Research in Brief

Super Parents: Preliminary Findings of a Group-Based Parenting Intervention

Currently Under Review at the Journal of Extension

Jens E. Jespersen

Graduate Research Assistant Oklahoma State University, Tulsa, Oklahoma jens.jespersen@okstate.edu

Cara D. Bosler

Research Fellow Oklahoma State University, Stillwater, Oklahoma cara.bosler@okstate.edu

Ruth S. Slocum

Licensed Clinical Social Worker Oklahoma State University, Tulsa, Oklahoma ruth.slocum@okstate.edu

Jennifer Hays-Grudo

Regents Professor Oklahoma State University, Stillwater, Oklahoma jennifer.hays.grudo@okstate.edu

Jerry Root

Project Director Oklahoma State University, Stillwater, Oklahoma jerry.root@okstate.edu

Laura Hubbs-Tait

Regents Professor Oklahoma State University, Stillwater, Oklahoma laura.hubbs@okstate.edu

Amanda S. Morris

Regents Professor Oklahoma State University, Tulsa, Oklahoma amanda.morris@okstate.edu

Introduction

Parent-child interactions and relationships have a profound influence on early child development. The first years of a child's life play a significant role in their developmental trajectory in most areas of development (Morris et al., 2017), and parents play the most crucial role in this process. According to Kim (2015), parenting is a learned skill that can be strengthened and improved through education and experience. However, often parents are not fully aware of the life-long benefits of their interactions with their children, or where to obtain education on such matters. Parents need to feel supported and competent in raising their children regardless of their own upbringing, socioeconomic status, or culture. As noted in Morris et al. (2017), support obtained through group-based parenting programs has been shown to improve parental stress and confidence. This paper introduces a group-based parenting intervention that couples the positive parenting techniques found in the Active Parenting program 1,2,3,4 Parents! (Popkin, Gard, & Montgomery, 1996) with stress reducing mindfulness techniques for parents, and brain building activities that parents can use with their children. This parenting intervention known as *Super* Parents holds great promise for Extension educators who wish to help parents and children build strong relationships and promote healthy self-regulation skills. Moreover, the Super Parents program has been adapted and updated and is now available as Active Parenting's The First Five Years (Popkin et al., 2017).

One practice included in this program that has shown promising outcomes in promoting positive parenting behavior is referred to as mindfulness. Mindfulness has been shown to help parents regulate emotions and stress, and has also been associated with positive neurological changes in the brain among adults (Hölzel et al., 2011). Mindfulness is conceptualized as the self-regulation of attention and non-evaluative acceptance of present experiences (Campbell, Thoburn, & Leonard, 2017). Mindfulness in parenting is an active process in which parents are mindful of parenting behaviors and decisions. Parents who practice mindfulness are able to focus their attention, intentionally self-regulate emotion in the context of the parent-child relationship, and remain aware of emotions for both self and child (Coatsworth, Duncan, Greenberg, & Nix, 2010). Mindfulness exercises included in the program involved activities such as controlled/deliberate breathing, where parents were instructed to take a moment to breathe deeply, regain control of their emotions, and thereby lower their stress level. Another activity called the Mind Jar, featured parents being given a jar filled with liquid and glitter. After shaking the jar, parents were shown that, just as the liquid and glitter slowly separate and settle, they are capable of separating their parenting experiences from distractions and worries.

Executive function and self-regulation skills are the mental processes that enable us to plan, focus attention, remember instructions, and perform goal-oriented behavior (Hofmann, Schmeichel, & Baddeley, 2012). Parents enrolled in the program were introduced to exercises that would enable them to practice and develop their own executive function in order to be more emotionally available in their every-day parenting. Activities included Simon Says-type games, freeze dance, and memory and attention games. Importantly, parents were given information about how these "games" help build their children's brains and encouraged to try them in their homes.

Along with practices to encourage mindfulness and develop executive function and self-regulation abilities, parents were introduced to practices of positive parenting that they could implement within their own families. Responsive, or positive, parenting has been identified as a key factor in influencing the developmental trajectory of children's executive function and social-emotional development. Theoretical frameworks have defined responsive parenting as parenting that includes the child experiencing interactions with parents in which he/she is provided consistent levels of warmth and acceptance, where the child feels accepted as a unique individual, and where the child receives consistent responses to his/her cues. Other aspects of positive parenting include the parent's responding to the child using rich language while maintaining the child's interests (Landry et al., 2011).

By emphasizing the importance of executive function in both parent and child, coupled with positive parenting techniques and mindfulness practices, the authors posit that the *Super Parents* intervention may be an effective parenting program that can be implemented by Extension educators in order to positively influence parenting attitudes, self-efficacy in parenting, parental executive function, and mindfulness. Improvement in each of these aspects is likely to prove efficacious in increasing parents' ability to nurture their relationship with their child, while aiding in the positive development of their child's executive function and social-emotional skills.

Program Overview and Implementation

Super Parents is a group-based parenting intervention that includes six interactive 2-hour sessions utilizing the Active Parenting video-based 1, 2, 3, 4 Parents! curriculum focused on positive, responsive parenting and child development. The three-session 1,2,3,4 Parents! is enhanced with content, activities, and games (for parents to play with children and on their own) focused on increasing parents' mindfulness and executive function (i.e., self-regulation, attention, working memory). The Super Parents program was implemented in three Educare schools. Educare is a high quality early childhood program (birth to 4) serving low-income families.

Super Parents was first presented over a one-year period in each of the schools by project staff who developed components of the program. These sessions were attended by parents, Educare Family Advocates and Mental Health Specialists. This served as a portion of training for the Educare staff who would continue to implement the program in future sessions. Family Advocates, their on-site supervisors, and Mental Health Specialists received additional training on the presentation and evaluation of Super Parents after attending the program as a participant. Project staff worked closely with the Family Advocates and Mental Health Specialists as they became responsible for presenting and evaluating the program after the first year. Over three years, across the three schools, the program was offered a total of eight times in English. Additionally, the curriculum was translated into Spanish and implemented by Family Advocates with one group of Spanish-speaking parents at one of the schools.

Data and Sample

In order to evaluate *Super Parents*, we collected pre- and post- group measures of parenting approaches and attitudes, perceived stress, executive function, and mindfulness on all

participants. We also collected data on parent participants three months following their last session. The sample included 68 participants (55 parents, 13 staff members; 17 Spanish-speaking; 88.2% female; 33.3% Caucasian, 22.2% African American, 33.3% Hispanic, 4.8% Native American; 80.7% biological mothers; 31.1% single-parent); 58 completed both pre- and post-test measures; 51 completed both the pre-test and three month-follow-up measures. Parents (not staff) reported on the behavior of a target child within the 0-5 age range (M age = 2.63) at all three time points. Tables 1 and 2 indicate the specific measures utilized. Participants were also asked for their impressions of the program in the post-test survey.

Table 1. Parenting constructs with measure, citations, sample items, and range of scores.

Construct	Measure	Citation	Sample item	Score Range
Positive	Active Parenting	Popkin &	"Children need	-40 - 40
Parenting	Now Survey	Mullis,1995	encouragement as	
			much as they need	
			discipline."	
Parent Self-	Parenting Self-	Dumka,	"I feel sure of myself	1 - 4
Efficacy	Agency Measure	Stoerzinger,	as a mother/father."	
		Jackson, &		
		Roosa, 1996		
Parent	Brief Behavioral	LeJeune,	"I am disorganized."	24 - 72
Executive	Rating Inventory	Beebe, Noll,	(Reverse coded)	
Functioning	of Executive	Kennedy,		
	Function	Isquith, &		
		Gioia, 2010		
Mindfulness	Freiburg	Walach,	"I am open to the	14 - 56
	Mindfulness	Buchheld,	experience of the	
	Inventory	Buttenmuller,	present moment."	
		Kleinknecht,		
		Schmidt, 2006		
Parent	Cohen Perceived	Cohen,	"In the past month,	0 - 4
Perceived	Stress Inventory	Kamarck, &	how often have you	
Stress		Mermelstein,	felt nervous or	
		1983	stressed?"	

Table 2. Child constructs with measure, citations, sample items, and range of scores.

Construct	Measure	Citation	Sample item	Score Range
Conduct	Strengths and	Goodman,	"Often loses	1 - 3
Problems	Difficulties	1997	temper."	
	Questionnaire			
Hyperactivity	Strengths and	Goodman,	"Restless,	1 - 3
	Difficulties	1997	overactive, cannot	
	Questionnaire		stay still for long."	
Prosocial	Strengths and	Goodman,	"Often offers to	1 - 3
Behavior	Difficulties	1997	help others	
	Questionnaire		(parents, teachers,	
	_		other children)."	

Results

Results of the evaluation are promising. Nearly all participants rated the overall experience of the workshop as good (21.3%) or excellent (76.6%). Participants' ratings on how applicable the program was via several items on a scale of 1 (disagree strongly) to 4 (agree strongly) were positive as well. For example, average ratings across three items: "Information was useful", "I will share the games and activities with children", and "I learned new parenting information" were 3.58, 3.71, and 3.71 respectively. When specifically asked about the best features of the program, many participants discussed similar content aspects including the mindfulness activities, learning new parenting techniques, the executive function activities, and the importance of self-care. For instance, a quote from a staff member illustrated her appreciation of the activities to use with children, "I love the information and games about how to help children develop their executive function." Additionally, a parent described how the program would impact her family, "I learned very good tips to talk with my children. It will improve my family relations."

Further, as you can see in Table 3, dependent sample t-test comparisons of pre- and post-test measures showed significant increases in positive parenting attitudes, parenting efficacy, parent mindfulness, and child prosocial behavior; and significant decreases in child conduct problems and hyperactivity. A marginal decrease in parent perceived stress was also evident.

Table 3. *T-tests comparing pretest and posttest measures.*

	Pretest		Post	Posttest		
Variable	M	SD	M	SD	N	T
Positive parenting attitudes	16.91	8.07	21.09	7.34	58	4.87***
Parenting efficacy	3.29	.54	3.47	.38	53	2.47**
Parent executive function	2.30	.31	2.33	.30	57	1.27
Parent mindfulness	40.35	6.48	41.91	6.72	57	1.68*
Parent perceived stress	1.74	.57	1.64	.57	56	-1.39 ⁺
Child conduct problems	1.40	.37	1.32	.29	45	-1.82*
Child hyperactivity	1.99	.47	1.73	.37	45	-4.19***
Child prosocial behavior	2.41	.40	2.63	.29	45	4.09***

Note: ***p < .001, **p < .01, *p < .05, *p < .06; results based on one-tailed test of significance.

Similarly, as shown in Table 4, t-tests comparing the pretest and the 3-month follow up data revealed significant increases in positive parenting attitudes, parenting efficacy, parent executive function, and child prosocial behavior; and significant decreases in parent perceived stress, child conduct problems, and child hyperactivity.

Table 4. *T-tests comparing pretest and 3-month follow-up measures.*

	Pretest		3 month Posttest			
Variable	M	SD	M	SD	N	T
Positive parenting attitudes	15.94	8.01	17.44	7.72	50	1.69*
Parenting efficacy	3.32	.63	3.59	.50	49	3.13**
Parent executive function	2.28	.34	2.40	.35	50	2.07*
Parent mindfulness	41.14	8.04	42.57	8.30	51	1.12

Parent perceived stress	1.79	.60	1.60	.62	50	-2.18*
Child conduct problems	1.40	.36	1.31	.30	51	-2.27*
Child hyperactivity	1.98	.46	1.75	.47	51	-3.71***
Child prosocial behavior	2.40	.38	2.51	.42	51	1.84*

Note: ***p < .001, **p < .01, *p < .05, *p < .10; results based on one-tailed test of significance.

Discussion

We examined the impact of the group-based parenting intervention *Super Parents* to observe changes in parenting and child outcomes. The pre-test to post-test findings suggest that after participating in the *Super Parents* program, parents were able to develop positive attitudes toward parenting, increase their feelings of efficacy in parenting, as well as enhance their ability to practice mindfulness. Among the child outcomes, the findings indicate that children of parents who participated in this group-based parenting intervention showed significant increases in prosocial behavior as well as significant decreases in child conduct problems and hyperactive behavior. As noted, multiple indicators of positive parenting increased. With observed significant increases in positive parenting attitudes, this change could potentially act as a gateway to increased use of positive parenting practices, for example, parenting efficacy and mindfulness, as observed in Table 3. Several studies have indicated that educating parents about specific parenting practices can impact their overall parenting attitudes. For example, presenting parents with information describing problems associated with corporal punishment can lead to parents showing less approval of such practices. (Holden et al., 2014; Taylor, McKasson, Hoy, & DeJong, 2017). In the case of the Super Parents intervention, parents learning about the beneficial outcomes of positive parenting and mindfulness techniques may have influenced overall positive parenting attitudes.

From the pre-test to the 3-month follow-up, parents demonstrated significant increases in positive parenting attitudes, parenting efficacy, and parenting executive function, along with a significant decrease in parenting stress. Like their parents, children's positive changes were significant not only at the post-test but also at the 3-month follow up: increases in prosocial behavior and decreases in child conduct problems and hyperactivity as reported by their parents. This is a promising outcome, as it shows that the positive findings gathered at the immediate post-test are also present three months later, or that these gains did not disappear over the measured period.

Despite promising findings in this study, there are several limitations to consider. First, parents were not randomized to conditions and there was no control group. This limits our ability to draw direct conclusions about effectiveness. Moreover, the data were all self-report and the sample was not particularly large. Nevertheless, this study provides initial evidence for the impact of *Super Parents* on positive parenting and child outcomes.

A key aspect of this program that will help with scalability is the utilization of the Train-the-Trainer Model. As certified Extension educators train community leaders on how to administer these types of programs, group leaders are then able to become certified and train other group leaders. This continuous training process has the potential to lead to increases in the prevalence and availability of the intervention within the community.

Conclusion

Group-based parenting programs have been shown to improve responsive parenting behavior, as well as increase parental support and elevate parents' confidence in their own parenting ability (Barlow & Stewart-Brown, 2000). Additionally, mindfulness has been shown to help parents regulate emotions and stress, and has been associated with positive neurological changes in the brain among adults (Hölzel et al., 2011). The Super Parents intervention, designed by coupling the positive parenting techniques in 1,2,3,4 Parents! with the stress reducing and cognitive skills of mindfulness and executive function, holds great promise for helping parents and children build strong relationships and healthy self-regulation skills. Our findings indicate that the Super Parents program which was designed to improve parenting attitudes, executive function, and mindfulness in parenting did have the intended positive effects on multiple parenting behaviors and child outcomes. These findings could be a basis for the implementation of other such parenting programs or trainings administered by Extension educators.

References

- Barlow, J., & Stewart-Brown, S. (2000). Behavior problems and group-based parent education programs. *Journal of Developmental and Behavioral Pediatrics*, 21(5), 256-370. doi:10.1097/00004703-200010000-00006
- Campbell, K., Thoburn, J. W., & Leonard, H. D. (2017). The mediating effects of stress on the relationship between mindfulness and parental responsiveness. *Couple and Family Psychology: Research and Practice*, 6(1), 48-59. doi:10.1037/cfp0000075
- Coatsworth, J. D., Duncan, L. G., Greenberg, M. T., & Nix, R. L. (2010). Changing parent's mindfulness, child management skills and relationship quality with their youth: Results from a randomized pilot intervention trial. *Journal of Child and Family Studies*, *19*, 203–217. doi:10.1007/s10826-009-9304-8
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24(4), 385-396. doi:10.2307/2136404
- Dumka, L. E., Stoerzinger, H. D., Jackson, K. M., & Roosa, M. W. (1996). Examination of the cross-cultural and cross-language equivalence of the Parenting Self-Agency Measure. *Family Relations*, 45(2), 216-222. doi:10.2307/585293
- Goodman, R. (1997). "The Strengths and Difficulties Questionnaire: a research note." *Journal of Child Psychology and Psychiatry* 38(5): 581-586. doi:10.1111/j.14697610.1997.tb01545.x
- Hofmann, W., Schmeichel, B. J., & Baddeley, A. D. (2012). Executive functions and self-regulation. *Trends in cognitive sciences*, 16(3), 174-180. doi:10.1016/j.tics.2012.01.006
- Holden, G. W., Brown, A. S., Baldwin, A. S., & Caderao, K. C. (2014). Research findings can change attitudes about corporal punishment. *Child Abuse and Neglect*, *38*(5), 902–908. doi:10.1016/j.chiabu.2013.10.013.
- Hölzel, B. K., Carmody, J., Vangel, M., Congleton, C., Yerramsetti, S. M., Gard, T., & Lazar, S. W. (2011). Mindfulness practice leads to increases in regional brain gray matter density. *Psychiatry Research: Neuroimaging*, *191*(1), 36-43. doi:10.1016/j.pscychresns.2010.08.006
- Kim, Y. (2014). Parenting needs as perceived by agency personnel working with parents and young children in southern Nevada. *Journal of Extension*, *54*(4), Article 4RIB4. Available at: https://www.joe.org/joe/2014august/rb4.php
- Landry, S. H., Smith, K. E., Swank, P. R., Zucker, T., Crawford, A. D., & Solari, E. F. (2012). The effects of responsive parenting intervention of parent-child interactions during shared book reading. *Developmental Psychology*, 48(4), 969-986. doi:10.1037/a0026400

- LeJeune, B., Beebe, D., Noll, J., Kennedy, L., Isquith, P., & Gioia, G. (2010). Psychometric support for an abbreviated version of the Behavior Rating Inventory of Executive Function (BRIEF) parent form. *Neuropsychology*, *16*, 182-201. doi:10.1080/09297040903352556
- Morris, A. S., Robinson, L. R., Hays-Grudo, J., Claussen, A. H., Hartwig, S. A., & Treat, A. E. (2017). Targeting parenting in early childhood: A public health approach to improve outcomes for children living in poverty. *Child Development*, 88(2), 388-397. doi:10.1111/cdev.12743
- Popkin, M. H., Gard, B., & Montgomery, M. (1996). 1 2 3 4 Parents! Parenting Children Ages 1 to 4: Leader's Guide. Atlanta, GA: Active Parenting Publishers. ISBN-10:1880283166
- Popkin, M., Morris, A. S., Slocum, R., & Hubbs-Tait, L. (2017). *Active Parenting: First Five Years*. Retrieved from https://www.activeparenting.com/First-Five-Years-of-parenting
- Taylor, C. A., McKasson, S., Hoy, G., & DeJong, W. (2017). Parents' primary professional sources of parenting advice moderate predictors of parental attitudes toward corporal punishment. *Journal of Child and Family Studies*, 26(2), 652-663. doi:10.1007/s10826-016-0586-3
- Walach, H., Buchheld, N., Buttenmuller, V., Kleinknecht, N., Schmidt, S. (2006). Measuring mindfulness: The Freiburg Mindfulness Inventory (FMI). *Personality and Individual Differences*, 40, 1543-1555. doi:10.1016/j.paid.2005.11.025

Abstract

Super Parents is a group-based parenting program targeting the parent-child relationship by teaching positive parenting behaviors (using the 1234 Parents! curriculum), executive function skills, and mindfulness. The specific aims of this study were to evaluate the effectiveness of the program by examining changes in parenting attitudes, mindfulness, executive function, parenting efficacy, stress, and child behavior. Through the use of pre- and post-measures, increases were observed in multiple positive parenting behaviors and child outcomes, along with decreases in multiple negative behaviors. These findings could be a basis for the implementation of other such parenting programs or trainings administered by Extension educators.

Keywords: child behavior, group-based parenting program, executive function, positive parenting, mindfulness