USING PLAY TO CULTIVATE RESILIENCE WITHIN RESOURCE FAMILIES: AN OCCUPATIONAL THERAPY-BASED COMMUNITY PROGRAM

by

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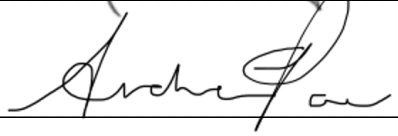
ANDREA POE 

Abstract

The child welfare system has struggled to meet the mental health needs of displaced youth and parents who accept the role of fostering, contributing to failed placements and a continued shortage in resource parents. A lack of quantitative evidence to support occupational therapy's legitimate role in addressing mental health in this setting inhibits progress in improving a struggling system. A quasi-experimental pilot study was completed to ascertain the potential for a novel occupational therapy community program to improve placement outcomes. A single group of five resource parents completed a pretest and posttest to determine if the program succeeded in decreasing their parenting stress levels and increasing factors of resilience within their families. The results showed a decrease in stress levels between the pretest and posttest for the Difficult Child subscale scores, $t(4) = -1.82$, $p = .07$, $d = -0.82$, CI 95% $[-\infty, 0.09]$, in addition to the Total Stress scores, $t(4) = -1.68$, $p = .08$, $d = -0.75$, CI 95% $[-\infty, 0.13]$, of the Parenting Stress Index, Fourth Edition Short Form. A significant increase in self-reported confidence regarding parents' ability to engage in meaningful activities with their children, $t(4) = 2.14$, $p = .05$, $d = 0.96$, CI 95% $[0.002, \infty]$, and their positive reactions to the program indicate strong potential for a similar occupational therapy program to increase resilience factors within resource families.

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Dedication

I want to thank my friends and family, especially my husband and daughter, for their love, support, and reminding me how to play in the midst of long hours of stressful work. Finally, I dedicate this project to my brothers and sister.

Introduction

An essential purpose of foster, or resource, families is to assist in supporting optimal development of youth to facilitate their successful transition into adulthood with self-sufficiency and resilience. This task becomes more difficult for resource families who are not well-prepared and supported to address foster children's needs accompanying their mental health issues caused by trauma (Cooley et al., 2017). The absence of foster children's healthy attachment to a caregiver increases risks of behavioral and emotional issues which often lasts into adulthood (Carlson, 1998; Crittenden, 1995; Dozier et al., 2008; Winsper et al., 2012,, as cited in Foran et al., 2020). Despite the importance of stable family environments for the support of mental health for vulnerable youth in foster care, there are an insufficient number of recruited resource parents prepared to handle the challenges of fostering within the current system due to a lack of support (Cook et al., 2003; Cooley et al., 2017; Masten & Barnes; 2018).

The success of resource parents is primarily supported through programs intended to increase parental competency (Vanschoonlandt et al., 2013, as cited in Cooley et al., 2017). However, Cooley et al. (2017) revealed that the foster care system as a whole was lacking in its competency support and related programs provided to resource parents. Parents remarked on the training services they received for addressing behavior issues among foster children but felt that it was not sufficient in covering the type of experiences encountered within their fostering role (2017). This deficit in family support contributes to an additional gap in mental health support for foster children who are the most vulnerable (Joint Legislative Audit and Review Commission [JLARC], 2018; Virginia Department of Social Services, 2022).

An additional barrier exists in the expansion of support provided to foster families. Though occupational therapy involves a background in pediatric, adult, and group treatment for

mental, emotional, and behavioral dysfunctions, it is not explicitly recognized as a viable avenue for treating mental health challenges in United States child welfare settings. Therefore, it is an underused resource for foster families to develop strategies to overcome their unique challenges.

Many challenges exist for parents who embark on the journey of fostering children who have been temporarily or permanently removed from their previous family. Challenges for resource parents may vary between child welfare agencies, but a few characteristics remain the same. These characteristics include management of foster children's mental health issues, developing a consistent daily routine, trying to navigate the complex system of child welfare, and advocating for foster children and themselves (Cooley et al., 2017; Helton et al., 2018; Lietz et al., 2016). There are an insufficient number of resource parents willing to accept these challenges for various reasons embedded in the complexity of the child welfare system, thereby negatively impacting life outcomes for vulnerable youth (Lietz et al., 2016). Understanding how best to address contributing factors of low recruitment and retention of resource parents involves dissection of the existing resources provided by child welfare agencies and exploration of novel, supportive, programs to cultivate resilience within resource families.

Literature Review

Resilience in Foster Care

In their synthesis of previous research on resilience, Masten and Barnes (2018) looked beyond trauma-informed care training for promoting positive family outcomes. They proposed "resilience-informed care" to allow for families to build upon strengths by highlighting the remarkable methods they used to overcome adversity (2018, p. 10). *Resilience* may be defined as a system's, individual's, or group's ability to adapt through life events that threaten the functioning, health, or safety of that system, individual, or group (Masten & Barnes, 2018). The

definitions of resilience have varied over the last several decades and disciplines. The definition changed when observed through the lens of developmental systems theory as it applies to children and their adverse life experiences, identifying it as a dynamic process influenced by multiple factors over time (Lietz et al., 2016; Masten, 2018, as cited in Masten & Barnes, 2018; Walsh, 2021). Factors of resilience were found to be equally dynamic and similar whether looking at individual characteristics of children or the family as a whole (Lietz et al. 2016; Masten & Barnes, 2018). Among these common factors were development of family roles, routines, and rituals in addition to self-regulation and meaningful social interactions within the family (Masten & Barnes, 2018). Masten (2011, 2014, 2015) conceptualized resilience intervention as addressing risk factors, collecting supports, and tapping into body functions and performance skills (as cited in Masten & Barnes, 2018). For the development of a resilience program for resource families, the following elements may be included: 1) reducing the factors contributing to multiplicity of placements; 2) increasing mental health support for resource families to be able to adapt to challenges; and 3) tapping into adaptive systems in order to build upon supportive skills, such as self-regulation.

Cook et al. (2003, as cited in Cook et al., 2003) developed one conceptual framework of resilience factors from a systems perspective called “ARC” (attachment, regulatory capacities, and competency). From this perspective, a community program for resource parents to increase family resilience includes building secure attachments between the resource parents and foster children, improving self-regulation, and increasing parenting competency (2003). ARC further illustrates the methods of enhancing secure attachment, including the aforementioned establishment of family roles, routines, and rituals (2003). Resource parents are encouraged to model adaptive coping behaviors and emphasize achievements rather than deficits with increased

parental awareness and response to a child's affect in place of the child's undesired behavior (2003). Cook et al. (2003) emphasized education and active, expressive play for building autonomy, self-awareness, and emotional regulation as factors of family resilience (as cited in Cook et al., 2003).

Roles, Routines, and Rituals

Multiple sources echo the importance of family roles, routines, and rituals in a nurturing foster family. When looking at the attributes of well-functioning foster families, Lietz et al. (2016) found that the process of resilience involved five dynamic phases of coping and adaptation starting with the basic level of survival and advanced incrementally through phases of adjustment, acceptance, growing stronger, and finally, helping others. Participants emphasized the importance of social support and connectedness within the family and community, both influencing each other. These, in turn, contribute to reinforcement of family roles, routines, and an important sense of meaning and purpose through family rituals (Cooley et al., 2017; Lietz et al., 2016). Helton et al (2018) confirmed this finding by also showing that the establishment of daily routines provides a strong foundation for building familial functional stability and enhancing children's sense of safety.

Self-Regulation

One adaptive system repeatedly mentioned with regards to intervention for resource family resilience is self-regulation (Cook et al., 2003; Masten & Barnes, 2018). The lack of self-regulation in resource families has been presented as one of the greatest sources of stress for resource parents (Cooley et al., 2017; Lietz et al., 2016). There are existing interventions which have shown promise in addressing this key element of resilience in foster children. Wood et al. (2017) conducted a pilot study with two groups of resource parents, a control group and one

having completed a brief trauma-informed training program, entitled Child-Adult Relationship Enhancement (CARE). The program involved competency in trauma and strategies for responding to behaviors, which helped replace maladaptive emotional responses between the foster parent and child with positive child-adult interactions. The results showed a clinically significant improvement in behavior on the Child Behavior Checklist (2017).

Research conducted by Cobb et al. (2014) confirmed the effectiveness of the Alert Program® when applied in a school setting. Teachers learned content to help manage their classrooms by addressing individual sensory needs impacting levels of alertness. Students demonstrated autonomy in choosing self-management strategies which they were motivated to utilize beyond the concluded intervention (2014). The simple, collaborative nature of similar programs may be a key support for positive outcomes through practical application and additional reinforcement of new coping strategies for self-regulation.

Takacs and Kassai (2019) conducted a meta-analysis of experimental and quasi-experimental study designs regarding interventions for addressing executive functioning in children which focused on behavior issues. They found that the most effective methods for improving self-regulation in children were different between typically developing children and atypically developing children. Normally developing children showed the most improvement with mindfulness interventions while the latter showed the most positive change after being taught new strategies, such as biofeedback-enhanced relaxation techniques (2019). This finding suggests that a bottom-up approach targeting sensory processing may prove more effective than cognitive behavioral methods for foster children of varying developmental levels who are coping with stress resulting from traumatic experiences.

Occupational Therapy's Valuable Role

One significant barrier to the delivery of occupational therapy mental health services within the foster care system has been the lack of public awareness and legal recognition of occupational therapy as a mental health profession. While new practice settings are slowly emerging, one contributing barrier continues to be the apparent: interprofessional overlap of roles and approaches which make it more difficult to define occupational therapy's role and perspective. To avoid this confusion, the differences between professional roles within the child welfare system should be clearly defined to delineate occupational therapy's unique contribution to promoting resilience within foster families.

Firstly, licensed social workers ensure the ethical safety and health care needs of individuals are met through assessing and responding to social situations in consideration of federal and state policies (National Association of Social Workers [NASW], 2013). They assess social factors that pose as risks or strengths for the individual or family members and apply evidence-based interventions for ensuring "educational, medical, dental, developmental, emotional, cultural, spiritual, social, recreational, and mental health needs are met" in collaboration with other providers (NASW, 2013, pp. 20-21). Only Licensed Clinical Social Workers can provide individual counseling and short-term psychotherapy to their clients (NASW, 2005). Secondly, case managers are the coordinators for children and families to facilitate delivery of needed services with similar goals in mind. The goals they set focus on the steps being taken to improve environmental conditions, secure a placement, and maintain the client's participation in educational and other relevant programs (Child Welfare Information Gateway, 2018). Goals for their foster care clients are centered around reunification or permanency.

In the state of Virginia, other professions work in collaboration with the foster care system to deliver services intended to reduce the negative impacts of trauma (National Council for Therapeutic Recreation Certification [NCTRC], n.d.). Certified Therapeutic Recreational Specialists are licensed to address foster children's participation in leisure and play by overcoming "physical, cognitive, social, emotional, and spiritual barriers" (NCTRC, n.d.). Licensed Mental Health Professionals, such as licensed counselors or psychologists, use specific methods to treat mental health issues with the goal of improving symptoms or changing specific behaviors, which impact well-being and quality of life.

Occupational therapy is the sole profession with the specific focus of goal attainment centered around performance and engagement in all of life's occupations. Like other disciplines, it uses psychosocial frames of reference but can also pull from a background of biomechanical approaches when relevant to a foster child's barriers to mental well-being and participation. Because of the numerous factors contributing to a child's performance in occupations, occupational therapy licensure and registration requires an advanced degree with practical experience within multiple settings and populations, including pediatrics and mental health. In Virginia, occupational therapists who are registered as Qualified Mental Health Professionals for children (QMHP-C) and practice under a Licensed Mental Health Professional for public insurance reimbursement, have extensive experience working in pediatric mental health (Legislative Information System, n.d.). The occupational therapist possesses comprehensive knowledge and skills in person, environment, and activity evaluation and intervention approaches to address all aspects of a person's functioning through valued occupations in addition to providing the knowledge and skills training which support valued occupations. This makes the occupational therapist a systems expert, able to determine which factors should be

addressed to achieve the desired performance outcome of foster families within the occupation of social participation. Such a perspective in treatment is effective when increasing resilience, because resilience is a system in which multiple factors contribute to a person's or group's ability to adapt through all challenges.

When looking at the efficacy of existing mental health interventions, a systematic review of traditional interventions delivered by Licensed Mental Health Professionals for foster care children showed that they were not proven to be effective (Hambrick et al., 2016). In order to measure the effectiveness of treatment, it is crucial that professionals consider the ultimate purpose of pharmacological intervention and behavioral remediation. The goals behind interventions for occupational therapy are more than ameliorating symptomatic outcomes which define only one aspect of a person's level of health. Occupational therapy goals are focused on practical, real-life application of knowledge and skills that impact quality of life, which is defined by individuals' satisfaction related to *being* and *doing* within their own unique context, environment, and attainment of life goals (Hitch & Pepin, 2020; World Health Organization, n.d.).

As supporting factors of resilience, roles, routines, rituals, and self-regulation already receive specific attention within occupational therapy practice (American Occupational Therapy Association, 2020). Well-performed occupations are the building blocks of roles, routines, and rituals and are guided by self-regulation, all promoters of resilience. Occupational therapists frequently use play to promote self-regulation among children through practical application in relevant roles within multiple settings (Wilson & Ray, 2018). Smith (2022) stressed the importance of occupational therapy's holistic approach in addressing foster children's fundamental human need to perform important activities. Lynch et al. (2017) noted that

occupational therapy services, both evidence-based and effective, could be directed toward foster children or their families.

Summary

Multiple sources assert that supportive services for resource families could and should be added or enhanced to increase resource parents' participation, improve fostering-related experiences, and promote better placement outcomes for foster children (Cooley et al., 2017; Helton et al., 2018; Lietz et al., 2016). Improved placement outcomes would directly benefit vulnerable, traumatized youth involved. Significant areas of needed support include increased communication about specific mental health needs of children; development of consistent roles, routines, and rituals; education regarding factors of resilience; and training in self-regulation (Cooley et al., 2017; Cook et al., 2003; Masten & Barnes, 2018). A deficit in mental health support for children may be buffered with supportive, responsive parenting approaches during important occupations, such as play, by increasing resilience in the midst of adversity (Cook et al., 2003; Masten & Barnes, 2018). Evidence shows that specific interventions conducted with resource parents can have a positive impact on children's social engagement by improving their self-regulation (Cobb et al., 2014; Cook et al., 2003; Wood et al., 2017). Inclusion of resilience-based elements within intervention may increase resource parents' and their children's threshold for coping with role-related stress, making resource parents more open to adoption, especially of older children (Children's Home Society of Virginia, 2018).

Though occupational therapy's rehabilitative role in clinical settings is well grounded in strong evidence and health care policy, its role in mental health is currently less established in the health care system. Quantitative evidence to support occupational therapy's direct role in the child welfare setting is lacking. No literature was found discussing delivery of occupational

therapy services within the child welfare setting nor the execution of resilience-based training programs for resource parents. This makes a holistic occupational therapy approach to social engagement within resource families worth consideration with its legitimate role in mental health to address existing gaps in supportive mental health services. The launch of a novel, occupational therapy community program may help illustrate to the public the potential benefits of occupational therapy in mental health while conceptualizing a newer framework for supportive services provided to resource families.

Theories

Several theories reinforced the design and implementation of this occupational therapy-based community program: sensory processing theories; the Developmental, Individual-Differences, and Relationship-Based Model (DIR); and the Model of Human Occupation (MOHO). These theories address the developmental needs of children in foster care by identifying underlying barriers to factors of resilience and applying a family-centered approach to intervention.

ASI and Dunn's Sensory Processing Model

Ayres' Sensory Integration Theory (ASI) is an occupational therapy framework based on neuroscience with emphasis on how stimuli is received, the process by which it is integrated, and how it impacts occupational performance (Ayres, 1979). Under this theory, it is understood that addressing existing sensory processing challenges of the child can promote a perceived sense of safety to support more advanced cognitive functioning for developing self-esteem and abstract reasoning (1979). Uncontrolled states of arousal may result from known or unknown triggers unique to a foster child's life experiences of removal or other traumatic events. By addressing

these sensory processing needs first during relevant occupations, children may become more open to forming healthy social connections through positive experiences.

Dunn continued Ayres' work using a newer model to explain the relationship between neuroscience and behavior. The model emphasizes modulation as the key function supporting self-regulation. Modulation allows an individual to prioritize sensory input based on whether it is novel or familiar, significant or unimportant, and threatening or safe (Dunn, 1997). Individuals may have inappropriate behavioral responses to stimuli. These could manifest as poor registration and sensory seeking or sensitivity and sensory avoidance behaviors based on their developed thresholds on the neurological threshold continuum. Through their sensory experiences, foster children develop their behavioral patterns based on their many unique personal factors which are influenced by the physical and social environments to which they are exposed.

DIR Model

Increased participation in regular social play in foster families may promote resilience factors, including self-regulation and parenting competency, improving long-term health outcomes for children (Cook et al., 2003; Masten & Barnes, 2018). The DIR Model, or DIR Floortime®, builds on sensory processing frames to guide play-based intervention. It assumes a child's positive social connection with a parent is a catalyst for development while an individual's sensory needs are being met in a safe environment (Greenspan, n.d.). It emphasizes the crucial role of the parent in the support of the child's development. In this model, the individual's current developmental strengths are recognized in addition to their individual sensory profile before the adult engages with them during play. The primary goal is parent-child attachment (n.d.). The use of this model in practice with trauma-informed approaches has shown

great promise in supporting development in children who have experienced trauma (Silberg & Lapin, 2017).

Play is the natural occupation of children as a product of their intrinsic motivation to develop and learn through sensory experiences (Ayres, 1979). Sensory processing theories and the DIR Model use the occupation of play for reaching developmental milestones, supporting executive functioning skills, and building social connections while considering the process rather than the outcome. This bottom-up approach to cognitive processing may prove more fruitful for children in foster care who have experienced trauma and may have difficulty self-regulating. These guiding theories are applicable to the challenge of building positive relationships between resource parents and their foster children by increasing a foster child's autonomy and sense of safety.

Model of Human Occupation

Positive parent-child connections may be nurtured through participation in regular play as a means for building stability in the child's environment by establishing roles, routines, and rituals, which may cultivate resilience (Cook et al., 2003, as cited in Cook et al., 2003; Masten & Barnes, 2018; Walsh, 2021). The Model of Human Occupation (MOHO) is a comprehensive model used by occupational therapists which considers important factors within the foster care context as it relates to the dynamic process of resilience. Emphasis is placed on the development of performance patterns for improving occupational participation, including roles, routines, and rituals (Kielhofner & Burke, 1980). This framework concludes that social connection mentioned in the DIR Model contributes to the volition of the child to participate in play and other family occupations through affect, which creates a shared meaning within the social experience (Kielhofner & Burke, 1980). These meaningful experiences are the building blocks of roles,

routines, and rituals which provide the child with a sense of stability and purpose to meet environmental demands. Based on this model, an intervention encouraging habituation of meaningful routines promotes resilience within the family (Cook et al., 2003; Kielhofner & Burke, 1980).

Within the context of foster families, emphasis should be placed on the differences in meaning regarding roles, routines, and rituals which are more likely to exist between resource parents and foster children. Affect that is produced from emotions in response to stimuli gives the event meaning to guide initial communication between the parent and child (Greenspan, 2007). Traumatic experiences of separation, abuse, and neglect influence the perceived meaning of social interactions that shape an individual's values and beliefs. An understanding of existing bias in the meaning-making process through development can increase a parent's responsiveness to a child's individual needs to form new family roles, routines, and rituals.

These theories provide a framework for the dynamic process through which individual roles are adopted to guide behavior within the family environment in support of children's development. Emphasis is placed on consideration of personal factors, including motivation and self-regulation, which influence occupational performance and family engagement. With new relationships, patterns for performing occupations within the family create consistent expectations and role identity to provide stability. Looking at family resilience through an occupational therapy lens offers a contextually sensitive, objective way for measuring resilience based on how families are able to achieve their goals of role performance through increased family engagement.

Purpose

The purpose of this novel, play-based community intervention was to promote self-regulation and establish stable roles, routines, and rituals as factors of resilience to improve parenting self-efficacy or perceived resource parent-child connection. The purpose of this exploratory research study was to determine the efficacy of an occupational therapy-based play intervention to discern and advocate for the role occupational therapy may perform in addressing mental health concerns of foster children and their families. This quasi-experimental, single-group study used a quantitative methodology in the evaluation of the community program with a pretest and posttest format.

Hypotheses

The study was guided by the following hypotheses:

1. An eight-session occupational therapy play-based group intervention will decrease parenting stress levels.
2. An eight-session occupational therapy play-based group intervention will increase factors of resilience among current resource parents.

Method

Participants

After receiving Shenandoah University and Virginia Department of Social Services IRB approval, a convenience sampling method was used to recruit resource parents who reside in 3 neighboring social services districts of Virginia. Eligible participants met the following inclusion criteria:

- Resident of Frederick County or neighboring districts (Winchester City, Warren County, and Clarke County)
- Age 21 or older

- Access to the internet using a desktop or laptop computer
- Available to participate in regular sessions a minimum of 1 time per week for 8 weeks
- Has the desire to learn more about family resilience and apply concepts and skills outside of the group sessions
- None of the parents are actively receiving family counseling services.
- Not a Treatment Foster Care home or receiving Virginia Enhanced Maintenance Assessment Tool (VEMAT) services

The following factors excluded parents from being able to participate in the group intervention:

- Residing outside of the specified areas of Virginia (Winchester City, Frederick County, and neighboring districts)
- Under the age of 21
- No access to the internet outside of a mobile device
- Participation in at least 1 session per week for 8 weeks is not feasible.
- There is no interest in learning knowledge and skills to enhance the level of care provided to foster children.
- At least one of the parents are actively receiving family counseling services.
- Home is a Treatment Foster Care home or receiving VEMAT (Virginia Enhanced Maintenance Assessment Tool) services

A recruitment email was sent by the local department of social services Foster Care Training and Recruitment Program Coordinator to 11 resource parents meeting the inclusion criteria. Participants declared their consent by signing the consent form provided via email before completing a brief survey inquiring about their session delivery preferences and

availability. Participants remained anonymous to the department of social services staff by assignment of a number which was used as their identification for data collection.

Over the span of 4 weeks, eight sessions of a community play-based intervention protocol was completed by the participants. All sessions were between 30-41 minutes in duration and were delivered as pre-recorded slide presentation videos for convenience with even numbered sessions offered live over Zoom at a consistent time each week. Some activities included direct instruction of relevant concepts (e.g. trauma, affect, co-regulation, self-regulation, modulation, and play), self-reflective writing prompts, observation of children, role-playing games, implementation of self-regulation strategies, and engagement in play with family. Participants were required to complete a minimum of 1 session per week to maintain participation status. Brief quizzes were administered at the conclusion of each pre-recorded session as evidence of continued participation. Email correspondence was used between the researcher and participants to communicate responses to homework assignments and quiz questions. Subjective feedback was encouraged and provided through email, which guided decisions to decrease the number of homework prompts and communicate the whole program schedule prior to launching session content online. At the program's conclusion, participants were entered in a drawing for a $100 gift card.

Data Collection

Participants' information was collected through a digital survey inquiring about their years of experience in actively fostering a child, type of foster home, and permanency goal. Demographic information was excluded due to the smaller sample size expected. The primary instrument used to measure the outcome of the intervention was an adapted version of the Parenting Stress Index, Fourth Edition Short Form (PSI-4-SF). The short form adaptation was

chosen to simplify the survey to encourage participants' engagement while still generating a sufficient amount of data to measure self-reported parenting routines, role performance, and the efficacy of the intervention. Evidence supports the validity and reliability of the full-length PSI-4 and its shorter, 36-item version. It has been proven to detect clinically significant change in interventions with convergent validity when compared to other measures of parenting issues. A pretest link was shared via email and the survey completed prior to the first session of the protocol. Participants completed the posttest within 3-4 days after completing the final session of the protocol. Pretest and posttest survey responses were coded and entered into a data spreadsheet using JASP for difference analysis.

Results

A recruitment email was sent to 11 parents meeting the inclusion criteria, of which seven participants provided their consent and completed the pretest survey. When asked which best described their foster care home, four (57%) selected "foster family non-relative" and three (43%) selected "foster family." When describing their permanency goal, five (71%) participants selected "reunification" with a prior custodian, five (71%) participants selected "adoption" as their goal, and no participants selected "custody transfer to a relative" as their goal. Two of the seven participants dropped out of the study during the first week.

The descriptive results for the adapted version of the PSI-4-SF, shown in Table 1, include three subscale scores and the total parenting stress scores. The two participants who did not complete the intervention were excluded in this descriptive analysis for two reasons. Firstly, their PSI-4-SF scores deviated from established norms for the expected level of parenting stress, which questioned the accuracy of their responses to the survey questions and suggested defensive responding. Secondly, their participation was so limited that very little change was

expected regarding patterns of daily living or parenting stress levels specifically in response to the intervention.

Table 1

Adapted PSI-4-SF Pretest and Posttest Scores

Subscale Scores	*n*	*M*	*SD*	Minimum	Maximum
		Pretest			
PD	5	19.00	6.30	12.000	28.000
P-CDI	5	21.00	7.11	14.00	33.00
DC	5	27.60	11.95	17.00	48.00
Total	5	70.00	22.53	46.00	107.00
		Posttest			
PD	5	22.60	6.66	13.00	31.00
P-CDI	5	19.40	8.20	13.00	33.00
DC	5	23.80	9.07	14.00	38.00
Total	5	65.80	20.78	40.00	97.00

Note. This data excludes the two participants who did not complete the program. PSI-4-SF = Parenting Stress Index, Fourth Edition Short Form; PD = Parental Distress scores; P-CDI = Parent-Child Dysfunctional Interaction scores; DC = Difficult Child scores; Total = Total Stress scores.

As much of the pretest and posttest data was intervallic data from Likert Scale questions, a Student's Paired Samples T-Test was utilized for within groups difference analyses due to a normal distribution of the data based upon non-significant Shapiro-Wilk Tests of Normality and inspections of the QQ plots. A Vovk-Sellke Maximum p Ratio (VS-MPR) analysis was employed to determine the probability the beneficial results would occur after the intervention versus no effect. Furthermore, Welch's T-Test was used to assess differences between groups based on factors which include type of foster care placement and permanency goal.

A Student's Paired Samples T-Test was conducted to compare each of the PSI-4-SF subscale scores and total scores from the pretest and posttest surveys. The results yielded a difference in the Total Stress scores between the pretest (M= 70.0 , SD = 22.53) and posttest (M= 65.8, SD = 20.78), t(4) = -1.68 , p = .08, d = -0.75, CI 95% [-∞, 0.13]. While these results were inconclusive, VS-MPR analysis indicates that the maximum possible odds in favor of H_1 over H_0 equals 1.82 times more likely for p = .08. There was a non-significant increase in total scores for Parental Distress for the pretest (M= 21.40, SD = 5.81) and posttest (M = 22.60, SD = 6.66), t(4) = 0.97 , p = .81, d = 0.43, CI 95% [-1.18, ∞]. In addition, there was a modest decrease in Parent-Child Dysfunctional Interaction stress scores from pretest (M = 21.00, SD = 7.11) to posttest (M = 19.40, SD = 8.20); however, these results were also inconclusive, t(4) = -1.17 , p = .15, d = -0.53, CI 95% [-∞, 0.30]. Finally, there was a decrease in Difficult Child subscale scores for the pre-test (M = 27.60, SD = 12.0) and the post-test (M = 23.80, SD = 9.10), t(4) = -1.82, p = .07, d = -0.82, CI 95% [-∞, 0.09]. While these results were also inconclusive, VS-MPR analysis indicated that the maximum possible odds in favor of H_1 over H_0 equals 1.96 times more likely for p = .07. Welch's T-Test revealed that there were no significant differences between

pretest and posttest outcomes of participants who plan to either adopt or not adopt in any of the dimensions.

A Student's Paired Samples T-Test was conducted to compare pretest and posttest ratings of factors of resilience, including confidence in spending quality time through meaningful activities, satisfaction in the quantity of meaningful time spent, and frequency of play with their children during the week. The analysis could not be conducted for participants' pretest and posttest ratings of predictability in daily routine due to a lack of variance. There was a statistically significant increase in participants' confidence in their ability to spend quality time with their children through meaningful activities for the pretest ($M = 3.80$, $SD = 1.30$) and the posttest ($M = 4.60$, $SD = 0.55$) with a large effect size, $t(4) = 2.14$, $p = .05$, $d = 0.96$, CI 95% $[0.002, \infty]$. VS-MPR analysis indicated that the maximum possible odds in favor of H_1 over H_0 equals 2.50 times more likely for $p = .05$. The analysis revealed no significant differences in participants' ratings of satisfaction in the quantity of meaningful time spent with family or frequency of play with their children during the week between the pretest and posttest.

Participant Feedback

Participants noted a busy schedule and family illness as some of the barriers to fulfilling the program requirements on time. The two participants who withdrew from the study stated, "...[we] had bitten off more than we could chew last week," in reference to their initial consent to participate in the study while in the process of finalizing the adoption of their child. However, the flexibility offered by the pre-recorded videos made it possible for some participants to complete more sessions than would have been possible by watching them consecutively when falling behind. One participant responded, "thank you for the recorded video, that was a very convenient format." Two of the five participants who completed the

program took advantage of optional live Zoom sessions, one attending two sessions and the other attending three sessions, and were unable to commit to additional Zoom meetings.

In general, the program content was well received and described as “helpful,” “useful,” and “wonderful.” Parents expressed their enjoyment in response to assignments challenging them to engage in play. While participating in a new activity with their child, one participant exclaimed, “it turned out very cute and fun for all!” Participants described how they were able to relate program content to their daily routine with practical application. One parent stated, “it has been a great source of discussion for us and we’ve applied some techniques.” Another said, “...we were playing… and she was having so much fun and it made me think about your class and what we have been learning.” Moreover, four of the seven participants completed every session, despite their being required to complete a minimum of four sessions (one per week) to maintain participation status.

Discussion

The purpose of this pilot study was to assess the efficacy of an evidence-based occupational therapy approach to increasing factors of resilience among resource families within the child welfare system. An eight-session occupational therapy play-based group intervention was predicted to decrease parenting stress. Though the analysis results were inconclusive, there was a visible decrease in stress levels which were note-worthy between the pretest and posttest for the Difficult Child and Parent-Child Dysfunctional Interaction subscale scores and the Total Stress scores with a moderate to large effect size, each of which were supported by their respective Bayes Factor bound. The slight increase in Parental Distress scores was not significant and likely due to other contextual factors impacting parental stress. However, the results showed

the potential for beneficial outcomes in parenting stress levels, which can influence parents' ability to accept and cope with parenting challenges and impact their permanency goals.

It was predicted that eight-sessions of an occupational therapy play-based group intervention would increase factors of resilience among current resource parents. Factors of resilience included self-rated consistency in daily routine, parents' confidence in spending quality time with their children through meaningful activities, quantity of meaningful time spent with family, and frequency of play during the week. After four weeks of intervention, the pretest and posttest results indicated no significant changes in parents' routines of meaningful time spent with their family during play or their level of satisfaction. This lack of change may have been due to the large quantity of content delivered in a shorter span of time than would be needed for participants to begin to make changes in their daily routine. Other factors unique to each family's situation could easily have influenced their ability to make changes to their patterns of performing play with their children. The online method of delivery of content, though convenient, may have impacted how much participants were able to understand and apply important concepts to their specific context at home. However, results showed a significant increase in parents' levels of confidence in spending quality time through meaningful activities with their children, demonstrating one positive outcome which precedes the process of adapting family routines to meet the demands of parenting.

Results from this pilot study support the conclusions reached in other studies regarding interventions focusing on trauma competency, responsive parenting, and behavior strategies to assist with self-regulation (Cobb et al., 2014; Wood et al., 2017). However, the limited scope and results of this study reflects the existing need to increase our understanding of family resilience and its contributing factors of roles, routines, and rituals within the family. Because of the

dynamic and contingent nature of resilience, further exploration is needed regarding the best approach to addressing factors of resilience. Despite the limited research available regarding occupational therapy's active role in the child welfare system, this pilot study confirms that a play-based occupational therapy group intervention has merit in addressing mental health concerns negatively impacting resilience within resource families.

This program demonstrated a new framework for service delivery that may be preventive and supportive of resource families' permanency goals. Because of specific conclusions which may be drawn from the individual subscales of the PSI-4-SF, this instrument may offer a valid method for evaluation or reevaluation of the mental health status of resource parents. This proactive, evaluative approach may catch early signs of dysfunction and stress that run undetected by parents before it results in a failed placement for their child. Additionally, occupational therapists or other members of a treatment team could use scores to guide their direct interventions and recommendations for seeking additional family support before it is too late to address.

Limitations

There were some limitations to note regarding this pilot study. Due to the small sample size and 28.6% rate of attrition, the results of this study may not be generalized among all resource parents. The parents who were unable to complete the content in this program may be similar to other parents who, despite needing additional supportive services, feel overwhelmed by the amount of extra time and energy required to explore resources or complete educational programs. For this very reason, individualized occupational therapy services may represent an even more practical solution to barriers in child-parent connections by applying concepts addressed in this program to a family's regular routine within the home.

Due to the regulations placed on the recruitment of participants, parents from treatment resource families and receiving additional support through VEMAT services were not included in this study. It was assumed that their parenting-related stress levels would be significantly higher than non-treatment families due to the increased demands of their role. Consequently, the study may have unnecessarily increased their parenting stress levels, despite the possibility they may have benefited more from the program than non-treatment resource families. Future research should include a larger, more randomized sample of placement types for fostered youth, including treatment resource families and kinship care.

The duration of implementation and the method of content delivery were limited for this pilot study. Future implementation of a similar program should consider best practice in the frequency of sessions, session durations, and duration of the whole protocol. It should also be considered if live sessions online or in-person influence resource parents' ability to make changes in their routine to nurture their relationship with their children. A long-term follow-up would be beneficial to track the placement outcomes for families who participated in the program.

Conclusion

An occupational therapy play-based group intervention for resource parents may help to bolster factors of resilience within families by promoting competence and skills in responsive parenting and facilitating meaningful, playful activities among family members. The intervention shows promise in increasing parents' ability to manage stress levels related to their child's behavior, improving parent-child interactions, and increasing parents' self-perceived confidence in engaging in meaningful activities with their child. The results of this pilot study help to reaffirm occupational therapy's role in mental health and suggest the beneficial outcomes of its

practical approach through interprofessional collaboration with state and local child welfare agencies.

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