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A Mental Health Intervention for Rural, Foster Children from Methamphetamine-involved Families: Experimental Assessment with Qualitative Elaboration

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The misuse of methamphetamine, a powerful central nervous system stimulant and neurotoxin (Wermuth, 2000; Rawson, Gonzales, & Brethen, 2002; SAMHSA, 1999), is a sizeable and ongoing criminal justice and public health problem across the U.S. (Cretzmeyer, Sarrazin, Huber, Block, & Hall 2003; Hohman, Oliver, & Wright, 2004; National Drug Intelligence Center, 2009); especially in rural areas (Adrian, 2003; F.B.I., 2006; Hutchison & Blakely, 2003; Illinois Criminal Justice Information Authority, 2004; Muskie School of Public Service, 2007). Methamphetamine misuse affects not just individuals, but entire families. Rural law enforcement officers and health, mental health, and child welfare professionals encounter children living in homes where their parents produce and/or misuse methamphetamine (Shillington, Hohman, & Jones, 2002; Haight, Janssen, Black, Kingery, Sheridan & Mulder, 2005). These children are at risk for the development of substance abuse and other mental health disorders (e.g., Haight, Ostler, Black & Kingery, 2009). If untreated or undertreated, these problems could jeopardize children's future well-being and mental health, and perpetuate substance misuse into future generations. Although there are a variety of effective mental health interventions for children, there are challenges to implementing them with rural children from drug-involved families including limited access to services and cultural appropriateness. This paper describes the cultural-adaptation, implementation and impact of an evidence-informed mental health intervention for individual rural children aged 7-17 from methamphetamine-involved families who are in foster care. It also considers the feasibility of the intervention, and its merits for future study.

Mental Health Disorders

Most children from methamphetamine-involved families report disturbing experiences within their families-of-origin including problematic relationships with parents, exposure to

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adult drug misuse, and a constellation of activities related to drug use or drug seeking behavior and other criminal behavior (Haight et al., 2009). Many of these children experience significant neglect of their basic needs for food, shelter and medical attention (Haight et al., 2005), as well as physical, sexual and emotional abuse from substance misusing parents and other users who frequent the home (Cretzmeyer et al., 2003; Hohman et al., 2004; West, McKenna, Stuntz & Webber-Brown, 2000; Manning, 1999; Haight et al., 2005; 2009). In general, children whose parents misuse substances are almost three times more likely to be physically or sexually assaulted than children of non-substance-involved parents (CASA, 1999). Given these risk factors, it is not surprising that children whose parents misuse substances are more likely than their peers to develop substance abuse and other mental health disorders (e.g., National Center on Addiction and Substance Abuse, Columbia University, 1999; Cretzmeyer et al., 2003; Millar & Stermac, 2000). Many children whose parents misuse methamphetamine show high levels of trauma symptoms and other emotional and behavioral problems (e.g., Asanbe, Hall & Bolden, 2008; Black, Haight & Ostler, 2006) even relative to other children in foster care (see Ostler, Haight & Black, 2007).

Physical aggression, identified as a common and traumatizing experience for individuals who misuse methamphetamine (Cohen Dickow, Homer, Zweben, Balabis, Vanderstoot, 2003), also characterizes the experiences of many children from methamphetamine-involved families. During semi-structured interviews, many children from methamphetamine-involved families spontaneously produced narratives of personal experience involving physical aggression. These narratives were primarily set at home and involved adults and the children themselves (Haight et al., 2010). Children most often described the initiator of the physical aggression as their parents or themselves and, likewise, most often described themselves, their siblings or parents as the targets of physical aggression. Most episodes of physical aggression depicted in narratives involved punching, kicking, biting, choking and/or hair pulling. Relatively few involved weapons. Children primarily attributed the physical aggression to anger and adult substance misuse, and described negative outcomes of the physical aggression. Many of these children also scored in the clinical range on externalizing and aggression CBCL scales.

Externalizing behavior may be particularly problematic for children from methamphetamine-involved families. Caregivers and other knowledgeable adults report relatively high levels of externalizing, especially aggressive, behaviors in children from rural, methamphetamine-involved families. Asanbe and colleagues (2008) studied rural, 4- to 5- year-old children from methamphetamine-involved families in Tennessee. These children had been placed by child protection services in the homes of relatives and were attending a community-based intervention program for low income children. They were compared with a group of preschoolers also participating in the intervention, but who had no known history of parent methamphetamine involvement. Children from methamphetamine-involved families scored higher than comparison children on caregiver reports (Behavior Assessment System for Children-Parent Rating Scale-Preschool) (Achenbach & Rescorla, 2000) of externalizing behaviors (40% vs 15% clinical range, respectively), especially aggression (42% vs 5% clinical range, respectively). Haight and colleagues (2005) interviewed knowledgeable adults (teachers, child welfare professionals, foster care providers, etc.) who reported high levels of aggressive behavior in school-aged children from methamphetamine-involved families (Haight et al., 2005). As a group, school-aged children from methamphetamine-involved families who were in foster care showed elevated externalizing behaviors (48% in the borderline or clinically significant ranges) and aggression scores (43% in the borderline- or clinically-significant ranges) on the Childhood Behavior Checklist (CBCL) (Ostler et al., 2007).

An Intervention for Rural Children from Methamphetamine-involved Families

Although much progress has been made in the development and implementation of mental health interventions for children, limitations remain regarding their cultural sensitivity and appropriateness. For example, much progress has been made in substance abuse prevention research (e.g., Dishion, 1996; Etz, Robertson, & Ashery, 1998; Kumpfer, Olds, Alexander, Zucker, & Gary, 1998) including methamphetamine use among adolescents (Spath, Clair, Shin & Redmond, 2006), but challenges remain regarding the implementation of effective interventions for culturally diverse families (see Spoth, Kavanagh, & Dishion, 2002). The limited research with culturally-adapted prevention and intervention programs suggests these adaptations can enhance effectiveness (Brody, Murry, Gerrard, Gibbons, Molgaard, et al., 2004; Kumpfer et al., 1998; Kumpfer, Pinyuchon, Melo & Whiteside, 2008). Existing cultural adaptations, however, have been criticized as superficial, e.g., changing photos to depict the targeted group. Researchers have argued that a deeper understanding of cultural context will lead to stronger outcomes (e.g., see Spoth et al., 2002; Kumpfer et al., 2002; Steiker, Castro, Kumpfer, Marsiglia, Coard & Hopson, 2008).

We approach children's mental health intervention from the theoretical perspective and methods of cultural developmental science (e.g., Rogoff, 2003; Shweder, Goodnow, Hatano, LeVine, Markus, & Miller, 2006). We view human development, including mental health issues targeted by interventions, as shaped within sociocultural-historical contexts. In designing and adapting any intervention, we first consider the concrete patterns of everyday life such as spontaneous narrative practices with children, and the local beliefs that support these practices. To understand participants' responses to interventions, we consider their experiences and interpretations of the activities in which they participate, as well as any relevant, culturally-appropriate assessments.

"Life Story Intervention" (LSI) is a mental health intervention adapted for individual rural children (aged 7-17) affected by parent methamphetamine abuse by a transdisciplinary team including a child clinical psychologist, counselor, psychiatrist, developmental psychologist, child welfare professional and social worker. LSI is evidence-informed (e.g., Gambrell, 2005). It draws upon empirical research on rural, methamphetamine-involved families and their children's experiences and psychological functioning (Haight et al., 2005; Ostler et al., 2007); narrative traditions (e.g., Shweder et al., 2006); and the treatment of trauma in children who have experienced family violence (e.g., Lieberman & Van Horn, 1998; 2003). It also draws upon the American Association of Child and Adolescent Psychiatry (AACAP) guidelines for intervention with children who have experienced trauma (American Academy of Child and Adolescent Psychiatry, 1998); and the considerable, locally-based clinical experience of team members with traumatized children in foster care who are affected by parent substance misuse.

The conceptual bases and implementation of LSI have been described in detail elsewhere (Haight et al., 2009). In summary, it is a narrative- and relationship- based intervention administered in and around the children's homes by community-based, master's degree level professionals experienced in working with children, e.g., teachers, child welfare professionals, counselors. Over approximately a 7 month period, children met individually for one hour-long weekly sessions with these local professionals. These "community clinicians" receive weekly training and supportive supervision in a small group setting from a PhD-level clinical psychologist or psychiatrist experienced in working with traumatized children and drug-involved families. (The psychologist and psychiatrist also are available for individual consultations.) In the first phase of the intervention lasting approximately 2 months, community clinicians focus on establishing an emotionally supportive relationship with the children, most of whom have histories of maltreatment and disrupted relationships with caregivers and other adults. Given children's relationship histories, it is especially

important for community clinicians to carefully frame their relationships, including its time limits, with the children. Some described their relationships as “like at school.” At the end of the school year, the student moves on, but the teacher is still interested in the child’s progress, and they may even see one another around the community. During this first phase, the community clinician and child may engage in activities of the child’s choosing such as walking in the woods, eating at a fast food restaurant, and playing with pets.

The focus of the next approximately four months is the co-construction of personal narratives. Children are invited, but never pressured, to talk about their lives in familiar surroundings in and around the home while engaged in activities such as swinging, drawing, reading children’s books, pretending with puppets or a dollhouse, or just talking. Narratives of personal experience have comprised a central component of a wide range of therapies (e.g., Coles, 1989; Holmes, 2001). Therapists working within a narrative framework emphasize the importance of creating stories as a way to help children interpret and gain a feeling of control and continuity in their lives, rethink views of themselves and others, and begin to alter problematic beliefs (e.g., Hanney & Kozłowska, 2002).

In the context of children’s own stories, clinicians also educate and correct misinformation about substance misuse, a necessary component of any intervention for children affected by parent substance misuse. In addition, rural youth are at higher risk than urban youth for substance misuse including misuse of stimulants (e.g., National Center on Addiction and Substance Abuse, Columbia University, 2000; Spoth et al., 2001). As part of the intervention, we drew on existing preventive research and clinical techniques to address the prevention of addiction and negative behavior that can result from substance misuse (see Haight et al., 2009). Given the emotionally sensitive nature of this topic for many of the children in our study, as well as the socialization messages they may have received prohibiting the discussion of such information with family outsiders, our approach to substance misuse education is flexibly adapted to the child’s tolerance.

Any intervention for children from methamphetamine-involved families also must address the common problem of trauma. There are a variety of approaches to therapeutic intervention with children who have experienced trauma. Cognitive behavioral therapies (Cohen, 1998) and psychodynamically based therapies (Lieberman et al, 2003) deal with the psychological sequelae of trauma and family violence in various ways. Although there is considerable debate within the field, there also is some convergence across diverse perspectives on key components (see Hanney & Kozłowska, 2002), which we incorporate in LSI: 1) Establishing a trusting relationship with a supportive adult is the focus of the first two months of LSI and is emphasized throughout. 2) LSI focuses on children’s understanding of and emotional reactions to trauma through the co-construction of personal narratives. Clinicians do address traumatic events, an approach shown to be more effective than nondirective treatments (e.g., Cohen & Mannarino, 1996; Deblinger, McLeer & Henry, 1990), but with careful attention to the child’s tolerance. The focus is not on the development of a “trauma narrative”, but of a life story, which includes traumatic as well as other events 3) LSI is designed to support a sense of mastery over traumatic events, an approach which has been shown to be more effective than techniques designed to merely help children express their feelings (e.g., Corder & Haizlip, 1989; Galante & Foa, 1986; Shelby, 2000). LSI focuses on the child’s mature and adaptive, as well as problematic, responses to difficult situations.

Termination issues are the focus of the final month of LSI. During this time, the end of the intervention is discussed with children, and mementos of the time spent together are created, for example, pictures, stories, and other artwork. In addition, children are helped to identify a trustworthy, supportive adult in their existing social network, for example, a grandparent

or teacher, who can provide ongoing emotional support. In the final session, clinicians meet with these “natural mentors” and the children to review progress, share the mementos and say good-bye.

Culturally-appropriate practice with rural children from methamphetamine-involved families

The cultural patterns of the rural Midwest and contexts of methamphetamine-involved families were primary considerations in adapting evidence-based practices for LSI. It is worth highlighting several features of LSI designed to enhance its cultural appropriateness:

Life Story Intervention involves collaboration with local professionals—

Accessibility to services is a perennial problem in rural areas. Few of the communities in which rural children in our study lived had specialized mental health services for children suffering from trauma symptoms. Their communities did, however, have rural professionals used to assuming multiple roles in support of children. For example: a teacher who routinely put food in the backpacks of children from substance-involved families, a child protection worker from the Illinois Department of Children and Family Services affectionately greeted as “Ms. DCFS” by children from her several client families residing in a rural trailer park, and an elementary school principal who allowed a little girl whose mother was involved with methamphetamine to stay after school to help her plant Spring flowers. (Haight et al., 2009). We recruit these “community clinicians”: social workers, counselors, educators and child welfare workers to implement LSI with one or two children each, and provide them with weekly, ongoing training and supportive supervision.

Using local professionals also facilitates the cultural adaptation of generic interventions. How adults support children and help them to understand and respond to their experiences including parent methamphetamine misuse reflects their culturally-constituted socialization beliefs which may or may not be consciously assessable or well-articulated. Groups differ in their folk theories about the nature of children and development, and the practices used to encourage development (Shweder et al., 2006). Evidence from North American families suggests that normative socialization strategies for helping children through adverse life events, including the perceived appropriateness of direct discussion, vary across communities in relation to culturally-specific belief systems (Burger & Miller, 1999; Cho & Miller, 2004). By collaborating with local professionals, we enhance the possibility that the intervention by design and in its implementation will reflect local implicit and explicit beliefs, in other words, that it will “make sense” to the child and the child’s family, thereby enhancing retention of treatment gains.

Life Story Intervention brings the treatment to the child—The issues of accessibility and cultural appropriateness also are enhanced by providing the intervention to children in and around their homes. For many foster parents in rural communities, an hours-long trip to yet another provider leads to resistance to participation or missed visits. Bringing the intervention to their homes can facilitate the participation of foster parents. Providing an intervention to children within a context familiar and emotionally meaningful to them has a variety of other benefits as well. When the clinician travels to see them individually and on their own turf, children can feel valued and cared for, and relationship building may be enhanced. In addition, the community context is rich in cues for children to spontaneously initiate personal narratives. For example, one child first discussed traumatic experiences involving his biological father after he saw a truck like the one his father drove. Another child told the story of how he was taken into foster care while visiting his old school. One boy told of his experiences in care while driving past his previous foster home (Haight et al., 2009). Going to the home and community also provides invaluable information for

community clinicians including about the children's relationships with their foster families, other adults, and peers. It also provides an opportunity to learn from foster parents' observations, and to exchange information, for example, about some common child responses to trauma.

Life Story Intervention is narrative-based—LSI employs storytelling as a central component of a culturally-appropriate intervention. Narrative-based intervention has gained acceptance as a culturally-sensitive treatment modality (e.g., see Malgady & Constantino, 2003). Howard (1991) describes the technique of story telling as the most adept process in understanding cultural diversity and conducting cross-cultural interventions. "Narrative is a cultural universal, and one of the most powerful interpretive tools that human beings possess for organizing experience in time and for interpreting and valuing human action" (Shweder et al., 2006, p. 744). Oral narratives are basic to socializing children into the meaning systems of their cultures (e.g., Bruner, 1986; 1990; Fivush, 1993; Miller, Wiley, Fung & Liang, 1997; Nelson, 1989; Sperry & Sperry, 1995) including in rural (Sperry & Sperry, 1996) and working class families (Miller & Moore, 1989). Children from a wide range of cultural communities within and beyond the U.S. participate in story telling during routine conversations with adults beginning very early in development (e.g. Hodge, Pasqua, Marquez, & Geishirt-Cantrell, 2002; Shweder et al., 2006; Fivush, 1991; Heath, 1996; Wiley, Rose, Burger & Miller, 1998), and they also overhear emotionally and socially significant stories told around them by others (Shweder et al., 2006). Each story provides an opportunity for the child to hear culturally-embedded experiences and their interpretations.

Although story telling appears to be a cultural universal, stories do vary systematically within and across cultures along a host of parameters (Shweder et al., 2006), which may or may not be consciously accessible or articulated by community members. Of the various genres, stories involving the actual experiences of the narrator not only emerge early in development, but occur habitually in the language of children and adults from a wide variety of culture communities, including white working-class communities (Shweder et al., 2006; Miller & Moore, 1989). The process of retelling and revising stories of personal experience is basic to the socialization process and is assumed to be transformative in a wide variety of developmental theories (Shweder et al., 2006). These small, mundane stories are saturated with values and culturally patterned meaning. They are viewed by many as integral to the development of concepts of self (e.g., Bruner, 1986, 1990; Fivush, 1993, Wiley et al., 1998). Through stories of personal experience, people create, interpret, and publicly project images of the self. Within the context of the family, adults and children together routinely apply culture-specific interpretations to their past experiences, allowing children to construct a sense of self in conjunction with significant others (e.g., Miller et al., 1997; Wiley et al., 1998).

Story-telling in various forms also has been used with children in foster care. Since the 1950s, child welfare professionals have used "life books" with children in foster care or preparing for adoption (Glickman, 1957). Co-created by the child and child welfare worker, the books encompass important life events and the child's feelings about those events. The goal is to support a sense of continuity for children whose lives and primary relationships have been disrupted. Wenger (1982) used storytelling to help children in foster care discuss their experiences including feelings of abandonment, anger, and desire for permanence.

The aim of this study is to examine the responses of rural, Midwestern children from methamphetamine-involved families, their foster parents and community clinicians to LSI. The interest is not in assessing specific components of the intervention per se, but in examining participants' responses to a culturally-adapted, evidence-informed intervention. A secondary interest is in considering the feasibility of the intervention and its merit for

future, larger scale studies. We employ a mixed method, longitudinal design with an emphasis on the qualitative component primarily for purposes of complementarity (Greene, 2007). This combination of quantitative and qualitative approaches offers an enriched portrait and more complete understanding of this culturally-adapted intervention. The quantitative component provides a description of children's psychological functioning over time, and an experimental assessment of the impact of the intervention on children's mental health and behavioral functioning. We use qualitative techniques to explore the experiences and beliefs of children, their caregivers and community clinicians with LSI. More specifically, we present a variable-based analysis of qualitative data elaborating the experiences of the intervention from the perspectives of participants. Then, we present two comparative case studies to illustrate the complexity and diversity of child responses to trauma and the intervention.

Method

This study is part of a larger project. Full details can be found in Haight et al., 2009. This section describes only those instruments and procedures directly relevant to examining LSI.

Setting

This study was conducted in the state of Illinois, which ranks fourth in the country for methamphetamine-related arrests and lab seizures (U.S. Department of Justice, 2008), in a seven county area served by several rural outposts of the Illinois Department of Children and Family Services (DCFS). According to the U.S. Census Bureau (2009), the region served by these field offices is predominantly rural and working-class and covers a total of 4,457 square miles. The estimated 2010 population in these seven counties is 165,407 (Illinois DCEO, 2010). In 2007, 97.5% of the population in these counties was white and the median annual family income ranged from \$36,007 to \$46,868. The percentage of the population with at least a high school education ranged from 79.3% to 82.9% with 10% to 21% of residents graduating from college (U.S. Census Bureau, 2009).

Participants

Following IRB approval for the study, DCFS caseworkers were asked to refer all children ages 7 to 15 years who were in foster care and whose parents' misused methamphetamine. Of the 26 referred children, 23 children from 16 families and their caretakers agreed to participate. Seven children, 3 from the control group and 4 from the experimental group, dropped out before completion of the study primarily because they moved. Fifteen children from 12 families completed the study.

Of the children completing the study, 6 (40%) were female and 9 (60%) were male. Child participants' ages ranged from 7 to 14.6 years ($M = 9.6$ years) at the start of the approximately 2 year long study. All were Caucasian. Seventy-three percent of children had substantiated cases of neglect and 27% of sexual and/or physical abuse. Seventy-three percent of children were school-aged when their parents began misusing methamphetamine. In 66% of families, both parents used methamphetamine, and 87% of parents did so for longer than three consecutive months. Eighty-seven percent of children had parents who were involved with methamphetamine production in the home, and 73% had a parent in jail or prison for a methamphetamine related offense. The parents of all children also misused other substances: 60% of parents misused alcohol and 67% misused other illicit substances, primarily marijuana and cocaine. Sixty-seven percent of children were from families with substance misuse dating back at least as far as their grandparents' generation.

At the beginning of the study, children's length of time in care ranged from 6 to 39 months ($M = 23.7$ months) with an average of 1.9 placements. Twenty-seven percent of children were living with relatives in kinship foster care, and 73% were living in traditional foster homes. Upon entering the study, 11 children (73%) had received some supportive counseling services in the offices of master's level clinicians.

Children were randomly assigned to an experimental or wait list control group, balancing for age and gender. Children assigned to the experimental group received LSI immediately. Children assigned to the wait-list control group received the intervention at the conclusion of the study. Of the 15 children completing the study, t-tests and chi square analyses revealed no significant differences between the experimental and control groups on gender, age, length of time in foster care, receipt of supportive counseling, or Peabody Picture Vocabulary Scores.

Participants also included 12 substitute caregivers: 2 biological grandparents and 10 traditional foster parents. In addition, four, white, female, master's-level professionals who conducted the intervention participated. All of these community clinicians were experienced in working with children involved with DCFS and from substance-involved families, and two had more than 25 years experience. One had a master's degree in counseling, and three had master's degrees in social work. All clinicians lived in or around the communities where the children resided.

Instruments

Children's Mental Health—Children's mental health and behavioral functioning were assessed using the Child Behavior Checklist (CBCL) completed by their foster caregivers. Developed for children between the ages of 6 and 18, this measure is a checklist including children's internalizing, externalizing, aggression and total behavior problems (Achenbach & Rescorla, 2001). The CBCL is a widely used standardized assessment with adequate reliability and validity (Achenbach & Rescorla, 2001). Recently, a PTSD/dissociation subscale also has been derived from existing items (Sim, Friedrich, Davies, Trenton, Lengua & Pithers, 2005). This subscale discriminates normative samples from psychiatric and sexual abuse samples (Sim, et al., 2005). The form takes about 15 minutes to complete.

Children's Experiences and Perspectives—A review of children's DCFS records was conducted to identify information related to length of time in care, placement history, any history of mental health treatment, exposure to methamphetamine and other substance misuse, intergenerational substance misuse and the reason for DCFS involvement with the family.

Following the intervention, semi-structured interviews lasting approximately 15-20 minutes were audio-taped. Children were asked: What was it like for you meeting with (community clinician)? What kinds of things did you do together? Has meeting with (community clinician) been helpful to you? How? Do you think this program would be helpful to other kids? What could we do to make the program better?

Screening of Children's Verbal and Cognitive Abilities—To ensure that children's linguistic and cognitive abilities were adequate to meaningfully respond to interviews, they were administered the Peabody Picture Vocabulary Test (PPVT-III), a norm-referenced, individually administered measure of receptive vocabulary for individuals from age 2-1/2 to adult (Dunn & Dunn, 1997). The PPVT-III takes approximately 10 minutes to administer and requires that children identify spoken words by pointing to pictures. It has excellent reliability and validity and is positively correlated with the Wechsler Intelligence Scale for

Children's (WISC) full-scale IQ score (Dunn & Dunn, 1981) including with emotionally disturbed children (Himelstein & Herndon, 2006).

Caregivers' Perspectives—Following the intervention, children's caregivers responded to an open-ended questionnaire. They were asked: What has meeting with (community clinician) been like for your child? What has it been like for you? What changes have you noticed in (child) over the last 7 months? To what do you attribute these changes? What parts of the intervention were most important? How could the intervention be improved? Do you have any other comments or advice?

Community Clinicians' Perspectives—Children's community clinicians also responded to an open-ended questionnaire at the completion of the intervention. They were asked: How has (child) responded to meeting with you? What changes have you noticed in (child) over the last seven months? To what do you attribute these changes? What has meeting with (child) been like for you? How could the intervention be improved? Do you have any other comments, or advice?

Field notes—Field notes were completed by community clinicians after each contact with the families. By design, they were less structured and more narrative-like than other instruments and were intended to raise important questions, allow for correction of methods, and elaborate on information collected during standardized assessments. Examples of field notes include descriptions of the child's interactions with family, friends and the community clinician.

Procedures

Data collection occurred primarily in a private location in the child's home. Experienced, master's-level professionals who were not serving as the child's community clinician collected the data. At the pretest assessment, lasting approximately one hour, the study was explained to children and their caregivers, children completed the PPVT, and caregivers completed the first CBCL. Over the next approximately 7 months, children in the experimental group were administered the intervention by community clinicians. At the post test assessment, children in the experimental group were interviewed and a second CBCL was completed for children in the experimental and control groups. Caregivers in the experimental group completed the open ended questionnaire after the CBCL. Community clinicians completed their questionnaires within approximately two weeks of termination. Children in the wait list control group were then administered the intervention. Thus, all children eventually received the benefits of treatment. Approximately 7 months later at the follow-up assessment, children in the experimental group were re interviewed and a third CBCL and second open-ended questionnaire were completed by caregivers. Record reviews occurred subsequent to the data collection. Child participants and caregivers received small thank you gifts.

Qualitative Data Management and Analysis—Children's interviews were transcribed verbatim. Emic codes which focused on the meanings ascribed by the participants to their experiences were developed through repeated readings of children's interview transcripts and caregivers' and community clinicians' open ended questionnaires (see Emerson, Fretz, & Shaw, 1995; Graue & Walsh, 1998; Schwandt, 2001). Several efforts were made to develop credibility (see Lincoln & Guba, 1985). The interviewers spent time developing rapport with children and caregivers in their homes, which facilitated their willingness to discuss emotionally difficult topics. Triangulation also occurred as data were gathered from multiple sources (children, caregivers and community clinicians). Member checking occurred through discussion of the coding with several participant adults. Peer debriefings occurred

through discussions with professional colleagues experienced in working with traumatized foster children from drug-involved families.

Results

Description of Children's Psychological Functioning

As indicated by Table 1, the mean scores for children's CBCL internalizing fell within the normal range at pre and post test assessments, but 33% of individual children scored in the subclinical or clinical range at each time. The mean scores for externalizing fell within the subclinical range at both times, and 60% and 47% of individual children scored in the subclinical or clinical range at pre and post test assessments, respectively. The mean scores for "Total" problems fell in the subclinical range at the pretest assessment, and 60% and 47% of individual children scored in the subclinical or clinical range at pre and post test assessments, respectively. At both time points, the mean scores for PTSD/dissociation, 7 and 6, respectively, were more than one standard deviation above the mean for a nonclinical sample ($M=2.9$, $SD=2.8$) (Sim et al. 2005), and 60% and 40% of children scored at least this high at pre and post test assessments, respectively.

The PPVT mean percentile rank ($M=38$, $SD = 29$) fell within one standard deviation of the population mean. One child scored two standard deviations above the mean, and two children scored two standard deviations below. The latter two children participated fully in the intervention, and gave articulate and elaborated responses to the interview and so are included in this report.

The Experiment: Change in Children's CBCL Scores

Repeated measures ANOVA revealed a group (experimental or control) by time (pre or post test) interaction on externalizing, $F(1,13) = 5.09$; $p < .05$, but no main effects. As shown in Figure 1, experimental group externalizing scores decreased modestly while control group externalizing scores increased modestly from times 1 to 2. Although there were no other significant findings, the pattern of modest improvement for the experimental group and modest decline for the control group is reflected in internalizing, total problems and PTSD/dissociation scores as well (see Table 1). Table 1 also indicates that internalizing, externalizing, total and PTSD/dissociation scores for the experimental group were stable or modestly improving from post test to follow-up.

Participant Perspectives

Children's Perspectives—When asked what the intervention was like for them, most children characterized the experience as enjoyable, especially their relationships with the community clinicians who were described using words like "cool," "fun" and "great". For 14-year-old Brad, it was important that Lynn was "a local person." As he elaborated:

It helped that I already knew Lynn from before. She lived around here so I'd seen her around the area and one of my brother's best friend's mother is Lynn's daughter...

When asked how the intervention had been helpful, several children discussed the importance of having someone to talk to, especially about problems. Jason, aged 12, explained that it is hard for him to talk about his family, but that it felt good to share his memories with someone: "I talk about my family to her and usually to no one else...It just washes some of the stuff away from ya." Brad, whose foster mother maltreated him emphasized Lynn's role both in talking with him and in helping him resolve specific ongoing problems.

...most of the time we just talked about things. Usually it was problems I was having with B (foster mother) or something like that... it's just having somebody to talk to. Somebody I know that I can talk to that understands... it's like kinda relieving to know that somebody else listens to you and understands you and cares about what's happening to you...She (Lynn) understood every thing I was going through and kinda helped me with it...

Children also discussed challenges and limitations of the intervention. A number of children described initial anxiety about talking about their experiences. Kim, aged 12, described her initial feelings: "I didn't want to talk... It was like, oh my God! I don't want to do this." Tom, aged 15, described that his anxieties resolved as he formed a relationship with Laura:

At first, I wasn't sure because I'm not really big on talking to people unless it's my mom or my grandma. ... And Laura, she just, I felt something about her that I could just tell her anything...

Although his initial anxieties were resolved, Jason recommended that in the future we better prepare children for the experience of meeting and talking with an adult.

Mary, aged 10, however, remained ambivalent about talking about her experiences:

I really didn't like it...I don't know why...I just didn't like it at all... But then, after a while it was kind of fun. ... and then I didn't like it and we had to talk about my past tense and I just got out of that and I was feeling like I was being pulled back in...and she asked me, "Do you want to talk about your family?" and I said, "No." ... Because I'm trying to get over what's happened in the past and I'm trying to start a new one. ...what I'm trying to say is that I really didn't like talking about my past.

Mary felt that she had only been helped "a little...because it's like, I'm tough. I don't like to listen to people. I'm hard headed." She did, however, recommend the intervention to other children because Gayle :

...can really help you get out your feelings... keep doing what you're doing and helping kids know that it's alright to express your feelings... as long as you get them out and don't get pulled back in them again...

A number of children also expressed how much they missed their community clinicians, and their sadness that the intervention was not longer.

Caregivers—Caregivers' perspectives largely echoed those of the children. When asked about the most important part of the intervention, most described the time spent with the community clinician as enjoyable to the child. They valued the opportunity for the child to "bond" and to have "one-on-one time with someone other than the family and foster family," and to "trust someone other than Mom." Michael's foster mother appreciated that his community clinician came to him at home, which was more comfortable to both her and Michael. A number of caregivers developed supportive relationships with the community clinicians, which they found of emotional and practical help when dealing with children's difficult behaviors. Their primary suggestion for improvement was to extend the time of the intervention beyond the seven months.

Community Clinicians—In describing their own experiences, most community clinicians agreed that the children with whom they worked were among the most emotionally challenging and clinically complex they had encountered. They expressed mixed feelings of fondness for the children as well as sadness and frustration. As Lynn articulated:

Meeting with Jason has been a wonderful experience for me as far as getting to know a delightful young man. I have also been touched emotionally by Jason: the thought of all of the loss he has suffered, his desire to “be normal”, and the struggle as he lets go of his family of origin while attempting to connect with his foster/adoptive family has been heart wrenching for me.

Roberta described her mixed emotions in working with Michael:

Michael was a difficult child to work with. ... I know he enjoyed the fun things we did and having one-on-one attention, but I believe his cognitive challenges prohibited him from developing a narrative of his life that could act as a foundation for therapy....I found myself to be very frustrated and feeling like I wasn't getting anywhere the majority of the time working with him. I enjoyed spending time with him, but I never felt like I had established a therapeutic rapport with him.

Of her experience working with Debra, Roberta continued:

I became more fond of Debra than I thought I would. It saddens me to know she is vulnerable and fragile, and at high risk for drug and alcohol addiction.

Laura described working with Kim:

Working with Kim has been very challenging. I was often frustrated by her lies, as it made it difficult for me to develop a coherent understanding of her life. I genuinely enjoyed Kim, she has many endearing qualities. I felt I was important to her, and enjoyed committing myself to helping her.

Community clinicians echoed children and foster parents regarding the advantages of delivering the intervention to children outside of an office setting in their homes and communities. They discussed the importance of contact with foster families, and of what they learned from observing the child interacting with family and friends. In addition, Roberta commented:

Meeting at the local park allowed physical activity. Also, we stumbled across several things which we built upon - a former teacher, a friend who was “visiting” his father, peers who were engaged in inappropriate behavior, etc.

At the same time, several community clinicians also described the challenges of maintaining professional boundaries in a community setting, especially with emotionally vulnerable children. Of her time with Jason, Lynn commented:

I am not sure how well I have been able to keep a “professional distance” due to the informality of our meetings and the needs that Jason brings to this relationship. ... As [supervisor] reminded me often, these kids truly do “hook us” emotionally, and it is definitely a challenge to maintain the role of professional in such an informal atmosphere.

Due to their contact with the children in their homes, several community clinicians struggled with issues of confidentiality. For example, Kim was delighted to return home to her mother's care, but after several weeks it became apparent to Laura that her mother had relapsed and Kim was suffering. Laura's challenge was to report the matter to DCFS while maintaining relations with Kim and her mother. Following discussion with her supervisor, Laura openly discussed with Kim's mother her concerns and why she had to report what she had observed. Laura was able to continue working with the family. Similarly, Lynn received supervision for responding to the maltreatment she observed at Brad's foster home, observations which corroborated Brad's own reports:

I have to admit that I often felt inadequate in knowing how to deal with many of the situations presented by Brad, especially when he was having such a difficult time in

his foster home. The balance between confidentiality and sharing of information (with DCFS) that was in “the best interest” of Brad was difficult to find. I sometimes felt I betrayed Brad by telling others of his pain that he shared during our private conversations, but when that information led to a change in foster placement that has turned out so well, it seems to have justified the action.

(Note that during his interview, Brad described himself and his younger brother as more “joyous” since moving to their new foster home. These foster parents have since become the boys’ permanent guardians.)

A challenge consistently articulated by community clinicians was that of termination. Laura described the most difficult part of the intervention as “ending it.” As Lynn articulated:

... I am concerned about the time constraints of the intervention and how that affects these children who are so desperate for something PERMANENT. I know first hand that Jason longs for consistency and continuity in his life. He has suffered far too much loss for such a young man. It has almost seemed cruel to me to offer this personal relationship with someone who genuinely cares for the child only to terminate at some point that the community clinician and the research team deems appropriate. ... even with all of my years of experience in counseling, and my experiences with DCFS families, I just was not prepared for what has happened with Jason.

Since termination of the intervention, Lynn has maintained some contact with both Jason and Brad. Jason invited her to his adoption party which she attended, and she has taken him out to lunch for his birthday, a yearly ritual they hope to continue. Lynn sees Brain periodically around the community, including at Little League baseball games where her grandson and Brad’s younger brother play on the same team. She reports that Brad always comes to sit by her and they enjoy visiting. Approximately three years after termination, she attended his high school graduation.

Community clinicians also were challenged by the diverse, changing and sometimes inconsistent ways in which children responded to the intervention, especially termination. Gayle described her time with Mary:

At first, I think she was excited to be involved in the project. Then, she seemed to feel uncomfortable in talking about her past and her family stories. She sometimes was very open with me, and other times she shut down. [During the last two months of the intervention], she often said that she wanted the project to end soon. My impression of her was that she was desperate to fit in to her new [foster/adopt] family to be. She longed for a family. At the same time, she talked about how much she cared about her family of origin. She often expressed that she missed her mom, who passed away. ... When I dropped Mary off at her house [after the final session] she didn’t look excited or disappointed about the fact that this project was over. Rather, she looked indifferent...

Given the emotional and professional challenges articulated by community clinicians, it is not surprising that they underscored the centrality of thorough preparation and ongoing training and supportive clinical supervision. When asked how the intervention could be improved, most community clinicians focused on increased training and supervision of community clinicians. As Laura described:

I think the training regarding the intervention could be improved. Narrative therapy makes sense theoretically, but operationalizing it in a specific context was difficult. Although I do think that the weekly supervision helped to develop specific skills, I felt generally lost as to the “big picture”, i.e. a beginning, a middle, or an end to my

work with Kim. The piece that was missing for me was a proactive therapeutic plan, I felt like I was always reacting.

Lynn observed:

It seems to me it would be beneficial for the community clinicians to receive a more thorough training period prior to actually working with the children. I realize that I am an MSW level worker, but my specialization was child welfare rather than mental health. Although, I have worked in the field for many years and provided counseling for substance affected families, I really do not feel I was adequately prepared for this type of intervention. I don't think I had a clear understanding of what was to be accomplished for some time. ... the weekly supervision with someone as qualified and experienced as [supervisors] improved things a lot for me. ... I think I would have benefited from more one on one contact with them from the get go. Unless the (community clinician) has a strong mental health background, I think the supervision of a PhD level psychologist or MD is a necessity.

Community clinicians also discussed the complex ways in which they perceived the intervention to have impacted the children. Although they all reported positive changes, they were realistic in their assessments of modest improvements. Consistent with reports from the children and foster parents, community clinicians underscored the centrality of the individual attention and the relationships they formed with the children. Laura emphasized the most important aspects of the intervention were:

The weekly time spent with Kim. She really had no one consistently in her life and I felt the fact that I came and maintained contact during all of the confusion of her life was meaningful to her.

In discussing her time with Michael she concluded:

I felt the most important part of the intervention was having someone in his life that he trusted, consistently telling him it was alright to talk about his experiences.

Lynn described her time with Jason:

I have observed Jason to be receptive to the specialized attention almost immediately. He has been less able to talk about the deep issues of anger, grief and confusion that I know are going on for him. Jason has responded to me with respect and warmth, letting me know frequently how much he enjoys our time together, and most recently his sadness at the idea of termination of the intervention. I have not seen a lot of progress as far as Jason becoming more comfortable in talking about the intimacy of his thoughts. However, I have seen him "open up" to the relationship I have offered. He often refers to me jokingly as his grandma. I have watched Jason talk briefly about some of the history of his family and change the subject quickly when the memories became intense. I know that some of Jason's inability to talk is due to deep feelings of shame, loss, and anger, but I also feel that Jason just lacks the verbal skills to talk about a lot of things. He seems to truly enjoy sharing with me his daily activities, but he struggles in his verbalization of events.

Community clinicians also underscored more specific gains. Roberta discussed her work with Daniel on substance abuse:

Daniel was eager to meet with me and remained positive and enthusiastic about having contact. He used our time to seek general information as well as information about drugs and to test out some of his thoughts about his mother's drug usage. I believed he was processing some of his grief of losing his mother - as parental

rights were terminated following a year of no visits during the time I worked with him. Both through direct conversations with him and through contact with his grandmother, I felt as though Daniel was processing our conversations. For example, we had discussed drug usage as being an illness and he shared this with his foster mother. ... I believe Daniel reached another level of acceptance of losing his mother and more of an understanding of drug and alcohol addiction. ... As we talked about the “stories” of his life, Daniel became more adept at telling me about various events in his life. However, he remained reluctant to fill in the details of past events. I thought perhaps he did not remember. However, I read the case record with the interviews with Daniel giving rich details of the drug use in his mother’s home as well as his sexual abuse.

Illustrative Case Studies

Tom—Children’s responses both to trauma and to LSI were diverse. Tom exemplifies a young adolescent who reacted to his difficult and traumatic experiences with anger as well as high levels of PTSD/dissociation, but who appeared to embrace and benefit from the intervention. When he began LSI with Laura at age 14, Tom was mature enough to reflect upon his experiences and motivated to do so. In addition, he had been in a stable foster placement for one year with a loving family who was in the process of adopting him.

Similar to many other children from methamphetamine-involved families, however, Tom was struggling with issues from his family-of-origin where he had experienced neglect and physical abuse, and witnessed adult criminality, substance misuse and violence for much of his childhood. He and his family had lived in a dilapidated trailer in an isolated rural area. During this time, he was frequently absent from school, smoked and drank from age 11, and engaged in other delinquent behavior. He also served as the primary caregiver for his younger siblings because his parents were often incapacitated, and the children were left without supervision or food.

When he first entered their care, approximately one year earlier, Tom’s foster mother reported that he had frequent nightmares and bedwetting. Although those problems were decreasing in frequency, he remained very angry with his parents, and held tightly to his plan for revenge when he would return home and beat up his step father. She also reported that he was loving, respectful and had a great sense of humor, characteristics corroborated by Laura. On the pretest, Tom scored in the subclinical range on the CBCL externalizing scale, and 20 on the PTSD/dissociation scale, nearly two standard deviations above the mean of a *psychiatric* sample ($M=8.4$, $SD=5.9$) (Sim et al. 2005). Following 8 months of Life Story intervention, he scored in the normal range on externalizing, and his PTSD/dissociation score was 10. These gains, however, were not entirely maintained at the follow-up when he again scored in the subclinical range on externalizing and 15 on the PTSD/dissociation. (Internalizing was within the normal range at all 3 time points.)

At the post test interview, Tom described his time with Laura:

... she really helped me ... I was telling her, “I can’t wait until I get my [driver’s] license.” She asked me why and I said, “Well, I’m going back to [hometown] and me and my stepfather are going to have a go around.” And she really calmed me down about that. ... Because he beat my mom. And she explained what would happen and stuff [if he went back home to fight his stepfather]. She really helped me with that. Me and her, we just got along really well. We’d talk about all kinds of stuff. She helped me through my anger issues and then we’d talk about it.

When asked about what was most helpful in working with Laura, he (T) explained to the interviewer (I):

T. When she calmed me down about me getting my license and going back to [home town]. I was a real hot head before. You say the wrong thing and I'm blown up. Before she started with me I was a real hot head. And she helped me calm down over that.

I. Do you still get angry?

T. Yeah, but not as bad. I take some deep breaths. I'll go on a walk.

Laura also responded positively to her time with Tom.

Tom was receptive to meeting with me. He understood that we would be meeting together and talking including about difficult events in his life and he thought he needed to talk to someone. He had been going to traditional therapy and he told me he didn't open up and talk with his therapist because she wasn't someone he wanted to talk to. He said he was willing to try and talk with me because I said we would go and do things together and that he didn't have to talk if he didn't want to.... During our time together, he was actually quite talkative. He seemed to easily tell me about the events of his past, even though the events were emotionally charged. We focused our attention on the on-going anger he felt for his family, particularly his step-father. Specifically, he felt that his mother would not have been involved with drugs if not for his step dad and he also described domestic violence...Tom was able to work with me on developing a vision for his future that did not include revenge.

In response to the question of any changes she had noted in Tom since he began meeting with her, Laura articulated:

While Tom was open to talking with me from the beginning, I think our time together helped him understand his mother's problems differently and that this change in understanding helped him to overcome his feelings of anger. For example, we spent time talking about domestic violence and what women go through and why they sometimes decide to stay in the relationship. This helped him realize how he could support his mom by sharing information with her when they talked on the phone, rather than just being upset with her for staying.

Debra

Debra exemplifies a younger child who responded to traumatic events with high levels of internalizing and PTSD/dissociation. Her response to LSI was guarded and she required more structure, routine and control to feel comfortable participating. Although her verbal skills were well within the normal range and she was performing at an age appropriate level in school, Debra appeared younger than her 7-1/2 years. Prior to placement with her grandmother 1-1/2 years earlier, Debra had lived with her family in substandard, rural housing where she experienced neglect, and physical and sexual abuse. She also was exposed to adult substance misuse, violence and criminality. Her grandmother, Jill, suffered from addictions as a younger adult and her own children, including Debra's mother, were raised primarily by their grandmother. Jill had been in recovery for her own addictions for some years and had a full time job at a local factory and supportive marriage with Joe. She was raising four grandchildren, the oldest of whom was 8-years-old, and providing periodic support for two of her adult children who were struggling with addictions. She and Joe also experienced financial strain and exhaustion. She was very discouraged regarding services and turnover of caseworkers, so was quite pleased that Debra would be seeing Roberta on a weekly basis over a period of seven months. She was not disappointed with Roberta, and consistently spoke in very positive terms about her work with Debra. Jill described Debra's behavior when she first came to live with her:

Debra was a bed wetter. She didn't talk much and tried extra hard to please. She did a lot of sexually acting out with herself and younger children. Academically, I was very scared for Debra. She came to me not knowing anything: 1,2,3 – ABC – colors – shapes, etc. Their mother has not seen the children for a year which is good for the kids. Visits were full of empty promises.

On the pre test, Debra scored in the clinical range on the CBCL internalizing and total scales. She scored 11 on the PTSD/dissociation subscale, which is above a psychiatric sample mean ($M=8.4$, $SD=5.9$) (Sim et al. 2005). On the post test and follow up test, she scored in the subclinical range on internalizing and total scales. (Externalizing was in the normal range at all three times points.) At pre and post test assessments, she scored 12 and 8, respectively, on the PTSD/dissociation scale.

In describing her 7 months with Roberta, Debra provided relatively little elaboration. She said that in the beginning she had been “shy,” but that the meetings turned out to be “fun.” They “typed stories on Roberta’s laptop,” went to the park and ate at a local fast food restaurant.

Roberta described Debra as a child who “tested limits,” had “guarded emotions,” and an “inability to directly express/describe earlier mistreatment.” She also noted that Debra had “great confidence in her grandmother”. Roberta described a typical session with Debra:

Debra was quiet during the first few minutes of each session. She would not even answer direct questions. As time went on, the initial quiet time shortened. Debra frequently tested limits. ... There were sessions when she was very focused and determined to accomplish something and other times when she was very distracted and flitted from one thing to the next. I could tell within minutes of meeting with her if she was going to be on target or testing limits and flitting between activities and subjects. ... When she was “less focused” during a session and we were at the park, swinging seemed to relax her body. Debra appeared to have a “mantra” - she did not have to worry because her grandmother loved her and would take care of it. ... Her explanation for living with her grandmother was her mother “did bad things. She used drugs.” Debra did not want to explore this much further. Whenever a serious/emotion/feeling subject was approached, Debra would become “silly” [for example, talk in babytalk]. She liked being “in charge” whether it was choosing a game, the temperature of the car, when we were going to leave, what path we were going to take to get home, etc. She was reluctant to express positive feelings towards me and/or the project - even though her grandmother and babysitter shared that Debra looked forward to our sessions and was very positive. Debra did not often give feedback as to whether she was listening or understanding what was being discussed.

In working with Debra, Roberta expressed the importance of structure and routine.

Debra established a routine for our sessions - locating a Disney song CD in my car and playing her favorite song and determining if she was going to get a treat. My car was important to her - she wanted to know how everything worked and checked to see if things had been moved from week to week. Debra kept something [e.g., a small toy] in the glove compartment and checked to make sure it was there.

Roberta reported that with Debra she also felt more comfortable when there was a plan or structure to a session such as reading a book. A child's picture book about two children who go to live with their aunt due to their mother's substance abuse (Woodson, 2002) was a favorite. Although Roberta and Debra only read and discussed it once, Debra would read the book and look at the pictures in Roberta's car and told her on two additional occasions that it

was a “good book,” one of the few pieces of positive feedback Debra provided to Roberta during their seven months together.

In describing any impact of the intervention on Debra, Roberta reflected:

...having a caring relationship with an adult was the primary accomplishment [of the intervention]. Debra has become more talkative in general and more comfortable talking about all aspects of her life. However, I would still describe her as not being “open.”

Discussion

This paper described the cultural adaptation, implementation and impact of Life Story Intervention. It also demonstrated the feasibility of the intervention with highly vulnerable children in rural communities with limited access to mental health services. Collaborating closely with community professionals, we integrated sociocultural theory with key premises from evidence-informed interventions and local storytelling traditions to address children’s mental health symptoms in a culturally appropriate manner. Helping children to form a supportive relationship with a community clinician through which they could co-construct and reflect on personal narratives was viewed as a key mechanism of change.

Given our preliminary findings, LSI clearly merits additional research. As indicated by their pretest CBCL scores, children entered LSI with diverse issues, but nearly all had clinical or subclinical behavior problems. In contrast to the wait-list control group, most children receiving LSI showed modest improvements over a seven month period. In particular, the trajectory of externalizing behavior for the experimental group improved while that of the control group worsened. In general, gains made by the experimental group were maintained over the seven month follow-up period.

In implementing a larger scale study it will be important to focus more attention on the preparation and supervision of community clinicians. Community clinicians were generally positive about their experiences with LSI, and several noted the advantages of meeting with children in and around their homes. On the other hand, most reported intense responses to their work with children whom they characterized as more emotionally challenging and clinically complex than any other children with whom they had worked. They also discussed the challenges that meeting children in and around their homes posed for maintaining professional boundaries and confidentiality. They underscored the importance of thorough preparation and supportive, ongoing supervision.

Greater attention also needs to be paid to framing Life Story Intervention for children, especially in preparing them for participation in LSI and for its termination. A number of children reported initial anxiety in talking about their family experiences, and for a few children that anxiety persisted. Most children were able to form supportive relationships with community clinicians, and several reported on specific ways in which they viewed LSI as helpful. These reports are corroborated by community clinicians and caregivers. Consistent with children’s reports, caregivers and community clinicians were concerned with issues of termination with children whose histories included multiple, traumatic disruptions of relationships with adults.

A primary strength of this study is its mixed method design. The experimental design allowed comparison of change over time in the mental health and behavioral functioning of children who did and did not receive the intervention. The qualitative component provided rich elaboration of participants’ experiences including corroboration and elaboration of the intervention’s modest effects, strengths and limitations. Perhaps most importantly, the

qualitative component illuminated the complexities and challenges of implementing and participating in the culturally-adapted intervention.

This study also has limitations. Attrition is a perennial problem with longitudinal research, especially with vulnerable populations. Although drop outs were nearly evenly distributed across the experimental and control groups, the 7 participants who failed to complete the intervention may differ from the 15 who completed the intervention. In addition, this research uses a small sample for the quantitative component, and statistical results should be considered preliminary. Another limitation is that caregivers were not blind as to whether or not the child was receiving the intervention, and may have anticipated positive treatment effects. Our study also is limited by its focus on children already living in foster care. Although these are the children most likely to present to mental health professionals, their perspectives and experiences may differ from those not involved in the child welfare system. Data on children still residing with their parents who are misusing methamphetamine are important to gather, but will be difficult to obtain.

Transferability of findings remains an open empirical question. It will be important to compare these findings with other samples of participants in rural areas. Certain perspectives of children, caregivers and community professionals may be unique to the cultural context of rural Illinois, but we suspect that many of our findings will be transferable to other settings and substance-involved families. Our findings on children's perspectives and mental health needs, for instance, show marked similarities to those reported in other studies of children who are reared by parents who abuse alcohol and other illegal drugs (e.g., Kroll, 2004).

Ideally, we see Life Story Intervention as a bridge, bringing a needed intervention to children at a critical time in their lives prior to engagement in a longer-term mental health intervention. The children in this study had significant emotional and behavioral issues when they began Life Story Intervention, and it is not realistic to expect that they would all be resolved in a few short months. Indeed, many issues remained unresolved at the end of Life Story Intervention. On the other hand, some modest improvements were apparent, and most of these highly vulnerable children were able to form meaningful relationships with community clinicians and begin to explore and reflect upon their past experiences through personal narratives.

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Fig. 1. Mean CBCL externalizing scores for experimental and control group participants over time.

Table 1
Mean CBCL scores for experimental and control group participants over time

	Experimental Group (n=8)			Control Group (n=7)			TOTAL (n=15)	
	Pre	Post	Follow-up	Pre	Post	Post	Pre	Post
Internalizing (T score)								
Mean	56	55	52	48	51	52	53	53
SEM	4	4	3	5	5	3	3	3
% clinical/subclinical	38	25	25	29	43	33	33	33
Externalizing (T score)								
Mean	64 ²	57	58	58	64 ^{2,3}	61 ¹	60 ¹	60 ¹
SEM	3	4	4	6	5	3	3	3
% clinical/subclinical	63	38	38	58	58	60	47	47
Total Problems (T score)								
Mean	64 ²	58	57	57	60 ²	61 ¹	59	59
SEM	3	4	4	5	6	3	3	3
% clinical/subclinical	75	50	38	43	43	60	47	47
PTSD/Dissoc (raw score)								
Mean	10 ⁵	6 ⁴	5	5	6 ⁴	7 ⁴	6 ⁴	6 ⁴
SEM	2	2	2	1	2	1	1	1
% > 1 SD above mean	75	38	25	43	43	60	40	40

¹ Subclinical level.

² Clinical level.

³ Interaction of time and group on externalizing, $p < .05$.

⁴ One standard deviation above the mean for a nonclinical sample of 629 children aged 4-12 randomly sampled from waiting rooms of pediatric and family medicine clinics in Rochester, MN (Sim et al. 2005).

⁵ Two standard deviations above the mean for the nonclinical sample.