 hours were spent in phone, email, or text contact with the foster parents (1.72 hours), youths (0.40 hours) or caseworkers (0.25 hours).
2. *Weekly supervision and meetings.* 14.4 hours were spent by lead coaches in weekly meetings and supervision activities for each sibling dyad.
3. *Transportation.* Transporting youth to and from sessions and community activities took an average of 13.8 hours per dyad. Transportation did take a significant amount of time; however, coaches reported using this time to converse with youth, build trust, and provide support to them.

This total staff time devoted to intervention delivery per dyad of 51 hours on average was equivalent to \$1,522.50 at \$30 per hour. Additional average costs per dyad included rent for the sibs session area (\$102.10), session incentives (i.e., prizes, gift cards, and other treats) (\$45.40), session snacks (\$57.79) and activity costs such as admissions to events, food, prizes, and gift cards (\$90.53). Thus, the cost to deliver the intervention for an average dyad including wages for one lead coach at a rate of \$30 per hour, rental space for sessions and snacks, activity and incentive costs, and transportation time for siblings and staff was \$1,818.32.

Additionally, staff members were paid for mileage when they used their own cars to transport youth at a rate which varied over time from 0.50 to 0.565 per mile. If rental cars were used the rate was approximately \$8 per hour. For about half of the sessions staff used their own cars while rental cars were used during the other half of the sessions. These automobile costs (\$234.90) in addition to all other costs of intervention delivery (\$1,818.32) put the total cost of the intervention at an average of \$2,053.22 per dyad.

Discussion

Findings indicate that the SIBS-FC program, a relational sibling-focused intervention for pre-adolescent and adolescent youth in foster care, was delivered as planned. A number of early and ongoing factors—including formalization of the relationship with DHS, comprehensive training and consistent supervision of staff, and pilot testing and modification—were key to early-stage intervention development of SIBS-FC. As others such as Proctor (2012) have noted, interorganizational and intraorganizational factors should be considered when undertaking EBP development. With respect to interorganizational factors, the culture and climate at DHS was accepting of SIBS-FC. Caseworkers and

administrators were eager to hear about ongoing progress and updates. Additionally, having a project staff member who was a DHS employee facilitated participant recruitment, enrollment, and retention as well as coordination with caseworkers. Intraorganizationally, having experienced and well-trained coaches who were provided ongoing supervision allowed for a smooth delivery of the curriculum including skill-building sessions and community activities. Coaches were able to implement the program even in situations that required extra planning and creativity (e.g., when siblings lived in separate residences and did not see each other regularly).

The conceptual model proposed by Aarons and colleagues (2011) of the implementation process enhances understanding of the contextual factors that may affect implementation of programs in child welfare. The general literature on implementation of EBPs in child welfare is growing (Horwitz et al, 2010) and research has shown that outcomes improve when individuals receive support from programs delivered with fidelity (Leve et al., 2012). Much of the literature, however, has focused specifically on well-established parenting programs (Andrews & McMillan, 2013; Leve et al., 2012) and little research has examined either the exploratory stage of EBP development—with particular attention to interagency collaboration, intervention modification, staff training and supervision, fidelity, and program costs—or sibling-focused intervention in child welfare. Two studies in the general sibling literature (Author et al., under reviewb; Feinberg et al., 2013a) have reported implementation feasibility and fidelity data; Author and colleagues (under reviewb) also reported on costs involved with intervention delivery. Given the absence of prior research on these topics with child welfare-involved youth and families, the current paper adds to the literature with its focus on feasibility and delivery of one of the first sibling-focused interventions focused on foster youth.

Research has shown that the process of implementing innovative programs is often as important as the programs and practices selected (Aarons & Palinkas, 2007). As results demonstrate, the SIBS-FC curriculum was implemented with a high degree of fidelity to program design. Coverage of curricular topics was high, with coaches introducing a specific skill (e.g., cooperation) at one session and then reviewing and practicing that skill with youth at follow-up sessions and community activities. In addition, the findings indicate that both older and younger siblings demonstrated the skills they learned to a high degree and had a high level of engagement with those skills in skill-building sessions and community activities. Moreover, youth enjoyed participating in the sibling program and nearly all noted that they would recommend the program to other youth in care. While it is unclear if youth would recommend the program to others because it allowed them to spend dedicated time together or because they appreciated what they learned from the curriculum, most did say they would recommend it.

Results also suggest that despite the challenges and costs involved with delivering SIBS-FC, the intervention catered to the diverse needs of siblings living together and siblings living apart. While many challenges identified were similar to those recognized by other child- and family-focused programs for youth in care (e.g., difficulty in tracking sibling/family moves, transportation costs), some challenges were sibling-specific (e.g., making sure siblings could come together for sessions and activities). Major costs were dedicated to coaching,

supervision and staff meetings, and transportation of siblings and staff. As with Author and colleagues (under reviewb), we found that working with more than one youth in a family is more expensive than working with one child per family. Additionally, because foster youth may experience multiple living situations, expenses accrued for tracking youth, communicating with foster families, and handling no-shows and/or needing to reschedule sessions or activities at the last moment. Planning and transportation costs were greater with dyads when those youth were living in separate (and sometimes changing) households.

A fairly substantial proportion (about 30%) of total intervention costs went directly towards transportation (11% mileage/car rental, 19% staff time). The program covered all transportation for youth to and from coaching sessions and community activities, which sometimes required coaches to use car-share vehicles (i.e., Zipcar) or rental cars that were more expensive than paying for mileage. Additionally, the project spanned three counties and coaches sometimes needed to travel over an hour in each direction to pick up youth, bring siblings together for a session or activity, and then drive siblings home (which sometimes meant driving to separate residences for siblings that lived apart).

Though transportation was an expensive component of the intervention, such costs can potentially be reduced in future implementation efforts (e.g., if sibling programming is offered as an adjunctive component to a family or parent training program or simply conducted at the offices of a community agency). More generally, these specific cost data may be critically important for agencies deciding how costs apply to their given situation. Community agencies may, for instance, choose to provide the intervention on-site to eliminate transportation costs, and may also provide reduced weekly supervision and meeting hours—especially after agency staff have accrued sufficient experience with the intervention. Thus, intervention cost reductions in a sustainable community format might approach 50% of the full costs reported here. As suggested by Foster and colleagues (2007), “estimates of intervention costs inevitably require some modification as the program is transported into community agencies” (p. 261).

Implications of these findings exist for future programming and intervention research in child welfare. Results suggest that intervening with siblings in foster care is facilitated by cross-agency collaboration; content can be covered adequately, and both older and younger siblings can comprehend and engage with material when it is presented actively and through coaching sessions interspersed with community activities; and siblings tend to hold positive views about the sibling curriculum. Results also suggest that time and program costs can be tracked consistently across staff and intervention participants. These are promising initial findings that support further sibling-focused program development in child welfare settings.

Such programs remain rare, unfortunately. Sibling prevention and intervention efforts may be particularly important for youth in care as siblings serve as a point of continuity when children are removed from their homes. Moreover, sibling interventions have the potential to address both the sibling relationship as well as more general life skills training needed by adolescent youth in care (e.g., relating to peers, problem solving, improving overall family dynamics). Future intervention studies should also examine the ways in which the sibling relationship may be useful to younger children as well as transition-age youth in foster care.

There is also growing demand for cost-focused studies in child welfare (Maher et al., 2012). While federal agencies increasingly require cost evaluations to be part of program delivery, cost evaluations are conducted infrequently in child welfare (Kaplan, 2012; Mullen & Shuluk, 2011). This study focused on costs from an agency perspective (see Foster et al., 2007), but future cost estimations should focus on a societal perspective as well. Future research should utilize available economic methods to not only document costs over time associated with program delivery but to support cost-effectiveness studies (Goldhaber-Fiebert et al., 2011).

While these early-stage feasibility findings for SIBS-FC are promising, follow-up study is needed to assess the full implementation and sustainment of this sibling intervention as well as the relationship between intervention implementation and program outcomes. These relationships should be examined for youth placed in the same household as well as for siblings living separately. It should also be noted that while the SIBS-FC intervention was viewed very positively by youth, it is unclear whether adolescents might prefer other approaches to sibling relationship development or intervention participation. It is also unclear whether sibling interventions are best implemented as stand-alone programs or within a parenting intervention as seen in other studies (Author et al., under reviewa; Feinberg et al. 2013b; Linares et al., in press). Research on such “sibling plus parent training” vs. sibling-alone interventions could help identify which intervention approach best meets the needs of multiple family members and enhances engagement and desired outcomes.

The current study had a number of limitations. The sample was from a single sibling intervention project within one region in the U.S., so findings may not be generalizable to youth in other areas or other sibling intervention approaches. Moreover, the overall project, including the delivery of the sibling program, was implemented as part of a research study. Additional considerations may need to be made if a sibling program focused on youth in care is delivered and implemented entirely within a community agency. Modifications may be made to reduce overall program costs (e.g., offering the program alongside a parent training program) or meet the needs of a given agency (e.g., providing the sibling program to younger siblings). It will be important for future work to carefully track these adjustments and continue to study how sibling programs are developed and implemented.

References

- Aarons GA, Hulburt M, Horowitz SM. 2011; Advancing a conceptual model of evidence-based practice implementation in public service sectors. *Administration and Policy in Mental Health*. 38:2–23.
- Aarons GA, Palinkas LA. 2007; Implementation of evidence-based practice in child welfare: Service provider perspectives. *Administration and Policy in Mental Health and Mental Services Research*. 34:411–419.
- Andrews AB, McMillan L. 2013; Evidence-based principles for choosing programs to serve parents in the child welfare system. *Administration in Social Work*. 37(2):106–119.
- Author et al. (2004)
- Author., et al. (Under reviewa)
- Author et al. (Under reviewb)

- Cotter KL, Bacallao M, Smokowski PK, Robertson CIB. 2013; Parenting interventions implementation science: How delivery format impacts Parenting Wisely program. *Research on Social Work Practice*. 23:639–650.
- Damschroder LJ, Hagedorn HJ. 2011; A guiding framework and approach for implementation research in substance use disorders treatment. *Psychology and Addictive Behaviors*. 25:194–205.
- East PL, Khoo ST. 2005; Longitudinal pathways linking factors and sibling relationship qualities to adolescent substance use and sexual risk behaviors. *Journal of Family Psychology*. 19:571–580. [PubMed: 16402872]
- Feinberg ME, Sakuma KL, Hostetler M, McHale SM. 2013a; Enhancing sibling relationships to prevent adolescent problem behaviors: Theory, design and feasibility of Siblings Are Special. *Evaluation and Program Planning*. 36:97–106. [PubMed: 23000632]
- Feinberg ME, Solmeyer AR, Hostetler ML, Sakuma KL, Jones D, McHale SM. 2013b; Siblings Are Special: Initial test of a new approach for preventing youth behavior problems. *Journal of Adolescent Health*. 53:166–173. [PubMed: 23298985]
- Feinberg ME, Solmeyer AR, McHale SM. 2012; The third rail of family systems: Sibling relationships, mental and behavioral health, and preventive intervention in childhood and adolescence. *Clinical Child and Family Psychology Review*. 15:43–57. [PubMed: 22105663]
- Foster EM, Porter MM, Ayers TS, Kaplan DL, Sandler I. 2007; Estimating the costs of preventive interventions. *Evaluation Review*. 31:261–286. [PubMed: 17478629]
- Geenen SJ, Powers LE, Hogansen JM, Pittman JOE. 2007; Youth with disabilities in foster care: Developing self-determination within a context of struggle and disempowerment. *Exceptionality*. 15(1):17–30.
- Goldhaber-Fiebert JD, Snowden LR, Wulczyn F, Landsverk J, Horwitz SM. 2011; Economic evaluation research in the context of child welfare policy: A structured literature review and recommendations. *Child Abuse and Neglect*. 35:722–740. [PubMed: 21944552]
- Horwitz SM, Chamberlain P, Landsverk J, Mullican C. 2010; Improving the mental health of children in child welfare through the implementation of evidence-based parenting interventions. *Administration and Policy in Mental Health*. 37:27–39. [PubMed: 20143150]
- Kennedy DE, Kramer L. 2008; Improving emotion regulation and sibling relationship quality: The More Fun with Sisters and Brothers program. *Family Relations*. 57(5):567–578.
- Kinsey D, Schlosser A. 2013; Interventions in foster and kinship care: A systematic review. *Clinical Child Psychology and Psychiatry*. 18:429–463. [PubMed: 23060602]
- Leve LD, Harold GT, Chamberlain P, Landsverk JA, Fisher PA, Vostanis P. 2012; Practitioner review: Children in foster care: Vulnerabilities and evidence-based interventions that promote resilience processes. *Journal of Child Psychology and Psychiatry*. 53:1197–1211. [PubMed: 22882015]
- Linares LO, Jimenez J, Nesci C, Pearson E, Beller S, Edward N, Levin-Rector A. Reducing sibling conflict in maltreated children placed in foster care. *Prevention Science*.
- Maher EJ, Corwin TW, Hodnett R, Faulk K. 2012; A cost-saving analysis of a statewide parenting education program in child welfare. *Research on Social Work Practice*. 22:615–625.
- Author, et al. (2014)
- Mullen EJ, Shuluk J. 2011; Outcomes of social work intervention in the context of evidence-based practice. *Journal of Social Work*. 11:49–63.
- Novis DK, Green AE, Legha RK, Aarons GA. 2013; Dissemination and implementation of evidence-based practices for child and adolescent mental health: A systematic review. *Journal of the American Academy of Child and Adolescent Psychiatry*. 52(10):1009–1025. [PubMed: 24074468]
- Patterson, GR. The contribution of siblings to training for fighting: A microsocial analysis. In: Block, J, Olweus, D, Radke Yarrow, M, editors. *Development of antisocial and prosocial behavior*. New York: Academic Press; 1986. 235–261.
- Powers LE, Turner A, Ellison R, Matuszewski J, Wilson R, Phillips A, et al. 2001; A multi component intervention to promote adolescent self-determination. *The Journal of Rehabilitation*. 67(4):13–20.
- Powers LE, Turner A, Matuszewski J, Wilson R, Ellison R, Westwood D, et al. 2001; TAKE CHARGE for the future: A controlled field-test of a model to promote student involvement in transition planning. *Career Development for Exceptional Individuals*. 24(1):89–104.

- Proctor E. 2012; Implementation science and child maltreatment: Methodological advances. *Child Maltreatment*. 17:107–112. [PubMed: 22337867]
- Proctor E, Landsverk J, Aarons GA, Chambers D, Glisson CA, Mittman B. 2009; Implementation research in mental health services: An emerging science with conceptual, methodological, and training challenges. *Administration and Policy in Mental Health and Mental Health Services Research*. 46:24–34.
- Shapiro CJ, Prinz RJ, Sanders MR. 2012; Facilitators and barriers to implementation of evidence based parenting interventions to prevent child maltreatment: The Triple P-Positive Parenting Program. *Child Maltreatment*. 17:86–95. [PubMed: 22089827]
- Shlonsky A, Bellamy J, Elkins J, Ashare CJ. 2005; The other kin: Setting the course for research, policy, and practice for siblings in foster care. *Children and Youth Services Review*. 27:697–716.
- U.S. Department of Health and Human Services. *Child Maltreatment*. Washington DC: Government Printing Office; 2010. Administration for Children and Families, Administration on Children, Youth, and Families, Children's Bureau.
- U.S. Department of Health and Human Services. Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. 2012. <http://www.acf.hhs.gov/programs/cb>

Biographies

Brianne H. Kothari, Ph.D. is a Senior Research Associate at the Regional Research Institute for Human Services at Portland State University. Her research is focused on understanding the experiences and trajectories of at-risk children and youth as well as designing, implementing and evaluating developmentally appropriate family systems focused intervention studies to best meet their needs.

Bowen McBeath, Ph.D. is an Associate Professor in the School of Social Work at Portland State University and an Affiliate Scientist at Oregon Social Learning Center. He is interested in the development, translation, and diffusion of consumer-centered interventions that seek to improve health, mental health, and well-being for child welfare populations.

Emilie Lamson-Siu, MSW was the project coordinator of the Supporting Siblings in Foster Care project has worked on many community-based projects. She is interested in research focused on interventions for children and youth in foster care.

Sara Jade Webb, M.S. is a data analyst at the Regional Research Institute for Human Services at Portland State University. She has experience working on a wide variety of projects including those focused on youth in foster care.

Paul Sorenson, MSW is a doctoral student in the School of Social Work at Portland State University. He is interested in better understanding children and youth in foster care including their internalizing behavior and foster home experiences.

Hannah Bowen, MSW was a lead coach on the Supporting Siblings in Foster Care project. She has worked on many community-based projects and is interested in interventions for youth in foster care.

Jeff Waid, MSW is a doctoral student in the School of Social Work at Portland State University. He is interested in child maltreatment prevention and intervention, organizational effectiveness, quantitative methodology, and program evaluation.

Lew Bank, Ph.D. is a Research Professor at Portland State University and Research Scientist at Oregon Social Learning Center. Dr. Bank has worked with children and families for more than 30 years, with a focus on parenting, sibling conflict, and child adjustment.

Highlights

- Focuses on essential early-stage considerations for EBP development.
- Describes the development and delivery of a sibling-focused intervention for foster youth.
- Reports on program fidelity, costs, and time required for the sibling program.
- Underscores the importance of early-stage implementation for programming in child welfare.

Session 1: Introduction.
Session 2: Cooperation.
Session 3: Planning community activities.
Community activity 1: Practicing cooperation.
Session 4: Managing feelings (emotional regulation).
Session 5: Problem solving.
Community activity 2: Practicing supporting each other and incorporating supportive adults into community activities.
Session 6: Getting adult support.
Community Activity 3: Practicing building adult alliances.
Session 7: Asking people in foster care for support.
Community activity 4: Practicing advocating with DHS case worker.
Session 8: Staying connected.

Figure 1. Sibling Program Sessions and Community Activities

Table 1
Demographics of SIBS-FC Participants

	Older Sibling (OS) (n=80)	Younger Sibling (YS) (n=80)
Age (SD)	13.1	10.6
	(1.4)	(1.7)
Age Difference (SD)	2.4	
	(1.0)	
Sibling Type (n)		
Full	60% (96)	
Half	38% (60)	
Step	1% (2)	
Other	1% (2)	
Living Situation at Orientation (n)		
Together	74% (118)	
Apart	26% (42)	
Gender (n)		
Female	50% (40)	48% (38)
Male	50% (40)	52% (42)
Gender Composition (n)		
OS male, YS male	31% (50)	
OS male, YS female	19% (30)	
OS female, YS female	29% (46)	
OS female, YS male	21% (34)	
Years siblings were in placement at TX start (SD)	2.1	2.1
	(3.5)	(3.0)
Placement type at TX start (n)		
Non-Relative Foster Parent	52% (41)	53% (42)
Kinship Care	33% (26)	33% (26)
Biological Parent(s)	14% (11)	10% (8)
Other Caregiver(s)	3% (2)	5% (4)
Race (n)		
American Indian or Alaskan Native	7% (5)	6% (5)
Asian or Pacific Islander	3% (2)	3% (2)
Black or African American	13% (10)	11% (9)
White	44% (34)	41% (32)
Multi-racial	22% (17)	24% (19)
Other	12% (9)	15% (12)
Ethnicity (n)		
Hispanic	20% (14)	23% (16)
Non Hispanic	80% (55)	77% (53)

Table 2
Fidelity to SIBS-FC Program: Reports of Coverage, Comprehension and Engagement of Siblings by Lead Coaches Across the Curriculum Sessions

Curricular Skills	Average Number of Times Covered (SD)	Average Percent of Sessions Covered	Content Covered (0-5) (SD)	Comprehension of Material (1-5) (SD)		Engagement with Material (1-5) (SD)	
				OS	YS	OS	YS
Sibs for Life	3.08 (1.26)	42%	4.85 (0.58)	4.83 (0.53)	4.83 (0.56)	3.98 (0.78)	3.94 (0.69)
Positive Self/Sib Thinking	3.48 (1.53)	48%	4.90 (0.61)	4.97 (0.17)	4.96 (0.20)	4.16 (0.62)	4.05 (0.66)
Activity Planning	4.38 (1.49)	59%	5.00 (0.00)	4.96 (0.36)	5.00 (0.00)	4.14 (0.61)	4.07 (0.60)
Cooperation	4.17 (1.80)	56%	4.93 (0.39)	4.97 (0.17)	4.96 (0.20)	4.11 (0.64)	4.01 (0.68)
Problem Solving	3.08 (1.63)	41%	4.77 (0.70)	4.84 (0.48)	4.70 (0.71)	3.93 (0.64)	3.67 (0.75)
Managing Feelings/Self/Sib Soothing	3.34 (1.59)	45%	4.85 (0.71)	4.81 (0.64)	4.81 (0.67)	3.81 (0.82)	3.64 (0.85)
Adult Allies	2.94 (1.40)	39%	4.85 (0.67)	4.88 (0.40)	4.87 (0.41)	3.77 (0.86)	3.62 (0.84)

Note: N = 71. OS= Older Sibling. YS= Younger Sibling. Lead coaches completed a fidelity form for each session. This table reflects the content covered and comprehension demonstrated across the curriculum (maximum reports were used these for items). Means were used for the engagement items to capture variation across program components.

Table 3
Fidelity to SIBS-FC Program: Reports of Coverage, Comprehension and Engagement of Siblings by Lead Coaches Across Curricular Activities

	Activity I				Activity II				Activity III				Activity IV			
	Demonstrated		Engagement		Demonstrated		Engagement		Demonstrated		Engagement		Demonstrated		Engagement	
	OS	YS	OS	YS	OS	YS	OS	YS	OS	YS	OS	YS	OS	YS	OS	YS
	4.34 (0.99)	4.33 (0.93)	4.41 (0.71)	4.36 (0.74)	2.46 (2.02)	2.54 (1.99)	4.11 (0.83)	4.48 (0.73)	4.43 (0.75)	4.45 (0.73)	4.42 (0.75)	4.42 (0.75)	3.86 (1.57)	3.83 (1.58)	4.47 (0.73)	4.37 (0.85)
Cooperation	73	73	71	72	72	72	69	71	58	58	57	57	35	35	30	30
Problem Solving					2.46 (2.02)	2.54 (1.99)	4.11 (0.83)	4.06 (0.92)	2.57 (1.90)	2.50 (1.94)	3.87 (0.92)	3.92 (0.86)	2.40 (2.21)	2.43 (2.15)	4.32 (0.75)	4.10 (1.07)
Managing Feelings					72	72	45	47	58	58	39	37	35	35	19	20
					3.36 (1.85)	3.35 (1.87)	4.29 (0.86)	4.34 (0.87)	3.03 (1.81)	2.95 (1.82)	3.95 (0.83)	3.98 (0.83)	3.06 (1.83)	3.09 (1.74)	4.08 (0.89)	3.89 (1.05)
Positive Communication with Allies					72	72	58	58	58	58	44	43	35	35	26	27
									1.93 (2.14)	1.86 (2.15)	4.36 (0.91)	4.18 (1.09)	2.80 (2.29)	2.69 (2.22)	4.76 (0.44)	4.67 (0.66)
Staying Positive									58	58	28	28	35	35	21	21
									3.66 (1.84)	3.71 (1.84)	4.53 (0.62)	4.47 (0.75)	3.43 (1.88)	3.51 (1.77)	4.44 (0.80)	4.39 (0.83)
									58	58	47	47	35	35	27	28

Note: OS=Older Sibling. YS=Younger Sibling.

Table 4
Time and Costs Spent Delivering the Intervention

SIBS-FC Coaching Activities (N=75)	Average Hours Per Dyad (SD) One coach	Costs for one coach at \$30/hr
Preparation	3.20	\$96.00
	(1.39)	\$41.70
Implementation of the Curriculum	13.89	\$416.70
	(4.0)	\$120.00
Post Session Time	1.85	\$55.50
	(1.00)	\$30.00
Phone/Email Contact with Siblings	.40	\$12.00
	(.40)	\$12.00
Phone/Email Contact with Foster Parent(s)	1.72	\$51.60
	(1.26)	\$37.80
Phone/Email Contact with Caseworker(s)	0.25	\$7.50
	(0.26)	\$7.80
Transportation	13.79	\$413.70
	(4.74)	\$142.20
Staff Meetings and Supervision	14.35	\$430.50
	(6.06)	\$181.80
Training	1.30	\$39.00
	(.89)	\$26.70
Total Time Per Dyad	50.75	\$1,522.50
Space		\$102.10
		\$43.09
Session costs		\$45.40
		\$32.46
Activity costs		\$90.53
		\$44.36
Snacks for sessions		\$57.79
		\$8.90
Transportation costs (Mileage and Rental Cars)		\$234.90
		\$100.32
Total costs		\$2,053.22