Using Play to Cultivate Resilience Within Resource Families: An Occupational Therapy-Based Community Program

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Abstract

The child welfare system has struggled to meet the mental health needs of youth in foster care and their families, 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. Though inconclusive, the results showed a decrease in stress levels between the pretest and posttest for the Difficult Child subscale scores, t(4) = -1.82, = .07, d = -0.82, CI 95% [- ∞ , 0.09], in addition to the Total Stress scores, t(4) = -1.68, p = .08, d = -0.75, CI 95% [- ∞ , 0.13], of the Parenting Stress Index, Fourth Edition Short Form. However, 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, ∞]. Results of the pilot study indicate potential for a similar occupational therapy program to increase resilience factors within foster families.

Keywords: foster care, resource families, foster parenting, responsive parenting, family resilience, child resilience, family play

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 a stable family environment, 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 (Cooley et al., 2017; Masten & Barnes; 2018).

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). In addition to management of foster children's mental health issues, challenges among resource families include 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). The Joint Legislative Audit and Review

Commission (2018) acknowledged the gap in overall support for resource families in contributing to poor placement outcomes in Virginia (Virginia Department of Social Services, 2022).

An additional barrier exists in the expansion of support provided to resource 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, occupational therapy is an underused service for resource families. The following literature review guided the development of a novel occupational therapy program by exploring factors of resilience and how they align with occupational therapy's role and practice methods.

Literature Review

Factors of 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 & 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). However, 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).

Multiple sources echo the importance of family roles, routines, and rituals in a nurturing resource family. Lietz et al. (2016) found that resource parents emphasize 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.

Occupational Therapy's Valuable Role

Factors of resilience already receive specific attention within occupational therapy practice because occupations are the building blocks of roles, routines, and rituals promoted through self-regulation (American Occupational Therapy Association, 2020). 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. One contributing factor continues to be the 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. Quality of life 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.).

Guiding Interventions for a Play-Based Program

Studies support the effectiveness of existing occupational therapy approaches in addressing self-regulation and parent-child connection as key elements of resilience. Through their meta-analysis of experimental and quasi-experimental studies, Takacs and Kassai (2019) found 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 some foster children who are coping with stress resulting from traumatic experiences. Occupational therapy considers varying developmental levels and often uses bottom-up approaches to help an individual begin to feel safe and in control within their environment.

A systematic review of cognitive and occupation-based interventions suggested that traditional occupational therapy approaches helped children improve their ability to self-regulate (Pfeiffer et al., 2018). Among these interventions was the Alert Program®, a widely recognized program addressing sensory processing. Though considered a cognitive intervention, this method also taps into the bottom-up approach by changing sensory input in response to the child's current state of arousal. Through this intervention, parents learned more about their children's sensory needs while promoting their child's autonomy, self-awareness, and control of externalizing behavioral responses at home (2018).

Occupational therapists frequently use play as an effective means to promote self-regulation among children through practical application in relevant roles within multiple settings (Wilson & Ray, 2018). Evidence suggests increased participation in regular social play within resource families may promote resilience factors, including self-regulation and parenting competency, improving long-term health outcomes for children (Greenspan, 2007; Masten & Barnes, 2018; Pfeiffer et al., 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 (Greenspan, 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).

Summary

Multiple sources assert that supportive services for resource families could and should be added or enhanced to improve resource parents' fostering-related experiences and promote better placement outcomes for foster children (Cooley et al., 2017; Helton et al., 2018; Lietz et al., 2016). 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; Pfeiffer et al., 2018). 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.

To address the existing gaps in mental health services and research, a novel, occupational therapy community program for resource parents was developed to include education and training centered around play. Play served as the means as well as the end goal for building parent-child connections, supporting development, and building structure in daily life. The educational program addressed areas of needed support, including education regarding developmental and sensory needs of foster children; development of consistent roles, routines, and rituals; education regarding factors of resilience; and training in self-regulation (Cooley et al., 2017; Masten & Barnes, 2018).

Purpose

The purpose of this pilot study was to explore 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.

Methods

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 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 36-item version was chosen to encourage participants' engagement. Evidence supports strong internal consistency for the domains and subscales of the PSI-4 and the PSI-4-SF with reliability coefficients of .96 and about .90 respectively (Abidin, 2012). The PSI-4 and PSI-4-SF are used in multiple countries with norm-referenced scores. The PSI-4 and PSI-4-SF stress scores have shown a strong correlation (r = .98). Four separate Likert scale questions were added to the survey to include specific measures of factors of resilience: self- reported establishment of routines, confidence in their own ability to engage in meaningful activities with their child, satisfaction with meaningful time spent with family members, and frequency of play with all family members.

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 "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.

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Subscale Scores	n	М	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

Table 1

Adapted PSI-4-SF Pretest and Posttest Scores

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 using. A *p* value $\leq .05$ was considered statistically significant. 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 indicated that the maximum possible odds in favor of H₁ over H₀ 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, the maximum possible odds in favor of H₁ over H₀ 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, ∞]. VS-MPR analysis indicates that the maximum possible odds in favor of H₁ over H₀ 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.

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 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. 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 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 statistically significant increase in parents' levels of confidence in spending quality time through meaningful activities with their children. This positive outcome precedes development of the roles, routines, and rituals that increase family resilience.

Results from this pilot study only suggest the same conclusions reached in other studies regarding interventions focusing on trauma competency, responsive parenting, and behavior strategies to assist with self-regulation (Pfeiffer et al., 2018). However, the limited scope and results of this study confirm 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. However, the promising results of this pilot study confirm that a play-based occupational therapy group intervention warrants further exploration to address 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. The individual subscales of the PSI-4-SF may offer an informative and efficient method for evaluation or reevaluation of the mental health status of resource parents who are fostering children between ages one month and 12 years. 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 participants in this study were fostering children within the age bracket recommended for the PSI-4-SF. However, future studies involving resource parents fostering adolescence should consider other standardized measures of parenting stress levels.

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 results show that a similar program has the potential to increase parents' ability to manage stress levels related to their child's behavior and improve parent-child interactions. There is a significant chance a similar program could increase parents' self-perceived confidence in engaging in meaningful activities with their child through play. 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.

References

- Abidin, R. R. (2012). Parenting Stress Index, Fourth Edition (PSI-4). Psychological Assessment Resources. American Occupational Therapy Association. (2020). Occupational therapy practice framework: Domain and process (4th ed.) [PDF file]. The American Journal of Occupational Therapy, 74(Suppl. 2), 7412410010. https://doi.org/10.5014/ajot.2020.74S2001
- Child Welfare Information Gateway. (2018). Case planning for families involved with the child *welfare agencies* [PDF file]. Department of Health and Human Services, Children's Bureau. Retrieved March 17, 2022, from https://www.childwelfare.gov/pubPDFs/caseplanning.pdf
- Children's Home Society of Virginia. (2018, May 23). Why is Virginia ranked nearly last for youth aging out of foster care... and what can we do to change the paradigm? [Blog]. https://chsva.org/blog/virginia-ranked-nearly-last-youth-aging-foster-care/
- Cooley, M. E., Thompson, H. M., & Wojciak, A. S. (2017). Risk, resilience, and complexity: Experiences of foster parents. *Children and Youth Services Review*, *76*, 35-41. https://doi.org/10.1016/j. childyouth.2017.02.030
- Foran, H. M., Fraude, I., Kubb, C., & Wamboldt, M. Z. (2020). Assessment of the parent-child relationship. In K. S Wampler & L. M. McWey (Eds.), *The handbook of systemic family therapy: Volume 2.* John Wiley & Sons Ltd.
- Greenspan, S. I. (n.d.). Floortime: What it really is, and what it isn't [PDF file]. https://solaristest.files.wordpress.com/2015/02/whatfloortimeisandisnot.pdf
- Greenspan, S. I. (2007). Levels of infant-caregiver interactions and the DIR Model: Implications for the development of signal affects, the regulation of mood and behavior, the formation of a sense of self, the creation of internal representation, and the construct of defenses and character structure. *Journal of Infant, Child, and Adolescent Psychotherapy, 6*(3), 174-210. https://doi.org/10.1080/15289160701657662

Hambrick, E. P., Oppenheim-Weller, S., N'zi, A. M. (2016, November). Mental health interventions for chil-

dren in foster care: A systematic review. *Children and Youth Services Review, 70*, 65-77. https://doi. org/10.1016/j.childyouth.2016.09.002

- Helton, J. J., Schreiber, J. C., Wiley, J., & Schweitzer, R. (2018). Finding a routine that works: A mixed methods study of foster parents. *Child & Family Social Work, 23*, 248-255. https://doi.org/10.1111/cfs.12412
- Hitch, D. & Pepin, G. (2020). Doing, being, becoming, and belonging at the heart of occupational therapy: An analysis of theoretical ways of knowing [PDF file]. *Scandinavian Journal of Occupational Therapy, 28*(1), 13-25. https://doi.org/10.1080/11038128.2020.1726454
- Joint Legislative Audit and Review Commission. (2018). *Improving Virginia's foster care system* [PDF file]. http://jlarc.virginia.gov/pdfs/reports/Rpt513-2.pdf
- Legislative Information System. (n.d.). Administrative Code: 12VAC35-105-20. Definitions *and units of measurement*. Virginia Law. https://law.lis.virginia.gov/admincode/title12/agency35/chapter105/sec-tion20/
- Lietz, C. A., Julien-CHinn, F. J., Piel, M. H. (2016). Cultivating resilience in families who foster: Understanding how families cope and adapt over time [PDF file]. *Family Process*, *55*(4), 660-672. https://doi. org/10.1111/famp.12239
- Lynch, A., Ashcraft, R., Paul-Ward, A, Tekell, L., Salamat, A., & Schefkind, S. (2017). Occupational therapy's role in mental health promotion, prevention, & intervention with children and youth: Foster care [PDF file]. American Occupational Therapy Association. https://www.aota.org/~/media/Corporate/ Files/Practice/Children/SchoolMHToolkit/Foster-Care-Info-Sheet-20170320.pdf
- Masten, A. S. & Barnes, A. J. (2018). Resilience in children: Developmental perspectives [PDF file]. *Children, 5*(7), 98. https://doi.org/10.3390/children5070098
- National Association of Social Workers. (2005). *NASW standards for clinical social work in social work practice* [PDF file]. https://www.socialworkers.org/LinkClick.aspx?fileticket=YOg4qdefLBE%3D&portalid=0
- National Association of Social Workers. (2013). *NASW standards for social work practice in child welfare* [PDF file]. https://www.socialworkers.org/LinkClick.aspx?fileticket=_Flu_UDcEac%3D&portalid=0
- National Council for Therapeutic Recreation Certification. (n.d.). *NCTRC Certification Standards: Information for the Certified Recreation Specialist and new applicants* [PDF file]. Retrieved March 13, 2022, from https://www.nctrc.org/wp-content/uploads/2019/08/CertificationStandards.pdf
- Pfeiffer, B., Clark, G.F., & Arbesman, M. (2018). Effectiveness of cognitive and occupation-based interventions for children with challenges in sensory processing and integration: A systematic review. *The Journal of Occupational Therapy*, 72(1), 7201190020p1–7201190020p9. https://doi.org/10.5014/ ajot.2018.028233
- Silberg, J. L. & Lapin, C. S. (2017). Expanding our toolkit through collaboration: DIR/Floortimeand dissociation-informed trauma therapy for children. *Frontiers in the Psychotherapy of Trauma and Dissociation, 1*(1), 45-64. DOI:10.46716/ftpd.2017.0005
- Smith, M. N. (2022). Occupational therapy's role in the foster care system [PDF file]. *The Open Journal of Occupational Therapy*, *10*(1), 1-6. https://doi.org/10.15453/2168-6408.1850
- Takacs, Z. K., & Kassai, R. (2019). The efficacy of different interventions to foster children's executive function skills: A series of meta-analyses. *Psychological Bulletin, 145*(7), 653-697. http://dx.doi.org/10.1037/bul0000195
- Virginia Department of Social Services. (2022d, March 1). *Snapshot of children in foster care in Virginia* [PDF file]. Retrieved March 25, 2022, from https://www.dss.virginia.gov/files/about/reports/children/ foster_care/2022/monthly_snapshot/Snapshot_Children_In_Foster_Care_-_20220301.pdf
- Walsh, F. (2021). Family Resilience [PDF file]. In Ungar, M., *Multisystemic resilience*. Oxford University Press. DOI:10.1093/oso/9780190095888.003.0015
- Wilson, B. J. & Ray, D. (2018, October). Child-centered play therapy: aggression, empathy, and self-regulation [PDF file]. *Journal of Counseling & Development*, 96(4), 399-409. https://doi.org/10.1002/ jcad.12222
- World Health Organization. (n.d.). WHOQOL: Measuring Quality of Life. Retrieved March 15, 2022, from https://www.who.int/tools/whoqol

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