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Adapting an evidence based parenting program for child welfare involved teens and their caregivers

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Abstract

The scarcity of caregivers and the unique vulnerability of teens involved with the child welfare system necessitate effective strategies for ensuring that caregivers are prepared and supported in the important role they play with children and youth within the child welfare system. They are in a position, through the establishment of a strong, positive, supportive connection with the youth, to potentially minimize the impacts of recent trauma and interrupt a negative trajectory by preventing the youth's initiation of high-risk behavior. In this paper we describe the process used to systematically adapt *Staying Connected with Your Teen*™, an evidence-based, prevention-focused parenting program found in other studies to reduce the initiation of teens' risky behaviors, for use with foster teens and their relative or foster caregivers. This work has been guided by the ADAPT-ITT framework developed by Wingood and DiClemente (2008) for adapting evidence-based interventions. Qualitative work conducted in Phase 1 of this study identified the need for the development of a trusted connection between foster youth and their caregivers, as well as tools for helping them access community resources, social services, and educational supports. This paper describes the process used to develop new and adapted program activities in response to the needs identified in Phase 1. We conducted a theater test with dyads of foster youth and their caregivers to get feedback on the new activities. Findings from the theater test are provided and next steps in the research are discussed which include examining program usability, fidelity, feasibility, and testing this new prevention program that has been tailored for child welfare involved youth and

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their caregivers. This intervention program has the potential to fill an important gap in the availability of preventive programming for caregivers of teens in foster care.

Keywords

Evidence-based prevention; Adaptation; Foster care; Parenting; Adolescence; Child welfare

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> "I thought it was really fun to work with new materials because it really brought my foster parent and I closer."

1. Introduction

1.1. Risk and foster care experience

Over one third of the approximately 400,000 children in foster care are 13 years of age or older (U.S. DHHS,, 2012). It is well documented that in comparison to the general population, young people with foster care experience are more likely to experience a variety of behavioral, physical, mental health, social, educational, and economic challenges (Ahrens, Richardson, Lozano, Fan, & DuBois, 2008; Carpenter, Clyman, Davidson, & Steiner, 2001; Courtney, Dworsky, Lee, & Raap, 2010; Courtney et al., 2005; Courtney, Terao, & Bost, 2004; Keller, Salazar, & Courtney, 2010; Kushel, Yen, Gee, & Courtney, 2007; McMillen et al., 2005; Merikangas et al., 2010; Narendorf & McMillen, 2010; Pecora et al., 2005; Pecora, White, Jackson, & Wiggins, 2009; Pecora et al., 2003; Pilowsky & Wu, 2006; Vaughn, Ollie, McMillen, Scott, & Munson, 2007; Zlotnick, Tam, & Soman, 2012).

Science now recognizes that childhood exposure to traumatic stress and to adverse childhood experiences can have profound and enduring effects on the neuroregulatory systems that mediate physical, mental, and behavioral health and development (Felitti & Anda, 2010; Felitti et al., 1998; Getz, Kirkengen, & Ulvestad, 2011; Shonkoff, Boyce, & McEwen, 2009). Children involved in the foster care system, by virtue of the need for system involvement as well as their experiences within the system, are often exposed to multiple traumatic stressors that may give rise to a host of adverse consequences into adulthood. One study found that 80% of 17- and 18-year olds with foster care experience had experienced a DSM-IV-tr-qualifying trauma, with nearly two thirds experiencing two or more (Salazar, Keller, Gowen, & Courtney, 2013). The transition to a new family or placement mandates an acculturation process that in and of itself can be confusing or at times even traumatic if not supported and addressed. In addition to providing safety and permanence for foster youth, understanding and developing buffers to traumatic experiences and supporting young people in unfamiliar environments are important to protecting and enhancing the wellbeing of children in foster/relative care. This paper describes the systematic process used to address these challenges and to provide support to foster families through the development of *Connecting*, an adaptation of an evidence-based parenting intervention, *Staying Connected with Your Teen*™ (Haggerty, Skinner, MacKenzie, & Catalano, 2007), designed to strengthen the relationships between foster youth and their caregivers and develop buffers to mitigate the impact of stressors. If found to be effective,

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Connecting will be a more affordable and accessible option for child welfare workers and families than any programs currently available.

1.2. Protection against risk in foster care

Stable out-of-home placements and access to caring, supportive adults have been found to protect against some of the challenges that youth in foster care face, and have been associated with a variety of positive outcomes, including increased educational attainment, fewer behavioral and mental health challenges, reduced participation in criminal behavior, and later age of first arrest (Ahrens et al., 2008; Cusick, Courtney, Havlicek, & Hess, 2011; Keller, 2007; Osgood, Foster, & Courtney, 2010; Pecora, Kessler, et al., 2006; Rubin, O'Reilly, Luan, & Localio, 2007; Salazar, Keller, & Courtney, 2011). Unfortunately, however, youth in care often experience disruptions in their social support due to placement and school changes. A majority of foster care alumni report having had at least three or more placements (Courtney et al., 2004; Pecora et al., 2005; Pecora et al., 2003), with approximately two thirds experiencing placements in a group home, residential treatment center, or institution (Courtney et al., 2004). One cause of placement disruption has been found to be unsuccessful adaptation or integration into the foster home (Coakley, Cuddeback, Buehler, & Cox, 2007; Leathers, 2006). As a result of a foster youth's history (and/or characteristics), which may include complex placement histories, insecure attachments, mental health needs, and/or developmental and cognitive delays, they may have difficulty forming trusting relationships with adult caregivers and adapting to a new living situation which may be quite different from what they have previously experienced (Brown, Arnault, George, & Sintzel, 2009; Chamberlain et al., 2008; Clausen, Landsverk, Ganger, Chadwick, & Litrownik, 1998; Coakley et al., 2007; DeGarmo, Chamberlain, Leve, & Price, 2009; Egeland & Sroufe, 1981; Minnis, Everett, Pelosi, Dunn, & Knapp, 2006; Rauktis, Vides de Andrade, Doucette, McDonough, & Reinhart, 2005; Sawyer, Carbone, Searle, & Robinson, 2007; Shin, 2005; Whenan, Oxlad, & Lushington, 2009).

Foster parents are often unprepared to adequately address the parenting needs of teens, particularly those with a history of abuse, neglect, and emotional or behavioral problems. The shortage of foster caregivers means that many are asked to provide care beyond their own expectations, training, and perceived capabilities (Whenan et al., 2009). They often deal with stressful issues, including strained relationships with biological parents, family tensions, placement disruptions, allegations/complaints against them, and disagreements with social service agencies (Coakley et al., 2007; Leber & LeCroy, 2012; Wilson, Sinclair, & Gibbs, 2000). These conditions result in foster parents experiencing stress, anxiety, and depression, which have been found to be associated with lower quality of parenting and higher rates of placement disruption (Cole & Eamon, 2007; Farmer, Lipscombe, & Moyers, 2005; Whenan et al., 2009; Wilson et al., 2000). Furthermore, the training that foster caregivers typically receive may not be sufficient or appropriate for developing the skills needed to work with young people in the foster care system (Dorsey et al., 2008; Linares, Montalto, Rosbruch, & Li, 2006). Yet, training may be one manner of addressing these challenges because it has been associated with increased placement stability as well as foster parent wellbeing and satisfaction (Cooley & Petren, 2011; Denby & Rindfleisch, 1996; Whenan et al., 2009).

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Historically, child welfare services have focused more on protecting children from abuse and neglect, which has resulted in a focus on physical safety and less on addressing the acculturative stress the youth may be experiencing and the relationship needs of children in care. There is growing attention to the importance of the wellbeing of child welfare involved children, including a recommended focus on the relationship between foster youth and their caregivers (State Policy Advocacy and Reform Center, 2013). There has been important, though limited, work on the relationship between foster youth and their caregivers. The importance of the quality of the relationship between infants and toddlers in foster care and their caregivers has been elevated by a number of researchers (Cole, 2006; Harden, 2007; Harden & Klein, 2011; Spieker, Oxford, Kelly, Nelson, & Fleming, 2012). Studies of the alliance/relationship between caregivers and youth in treatment foster care have demonstrated that positive relationships between foster parents and youth are critically important for achieving desired emotional and behavioral outcomes among emotionally disturbed youth in out-of-home care (Bickman et al., 2004; Chamberlain, 2003; Kazdin, Marciano, & Whitley, 2005; Rauktis et al., 2005; Shirk & Karver, 2003; Southerland, Mustillo, Farmer, Stambaugh, & Murray, 2009). Despite evidence that a positive relationship between children and their foster caregivers and/or caring adults is important for healthy development and a sense of wellbeing (Ahrens et al., 2008; A. Fox & Berrick, 2007; Osgood et al., 2010), relatively little is known about how best to create and strengthen the relationship between non-behaviorally challenged foster youth and their caregivers. There are few tested programs available to assist teens and their foster/relative caregivers to make the transition into placement in foster or relative care. While some programs have been developed and found to be effective with foster families (Alexander et al., 1998; Chamberlain & Mihalic, 1998; Henggeler, Mihalic, Rone, Thomas, & Timmons-Mitchell, 1998; Smith, Leve, & Chamberlain, 2011), they tend to be targeted toward a subset of the child welfare population, are quite costly, and few have been preventive in nature. In addition to costs, program managers are often reluctant to commit to implementing new evidence-based programs (EBPs) because of the extra coordination, training, and supervision required for quality implementation (Webster-Stratton & Reid, 2010). The fact that adapted interventions must be viable in a system with extremely limited and variable resources creates complexities that may not have been considered in other intervention designs. The challenge is to provide foster parents and teens with programs that are based on sound science, are culturally relevant to the population, and minimize the trauma associated with placement in out-of-home care. When adapting parenting interventions for use in the child welfare system, the unique situations and experiences of foster children and foster families must be taken into consideration. Cultural adaptation scholars recognize the importance of adapting evidence-based treatment or intervention protocols to ensure that they are culturally relevant to the target population (Bernal & Sáez-Santiago, 2006; Kumpfer, Alvarado, Smith, & Bellamy, 2002; Parra Cardona et al., 2012; Rodriguez, Baumann, & Schwartz, 2011; Smith et al., 2011).

1.3. Current study

In order to systematically adapt *Staying Connected with Your Teen*™ (SCT) for use with a child welfare involved population, we have employed the ADAPT-ITT framework (Wingood & DiClemente, 2008) which was developed as a method for adapting evidence-

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based HIV prevention interventions for use with different at-risk populations. *Staying Connected with Your Teen*™ (SCT) is an evidence-based, prevention-focused, family-based, parenting program theoretically guided by the social development model (SDM) (Hawkins et al., 2008). The SDM organizes research on risk and protective factors into an etiological model that integrates perspectives from social control (Hirschi, 1969), social learning (Bandura, 1977), and differential association theories (Sutherland, 1973). According to the SDM, prosocial opportunities for involvements, skills, rewards, bonds, and beliefs are hypothesized to influence prosocial behavior. A similar process is believed to operate for antisocial opportunities and behavior. This general theory specifies the causal pathways by which risk and protective factors operate in the etiology of problem behaviors. Each chapter of the SCT program targets specific SDM constructs.

SCT was developed as a universal substance abuse prevention intervention for families with children 12 to 17 years old. The program includes a self-directed, 108-page family workbook written to an eighth-grade reading level, and videos (117 mins.) with step-by-step interactive activities featuring Latino, African American, and European American families. The workbook and videos address: (a) the shifting role of parents in relating to teens, (b) identifying and reducing risks for problem behaviors, (c) bonding with your teen to strengthen protection, (d) learning tools to work well with the family and solve problems, (e) encouraging active involvement in the family, (f) establishing family policies on health and safety issues, and (g) supervising without invading. The video demonstrates problem-solving skills and family meetings to create a framework for family discussions. The program takes approximately an hour a week for 8 – 11 weeks to complete. Families receive weekly contact from a family consultant to support the family in their use of SCT.

The waitlist control pilot study of SCT found significant immediate treatment effects, including improved family bonding, reduced family discipline problems, improved supervision, and improved parental commitment to supporting school, and trend-level differences on family attitudes favorable to antisocial behavior (Pollard, 1998). A subsequent randomized controlled trail offering both a family group adminstation as well as a self-directed approach found that both modes of adminstrations of the program strengthen family connections and functioning and provide families with the tools to support their teens in successfully resisting initiation of a host of high-risk behaviors, including substance use, risky sexual behavior, and violence (Haggerty et al., 2007). The self-administered approach was found to be as effective as the group-administered approach in reducing favorable attitudes toward drug use (d = .39) 2 years post intervention. African American youth reported significantly less violent behavior (d = .45) and were 70% less likely to initiate sex or substance use in comparison to their control counterparts (Haggerty et al., 2007).

A variety of factors influenced our decision to select the self-administered format of SCT as the focus of our adaptation efforts, including the fact that the program is efficacious with high-risk, low-income youth, and the self-directed format had higher take-up rates in the efficacy trial (Haggerty, MacKenzie, Skinner, Harachi, & Catalano, 2006). In addition, SCT is cost effective at approximately $300 per family and imposes little burden on child welfare case workers.

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The goal of the adapted program, *Connecting*, is to create a sense of belonging and develop skills that will help mitigate the negative impacts of traumatic stressors and acculturative stress that these youth may have experienced. We believe that this strengthened relationship is essential before the benefits of the key elements of the original evidence-based program can be realized.

2. Methods

The ADAPT-ITT framework was used to systematically adapt the original Staying Connected with your Teen program and involves eight steps: (1) Assessment, (2) Decisions on Program Augmentation, (3) Adaptation, (4) Production, (5) Topical Experts, (6) Integration, (7) Training, and (8) Testing.

Table 1 illustrates the methodology used during each phase of the adaptation process and the version of the adapted document based on that phase.

2.1. Phase 1: Assessment

The first step of the ADAPT-ITT process involved nine focus groups [three with former foster youth (n = 20), three with caregivers (n = 16), and three with child welfare staff (n = 27)]. Participants were provided with a description of the SCT program and a segment of the videotape. Using a semistructured group discussion guide, the facilitator sought information about the usefulness of a program such as SCT and facilitators and barriers to the use of such a program with child welfare involved families. Through thematic coding and analysis of focus group transcripts, the researchers learned that there was a need for evidence-based parenting programs for this population and that the lack of a trusted connection between foster youth and their caregivers, if unaddressed, would likely undermine the efficacy of the intervention (Storer, Barkan, Sherman, Haggerty, & Mattos, 2012).

The work described in this paper focuses on ADAPT-ITT Phases 2 (Decision) through 6 (Integration). All study procedures were approved by the Washington State Institutional Review Board.

2.2. Phase 2: Decisions on Program Augmentation

The decision-making phase included a thorough review of the information gleaned from the focus groups in Phase 1 (previously described in Storer et al., 2012, p. 1859). To briefly review, the key themes emerging from the focus groups as essential adaptations of the program included: (a) targeting a younger age group (11 – 15) than initially planned (13 – 17) in order to prevent the initiation of risky behaviors which focus group participants noted tend to begin at an earlier age among foster youth; (b) revising the language and activities to make the program more relevant to foster youth and caregivers, including addressing differences in family norms, values, culture, and background between youth and their caregiver; (c) changing the name of the program from *Staying Connected with Your Teen* to something more applicable because foster youth reported that they did not initially feel “connected” with their caregiver; (d) creating and/or revising content to strengthen the relationship between youth and their caregivers; (e) adding information about brain development and typical challenges of adolescence; (f) addressing the development of

independent living skills; and (g) targeting the program to caregivers that have a long-term commitment to the teens in their care. With these major adaptation areas identified, the team of researchers worked collaboratively to decide how best to adapt the curriculum. This included deciding what elements from the original *Staying Connected with Your Teen* program to keep ‘as is’; what elements needed to be modified to increase their relevance for the foster care population; and what elements needed to be added to address the unique situations of foster youth and their caregivers, including youths’ history of trauma and experiences of acculturative stress.

The principal investigator, co-investigator, and research and intervention staff, all of whom had relevant direct practice and/or intervention research experience and included a public child welfare staff member, met weekly over a 6-week period for a total of approximately 12 hours to systematically examine each component of the original curriculum for changes, additions, or adaptations to address the feedback from the focus groups and to make the program language and context appropriate for a child welfare involved population. Through an ongoing and iterative process, activities were created or revised to address the needed adaptations. They were then thoroughly reviewed and discussed by the research team and further refined to incorporate team feedback. The following decisions and adaptations were made to the original evidence-based intervention, *Staying Connected with Your Teen*: (a) the program was modified to target youth ages 11 to 15; (b) the program was modified to be appropriate for teens and caregivers for whom the placement is viewed as stable and likely to continue for at least 6 months, and in which the caregivers are committed to a long-term placement; (c) throughout the program workbook, “parent” was changed to “caregiver” and “your teen” was changed to “teen in your care”; (d) the name of the program was changed from *Staying Connected with Your Teen* to *Connecting*.

In addition, a new chapter was added to the beginning of the workbook containing activities that focus on promoting a connection between caregivers and teens as well as an opportunity for teens, if they choose, to acknowledge aspects of their history and experiences. These activities include:

- *Brag Boards* to be created by caregivers and teens separately and then talked about together. This creates a way for each to share basic and nonintrusive information (favorite activities, things they are proud of, etc.) with one another.
- *Foster Youth Stories* are digital stories made by former foster youth that provide a positive image of foster youth while acknowledging common and often painful challenges that they deal with while in foster care. The three selected stories offer foster youths’ perspectives on the pain of being separated from siblings, not having a sense of belonging, and the behavioral reactions that they had to their situations.
- Sharing Important Relationships provides an opportunity for foster youth to share their important relationships so that their caregivers know who matters in the teen’s life.
- Words, Words, Words is an opportunity for foster youth and caregivers to describe what they think it is like to be in each other’s shoes.

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- *Hopes and Fears is an activity that gives the teen and caregiver a chance to talk about* their hopes and fears related to engaging in the *Connecting* program, as well as for their future.

In order to further enhance connections between the teen and their foster/relative caregiver, families come up with a list of activities (e.g., taking a walk, watching a movie, baking, etc.) that they would like to do together, and at the end of each chapter of the workbook they select one to do. Additionally, to demonstrate positive regard for the experience of the teen, a teen self-care activity was added to each chapter.

Other activities created in response to the lessons learned from the Phase 1 focus groups include: (a) *Exploring Differences*, which was added to help families think about where their differences come from and how they can respect those differences within their home. In addition, throughout the workbook, activities were modified to acknowledge and address potentially different cultural backgrounds, perspectives, and experiences of foster youth and caregivers; (b) a *Skill Development* activity was added to help caregivers and teens evaluate the teen's current skill set and discuss skills that the teen wants to develop as he or she moves towards independence. This was identified as an especially important topic for teens in care. The activity was developed in consultation with child welfare staff working with teens on independent living skills and includes resources for families to support skill development and independence; (c) *What's Going on with Teenagers*, a new section covering brain development, was added to help caregivers recognize the difference between typical adolescent behaviors and behaviors that may be related to the experience of foster care; and (d) *Moving Forward* was added to the end of the *Connecting* program. In this activity, the foster/relative caregiver and teen write letters to one another reflecting on their experience participating in the program. This activity is intended to provide a sense of closure while leaving space for continued connecting and relationship growth.

2.3. Phase 3: Administration of Adaptations – Theater Test

A key feature of the administration phase was the use of an innovative methodology known as theater testing, which aims to gather additional feedback on program modifications from members of the target population (n ~ 15), analyze the results, and use the findings to further refine the program. Theater testing is a form of pretesting used in media marketing research and is recommended as part of the ADAPT-ITT process (National Cancer Institute, 2004; Wingood & DiClemente, 2008). Once a preliminary draft of the modified program was developed, the theater test allowed program staff to collect critiques of the materials, content, and delivery of the intervention and to identify the need for removal, addition, or modification of materials to enhance the relevance and efficacy for the target population.

2.3.1. Eligibility criteria and recruitment process—To be eligible for inclusion in the theater test, foster youth had to: (a) be between the ages of 11 and 15; (b) live in a home-based setting with a relative or licensed foster caregiver (not residential or group care); (c) reside in the areas participating in the study; (d) not have initiated the risky behaviors that the program aims to prevent (daily smoking, regular and heavy alcohol use, illegal drug use, selling/dealing illegal drugs); and (e) not have been arrested and found guilty of a crime. Due to human subjects constraints, the researchers were reliant upon the public child welfare

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agency workers to identify and recruit appropriate dyads for participation in the theater test. Child welfare agency partners generated a list of potential participants using the above criteria to ensure the theater test participants reflected the intervention's target population. Once youth/caregiver dyads were identified, biological parents were mailed a letter about the study and theater test and were able to indicate if they wished for their child not to be contacted. If the biological parent did not opt out of their child's participation, the child welfare liaison contacted the current foster or relative caregiver regarding the theater test. If he/she was interested, the worker then contacted the youth. If both caregiver and youth were interested in participating, they were invited to the theater test. Fifteen youth/caregiver dyads were approached by child welfare staff in order to achieve the target goal of seven youth/caregiver pairs. Prior to the start of the theater test, adults were given consent forms to read and sign. Research staff met individually with youth to review and sign the assent form. The theater test took approximately 3 hours, and lunch and snacks were provided. Youth received $50 and caregivers received $100 for their participation in the theater test.

2.3.2. Theater test sample—Nine dyads of caregiver and youth in care (a total of 18 participants) were recruited by child welfare staff from three Washington State counties to participate in the theater test. The teens ranged in age from 11 to 15, with an average age of 13.3 years. Nine youth (three male, six female) and nine caregivers (two male, seven female) participated in the theater test. Most teens selected more than one race. Five youth reported being Latino/Hispanic, four reported being American Indian/Alaska Native, one African American, one Asian, and eight reported being White. Seven of the caregivers reported being White, one African American, and one Latino/Hispanic.

2.3.3. Theater test process and data collection—Once participants consented/ assented, ground rules for discussions were presented by the facilitator and agreed upon by participants. The process for the theater test was explained to all participants. In addition, the facilitator presented a brief introduction to the *Connecting* program and explained that the modules and activities were designed to be completed in their own home in a self-directed manner without a facilitator. Each dyad had its own work station and computer for privacy. The facilitator was responsible for the timing of each activity as well as collecting surveys and facilitating group discussions after each module.

Five activities were included in the theater test, two of which were new and three that were revised activities from the original curriculum. The five activities were selected for testing because the researchers were unsure about how they would be received in the testing phase of the study and they were the most likely to need further refinement and/or they were appreciably different from the original curriculum. Caregivers and teens participated jointly in the activities.

1. *Brag Board*—new activity (20 minutes).

   Each person was asked to complete a brag board by listing things they love to do, important traditions or events, things they are proud of, positive influences in their lives, etc. Once completed, members shared their brag boards with one another.

2. *Foster Youth Digital Stories*—new activity (35 minutes).

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This activity included watching three short video segments of youth describing their experiences in foster care. After watching each video, staff used a set of questions to guide youth and caregivers in sharing their reactions.

3. *Sharing Important Relationships*—revised activity (20 minutes).

   Caregivers and youths were asked to use a worksheet to list some of the important people in their lives and then share the list with one another. The goal was to better understand important relationships in one another's lives outside of the family with whom they are currently living and to identify those with whom they wish to stay in contact.

4. *Identifying Risks*—revised activity (25 minutes).

   Youth and caregivers together identified community-level risk factors both in their current community and the youth's previous community and how those risk factors may be reduced.

5. *Anger Thermometer*—revised activity (25 minutes).

   Youth and caregivers were asked to identify on a worksheet their personal physical and mental signals that tell them they are getting angry and behaviors that tell them their anger is getting out of control. They then shared their thermometers and discussed how each could use these signals to manage their emotions more effectively.

After each module, participants completed a written survey to reflect on critiques of the materials, content, and delivery of the intervention. Questions such as "What did you like?"; "After completing this activity how likely is it that you would continue with the program?"; and ratings of the interest level of each activity, clarity of activity instructions, comfort in completing each activity, and whether they would involve other family members in each activity were included in the survey. The caregiver and youth each filled out a feedback survey. At the end of each module, the facilitator collected the surveys and used the responses as triggers to engage participants in a short discussion regarding the relevance of the module and to identify suggestions for removing or adding material to enhance its relevance for the target population. Efforts were made by the facilitator to gather reactions from both caregivers and youth.

At the end of the theater test, the caregivers and youth had separate discussion groups to elicit their overall impressions and feedback. The purpose of this was to give both youth and caregivers an opportunity to share things which they may not have wanted to share in front of the other as well as to get overall impressions of specific activities and the experience as a whole. The final discussion groups included two questions:

1. What is the most important thing for us to know about your experience today working with these materials?
2. Is there anything that you want to share with us about your experience that you did not have an opportunity to share?

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2.3.4. Theater test results—In general, the feedback regarding the five theater-tested activities was very positive, with participants indicating that the activities were clear, interesting, and comfortable for participants. Participants indicated that they would be willing to continue with the program and to involve family members in the activities. The main exception was the *Identifying Risks* section, which seemed least understood and was the lowest ranked activity.

The results from the Theater Test Feedback Survey are shown in Table 2. The survey data from both caregivers and teens indicated that the directions for activities were understood and that there was a high degree of comfort in completing activities (generally a score of 6 or above on a 7-point scale). With the exception of the *Identifying Risks* activity, the activities were ranked at a minimum of neutral (4) and above in interest, likelihood of continuing the program, and likelihood of involving other family members. In comparison to the other activities, the ratings for the *Identifying Risks* activity indicated that the instructions were the least understood, it was the least interesting, participants felt the least comfort in doing the activity, and they were less likely to continue the program or invite other members to participate after trying the activity. The teens' feedback indicated that they were slightly more comfortable with doing the activities than their caregivers, with the exception of the *Anger Thermometer*.

2.3.5. Caregiver feedback—Caregivers described the foster youth digital stories as a "crack open moment" and a "catalyst for communication." They commented that some of the activities needed more visuals and that sometimes important context was missing. They noted that while some activities in and of themselves might be boring and convey information that they already knew about the youth, doing the activity together was helpful for eliciting interactions between the youth and caregiver to develop the relationship. Caregivers generally reported that the activities helped them to understand the youth's perspective; this was especially true for new caregivers. Overall, they felt the activities were helpful for increasing interaction and they gave the youth a venue or framework for sharing important information about themselves.

2.3.6. Youth feedback—The youth enjoyed the foster youth digital stories and said the stories gave them a positive and hopeful sense of the future because the foster youth in the digital stories, despite their challenges, were all doing well. Youth expressed messages that they'd heard from teachers and others about the negative futures of foster youth, so they expressed a sense of hopefulness after seeing the stories. Some youth described their experience of the theater test by saying it "brought my foster parent and I closer" and "I learned more about my foster parent." The youth raised concerns about how much they may or may not wish to share with their caregivers. In some cases their relationship with their caregiver was tenuous, or they expressed concerns about not wanting to get into arguments or hurt their caregivers' feelings. Some youth felt the activities might be more appropriate to do with a counselor. They indicated that there was a need for more organization to the activity entitled *Sharing Important Relationships*.

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2.4. Phase 4: Production

Once the theater test was completed, the caregiver and youth feedback was thoroughly reviewed, analyzed, and used to further adapt the materials to enhance relevance and effectiveness. For example, the feedback regarding *Identifying Risks* indicated that the instructions were not clear and the activity was confusing. In addition, it was the lowest rated of the five activities in terms of interest and "willingness to involve other family members." The activity was simplified by reducing the number of steps involved and making the chart less complicated to understand. More discussion questions were added to the activity to prompt more interaction between youth and caregivers. Likewise, feedback on the *Brag Board* resulted in some word changes suggested by participants. Some participants reported difficulty understanding the term "mental signals" on the anger thermometer, so multiple variations on how to best convey this were discussed. Eventually, the term "mental signals" was changed to "thoughts and statements." In summary, the revised curriculum involved major adaptations that were incorporated into the curriculum and program materials based on findings from the focus groups and theater test while preserving fidelity to the original evidence-based program content.

2.5. Phases 5 and 6: Topical Expert Reviews and Integration

After producing a full draft of the adapted curriculum and program materials, we asked three topical experts to review the curriculum. The selected topical experts had expertise in youth development, parenting interventions, and the child welfare system. They were provided background on the study and given the original and modified program workbooks, an adaptations chart which contained a summary of all workbook changes, and a summary of the feedback from the theater test. The topical experts were asked to provide feedback on the newly developed material aimed at building the connection between the teen and their caregiver, the overall feel and content of the program, and fidelity to the essential components of the original parenting program.

The topical experts provided the requested feedback, as well as other questions and comments that helped direct the researchers in further refining the intervention materials. Feedback received from the topical experts was reviewed and incorporated into the curriculum materials and planned procedures for the testing phase of the study.

3. Discussion

While most adolescents are susceptible to engaging in risky behaviors, teenagers in foster care are even more vulnerable (Ahrens et al., 2008; Carpenter et al., 2001; Courtney et al., 2005; Courtney et al., 2004; Narendorf & McMillen, 2010; Pecora et al., 2009; Pilowsky & Wu, 2006; Vaughn et al., 2007; Wall & Kohl, 2007) and have poorer physical, mental, and behavioral health than other youth in the United States (Keller et al., 2010; McMillen et al., 2005; Merikangas et al., 2010; Pilowsky & Wu, 2006; Zlotnick et al., 2012). Children involved in the foster care system are often exposed to multiple traumatic stressors that may give rise to a host of adverse behaviors and consequences into adulthood. Caregivers need tools to meet the challenges of keeping foster teens safe (Whenan et al., 2009) and providing environments that buffer the risks they face, yet there exists a dearth of preventive, cost-

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effective, evidence-based programs to support these families (Storer et al., 2012). This paper describes the systematic process used for adapting a prevention-focused, evidence-based parenting program for use with child welfare involved families. Given the shortage of available resources tailored to foster teens and their caregivers, the work to develop *Connecting* represents an important contribution to the field of practice and research.

The use of the ADAPT-ITT process (Wingood & DiClemente, 2008) led to the identification of the need to develop curriculum that establishes and strengthens the connections between teens in out-of-home care and their caregivers before the activities of the original evidence-based prevention program would be beneficial to teens and caregivers. This was crucial insight to gain early in the process and led to the most notable adaptations of the *Staying Connected with Your Teen* curriculum. The ADAPT-ITT process guided us to test these adaptations using a theater test with teens in foster care and their caregivers in order to assess the feasibility and likelihood that they would find the activities usable and useful. In fact, we learned that the connection-building activities were very welcome and critically important to helping open up dialogue between youth and their caregivers.

Building the relationship between foster youth and their relative or foster caregiver is important foundational work to attend to when children and youth are placed in out-of-home care. Research on acculturative stress (Crockett et al., 2007; Williams & Berry, 1991) may offer a theoretical framework as well as strategies for addressing the impact that placement in out-of-home care has on youths' healthy development. Immigrants, refugees, and other marginalized groups have been described as experiencing acculturative stress as they attempt assimilation into a new cultural context (Crockett et al., 2007; Gil, Vega, & Dimas, 1994; Williams & Berry, 1991). Youth within these assimilating families experience a kind of acculturation gap with their parents as a result of the perspectives and expectations of their parents that are divergent from those of the culture within which they are assimilating which puts them at increased risk of adverse outcomes (Martinez & Eddy, 2005). Exposure to divergent family cultural values and practices when a youth is placed outside of their home and family may create an experience of disconnection that is not dissimilar from that experienced by immigrants and refugees. There may be lessons to be learned from studies of those populations that may provide insight into the process of acculturative stress and potential buffers to ameliorate adverse effects that may be relevant for foster youth.

In the case of child welfare involved youth, 'cultural' adaptation necessitates including elements that address: (a) the traumatic stress that youth have experienced within their family of origin that led to them being placed outside of their home; (b) the stress associated with being placed into an unfamiliar family "culture," and often times with a family whose racial or ethnic culture is different from that of the youth; (c) their uncertainty about their current living situation and whether they will return to their family of origin or where they will find a permanent home; and (d) the added vulnerability associated with their developmental age, in this case, adolescence. Thus, the addition of digital stories to the curriculum was aimed to enhance understanding and dialogue about possible points of disconnection that the youth may be experiencing in their out-of-home placement in the hope of mitigating at least some acculturative stress. Through watching and discussing the stories of former foster youth, youth may feel a sense of acknowledgement and validation of

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their own experience. We hope that the stories and discussion will give caregivers additional insight and understanding of the kinds of experiences their foster youth carries, and provide an opportunity for the youth to feel more authentically seen and known by the caregiver. Understanding the factors that facilitate the successful navigation within a family may help clarify what may be of benefit to foster youth and their caregivers as they navigate potentially disparate backgrounds, values, and expectations. We do not yet know whether the new activities aimed at strengthening the relationship between teens and their caregivers will help them benefit from the established elements of the evidence-based program as intended. However, we have learned from preliminary assessments of our adaptations that foster youth and their caregivers seem to value this aspect of the program.

Furthermore, some of the relationship-building activities added to the *Connecting* program provide an opportunity for youth to share with their caregivers some of their history, which in turn may give them an opportunity to acknowledge traumas that have occurred. These more sensitive activities have been carefully constructed and provide guidance for caregivers regarding when to involve the child's social worker in further discussion and decisions. For example, the *Sharing Important Relationships* activity provides an opportunity for the teen to share who is important to them and who they would like to stay in touch with. In some cases, the teen may identify people with whom they are not allowed to have contact for safety reasons. The curriculum informs the caregiver of this possibility and notes this may be a sensitive topic that could benefit from a conversation with the teen's social worker before any commitments can be made regarding maintaining these types of connections. Further research is needed to explore the extent to which relationship-building activities and the establishment of connections with foster and relative caregivers mitigate traumatic and acculturative stress.

In reviewing challenges of adapting programs for use in the child welfare system, Spencer et al. (2010) reiterated the importance of empirically testing the impact of mentoring programs with foster youth rather than extrapolating findings from other youth populations. This is also a crucial consideration for adaptations of parenting programs for use with youth in foster care. There are also a variety of challenges related to conducting rigorous evaluations of child welfare interventions to ensure appropriateness and effectiveness of adaptation efforts. Experimental evaluations of interventions in child welfare settings are rare (Kessler, Gira, & Poertner, 2005; Wulczyn, Barth, Yuan, Harden, & Landsverk, 2005). Some challenges to conducting rigorous evaluations in child welfare settings include complex permission processes needed for youth participation, issues of confidentiality, difficulty in obtaining large sample sizes, ethical issues regarding withholding treatment in control groups, and attrition due to placement changes, school changes, and movement into and out of foster care (Maher et al., 2009; Pecora, McAuley, & Rose, 2006). Another challenge of adapting interventions for use in child welfare is related to the high rate of staff turnover. Adapting interventions that will work despite changing implementers is an important adaptation as well as dissemination consideration (D. P. Fox, Gottfredson, Kumpfer, & Beatty, 2004). A number of these challenges applied to the current phase of the study, and we employed a variety of strategies to overcome these obstacles. First, we have been fortunate to have champions within the leadership of the public child welfare system in the

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regions where the study is being conducted. These partnerships were forged prior to submission of the grant proposal that funds this work and included a nominal amount of support for their assistance with identifying potential participants and navigating the complex permission processes and confidentiality constraints required with this vulnerable population of children and families. We have sought the input, advice, and assistance of our child welfare system partners and we have benefitted greatly by having a staff member as part of our research team. Working in partnership with child welfare staff, stakeholders, and clients has been critical to the successful adaptation of this evidence-based curriculum within the public child welfare setting.

The next phase of the study examines program usability, fidelity, feasibility, and tests the *Connecting* intervention to determine whether it has short-term effects on improving family management practices, family conflict, family bonding, and favorable attitudes toward drug use and other risky behaviors, and long-term effects on reducing substance use, delinquency, violence, and risky sexual behavior. If found to prevent these adverse outcomes, the *Connecting* program has the potential to fill an important gap in preventive programming for a highly vulnerable population, foster teens and their caregivers.

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Highlights

- Uses ADAPT-ITT process to systematically adapt a prevention program for foster teens
- Program focuses on strengthening connection between foster teen and caregiver
- Teens and caregivers find the program interesting and helpful
- Program acts as a “catalyst for communication”
- Adapted program is being piloted in waitlist controlled trial (results not shown)

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Table 1

The ADAPT-ITT Process

Phase	Methodology	Version
Assessment	• Assess new target population; conduct 9 focus groups with former foster youth aged 18 – 21 (n = 20), foster parents (n = 16), and child welfare agency staff (n = 27); analyze results (Storer et al. 2012)	Original
Decision	• Decide how *Staying Connected with Your Teen* needs to be adapted for this population	Revision 1
Administration	• Administer theater test with 9 caregiver/foster youth dyads (new target population) to gather additional feedback on revised program; analyze results	Revision 1
Production	• Produce second revision of the adapted program, incorporating feedback from the theater test	Revision 2
Topical Expert Review	Collect additional feedback from topical experts	Revision 2
Integration	• Integrate revisions from topical experts	Revision 3
Training	• Train staff to implement the program	Revision 3
Testing	• Test the adapted program as part of a randomized waitlist-controlled trial with 60 caregiver/foster youth dyads	Revision 3
	• Additional revisions made to the program structure based upon feedback from families	
	• Analyze results	Revision 4

Table 2

Theater Test Feedback Survey Data

	Likely to continue with program Scale 1–7[*]	Material interesting Scale 1–7	Comfort in doing activity Scale 1–7	Likely to involve other family members Scale 1–7	Understood what to do Yes or No
Brag Board					
Caregiver [**]	6.0	4.7	6.1	5.6	7 yes, 1 no
Teen [**]	4.6	5.0	6.25	5.4	8 yes
Foster Youth Digital Stories					
Caregiver	5.6	5.8	6.1	5.3	8 yes, 1 NA
Teen	5.8	5.4	6.3	5.0	7 yes, 2 "kinda"
Sharing Important Relationships					
Caregiver	5.0	4.3	6.1	5.1	8 yes, 1 NA
Teen	6.2	5.3	6.4	4.8	7 yes, 2 NA
Identifying Risks					
Caregiver	4.4	3.1	5.1	4.0	4 yes, 4 no, 1 NA
Teen	5.0	4.8	6.1	3.8	5 yes, 1 no, 3 "sorta"
Anger Thermometer					
Caregiver	6.0	5.4	6.5	5.8	7 yes, 2 NA
Teen	5.7	4.8	6.4	4.6	7 "kinda", 2 NA

[*] verage score on scale of 1 – 7. Scales were ordered 1 to 7, with 4 being neutral. Very unlikely to very likely, not interesting to very interesting, very uncomfortable to very comfortable

[**] For the first activity. Brag Board: there were 16 participants (8 caregivers and 8 teens). Another dyad arrived after the first activity, bringing the total for the last four activities to 18 (9 caregivers and 9 teens). N = 18

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