A Multi-Tiered Evaluation of the Effectiveness of the FLIP IT Parent-training Model

Submitted to:
Ohio Department of Mental Health & Addiction Services
Office of Quality, Planning, and Research
Research and Evaluation Bureau

In response to:

Family Engagement and the Management of Challenging Child Behaviors (Birth to Age 8)

Principal Investigator
Dawna-Cricket-Martita Meehan, Ph.D.
Miami University
Department of Psychology
Center for School-Based Mental Health Programs

90 N. Patterson Ave.
Oxford, OH 45056
(513) 529-4247
(513) 529-2420 fax
meehandc@miamioh.edu

Submitted: June 30, 2016

Table of Contents

History of the FLIP IT Model

In November of 2005, the Franziska Racker Centers located in Ithaca, NY hired Rachel Wagner Sperry to serve as the Project Coordinator of an innovative grant from the New York State Department of Children and Family Services to develop a training curriculum for preschool teachers (and parents) working with children who have severe behavior challenges. Rachel has a background in preschool education, a Master's in Social Work, and many years of experience in the field of Early Childhood Mental Health.

The NY grant called for initial focus groups, classroom observations, and survey data collection from teachers and parents of young children, as well as feedback from early childhood leaders, administrators, and academics. The focus group feedback showed strong trends. People all across the community shared a common concern about the increase they were seeing in challenging behavior among young children. They also shared that they often felt they had nowhere to turn when trying to solve the problem of severe behavior challenges. People unanimously requested "practical strategies that work with a variety of behaviors" and "strategies that are useable the next day and realistic." When asked what "a dream training" on this topic would include, they unanimously requested "Hands-on training with opportunities to practice and discuss real life scenarios." The community also requested easy reading resources that could be shared with teachers and parents in order to foster a "whole child" approach.

Using the focus group feedback, best practice research, and the already established Devereux Early Childhood Assessment (DECA) Program as her inspiration, Rachel began the research and collaboration necessary to develop a training curriculum that would meet the needs identified. The Devereux Center for Resilient Children agreed to allow the DECA Program research and concepts to be incorporated into the training that is now titled, "FLIP IT, Transforming Challenging Behaviors." This training provides teachers, parents, and administrators with *four supportive steps to help young children learn about their feelings, gain healthy self-control, and reduce challenging behavior.* FLIP IT is a mnemonic which stands for F – Feelings, L – Limits, I – Inquiries, and P – Prompts. The original training curriculum, including a 120-page manual and PowerPoint slide show, was finalized in November of 2006. In piloting this initial training, the feedback was overwhelmingly positive. This training provided parents and teachers with what they had asked for- it was hands on, practical, engaging, and useful.

As a result of the collaboration established between the Franziska Racker Centers and the Devereux Center for Resilient Children in 2006, the original works created under the one-year grant funding were turned over to Devereux in 2007 in an effort to advance the concept of FLIP IT and reach a larger audience. Now under the Devereux umbrella, Rachel Wagner Sperry and team continued to develop the FLIP IT concept. The original training was enhanced, a train-the-trainer was developed, reminder resources were created, an e-learning course was established, and a book entitled *FLIP IT, Transforming Challenging Behavior* was written and published in 2011. The book received a National Parenting Publication Award in 2012 and requests to translate the book have come from as far as the Czech Republic. The book and trainings have reached thousands of educators, mental health professionals, and parents in the United States and internationally.

Literature Review of Parent-training Models

In recent years, researchers and practitioners have developed skill-based training models to enhance parents' abilities to effectively manage their children's social, emotional, and behavioral wellness. In a recent meta-analysis examining 28 randomized controlled trials, parent training was significantly associated with greater improvements in child disruptive behavior compared to not receiving parent training (Michelson, Davenport, Dretzke, Barlow, & Day, 2013). The positive impact of parent training appears to have long-term impact, with families who received parent training demonstrating better outcomes at a 6 month follow-up assessment, compared to families who did not receive parent training (Kjobli & Bjornebekk, 2013). In particular, families who received parent training had more positive parenting practices, more positive disciplinary strategies, and children with fewer behavioral problems after parent training. As such, we conducted a longitudinal study to ascertain whether or not positive outcomes were maintained 6+ months following being trained in the FLIP IT model.

When providing parents with skill-based training to better manage their children's social-emotional-behavioral functioning, it is important that parents remain involved throughout the duration of the educational training process and effectively implement their skills following the completion of their training. Studies have identified risk factors that predict parental dropout from parent training, including low socioeconomic status, ethnic minority status, single parent household, and high parenting stress (Bagner & Graziano, 2012; Fernandez & Eyberg, 2009; Lavigne et al., 2010; Werba, Eyberg, Boggs, & Algina, 2006), and risk factors that can adversely impact outcomes following parent training, including mother's low educational level, low socioeconomic status, and high parenting stress (Bagner & Graziano, 2012; Lundahl, Risser, & Lovejoy, 2006; Reyno & McGrath, 2006). Conversely, low levels of parenting stress have been associated with children's ***higher*** levels of self-control, initiative, attachment, and the ability to communicate effectively, and ***lower*** levels of problematic behaviors (Bender & Carlson, 2013). As such, we included these risk and protective factors in the empirical examination of the FLIP IT parent-training program.

Researchers have examined the qualitative components that contribute to parents' abilities to successfully implement parenting skills to improve their children's social-emotional-behavioral outcomes (Holtrop, Parra-Cardona, & Forgatch, 2013). Three core phases that move parents through the process of mastering and effectively using their new parenting skills include: 1) attempting, 2) appraising, and 3) applying. First, it is important to examine how parents 'attempt' new skills (e.g., methods of learning such as role-playing, rehearsal, use of visual aids, and practicing in different situations). Second, it is important to understand how parents 'appraise' the successfulness of their attempts (e.g., is this working for my family? Can I use this strategy consistently? Does this fit with my priorities as a parent?). Finally, it is important to assess how parents 'apply' their new skills and knowledge over the long-term (e.g., regularly implement new skills, adapt/modify strategies to personal situation, use skills on an 'as needed' basis, or set aside strategies deemed unnecessary/not useful). As such, we obtained interview and focus group information from parents following their FLIP IT training session, and conducted qualitative analyses to help answer these questions and provide evidence of the effectiveness of the FLIP IT parent-training program.

Goals and Objectives of the Current Research

Despite its positive anecdotal praise and award winning, the FLIP IT curriculum had not previously undergone a longitudinal empirical evaluation to validate its ability to systematically and consistently produce positive outcomes over an extended period of time. The goal of the current study was to empirically evaluate the effectiveness of the FLIP IT parent-training program, delivered by Early Childhood Mental Health consultants/trainers to a representative group of parents from across the state of Ohio.

The primary goal of the empirical evaluation was to determine the effectiveness of the FLIP IT parent-training program to decrease negative social, emotional, and behavioral outcomes and increase positive social, emotional, and behavioral outcomes among participants' children. Based on the review of the relevant literature, parent training has been associated with positive outcomes, including more positive parenting practices, more positive disciplinary strategies and fewer disciplinary and behavioral problems among the children.

The *first objective of the primary goal* was to assess whether or not the FLIP IT parent-training program was associated with positive outcomes in each of these areas. In order to assess outcomes in these areas, we conducted quantitative analyses of caregivers' pre-test, post-test, 3-month follow-up, and 6+-month follow-up scores on the Child Behavior Checklist (to assess behavioral, emotional, and social problems in children), the Ages & Stages Questionnaire: Social Emotional (to assess social and emotional difficulties in children), the Parenting Scale (to assess parenting practices and disciplinary strategies), the Parenting Stress Index (to assess stress levels regarding the parenting practices), and the Devereux Early Childhood Assessment Preschool questionnaire (to assess resilience in children).

The *second objective of the primary goal* was to examine how caregivers 'attempt' new skills, how caregivers 'appraise' the successfulness of their attempts, and how caregivers 'apply' their new skills and knowledge over the long-term. In addition, we determined participants' satisfaction with the FLIP IT training and their desire/need for additional services (e.g., booster sessions, follow-up assistance, coaching). In order to assess these areas, we conducted qualitative analyses of caregivers' responses to focus group questions and individual caregiver phone interview questions at post-test and at 6+-month follow-up.

The secondary goal of the evaluation was to determine whether or not demographic characteristics predicted commitment to the intervention and/or outcomes following the intervention. Low socioeconomic status, ethnic minority status, single parent household, caregiver's low educational level, and high parenting stress have all been associated with dropout and poor outcomes following parenting training.

The *objective of the secondary goal* was to assess the impact that these demographic factors had on mortality (e.g., dropout) rates among caregivers who initially expressed interest in participating in the program. We conducted comparative analyses of demographic characteristics between caregivers who dropped out of the study prior to the FLIP IT parent-training program, compared to caregivers who completed the FLIP IT parent-training program; between caregivers who dropped out immediately following the training session, compared to those who completed 3-month follow-up; and between caregivers who dropped out following the 3-month follow-up, compared to those who completed 6+-month follow-up.

FLIP IT Trainings by Instructor and Region

The Ohio Department of Mental Health & Addiction Services trained the state's Early Childhood Mental Health (ECMH) consultants as instructors in the FLIP IT model. In each of Ohio's 12 service delivery areas (SDA), one or more ECMH consultants were assigned to serve that region and provide FLIP IT training to parents (and early childhood professionals). The following figure is an example of ECMH consultants' SDA coverage, although the actual number of providers and individuals who served in that capacity changed periodically throughout the course of this study (and this map is not necessarily representative of the actual individuals involved).

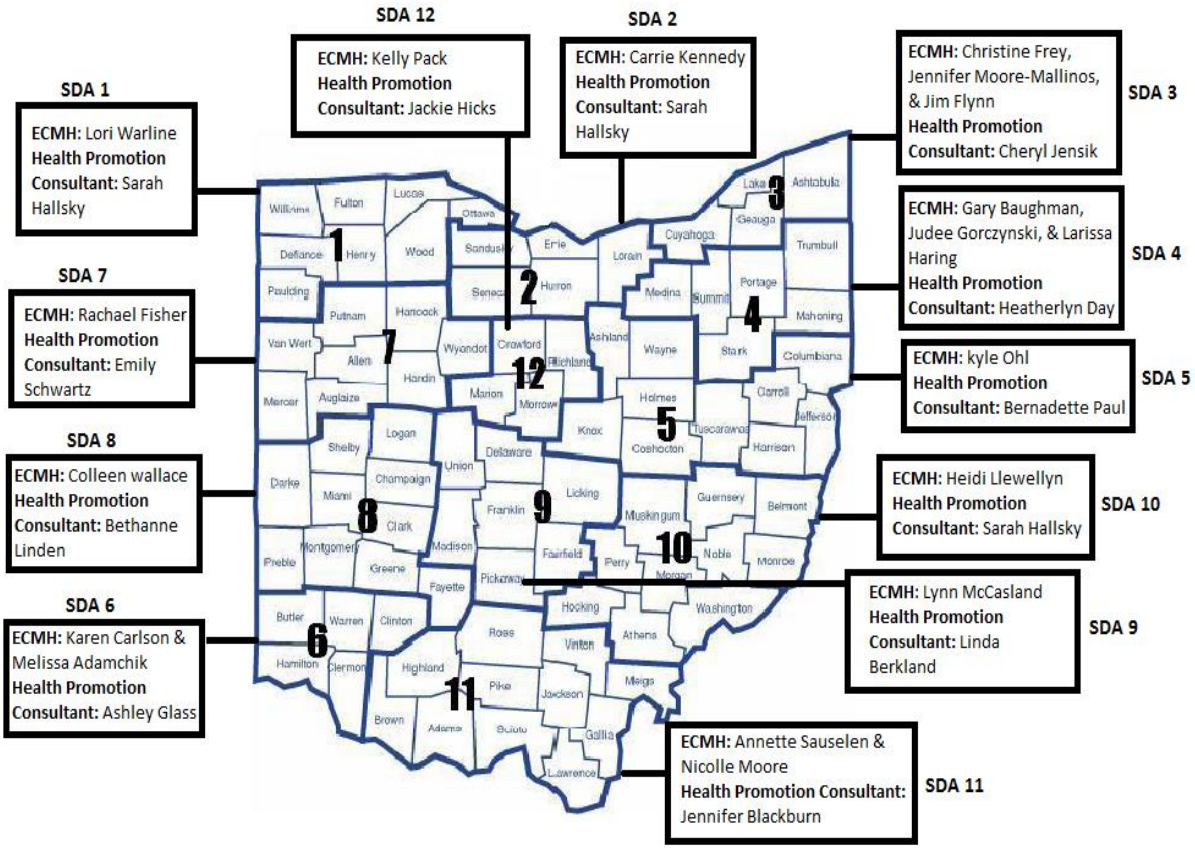
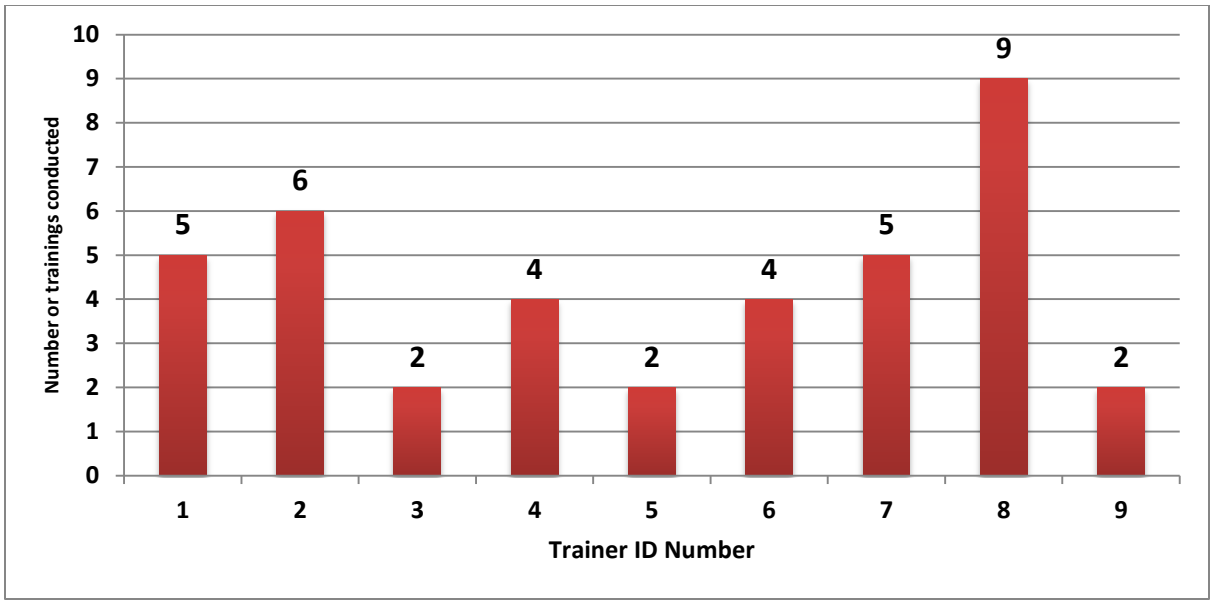


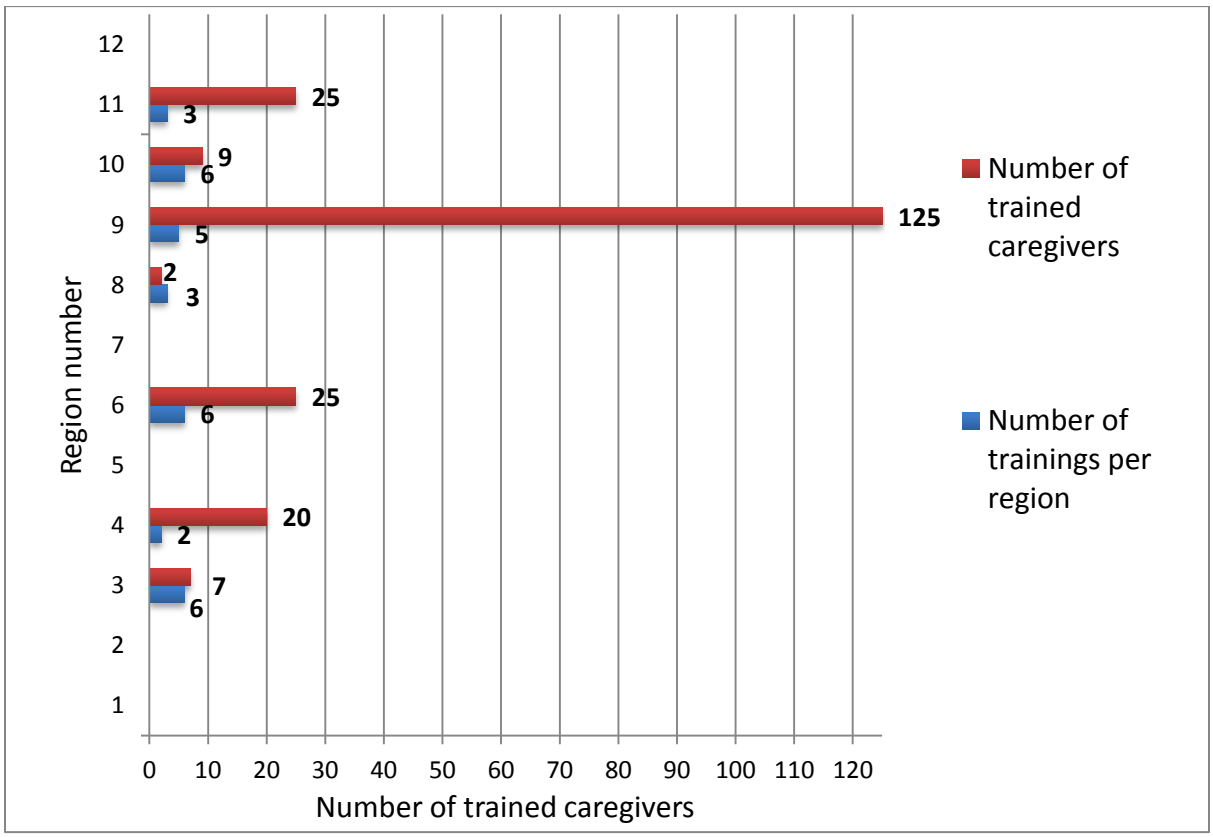
Figure 1: Map of ECMH consultants (in May of 2014) by service delivery area (SDA) in Ohio

Throughout the FLIP IT evaluation study, the evaluation team at Miami University's Center for School-Based Mental Health Programs was provided with the names and contact information of 19 ECMH consultants. Of those consultants, 47% (n=9) conducted all of the 31 training sessions that resulted in caregivers trained in the FLIP IT model (n=213, please refer to demographic section below for more information about caregivers). Random numbers were assigned to each of the 9 ECMH consultants who facilitated trainings, and the following graph outlines the number of trainings each consultant instructed/co-instructed throughout the course of the study.

 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600



Of the 31 trainings conducted, 26% (n=8) were conducted in pairs, and 74% (n=23) were conducted by an individual ECMH consultant. FLIP IT trainings associated with this study occurred in 7 of the 12 regions, with a range of 2-35 caregivers in attendance per session. Region 9 had the most caregivers trained (n=125), followed by regions 11 & 6 (n=25 each), region 4 (n=20), region 10 (n=9), region 3 (n=7), and region 8 (n=2).



 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

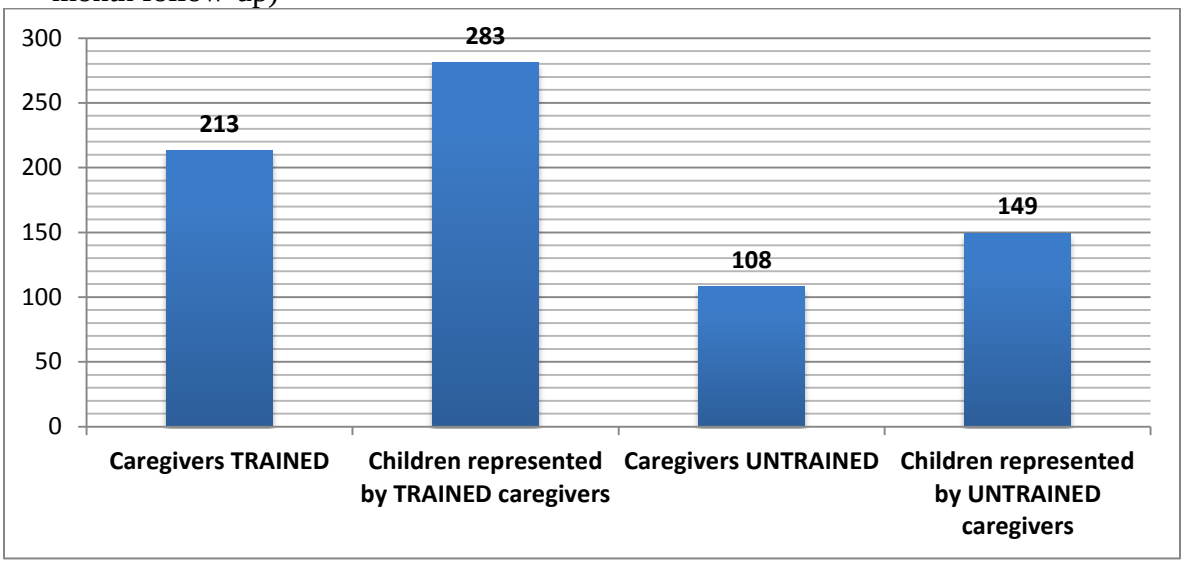
The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

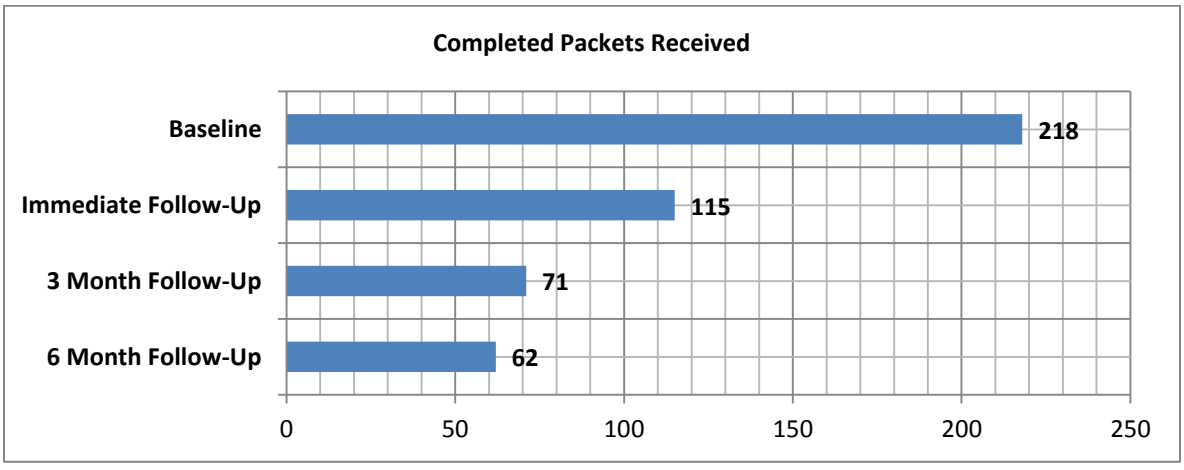
Demographic Characteristics of Participants

Number of Participants

Throughout the FLIP IT study, a total of 321 caregivers completed informed consent procedures. Among those who provided informed consent to participate, 231 caregivers completed a total of 466 unique survey packets representing 4 different data collection time points before and after receiving the FLIP IT parent-training:

- 218 caregivers completed survey packets prior to attending FLIP IT training (baseline)
- 213 caregivers, representing 283 children, attended the FLIP IT parent-training session
- 108 caregivers, representing 149 children, provided baseline information but did not attend the FLIP IT parent-training session
- 115 caregivers completed survey packets immediately following their FLIP IT training session (immediate follow-up)
- 71 caregivers completed survey packets 3 months following their FLIP IT training (3 month follow-up)
- 62 caregivers completed survey packets 6+ months following their FLIP IT training (6+ month follow-up)



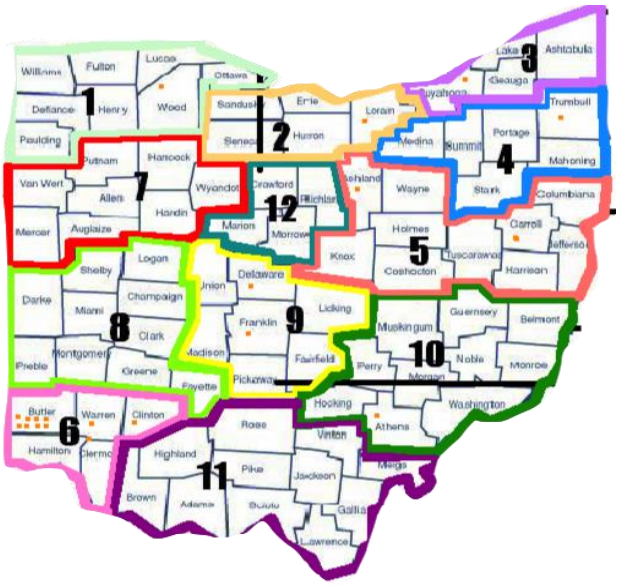


 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

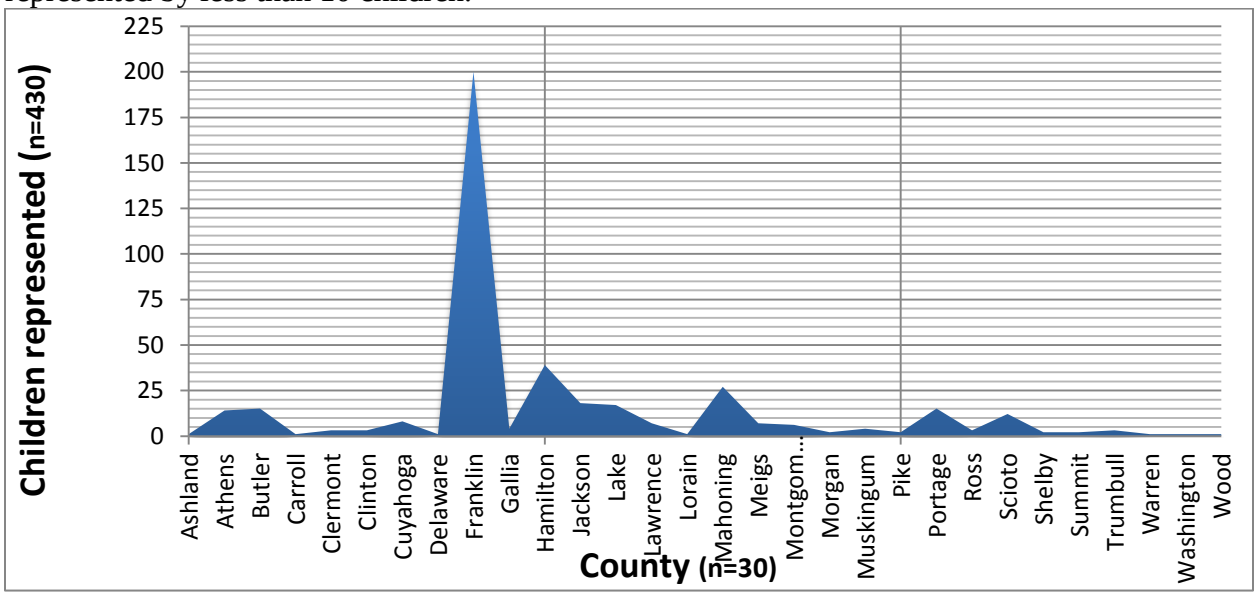
The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

Location of Families & Children

The 231 caregivers who completed survey packets provided information on a total of 430 children. These families represented children from 30 of Ohio's 88 counties. Counties were combined to form 12 regions across the state (first state map below). Data were obtained from families of the following counties in Ohio: Ashland, Athens, Butler, Carroll, Clermont, Clinton, Cuyahoga, Delaware, Franklin, Gallia, Hamilton, Jackson, Lake, Lawrence, Lorain, Mahoning, Meigs, Montgomery, Morgan, Muskingum, Pike, Portage, Ross, Scioto, Shelby, Summit, Trumbull, Warren, Washington, and Wood. This represented regions 3, 4, 6, 8, 9, 10, 11, and 12. Regions 1, 2, 5, and 12 were not represented (second state map below).



The most heavily represented county was Franklin County (n=200), followed by Hamilton County children (n=39), Mahoning County children (n=27), Jackson (n=18), Lake (n=17), Butler (n=15), Portage (n=15), Athens (n=14), and Scioto (n=12). The remaining counties were represented by less than 10 children.

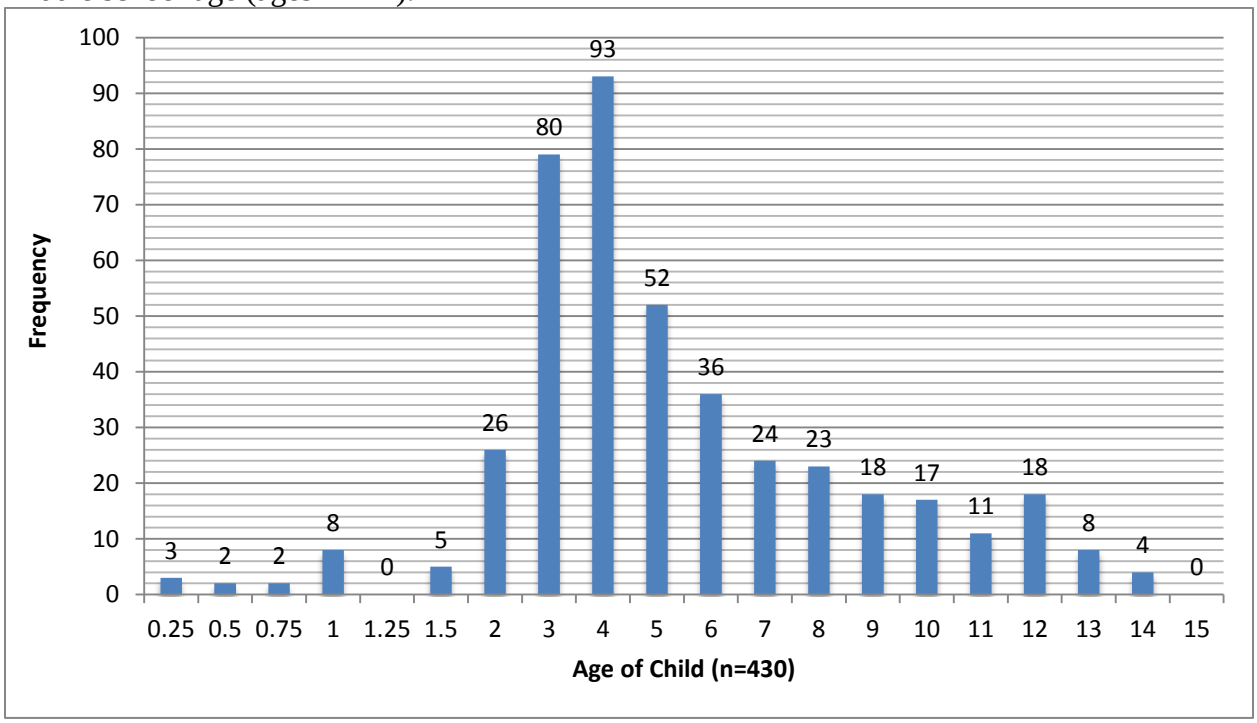


 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

Age of Children

Among the 430 children who were represented in the study, ages ranged from 3 months to 14 years old. The majority (n=225) was predominately pre-school age (ages 3-5); 46 children were age 2 or younger; 129 children were elementary school age (ages 6-11); and 30 children were middle school age (ages 12-14).



The number of children in each age group by region is represented in the following table.

	Ages	0.25	0.5	1	1.5	2	3	4	5	6	7	8	9	10	11	12	13	14
Region																		
1																		
2																		
3			1			1	2		2	3	1			1				
4				1		4	3	6	3	4	2	2	2					
5																		
6						1	8	4	6	2	2	2	2	1		2		
7																		
8					2													
9		2		3		12	32	39	23	7	5	6	5	7	4	7	6	4
10					1		1	3	1	1	2	6	2	3				
11		2	1				6	7	1	5	4	1	1	1	1	1		
12																		

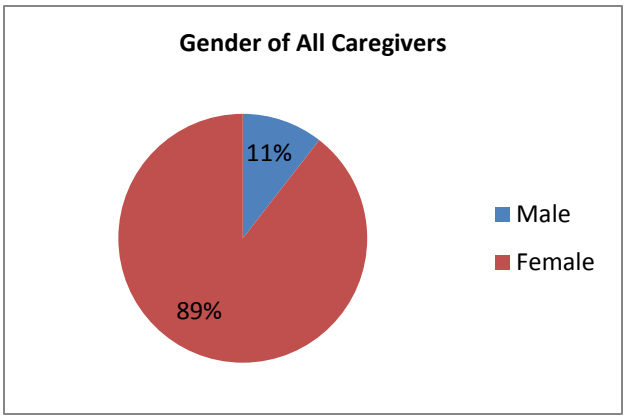
 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

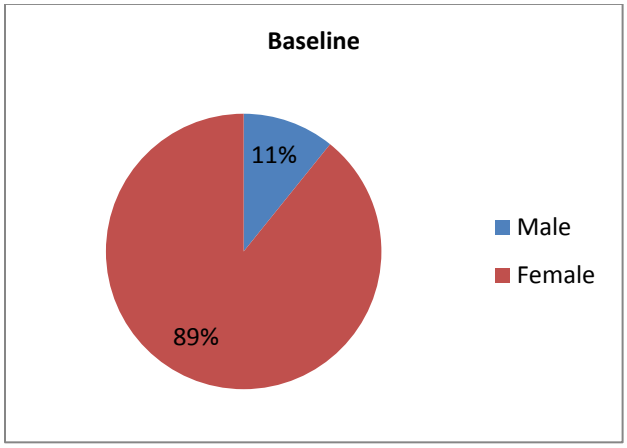
The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

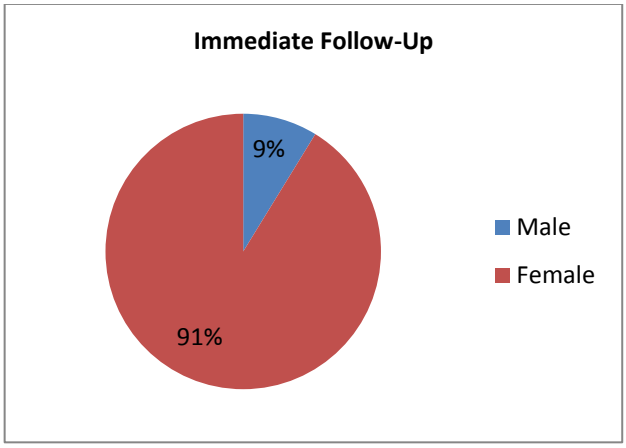
Gender of Caregivers

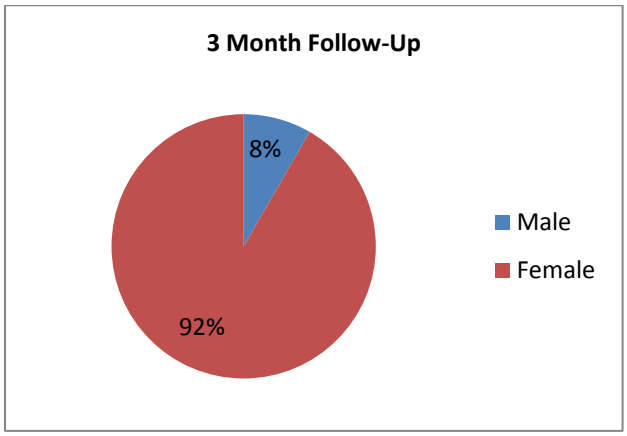
GENDER	All Participants	*Baseline*	*Immediate Follow-Up*	*3 Month Follow-Up*	*6+ Month Follow-Up*
Male	24 (11%)	23 (11%)	10 (9%)	6 (8%)	1 (2%)
Female	204 (89%)	191 (89%)	104 (91%)	66 (92%)	61 (98%)
TOTAL	**228 (100%)**	**214 (100%)**	**114 (100%)**	**72 (100%)**	**62 (100%)**

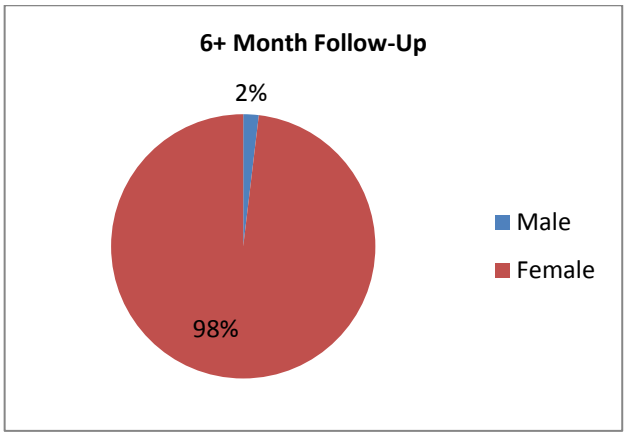
The caregivers in the current study were predominately female (n=204, 89%). Of those who completed surveys prior to attending the FLIP IT training, 89% (n=191) were female and 11% (n=23) were male. Immediately following the FLIP IT training session, 91% (n=104) of caregivers were female and 9% (n=10) were male. At 3-month follow-up, 92% (n=66) of caregivers were female and 8% (n=6) were male. At 6+ month follow-up, 98% (n=61) were female and 2% (n=1) were male.











*Percentages were rounded to whole numbers in order to represent the total as 100%.

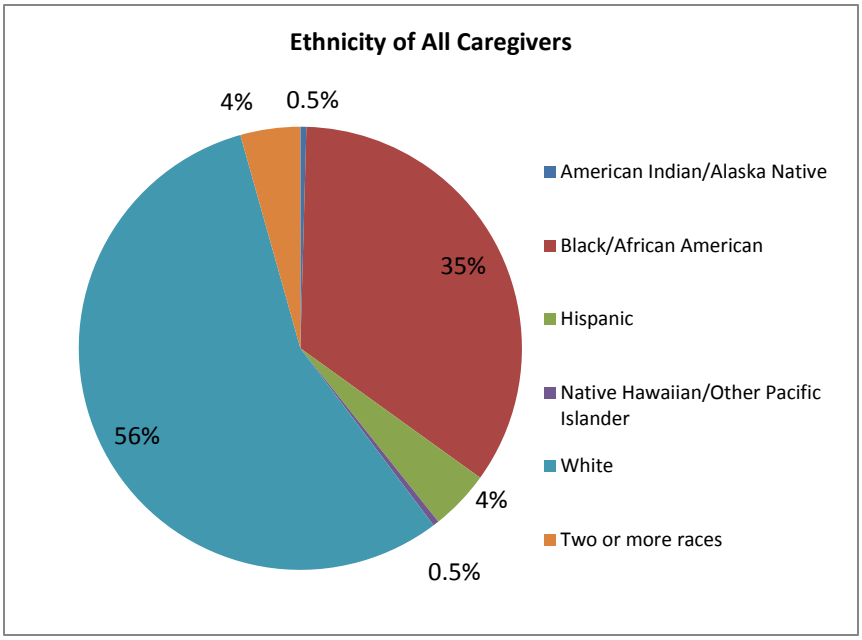
 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

Based on the 2014 U.S. Census Data, 51.1% of population in Ohio is female. As such, the participants of the current study are over-representative of women. As is common when working with caregivers, women/mothers are often the caregiver who participates in studies, trainings, and meetings on behalf of their children and families. As such, it should be noted that the overall results of the FLIP IT parent-training evaluation project are most representative of beliefs, attitudes, and skills of women and mothers. Separate gender analyses were conducted with women-only data and men-only data to highlight gender-based differences (see Appendices).

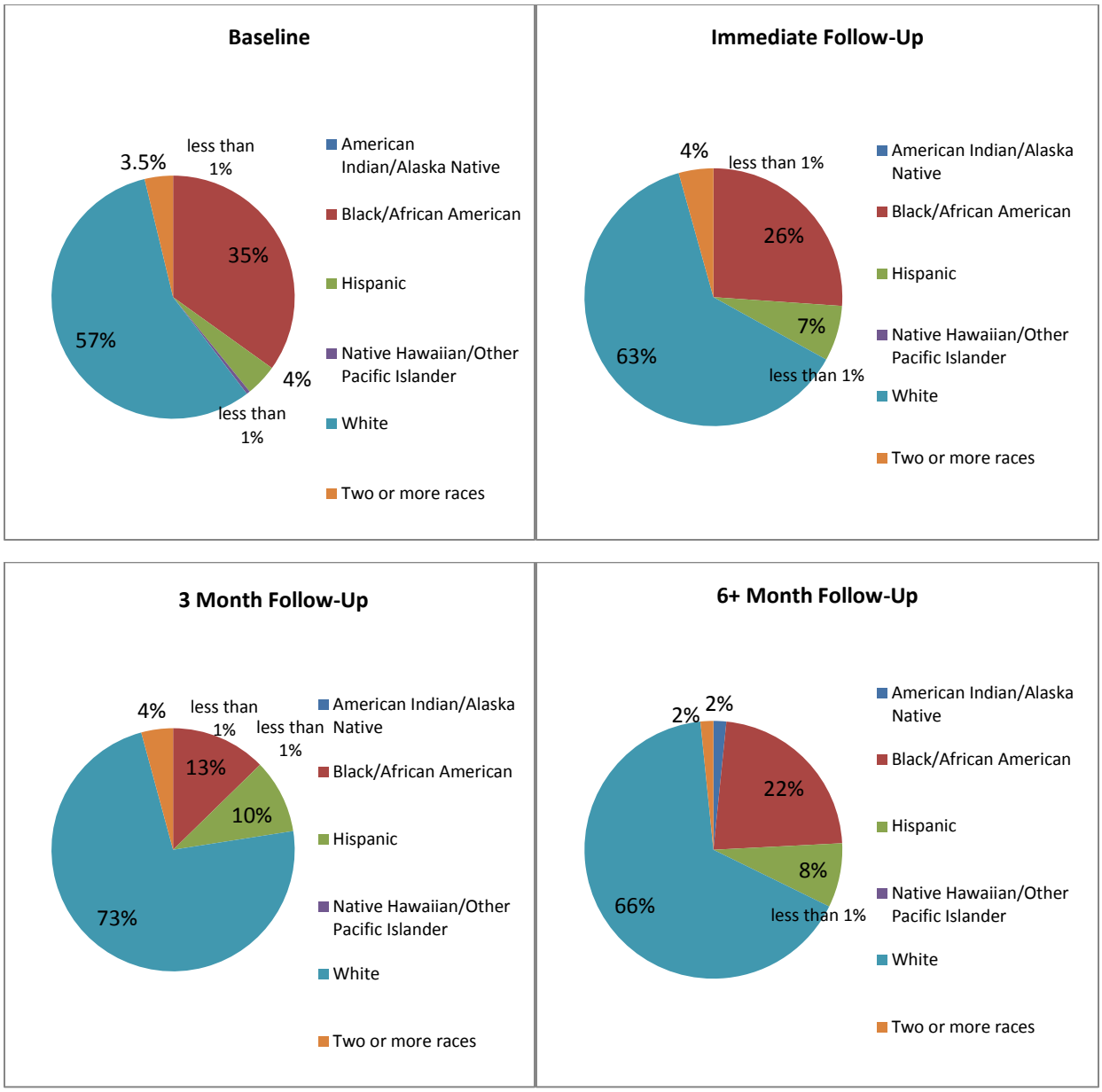
Ethnicity of Caregivers

ETHNICITY	All Participants	*Baseline*	*Immediate Follow-Up*	*3 Month Follow-Up*	*6+ Month Follow-Up*
American Indian/Alaska Native	1 (0.5%)	0 (0%)	0 (0%)	0 (0%)	1 (2%)
Black/African American	79 (35%)	74 (35%)	30 (26%)	9 (13%)	14 (22%)
Hispanic	10 (4%)	9 (4%)	8 (7%)	7 (10%)	5 8%)
Native Hawaiian/Other Pacific Islander	1 (0.5%)	1 (0.5%)	0 (0%)	0 (0%)	0 (0%)
White	128 (56%)	120 (57%)	72 (63%)	52 (73%)	41 (66%)
Two or more races	10 (4%)	8 (3.5%)	5 4%)	3 (4%)	1 (2%)
TOTAL	**229 (100%)**	**212 (100%)**	**115 (100%)**	**71 (100%)**	**62 (100%)**



The caregivers in the current study were predominately White (n=128, 56%). Of those who completed surveys prior to attending the FLIP IT training, 57% (n=120) were White, 35% (n=74) were Black/African American, 4% (n=9) were Hispanic, 3.5% (n=8) were multi-racial, and less than 0.5% (n=1) was Native Hawaiian/Other Pacific Islander. Immediately following the FLIP IT training session, 63% (n=72) were White, 26% (n=30) were Black/African American, 7% (n=8) were Hispanic, and 4% (n=5) were multi-racial. At 3-month follow-up, 73% (n=52) were White, 13% (n=9) were Black/African American, 10% (n=7) were Hispanic, and 4% (n=3) were multi-racial. At 6+ month follow-up, 66% (n=41) were White, 22% (n=14) were Black/African American, 8% (n=5) were Hispanic, 2% (n=1) were American Indian/Alaska Native, and 2% (n=1) were multi-racial.

 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600



*Percentages were rounded to whole numbers in order to represent the total as 100%.

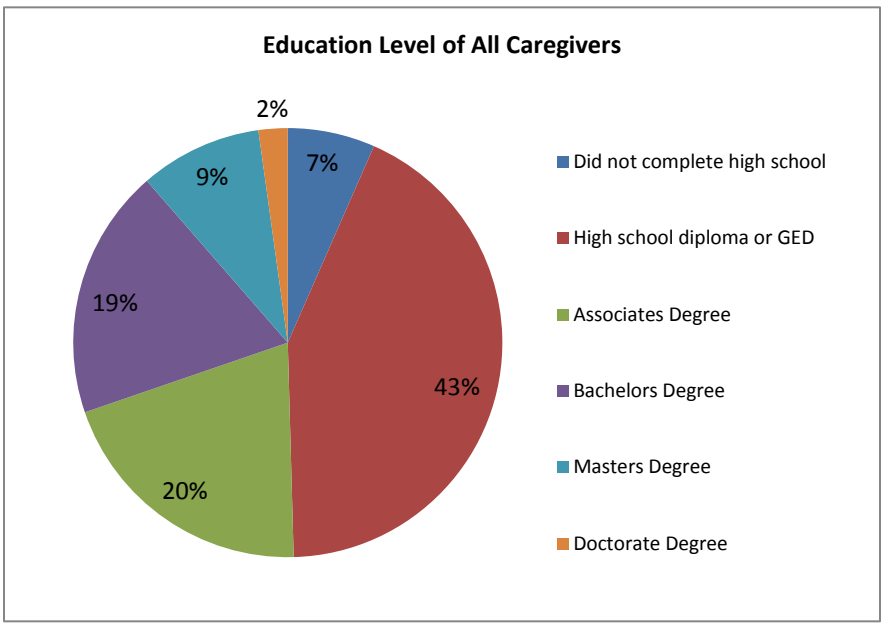
Based on the 2014 U.S. Census Data, 80.1% of population in Ohio is White, 12.6% is Black/African American, 3.5% is Hispanic, 2.1% is multi-racial, 2.0% is Asian, 0.3% is American Indian/Alaska Native, and 0.1% is Native Hawaiian/Other Pacific Islander. Compared to the Census data, Black/African American and Hispanic individuals were over-represented among the FLIP IT study sample. White and Asian individuals were under-represented. It should be noted, however, that an intentional effort was made to include an over-representative sample of Black/African American and Hispanic caregivers to ensure that minority caregivers' voices were captured in this study. To this end, the results of the evaluation should be very useful in understanding the impact of the FLIP IT training on families from different racial backgrounds.

 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

Educational Level of Caregivers

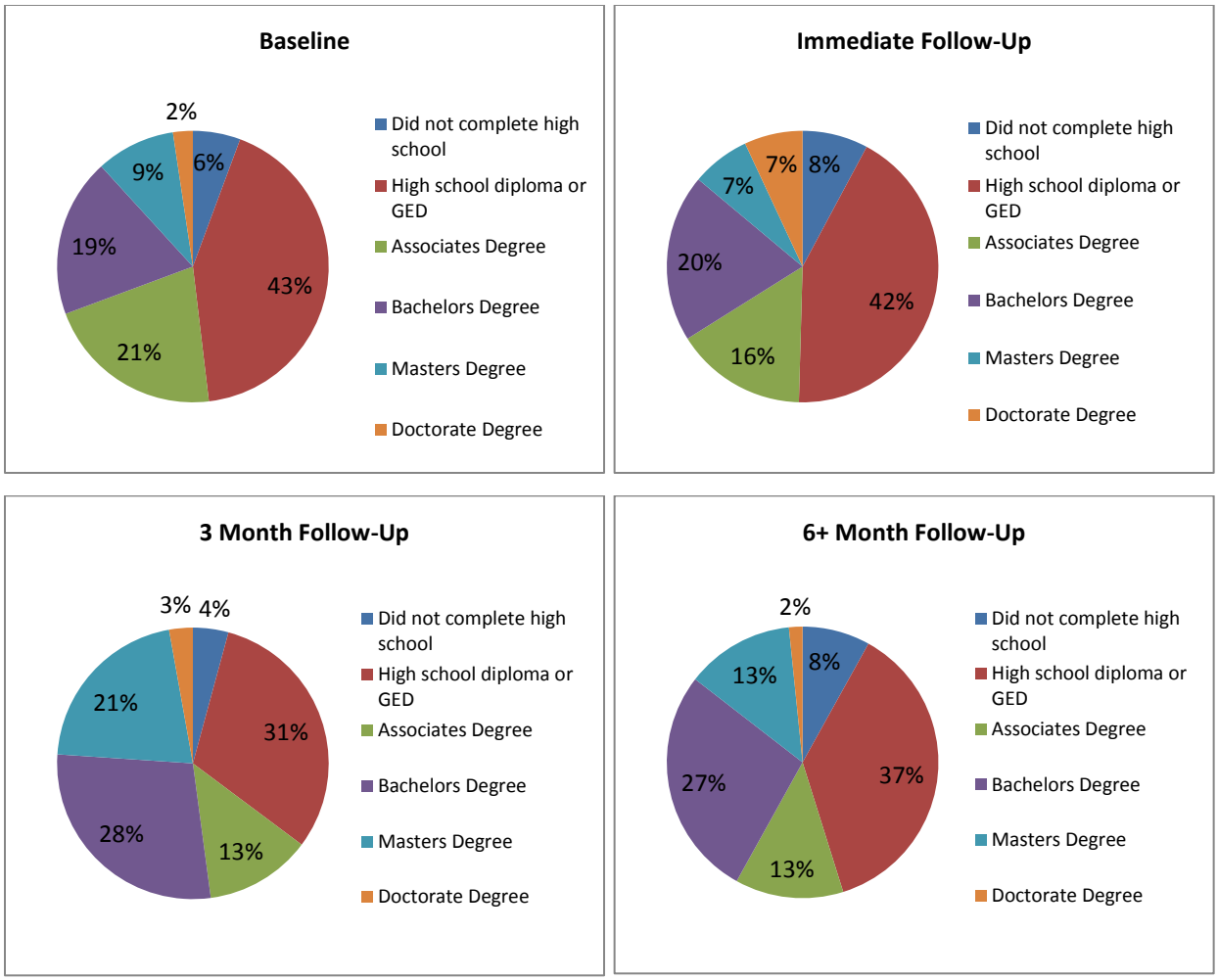
EDUCATIONAL LEVEL	All Participants	*Baseline*	*Immediate Follow-Up*	*3 Month Follow-Up*	*6+ Month Follow-Up*
Did not complete high school	15 (7%)	12 (6%)	9 (8%)	3 (4%)	5 (8%)
High school diploma or GED	98 (43%)	90 (43%)	49 (42%)	22 (31%)	23 (37%)
Associates Degree	46 (20%)	45 (21%)	18 (16%)	9 (13%)	8 (13%)
Bachelor's Degree	43 (19%)	40 (19%)	23 (20%)	20 (28%)	17 (27%)
Master's Degree	21 (9%)	20 (9%)	8 (7%)	15 (21%)	8 (13%)
Doctorate Degree	5(2%)	5 (2%)	8 (7%)	2 (3%)	1 (2%)
TOTAL	**228 (100%)**	**212 (100%)**	**115 (100%)**	**71 (100%)**	**62 (100%)**

The caregivers in the current study were predominately high school graduates (n=98, 43%). Of those who completed surveys prior to attending the FLIP IT training, 43% (n=90) were high school graduates, 21% (n=45) had an associate's degree, 19% (n=40) had a bachelor's degree, 9% (n=20) had a master's degree, 6% (n=12) did not complete high school, and 2% (n=5) had a doctorate degree. Immediately following the FLIP IT training session, 42% (n=49) were high school graduates, 20% (n=23) had a bachelor's degree, 16% (n=18) had an associate's degree, 8% (n=9) did not complete high school, 7% (n=8) had a doctorate degree, and 7% (n=8) had a master's degree. At 3-month follow-up, 31% (n=22) were high school graduates, 28% (n=20) had a bachelor's degree, 21% (n=15) had a master's degree, 13% (n=9) had an associate's degree, 4% (n=3) did not complete high school, and 3% (n=2) had a doctorate degree. At 6+ month follow-up, 37% (n=23) were high school graduates, 27% (n=17) had a bachelor's degree, 13% (n=8) had a master's degree, 13% (n=8) had an associate's degree, 8% (n=5) did not complete high school, and 2% (n=1) had a doctorate degree.



 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.



*Percentages were rounded to whole numbers in order to represent the total as 100%.

Based on the 2014 U.S. Census Data, 88.5% of population in Ohio is a high school graduate or higher and 25.2% of the population has a bachelor's degree or higher. Among the FLIP IT study participants, 92%-96% of the caregivers had a high school diploma or higher, and 30%-52% had a bachelor's degree or higher (at the various time points in the study). As such, the FLIP IT study participants represent a somewhat more educated group compared to the general population in Ohio.

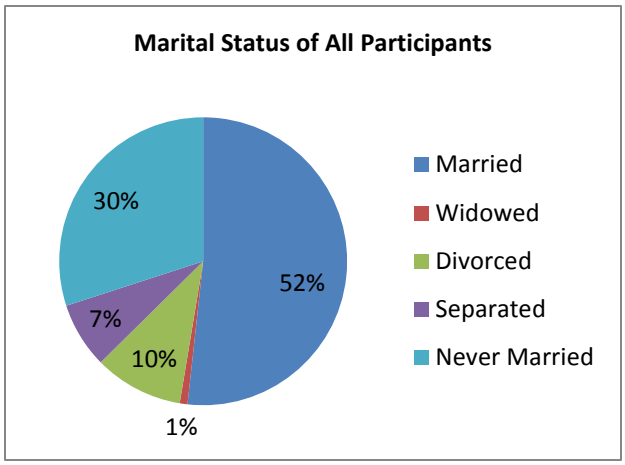
Marital Status of Caregivers

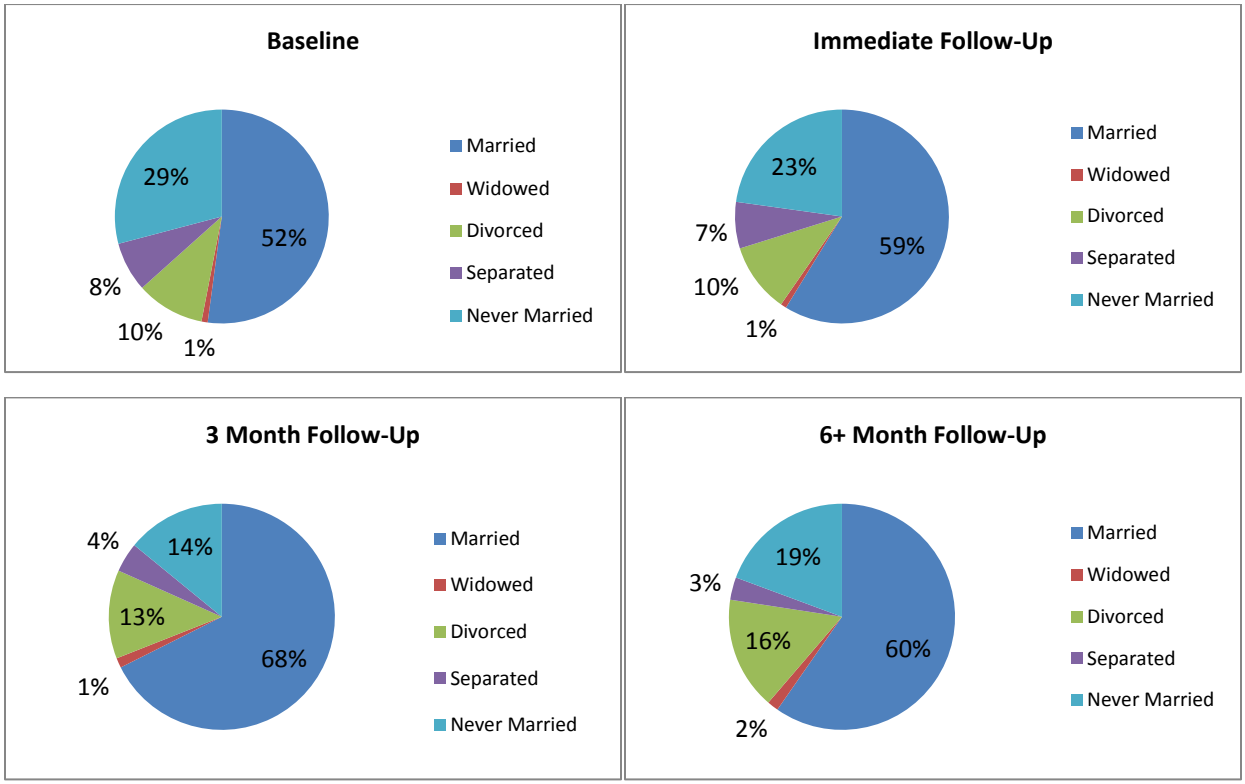
MARITAL STATUS	All Participants	*Baseline*	*Immediate Follow-Up*	*3 Month Follow-Up*	*6+ Month Follow-Up*
Married	119 (52%)	111 (52%)	67 (59%)	48 (68%)	37 (60%)
Widowed	2 (1%)	2 (1%)	1 (1%)	1 (1%)	1 (2%)
Divorced	23 (10%)	22 (10%)	12 (10%)	9 (13%)	10 (16%)
Separated	17 (7%)	16 (8%)	8 (7%)	3 (4%)	2 (3%)
Never Married	69 (30%)	62 (29%)	26 (23%)	10 (14%)	12 (19%)
TOTAL	**230 (100%)**	**213 (100%)**	**114 (100%)**	**71 (100%)**	**62 (100%)**

 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

The caregivers in the current study were predominately married (n=119, 52%). Of those who completed surveys prior to attending the FLIP IT training, 52% (n=111) were married, 29% (n=62) were never married, 10% (n=22) were divorced, 8% (n=16) were separated, and 1% (n=2) were widowed. Immediately following the FLIP IT training session, 59% (n=67) were married, 23% (n=26) were never married, 10% (n=12) were divorced, 7% (n=8) were separated, and 1% (n=1) were widowed. At 3-month follow-up, 68% (n=48) were married, 14% (n=10) were never married, 13% (n=9) were divorced, 4% (n=3) were separated, and 1% (n=1) was widowed. At 6+ month follow-up, 60% (n=37) were married, 19% (n=12) were never married, 16% (n=10) were divorced, 3% (n=2) were separated, and 2% (n=1) were widowed.





*Percentages were rounded to whole numbers in order to represent the total as 100%.

Based on the 2014 U.S. Census data, approximately half of people 15 years of age and older are married in Ohio (52% of men and 49% of women). Among that group, approximately 1/3 of Ohioans have never been married (34% of men and 28% of women). 3% of Ohio men and 10% of Ohio women are widowed, and 11% of Ohio men and 13% of Ohio women are divorced. Compared to the Census data, the current FLIP IT study sample is over-representative of married individuals and under-representative of widowed individuals.

Number of People in Caregiver's Household

Number in Household	*All Participants*	*Baseline*	*Immediate Follow-Up*	*3 Month Follow-Up*	*6+ Month Follow-Up*
1	3	2	2	3	2
2	34	32	16	9	11
3	52	50	26	16	12
4	62	56	35	21	20
5	47	45	21	15	8
6	15	13	9	6	4
7	5	5	4	1	2
8+	13	11	2	0	3
TOTAL	**231**	**214**	**115**	**71**	**62**

Number of Children in Caregiver's Household

Number of Children	*All Participants*	*Baseline*	*Immediate Follow-Up*	*3 Month Follow-Up*	*6+ Month Follow-Up*
0	8	8	6	3	5
1	48	43	29	17	13
2	84	78	43	26	23
3	58	56	23	16	14
4	9	8	8	6	4
5	6	5	2	1	0
6	11	11	1	0	0
7	3	1	2	0	3
TOTAL	**227**	**210**	**114**	**69**	**62**

Number of Adults in Caregiver's Household

Number of Adults	*All Participants*	*Baseline*	*Immediate Follow-Up*	*3 Month Follow-Up*	*6+ Month Follow-Up*
1	76	70	29	21	23
2	141	130	82	46	33
3	4	4	2	1	1
4	4	4	2	1	2
5	2	1	0	1	2
6	1	1	0	0	0
TOTAL	**228**	**210**	**115**	**70**	**61**

The caregivers in the current study were predominately from households of 2-5 people, typically consisting of 1-3 children living with 1-2 adults. A minority of the caregivers lived in households with no children, households with more than 3 children, or in households with more than 2 adults.

Annual Income of Caregiver's Household

ANNUAL INCOME	All Participants	*Baseline*	*Immediate Follow-Up*	*3 Month Follow-Up*	*6+ Month Follow-Up*
Less than $10,000	49 (21%)	46 (22%)	16 (14%)	9 (13%)	12 (20%)
$10,000-$19,999	26 (11%)	26 (12%)	8 (7%)	4 (6%)	4 (6%)
$20,000-$29,999	30 13%)	28 (13%)	13 (11%)	9 (13%)	4 (7%)
$30,000-$39,999	22 (9%)	18 (9%)	16 (14%)	7 (10%)	11 (18%)
$40,000-$49,999	20 (9%)	17 (8%)	11 (10%)	4 (6%)	3 (5%)
$50,000-$59,999	11 (5%)	11 (5%)	9 (8%)	4 (6%)	3 (5%)
$60,000-$69,999	13 (6%)	9 (4%)	4 (4%)	1 (1%)	0 (0%)
$70,000 or more	59 (26%)	58 (27%)	37 (32%)	31 (45%)	24 (39%)
TOTAL	**230 (100%)**	**213 (100%)**	**114 (100%)**	**69 (100%)**	**61 (100%)**

The caregivers in the current study predominately fell into two income groups: those who made less than $10,000 (n=49, 21%) and those who made $70,000 or more (n=59, 26%). Of those who completed surveys prior to attending the FLIP IT training, 27% (n=58) had a household income of $70,000 or more, and 22% (n=46) had a household income of $10,000 or less. The remaining income categories accounted for between 4%-13% of the participants. Immediately following the FLIP IT training session, 32% (n=37) had a household income of $70,000 or more, 14% (n=16) had a household income of $10,000 or less, and 14% (n=16) had an income of $30,000-$39,999. The remaining income categories accounted for between 4%-11% of the participants. At 3-month follow-up, 45% (n=31) had a household income of $70,000 or more, 13% (n=9) had a household income of $10,000 or less, and 13% (n=9) had a household income of $20,000-$29,999. The remaining income categories accounted for between 1%-10% of the participants. At 6+ month follow-up, 39% (n=24) had a household income of $70,000 or more, 20% (n=12) had a household income of $10,000 or less. The remaining income categories accounted for between 0%-18% of the participants.

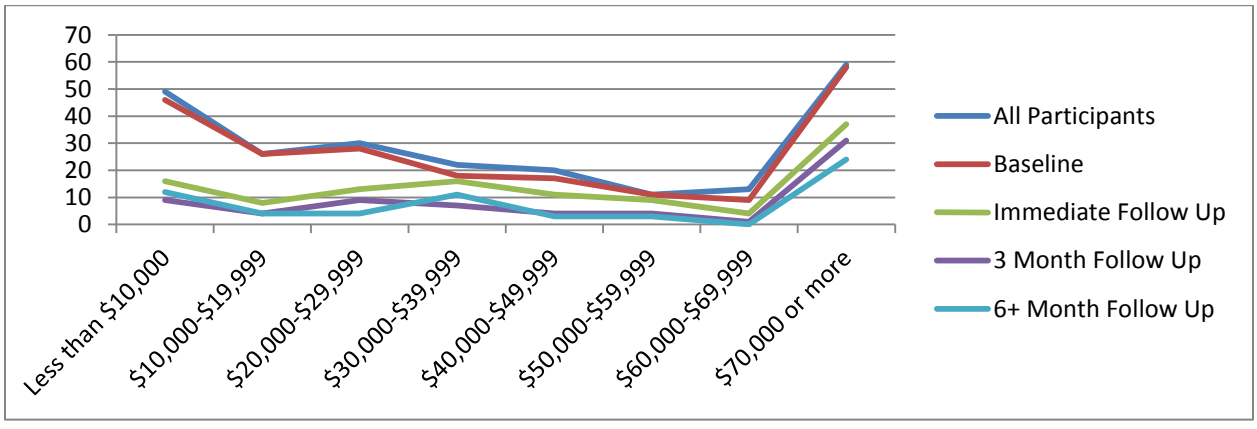


Figure 2: Number of FLIP IT study participants (y axis) by household income amount (x axis)

The two predominant income levels of the FLIP IT participants represent a bi-modal data distribution with 'peaks' at both of the income extremes. As such, we have analyzed the data taking into account the bi-modal nature of the data to highlight group differences (see Appendices).

Data Analysis

Miami University's Center for School-Based Mental Health Programs completed analyses of the quantitative and qualitative data obtained from the evaluation of the FLIP IT parent-training.

Quantitative and Qualitative Databases

For the quantitative data, an SPSS database was created. For the qualitative focus group and phone interview data, we used a state-of-the-art, robust, leading qualitative research software tool (NVivo) to code thematic elements discussed by focus group and phone interview participants.

Binary Demographic Variables

In order to effectively utilize the demographic data to distinguish among the different groups in the study, we defined each of the demographic variables as follows:

- *Low socioeconomic status* was defined as earning an annual income 125% of the federal poverty level or less (e.g., $29,438 or less for a family of four, using the 2013 HHS Poverty Guidelines). We calculated each participant's socioeconomic status based on the number of individuals in their family and their family's reported annual income (coded as 'yes' for low SES and 'no' for not low SES).
- *Ethnic minority status* was defined as endorsing any ethnicity other than "White" (coded as 'yes' for ethnic minority and 'no' for White).
- *Low educational level* was defined as having less than a high school education (coded as 'yes' for low educational level and 'no' for not low educational level).
- *Single parent household* was defined as one adult living in a household with one or more children (coded as 'yes' for single parent household and 'no' for not single parent household).
- *Parenting stress* was defined as a Total Stress score above the recommended 'threshold' level according to the scale guidelines (coded as 'yes' for high parenting stress level and 'no' for not high parenting stress level).

Definition of Statistical Analyses

Analyses of variance (ANOVAs)

ANOVAs are used to determine the degree to which two or more groups within an independent variable differ on one or more dependent variables by comparing the means of each group while statistically controlling for random factors.

Multivariate analyses of variance (MANOVAs)

MANOVAs use the same statistical methods as ANOVAs, but include two or more independent variables.

Repeated measures ANOVAs and MANOVAs

Repeated measures ANOVAs and MANOVAs are used to compare group means where the participants are the same in each group and they complete survey measures three or more times over the course of the study. In the current study, caregivers who completed measures at baseline, immediate follow-up, 3-month follow-up, and 6+month follow-up were included in the repeated measures ANOVA and MANOVA analyses.

Quantitative Outcomes & Results

Demographic Variables

In order to determine whether the time points differed significantly on demographic variables, a MANOVA was conducted with time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up) as the independent variable and demographic variables (gender, SES, ethnicity, educational level, household status, and parenting stress level) as the dependent variables.

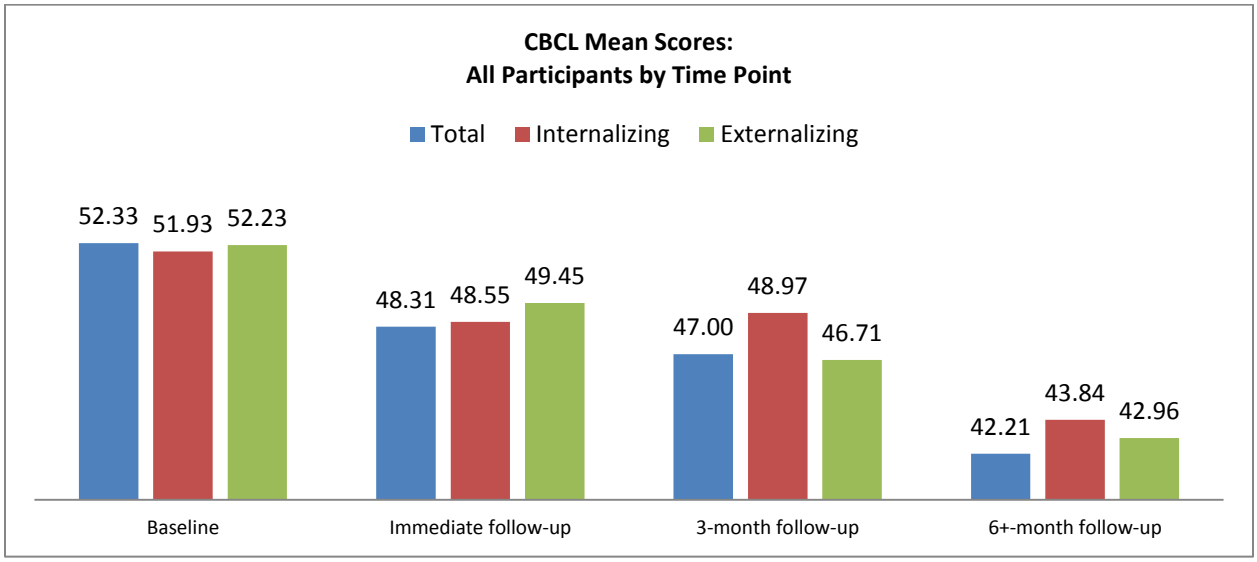
Time point was associated with a significant effect on the demographic variables [using Wilks' Lambda, $F(18,1265)=2.127$, $p=.004$]. Univariate analyses indicated a significant effect for low socioeconomic status [$F(3,452)=4.652$, $p=.003$] and high parenting stress [$F(3,452)=3.389$, $p=.018$]. No other significant differences were found among the remaining demographic variables. Separate analyses examining low socioeconomic status and high parenting stress level on each of the outcome measures are included in the remainder of this report.

Child Behavior Checklist (CBCL)

The Child Behavior Checklist (CBCL) is a widely used method of identifying problem behavior in children. It is a component in the Achenbach System of Empirically Based Assessment developed by Thomas M. Achenbach (Achenbach & Rescorla, 2001). Problems are identified by a respondent who knows the child well, usually a parent or other caregiver. In the current study, total scores (identifying overall behavior problems), internalizing scores (identifying anxiety, depression, withdrawal, and somatic complaints) and externalizing scores (identifying delinquent and aggressive behavior) were calculated for each child whose caregiver completed the CBCL form.

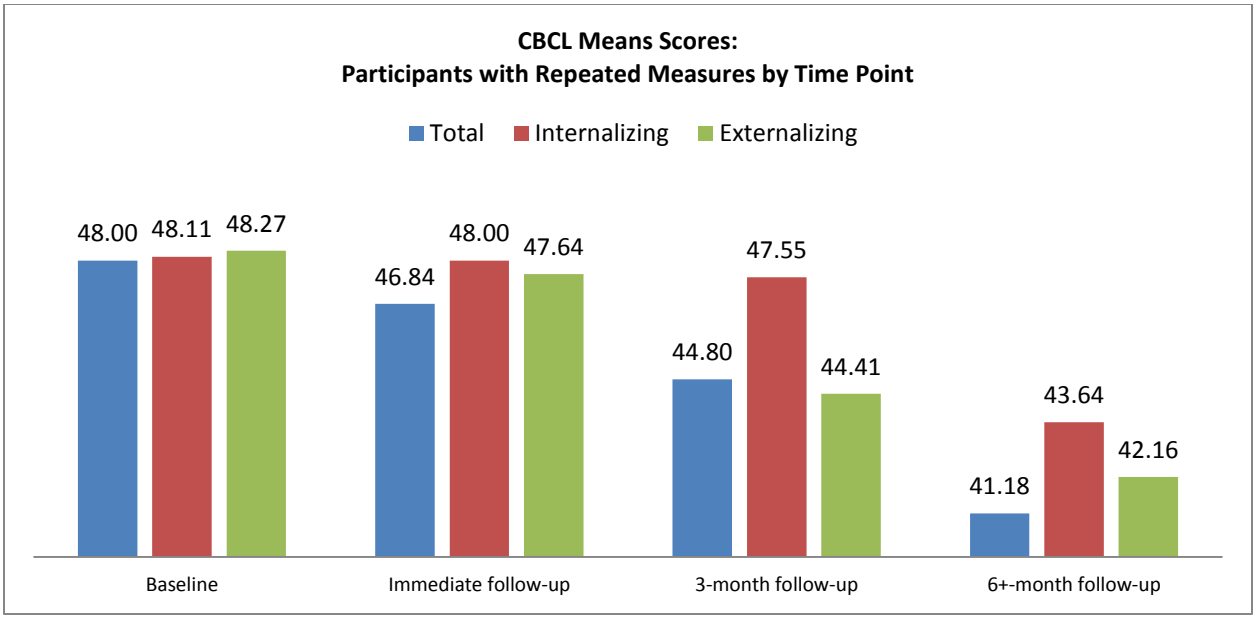
- 207 caregivers completed the CBCL at baseline
- 110 caregivers completed the CBCL at immediate follow-up
- 68 caregivers completed the CBCL at 3-month follow-up
- 57 caregivers completed the CBCL at 6+-month follow-up

CBCL Mean Scores



 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.



CBCL Total Scores

An ANOVA (using all participants' data) was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up), low SES, and high parenting stress on CBCL total scores. There was a significant effect of time point on CBCL total scores at the $p<.05$ level [$F(3,426)=9.501$, $p=.000$]. No significant effects were observed for time point by low SES or for time point by high parenting stress level. Post hoc analysis revealed that baseline CBCL total scores (m=52.33) were the highest, followed by immediate follow-up (m=48.31), 3-month follow-up (m=47.00), and 6+-month follow-up (m=42.21) scores, respectively. The data demonstrate that children's overall problems reported on the CBCL continually declined at each time point following their caregivers' training in the FLIP IT program.

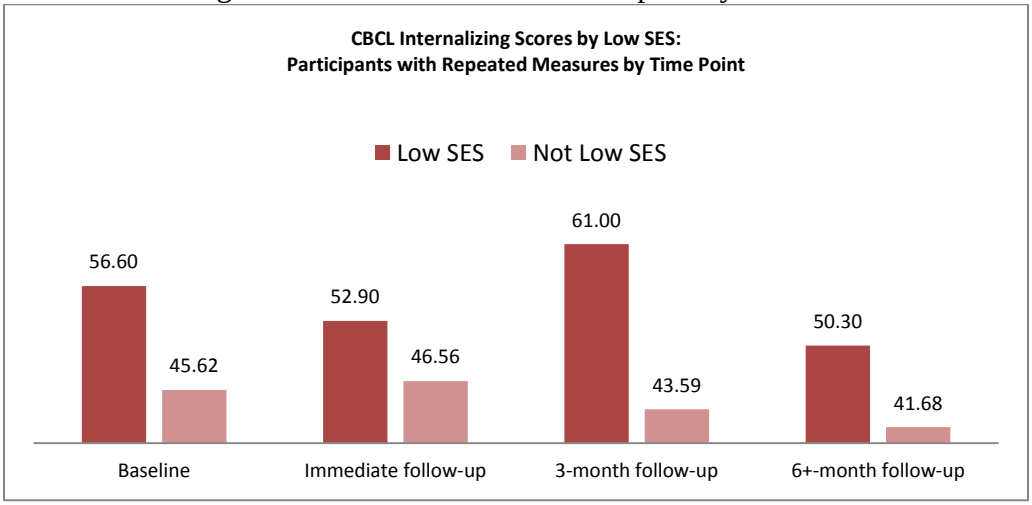
A repeated measures MANOVA (using the participants' data who completed measures at each time point) was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up), low SES, and high parenting stress on CBCL total scores. There was a significant effect of time point on CBCL total scores at the $p<.05$ level [using Wilks' Lambda, $F(3,38)=4.994$, $p=.005$]. No significant effects were observed for time point by low SES or for time point by high parenting stress level. Post hoc analysis revealed that baseline CBCL total scores (m=48.00) were the highest, followed by immediate follow-up (m=46.84), 3-month follow-up (m=44.80), and 6+-month follow-up (m=41.18) scores, respectively. The data demonstrate that children's overall problems reported on the CBCL continually declined at each time point following their caregivers' training in the FLIP IT program.

CBCL Internalizing Scores

An ANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up), low SES, and high parenting stress on CBCL internalizing scores. There was a significant effect of time point on CBCL internalizing scores at the $p<.05$ level [$F(3,426)=8.666$, $p=.000$]. No significant effects were observed for time point by

low SES or for time point by high parenting stress level. Post hoc analysis revealed that baseline CBCL internalizing scores (m=51.93) were the highest, followed by 3-month follow-up (m=48.97), immediate follow-up (m=48.55), and 6+-month follow-up (m=43.84) scores, respectively. The data demonstrate that children's internalizing problems reported on the CBCL declined significantly from baseline to 6+months following their caregivers' training in the FLIP IT program.

A repeated measures MANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up), low SES, and high parenting stress on CBCL internalizing scores. There was a significant effect of time point on CBCL internalizing scores at the $p<.05$ level [using Wilks' Lambda, $F(3,38)=3.430$, $p=.026$] and time point by low SES on CBCL internalizing scores at the $p<.05$ level [using Wilks' Lambda, $F(3,38)=3.193$, $p=.034$]. No significant effects were observed for time point by high parenting stress level. Post hoc analysis revealed that baseline CBCL internalizing scores (m=48.11) were the highest, followed by immediate follow-up (m=48.00), 3-month follow-up (m=47.55), and 6+-month follow-up (m=43.64) scores. The data demonstrate that children's internalizing problems, such as anxiety, depression, withdrawal, and somatic complaints, declined at each time points following their caregivers' training in the FLIP IT program. Participants who reported annual incomes of 125% or less of the federal poverty level (low SES) reported significantly more internalizing problems among their children compared to caregivers who reported annual incomes greater than 125% of the federal poverty level.



CBCL Externalizing Scores

An ANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up), low SES, and high parenting stress on CBCL externalizing scores. There was a significant effect of time point on CBCL externalizing scores at the $p<.05$ level [$F(3,426)=8.166$, $p=.000$]. No significant effects were observed for time point by low SES or for time point by high parenting stress level. Post hoc analysis revealed that baseline CBCL externalizing scores (m=52.23) were the highest, followed by immediate follow-up (m=49.45), 3-month follow-up (m=46.71), and 6+-month follow-up (m=42.96) scores, respectively. The data demonstrate that children's externalizing problems reported on the CBCL continually declined at each time point following their caregivers' training in the FLIP IT program.

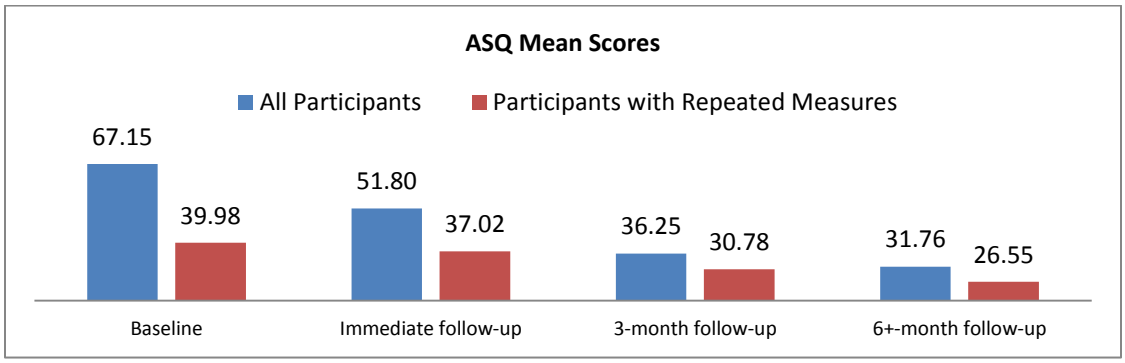
A repeated measures MANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up), low SES, and high parenting stress on CBCL externalizing scores. There was a significant effect of time point on CBCL externalizing scores at the $p<.05$ level [using Wilks' Lambda, $F(3,38)=3.127$, $p=.037$]. No significant effects were observed for time point by low SES or for time point by high parenting stress level. Post hoc analysis revealed that baseline CBCL externalizing scores (m=48.27) were the highest, followed by immediate follow-up (m=47.64), 3-month follow-up (m=44.41), and 6+-month follow-up (m=42.16) scores. The data demonstrate that children's externalizing problems, such as delinquent and aggressive behavior, continually declined at each time point following their caregivers' training in the FLIP IT program.

Ages and Stages Questionnaire (ASQ)

The Ages and Stages Questionnaire (ASQ) was developed based on four decades of research and feedback from parents by lead developers, Drs. Diane Bricker and Jane Squires (Squires & Bricker, 2009). The ASQ is a form for parents to complete within 10-15 minutes and professionals from early childhood centers, pediatric offices, and state and local organizations to interpret. This screening tool allows for professionals to assess the developmental stages of a young child and screen for developmental delays. The ASQ offers the screening assessments from infancy to 5 years. In the current study, ASQ total scores were calculated for:

- 201 caregivers who completed the ASQ at baseline
- 111 caregivers who completed the ASQ at immediate follow-up
- 64 caregivers who completed the ASQ at 3-month follow-up
- 55 caregivers who completed the ASQ at 6+-month follow-up

ASQ Mean Scores



ASQ Total Scores

An ANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up), low SES, and high parenting stress on ASQ scores. There was a significant effect of time point on ASQ scores at the $p<.05$ level [$F(3,415)=9.490$, $p=.000$]. No significant effects were observed for time point by low SES or for time point by high parenting stress level. Post hoc analysis revealed that baseline ASQ scores (m=67.15) were the highest, followed by immediate follow-up (m=51.80), 3-month follow-up (m=36.25), and 6+-month follow-up (m=31.76) scores, respectively. The data demonstrate that children's overall risk for developmental problems continually declined at each time point following their caregivers' training in the FLIP IT program.

 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

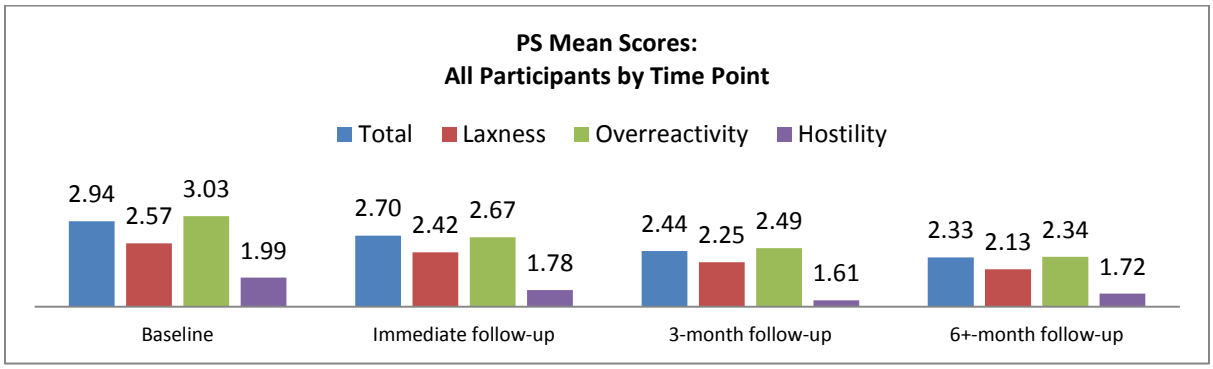
A repeated measures MANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up), low SES, and high parenting stress on ASQ scores. There was a significant effect of time point on ASQ scores at the $p<.05$ level [using Wilks' Lambda, $F(3,36)=3.178$, $p=.035$]. No significant effects were observed for time point by low SES or for time point by high parenting stress level. Post hoc analysis revealed that baseline ASQ scores (m=39.98) were the highest, followed by immediate follow-up (m=37.02), 3-month follow-up (m=30.78), and 6+-month follow-up (m=26.55) scores, respectively. The data demonstrate that children's risk for developmental delays continually declined at each time point following their caregivers' training in the FLIP IT program.

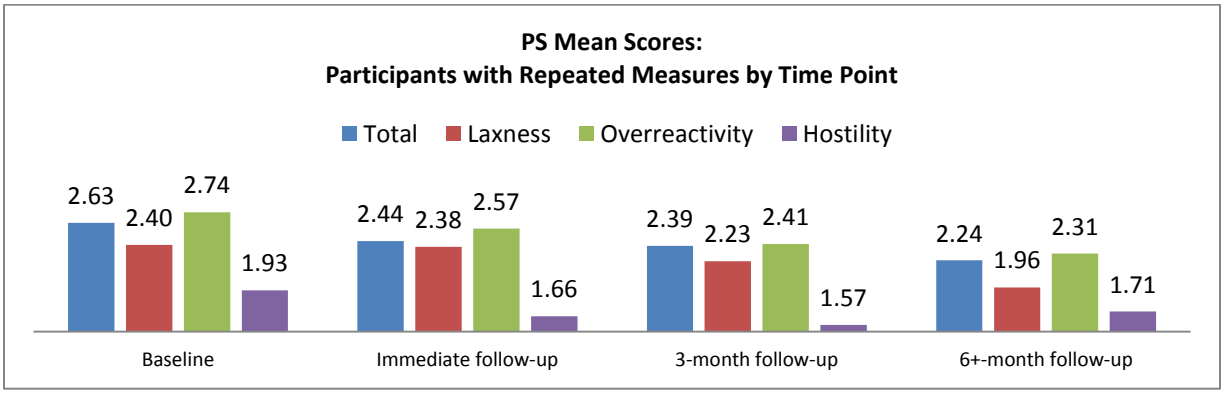
Parenting Scale (PS)

The Parenting Scale (PS) is a 30-item questionnaire that measures the similarities and differences in how the parents parent on a 7-point Likert scale (Arnold, O'Leary, Wolff, & Acker, 1993). The questions ask parents simple hypotheticals to see how they would react to different behavior problems. The scale measures the parents on three subscales: laxness, over-reactivity, and hostile parenting. Laxness refers to a parents' inconsistent or permissive parenting, while over-reactivity refers to a parents' harsh or punitive parenting. Hostile parenting refers to the extent to which a parent hits, curses or insults their child. In the current study, PS total scores, laxness scores, over-reactivity scores, and hostility score were calculated for:

- 204 caregivers who completed the PS at baseline
- 110 caregivers who completed the PS at immediate follow-up
- 68 caregivers who completed the PS at 3-month follow-up
- 58 caregivers who completed the PS at 6+-month follow-up

PS Mean Scores





 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

PS Total Scores

An ANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up), low SES, and high parenting stress on PS total scores. There was a significant effect of time point on PS total scores at the $p<.05$ level [$F(3,424)=14.385$, $p=.000$]. No significant effects were observed for time point by low SES or for time point by high parenting stress level. Post hoc analysis revealed that baseline PS total scores (m=2.94) were the highest, followed by immediate follow-up (m=2.70), 3-month follow-up (m=2.44), and 6+-month follow-up (m=2.33) scores, respectively. The data demonstrate that children's overall PS scores continually declined at each time point following their caregivers' training in the FLIP IT program.

A repeated measures MANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up), low SES, and high parenting stress on PS total scores. There was a significant effect of time point on PS total scores at the $p<.05$ level [using Wilks' Lambda, $F(3,40)=5.180$, $p=.004$]. No significant effects were observed for time point by low SES or for time point by high parenting stress level. Post hoc analysis revealed that baseline PS total scores (m=2.63) were the highest, followed by immediate follow-up (m=2.44), 3-month follow-up (m=2.39), and 6+-month follow-up (m=2.24) scores, respectively. The data demonstrate that children's overall PS total scores continually declined at each time point following their caregivers' training in the FLIP IT program.

PS Laxness Scores

An ANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up), low SES, and high parenting stress on PS laxness scores. There was a significant effect of time point on PS laxness scores at the $p<.05$ level [$F(3,425)=4.029$, $p=.008$]. No significant effects were observed for time point by low SES or for time point by high parenting stress level. Post hoc analysis revealed that baseline PS laxness scores (m=2.57) were the highest, followed by immediate follow-up (m=2.42), 3-month follow-up (m=2.25), and 6+-month follow-up (m=2.13) scores, respectively. The data demonstrate that children's PS laxness scores continually declined at each time point following their caregivers' training in the FLIP IT program.

A repeated measures MANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up), low SES, and high parenting stress on PS laxness scores. There was a significant effect of time point on PS laxness scores at the $p<.05$ level [using Wilks' Lambda, $F(3,41)=4.691$, $p=.007$]. No significant effects were observed for time point by low SES or for time point by high parenting stress level. Post hoc analysis revealed that immediate follow-up PS laxness scores (m=2.38) were the highest, followed by baseline (m=2.40), 3-month follow-up (m=2.23), and 6+-month follow-up (m=1.96) scores, respectively. The data demonstrate that children's overall PS laxness scores declined at 3- and 6+-months following their caregivers' training in the FLIP IT program.

PS Over-reactivity Scores

An ANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up), low SES, and high parenting stress on PS over-reactivity scores. There was a significant effect of time point on PS over-reactivity scores at the

$p<.05$ level [$F(3,425)=10.628$, $p=.000$]. No significant effects were observed for time point by low SES or for time point by high parenting stress level. Post hoc analysis revealed that baseline PS over-reactivity scores (m=3.03) were the highest, followed by immediate follow-up (m=2.67), 3-month follow-up (m=2.49), and 6+-month follow-up (m=2.34) scores, respectively. The data demonstrate that children's PS over-reactivity scores continually declined at each time point following their caregivers' training.

A repeated measures MANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up), low SES, and high parenting stress on PS over-reactivity scores. There was a significant effect of time point on PS over-reactivity scores at the $p<.05$ level [using Wilks' Lambda, $F(3,41)=2.879$, $p=.047$]. No significant effects were observed for time point by low SES or for time point by high parenting stress level. Post hoc analysis revealed that baseline PS over-reactivity scores (m=2.74) were the highest, followed by immediate follow-up (m=2.57), 3-month follow-up (m=2.41), and 6+-month follow-up (m=2.31) scores, respectively. The data demonstrate that children's overall PS over-reactivity scores continually declined at each time point following their caregivers' training in the FLIP IT program.

PS Hostility Scores

An ANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up), low SES, and high parenting stress on PS hostility scores. There was not a significant effect of time point on PS hostility scores at the $p<.05$ level [$F(3,425)=1.918$, $p=.126$]. No significant effects were observed for time point by low SES or for time point by high parenting stress level.

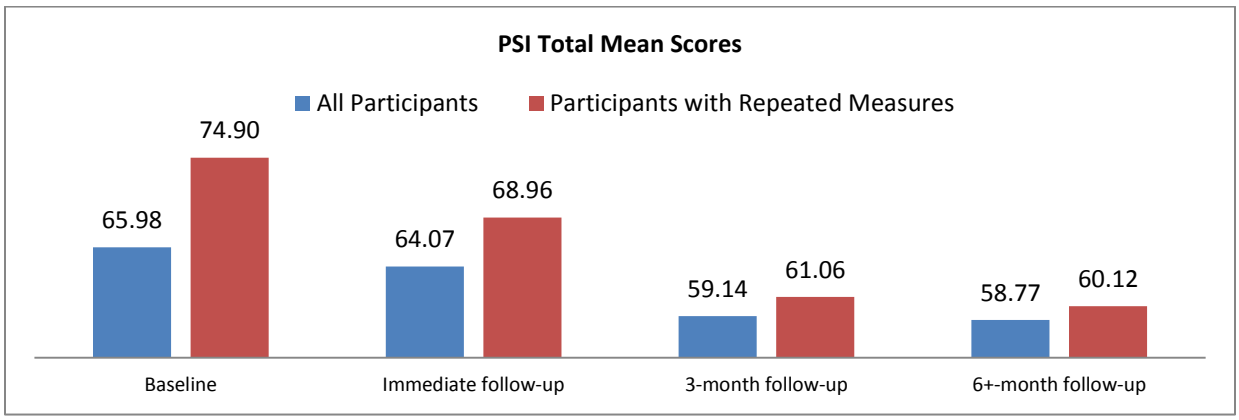
A repeated measures MANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up), low SES, and high parenting stress on PS hostility scores. There was not a significant effect of time point on PS hostility scores at the $p<.05$ level [using Wilks' Lambda, $F(3,41)=1.272$, $p=.297$]. No significant effects were observed for time point by low SES or for time point by high parenting stress level.

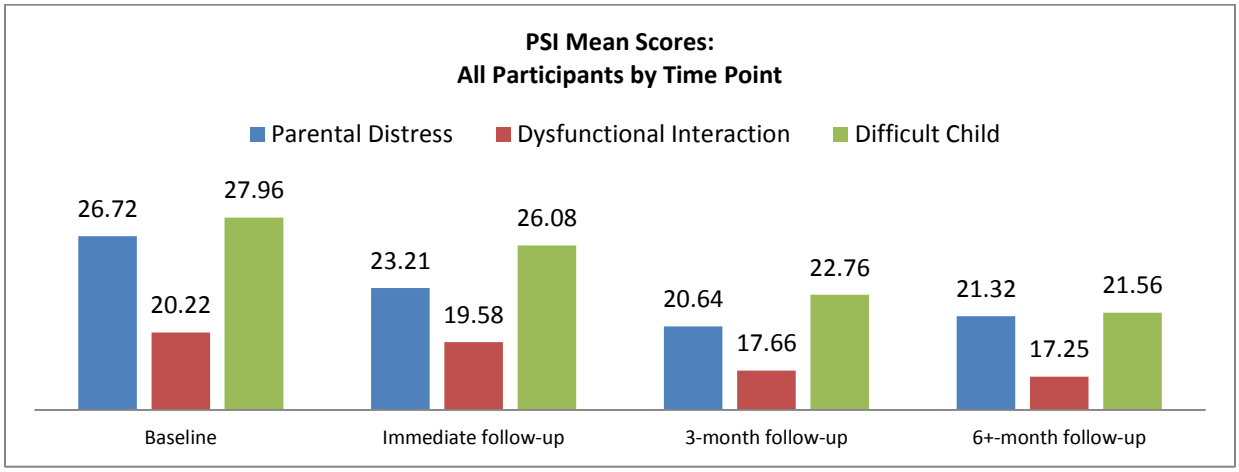
Parenting Stress Index (PSI)

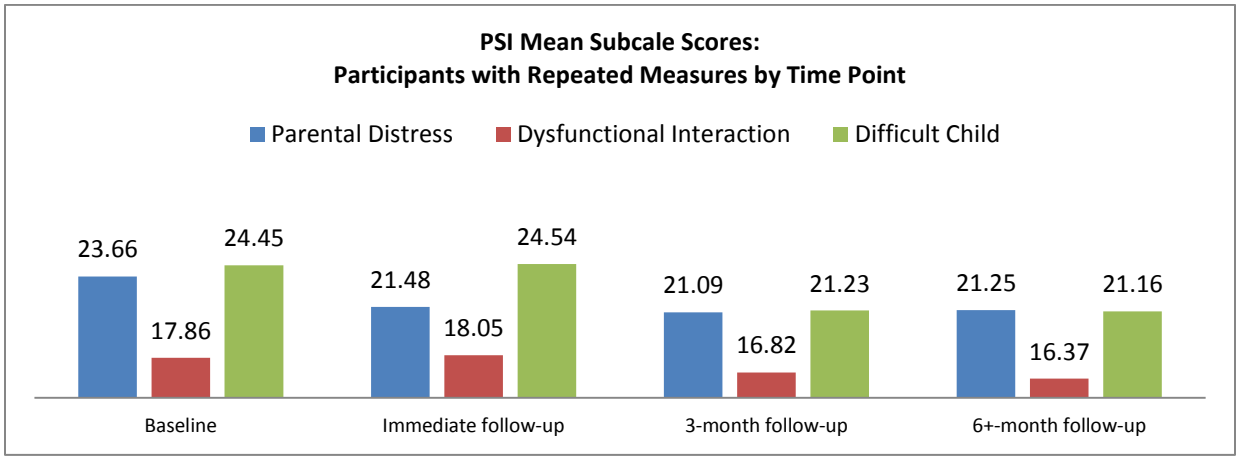
The Parenting Stress Index (PSI) is a screening tool used to evaluate parenting systems and identify issues with parent and child behaviors (Abidin, 1995). This inventory assesses three major domains of stress: child characteristics, parent characteristics, and situational/demographic life stress. With the purpose of identifying parent-child problem areas, this 120-item questionnaire takes 20 minutes to complete. In the current study, PSI total scores, parental distress scores, dysfunctional interaction scores, and difficult child score were calculated for:

- 206 caregivers who completed the PSI at baseline
- 112 caregivers who completed the PSI at immediate follow-up
- 67 caregivers who completed the PSI at 3-month follow-up
- 57 caregivers who completed the PSI at 6+-month follow-up

PSI Mean Scores







PSI Total Scores

An ANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up), low SES, and high parenting stress on PSI total scores. There was a significant effect of time point on PSI total scores at the $p<.05$ level [$F(3,426)=9.973$, $p=.000$]. No significant effects were observed for time point by low SES or for time point by high parenting stress level. Post hoc analysis revealed that baseline PSI total

scores (m=74.90) were the highest, followed by immediate follow-up (m=68.96), 3-month follow-up (m=61.06), and 6+-month follow-up (m=60.12) scores, respectively. The data demonstrate that overall PSI scores continually declined at each time point following training in the FLIP IT program.

A repeated measures MANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up) and low SES (high parenting stress was not included, as this analysis is based on parenting stress scores) on PSI total scores. There was a significant effect of time point on PSI scores at the $p<.05$ level [using Wilks' Lambda, $F(3,41)=3.741$, $p=.018$]. No significant effects were observed for time point by low SES. Post hoc analysis revealed that baseline PSI scores (m=65.98) were the highest, followed by immediate follow-up (m=64.07), 3-month follow-up (m=59.14), and 6+-month follow-up (m=58.77) scores, respectively. The data demonstrate that children's overall PSI scores continually declined at each time point following their caregivers' training in the FLIP IT program.

PSI Parental Distress Scores

An ANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up), low SES, and high parenting stress on PSI parental distress scores. There was a significant effect of time point on PSI parental distress scores at the $p<.05$ level [$F(3,425)=10.180$, $p=.000$]. No significant effects were observed for time point by low SES or for time point by high parenting stress level. Post hoc analysis revealed that baseline PSI parental distress scores (m=26.72) were the highest, followed by immediate follow-up (m=23.21), 3-month follow-up (m=20.64), and 6+-month follow-up (m=21.32) scores, respectively. The data demonstrate that PSI parental distress scores continually declined at each time point following training in the FLIP IT program.

A repeated measures MANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up) and low SES (high parenting stress was not included, as this analysis is based on parenting stress scores) on PSI parental distress scores. There was not a significant effect of time point on PSI scores at the $p<.05$ level [using Wilks' Lambda, $F(3,40)=1.414$, $p=.253$]. No significant effects were observed for time point by low SES.

PSI Dysfunctional Interaction Scores

An ANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up), low SES, and high parenting stress on PSI dysfunctional interaction scores. There was a significant effect of time point on PSI dysfunctional interaction scores at the $p<.05$ level [$F(3,425)=4.300$, $p=.005$]. No significant effects were observed for time point by low SES or for time point by high parenting stress level. Post hoc analysis revealed that baseline PSI dysfunctional interaction scores (m=20.22) were the highest, followed by immediate follow-up (m=19.58), 3-month follow-up (m=17.66), and 6+-month follow-up (m=17.25) scores, respectively. The data demonstrate that PSI dysfunctional interaction scores continually declined at each time point following training in the FLIP IT program.

A repeated measures MANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up) and low SES (high parenting stress was not included, as this analysis is based on parenting stress scores) on PSI dysfunctional interaction scores. There was not a significant effect of time point on PSI dysfunctional interaction scores at the $p<.05$ level [using Wilks' Lambda, $F(3,40)=1.936$, $p=.139$]. No significant effects were observed for time point by low SES.

PSI Difficult Child Scores

An ANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up), low SES, and high parenting stress on PSI difficult child scores. There was a significant effect of time point on PSI difficult child scores at the $p<.05$ level [$F(3,425)=8.864$, $p=.000$]. No significant effects were observed for time point by low SES or for time point by high parenting stress level. Post hoc analysis revealed that baseline PSI difficult child scores (m=27.96) were the highest, followed by immediate follow-up (m=26.08), 3-month follow-up (m=22.76), and 6+-month follow-up (m=21.56) scores, respectively. The data demonstrate that PSI difficult child scores continually declined at each time point following training in the FLIP IT program.

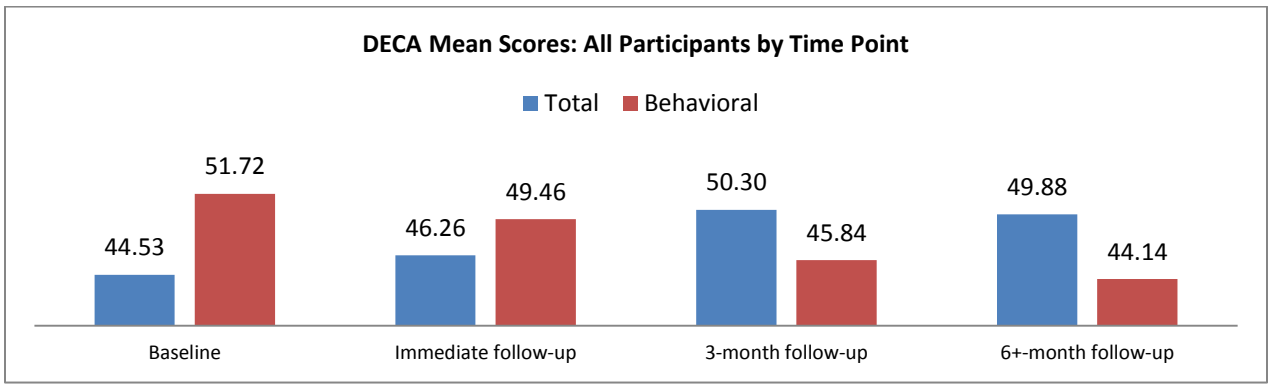
A repeated measures MANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up) and low SES (high parenting stress was not included, as this analysis is based on parenting stress scores) on PSI difficult child scores. There was a significant effect of time point on PSI scores at the $p<.05$ level [using Wilks' Lambda, $F(3,40)=5.254$, $p=.004$]. No significant effects were observed for time point by low SES. Post hoc analysis revealed that immediate follow-up PSI difficult child scores (m=24.54) were the highest, followed by baseline (m=24.45), 3-month follow-up (m=21.23), and 6+-month follow-up (m=21.16) scores, respectively. The data demonstrate that PSI difficult child scores were significantly lower at 3 and 6+ month follow-up time points compared to baseline and immediate follow-up time points.

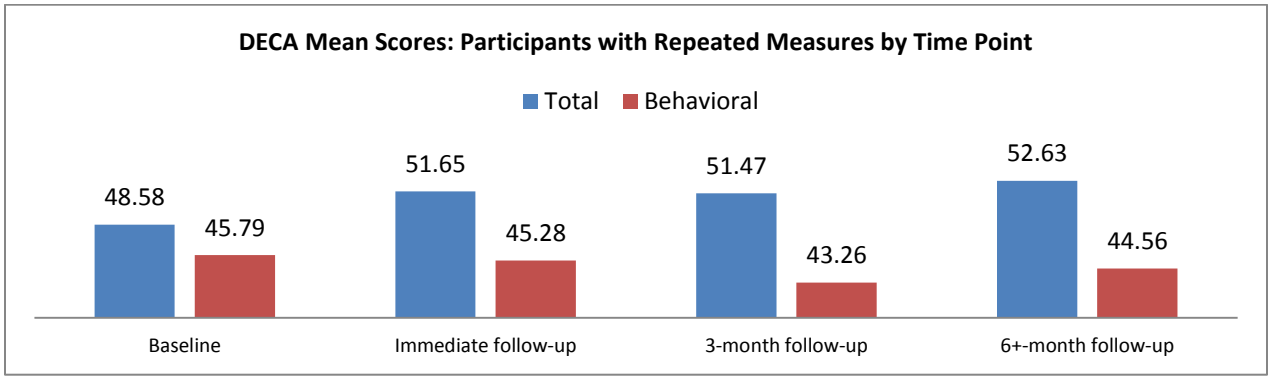
Devereux Early Childhood Assessment (DECA)

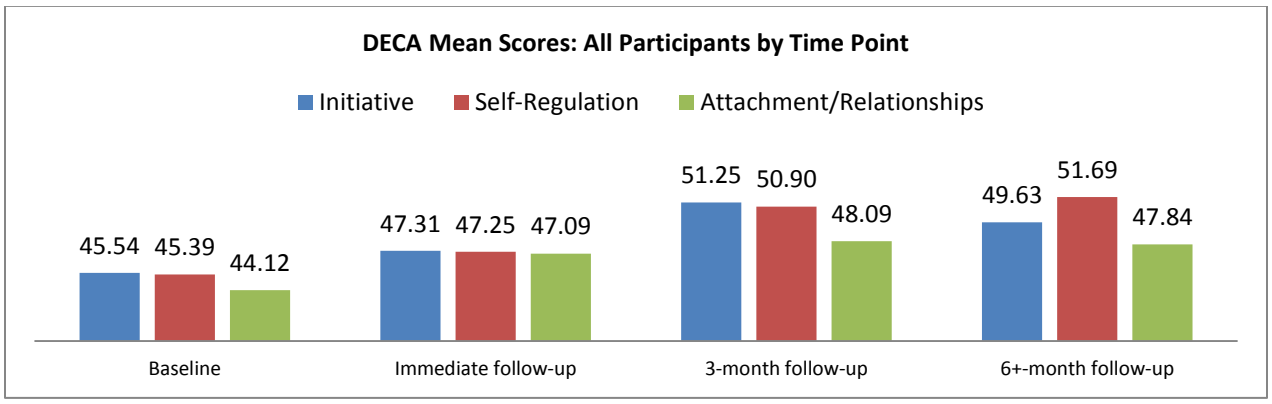
The Devereux Early Childhood Assessment (DECA) is a strength-based assessment developed by the Devereux Center for Resilient Children (DCRC) to support the healthy social and emotional development and resilience of children and the adults who care for them (Mackrain, LeBueffe, & Powell, 2007). It assesses for protective factors in children from infancy to 8th grade. This research-based assessment is nationally standardized, reliable, and valid. In the current study, DECA total, behavioral, initiative (ability abilities to use independent thought and action to meet his/her needs), self-regulation (ability to express emotions and manage behaviors in healthy ways), and attachment/relationship (ability to promote and maintain mutual, positive connections with other children and adults) scores were calculated for:

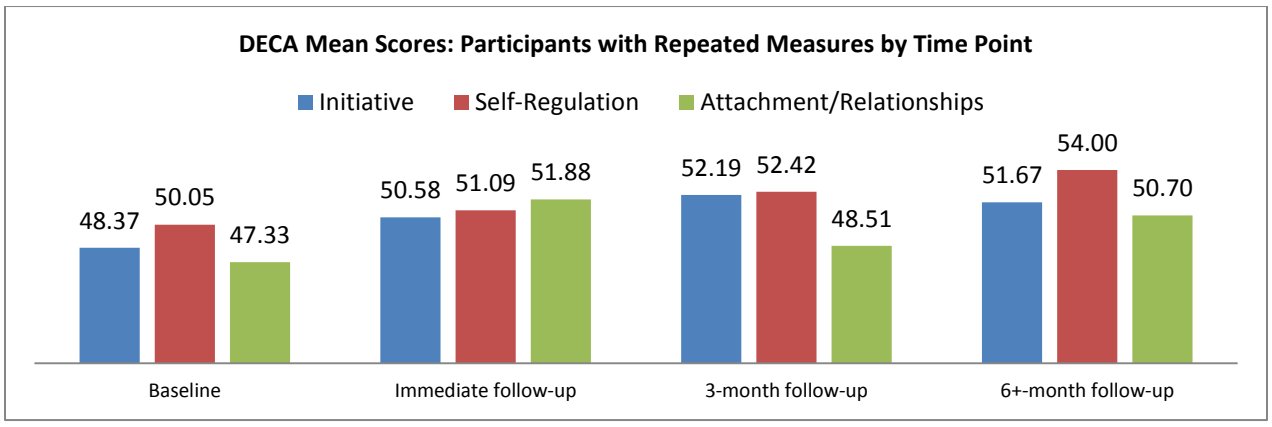
- 205 caregivers who completed the DECA at baseline
- 111 caregivers who completed the DECA at immediate follow-up
- 67 caregivers who completed the DECA at 3-month follow-up
- 58 caregivers who completed the DECA at 6+-month follow-up

DECA Mean Scores









 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

DECA Total Scores

An ANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up), low SES, and high parenting stress on DECA total scores. There was a significant effect of time point on DECA total scores at the $p<.05$ level [$F(3,425)=6.773$, $p=.000$]. No significant effects were observed for time point by low SES or for time point by high parenting stress level. Post hoc analysis revealed that baseline DECA total scores (m=44.53) were the *lowest*, followed by immediate follow-up (m=46.26), 6+-month follow-up (m=49.88) scores, and 3-month follow-up (m=50.30), respectively. The data demonstrate that DECA total scores *increased* from baseline to 6+months following training in the FLIP IT program.

A repeated measures MANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up) and low SES (high parenting stress was not included, as this analysis is based on parenting stress scores) on DECA total scores. There was not a significant effect of time point on DECA total scores at the $p<.05$ level [using Wilks' Lambda, $F(3,40)=1.655$, $p=.192$]. No significant effects were observed for time point by low SES or time point by high parenting stress.

DECA Behavioral Scores

An ANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up), low SES, and high parenting stress on DECA behavioral scores. There was a significant effect of time point on DECA behavioral scores at the $p<.05$ level [$F(3,425)=6.497$, $p=.000$]. No significant effects were observed for time point by low SES or for time point by high parenting stress level. Post hoc analysis revealed that baseline DECA behavioral scores (m=51.72) were the *highest*, followed by immediate follow-up (m=49.46), 3-month follow-up (m=45.84) and 6+-month follow-up (m=44.14) scores, respectively. The data demonstrate that DECA behavioral scores continually de*creased* at each time point following training in the FLIP IT program.

A repeated measures MANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up) and low SES (high parenting stress was not included, as this analysis is based on parenting stress scores) on DECA behavioral scores. There was not a significant effect of time point on DECA behavioral scores at the $p<.05$ level [using Wilks' Lambda, $F(3,40)=1.019$, $p=.394$]. No significant effects were observed for time point by low SES or time point by high parenting stress.

DECA Initiative Scores

An ANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up), low SES, and high parenting stress on DECA initiative scores. There was a significant effect of time point on DECA initiative scores at the $p<.05$ level [$F(3,425)=6.255$, $p=.000$]. No significant effects were observed for time point by low SES or for time point by high parenting stress level. Post hoc analysis revealed that baseline DECA initiative scores (m=45.54) were the *lowest*, followed by immediate follow-up (m=47.31), 6+-month follow-up (m=49.63), and 3-month follow-up (m=51.25) scores, respectively. The data demonstrate that DECA initiative scores *increased* from baseline to 6+months following training in the FLIP IT program.

A repeated measures MANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up) and low SES (high parenting stress was not included, as this analysis is based on parenting stress scores) on DECA initiative scores. There was not a significant effect of time point on DECA initiative scores at the $p<.05$ level [using Wilks' Lambda, $F(3,37)=1.198$, $p=.324$]. No significant effects were observed for time point by low SES or time point by high parenting stress.

DECA Self-Regulation Scores

An ANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up), low SES, and high parenting stress on DECA self-regulation scores. There was a significant effect of time point on DECA self-regulation scores at the $p<.05$ level [$F(3,425)=7.079$, $p=.000$]. No significant effects were observed for time point by low SES or for time point by high parenting stress level. Post hoc analysis revealed that baseline DECA self-regulation scores (m=45.39) were the *lowest*, followed by immediate follow-up (m=47.25), 3-month follow-up (m=50.90), and 6+-month follow-up (m=51.69) scores, respectively. The data demonstrate that DECA self-regulation scores *increased* at each time point following training in the FLIP IT program.

A repeated measures MANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up) and low SES (high parenting stress was not included, as this analysis is based on parenting stress scores) on DECA self-regulation scores. There was not a significant effect of time point on DECA self-regulation scores at the $p<.05$ level [using Wilks' Lambda, $F(3,37)=1.867$, $p=.152$]. No significant effects were observed for time point by low SES or time point by high parenting stress.

DECA Attachment/Relationships Scores

An ANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up), low SES, and high parenting stress on DECA attachment/relationship scores. There was a significant effect of time point on DECA attachment/relationship scores at the $p<.05$ level [$F(3,425)=3.531$, $p=.015$]. No significant effects were observed for time point by low SES or for time point by high parenting stress level. Post hoc analysis revealed that baseline DECA attachment/relationship scores (m=44.12) were the *lowest*, followed by immediate follow-up (m=47.09), 6+-month follow-up (m=47.84) scores, and 3-month follow-up (m=48.09), respectively. The data demonstrate that DECA attachment/relationship scores *increased* at each time point following training in the FLIP IT program.

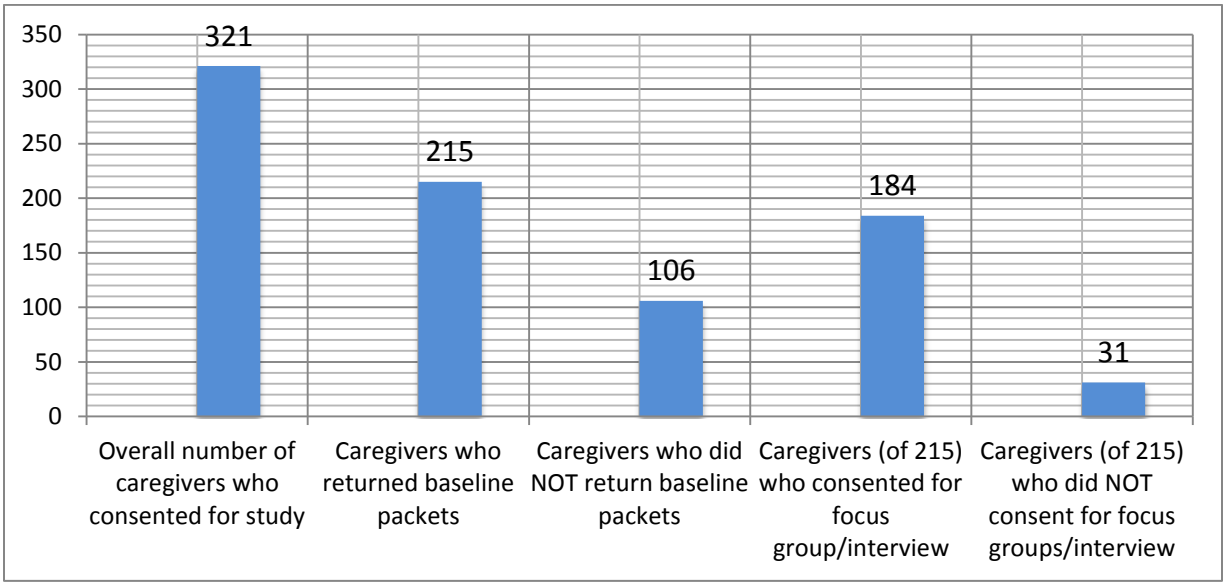
A repeated measures MANOVA was conducted to compare the effect of time point (baseline, immediate follow-up, 3-month follow-up, and 6+-month follow-up) and low SES (high parenting stress was not included, as this analysis is based on parenting stress scores) on DECA attachment/relationships scores. There was not a significant effect of time point on DECA attachment/relationships scores at the $p<.05$ level [using Wilks' Lambda, $F(3,37)=2.741$, $p=.057$]. No significant effects were observed for time point by low SES or time point by high parenting stress.

Qualitative Outcomes & Results

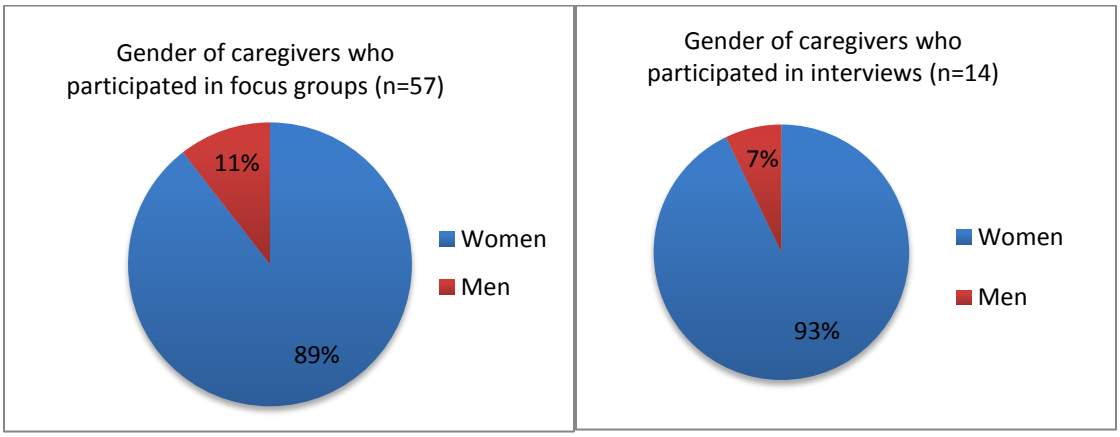
Focus Groups and Interviews

Of the 321 caregivers who consented to be part of the study, 215 completed and returned baseline packets. Of those who completed and returned baseline packets (n=215):

- 184 caregivers consented to be a part of a focus group or interview.
- 31 caregivers chose *not* to be a part of a focus group or interview.
- 106 caregivers did not return baseline packets and, as such, were not offered the opportunity to participate in a focus group or interview.



Of the 184 caregivers who provided informed consent, 71 caregivers took part in a focus group or interview. Of those, 57 caregivers were part of a focus group and 14 caregivers were interviewed. Of the 57 caregivers who were part of a focus group, 51 were women and 6 were men. Of the 14 caregivers who were interviewed, 13 were women and 1 was a man. All focus groups conducted (n=4) were done so immediately following participation in the FLIP IT training session. All of the interviews (n=14) were conducted 6+months post participation in the FLIP IT training session.



 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

In the focus groups and interviews, participants were asked to respond to a pre-developed set of questions and discussion prompts, including:

1. *How satisfied are you with the FLIP IT parent-training that you received?*
2. *What method was most helpful in teaching you the new skills from the FLIP IT model (e.g., role-playing, rehearsing, and visual aids)?*
3. *How successful have you been in implementing the skills you learned in the FLIP IT model?*
4. *Is this model working for your family?*
5. *Are you able to use the FLIP IT steps consistently?*
6. *Does using the FLIP IT steps fit with your priorities as a parent?*
7. *Are you using the FLIP IT steps regularly (e.g., daily/weekly)?*
8. *Have you modified any of the steps to better fit your personal situation/your family? If so, how?*
9. *Do you use the FLIP IT steps only on an 'as-needed' basis (e.g., only once in a while)?*
10. *Have you decided not to use the FLIP IT steps? If so, why? Did you find them not useful? Did you find them unnecessary?*
11. *Do you think you could benefit from a "booster session" of the training? If so, how?*
12. *Do you think you could benefit from "coaching" by the FLIP IT trainer? If so, how?*
13. *What have been the most positive outcomes you and your family have experienced since using the FLIP IT model?*
14. *What have been the biggest challenges you and your family has experienced since using the FLIP IT model?*
15. *Would you like to say anything else to us about the FLIP IT model and your experience with it?*

All focus groups and interviews were transcribed and loaded into the NVivo statistical analysis database. The research team developed coding criteria representing the thematic elements of the focus group and interview discussions. Four major thematic elements were identified: 1) *satisfaction*, including overall satisfaction, satisfaction with the FLIP IT training, and satisfaction with the FLIP IT skills/steps; 2) *FLIP IT training*, including learning new skills, helpfulness of examples used in the training (e.g., role-plays, visual aids), and relevance of the training/examples to the caregiver/family; 3) *FLIP IT skills*, including general use of the skills, feasibility of using the skills, and outcomes related to using the skills; and 4) *follow-up*, including the caregivers' desire for follow-up post-training, desire for coaching and/or booster sessions, and opinions about whether other adults in the children's lives should be trained. In addition, any response that a coder was unsure about was coded as "Other" and examined by other members of the team to determine if it contained any data relevant to the four elements.

Six members of the research team were responsible for coding the transcripts using the coding criteria. Three members of the coding team were current staff members at the Center for School-Based Mental Health Programs at Miami University, and three members of the coding team were current graduate students at Miami University. Two raters were assigned to code each of the 4

focus groups and 13 interviews. Once all transcripts were coded and entered into NVivo, inter-rater reliabilities were calculated. Inter-rater reliability is a measure of reliability used to assess the degree to which different judges or raters agree in their assessment decisions. In statistics, it gives a score of how much consensus, or agreement, there is in the ratings given by judges. The general rule of thumb for percent agreement is presented in Neuendorf: "Coefficients of .90 or greater are nearly always acceptable, .80 or greater is acceptable in most situations, and .70 may be appropriate in some exploratory studies for some indices" (Neuendorf 2002, p. 145). The following table displays the inter-rater reliability agreement statistics between the rating pairs.

Table 1: Frequency of 100% agreement between raters

	Rater 1	Rater 2	Rater 3	Rater 4	Rater 5	Rater 6
Rater 1	--					
Rater 2	64.5%	--				
Rater 3	--	52.7%	--			
Rater 4	52.7%	--	53.8%	--		
Rater 5	--	--	--	66.7%	--	
Rater 6	--	--	--	57%	49.5%	--

Table 2: Frequency of 90% - 99.9% agreement between raters

	Rater 1	Rater 2	Rater 3	Rater 4	Rater 5	Rater 6
Rater 1	--					
Rater 2	30.1%	--				
Rater 3	--	40.1%	--			
Rater 4	40.1%	--	41.9%	--		
Rater 5	--	--	--	28%	--	
Rater 6	--	--	---	75.5%	47%	--

Table 3: Frequency of 80% - 89.9% agreement between raters

	Rater 1	Rater 2	Rater 3	Rater 4	Rater 5	Rater 6
Rater 1	--					
Rater 2	3.2%	--				
Rater 3	--	6.5%	--			
Rater 4	5.4%	--	3.7%	--		
Rater 5	--	--	--	4.3%	--	
Rater 6	--	--	--	0%	2.7%	--

Table 4: Frequency of less than 80% agreement between raters

	Rater 1	Rater 2	Rater 3	Rater 4	Rater 5	Rater 6
Rater 1	--					
Rater 2	2.2%	--				
Rater 3	--	0.7%	--			
Rater 4	1.9%	--	0.5%	--		
Rater 5	--	--	--	1.1%	--	
Rater 6	--	--	--	0%	0.5%	--

Only a very small percentage of ratings (less than 7%) fell below 80% agreement, with a range of 69%-79%. No inter-rater reliability fell below 69%. These inter-rater reliability statistics show that the vast majority of the ratings fall within an acceptable range of agreement.

The following qualitative analyses provide information about the thematic responses to each question/discussion prompt. The first section provides numerical representation of the data, in which frequencies of positive, negative, and neutral responses are reported by thematic element. In the second section, each thematic element is explored in detailed. For visual representation of the data, Word Clouds are included in which words that were discussed most often are represented in larger font and the words discussed less often are represented in smaller font. In addition, the specific comments from participants' transcripts are provided to give a sample of the type and quality of responses.

Based on qualitative analyses of focus group and interview responses, parents/caregivers were overwhelmingly satisfied with their overall FLIP IT experience, the FLIP IT training session, and the FLIP IT steps/parenting skills that they learned. The majority (86%) of participants' comments related to their satisfaction with their FLIP IT experience, compared to 8% that were neutral, and 5% that related to dissatisfaction. Similarly, 86% of participants' comments described satisfaction with the FLIP IT training, compared to 12% that were neutral, and 2% that described dissatisfaction. When asked about their satisfaction with their new skills, 97% of comments described positive satisfaction, compared to 3% that were neutral.

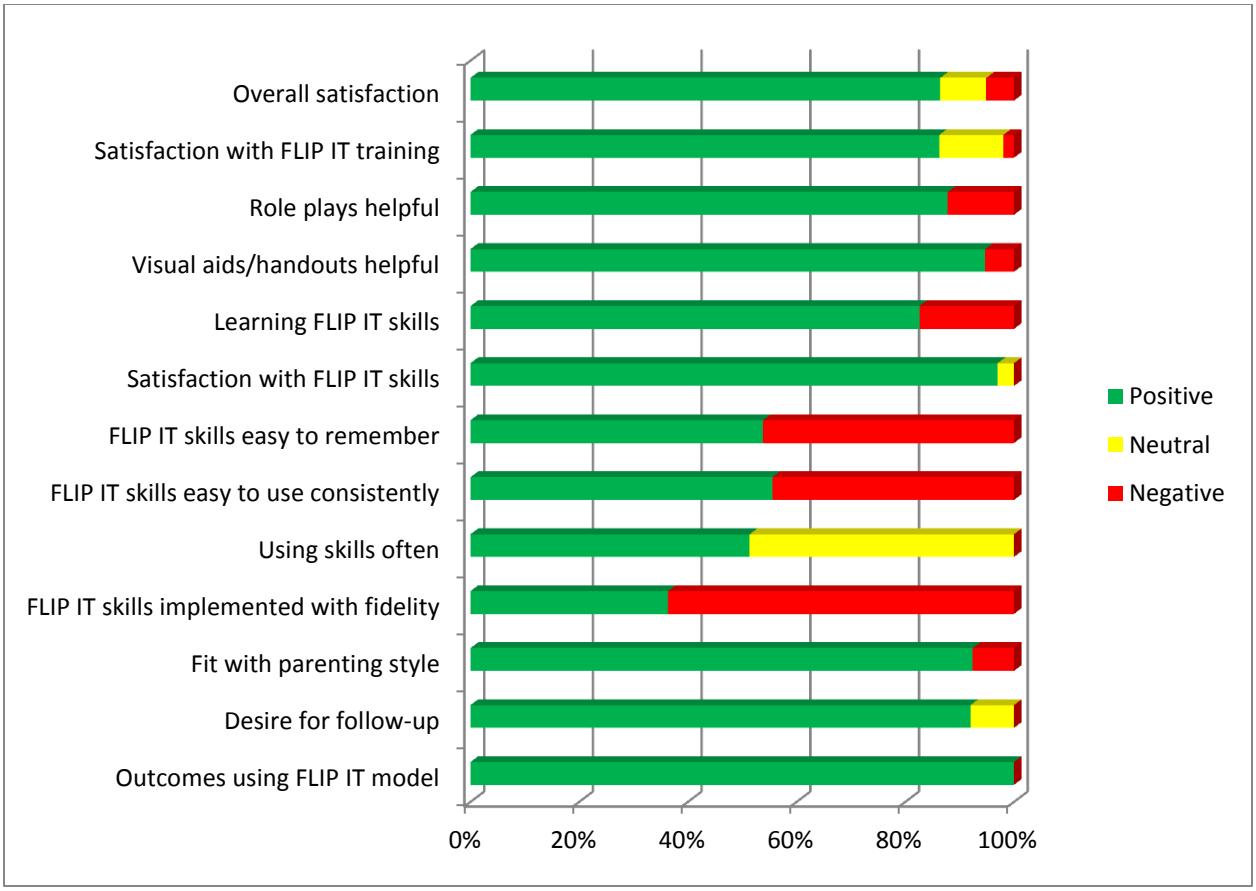
Participants were asked to describe whether or not they learned new parenting techniques and skills as a result of attending the FLIP IT training session. 83% of comments described learning new skills through the training, while 17% described not learning new skills. For those who described not learning new skills, most of the comments made were about already knowing the skills and/or already using similar parenting strategies with their children.

With regard to their experiences in the FLIP IT training session, parents/caregivers found the role-plays (88% positive comments) and visual aids/handouts (95% positive comments) to be helpful in learning the FLIP IT steps.

Once they attempted to implement the FLIP IT steps in their everyday lives, participants were much more split about the ease of remembering the skills (54% positive, 46% negative) and their ability to use the skills consistently (56% positive, 44% negative). Participants were asked how often they use the skills. 51% of comments related to using the skills often and 49% related to using them sometimes. Participants were also asked whether or not they use the skills with fidelity to the FLIP IT model. 36% of comments described using the skills with fidelity and 64% described making adaptations/modifications to the skills to fit their specific circumstances.

Most importantly, when asked whether or not they and their families experienced positive outcomes, an *overwhelming 100% of comments described positive outcomes*. 92% of comments described the skills fitting with their own personal parenting style and 8% of comments described the skills not fitting.

When asked about their desire for follow-up after the FLIP IT training session, 92% of the comments related to the desire for follow-up (such as coaching or booster sessions) to further enhance and hone their skills, while 8% were neutral about needing follow-up.



Overall satisfaction

Participants were asked to discuss their overall satisfaction with their FLIP IT experience. Among the 59 comments related to overall satisfaction with FLIP IT, 86% participants' comments (n=51) related to their satisfaction with their FLIP IT experience.

Participant comments included:

- *When people are tired or short-tempered, it seems like everything really flares, and that is when this [FLIP IT] is called for.*
- *It is a really good model; it would be nice to see it more widespread. It got me thinking about how unusual it is for people to think about the way children are approached and spoken to, and problems addressed. It would be really nice to see it become more widespread.*
- *I liked the whole program.*
- *The information was good.*
- *I think the FLIP IT works very well.*
- *It helps to calm me down. It gives me the ability to not get so frustrated with him. I always tell him we are a team and we will figure it out together. I like that it helps him too. I want him to problem solve and I want him to be able to deal with his own emotions, so this does help.*

 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

- *I would just say it has really been an eye opener for me and I feel fortunate I was able to be a part of something like this, to help me. I have even discussed it with a few friends of mine who are parents.*
- *When you called me and I started thinking about it, I thought 'you know, this has been a very good thing'.*
- *I feel like any parent that is going through behavior or emotional problems with their child, if they have a chance to do the FLIP IT training, they should do it. The information was very good when it comes to dealing with kids. Especially a single parent, like me. It has relieved a lot of stress, learning how to deal with the child. I was at a point where I didn't know what else to do. So I feel if more parents are able to be involved in the training- that would be great.*

Figure 3: Participant responses regarding overall satisfaction with FLIP IT

Satisfaction with FLIP IT training

Participants were asked to discuss their satisfaction with their FLIP IT training experience. Among the 51 comments related to satisfaction with the FLIP IT training, participants overwhelmingly responded that they were satisfied (n=44 comments; 86% of total comments) with the FLIP IT training that they received. Only 1 comment (2% of total comments) indicated some dissatisfaction with the training: (*My first impression of FLIP IT was that there was a little bit too much talking*). A small number of comments (n=6; 12% of total comments) indicated neutral satisfaction with the training, including comments about the training being average or 'so-so', not receiving new information in the training, indicating that the trainer was 'okay', and desiring two smaller sessions, rather than one longer session.

Among those participants who responded positively, comments included:

- *I'm very glad I took the class. It has given me a ton of knowledge and I really appreciate the opportunity that everybody gave us.*
- *I really liked it. I felt it was very informative.*
- *I am incredibly satisfied. It has been a huge help.*
- *I would say very satisfied. Even though I focused on feelings with my kids before, it was a little bit different than that, so getting the information and being able to practice it I found to be very beneficial and it has helped my kids, myself, and my husband.*
- *I was just really pleased with how much I got out of it and how well it has worked as far as turning the situation around from a negative to a positive so many times. It really works well.*
- *I do enjoy it was changed up and we did not sit and do the same thing for the entire training. Everybody learns in a different way, so I like that it was done so that each of us could get our own learning style touched on.*
- *Very satisfied. It really helped me out in a lot of ways with my son, even though he is non-verbal.*
- *I am very satisfied and I have seen a lot of change.*

Figure 4: Participant responses regarding satisfaction with FLIP IT training

Most helpful training method

Participants were asked which method was most helpful in teaching them the new skills of the FLIP IT model. Participants provided the most positive comments about group rehearsal and roles plays (65 comments, compared to 9 negative comments), followed by visual aids and handouts (36 comments, 2 negative comments) and videos (2 comments, compared to 5 negative comments). In general, participants felt that the videos were more appropriate for classroom settings, rather than home settings.

Clearly, the majority of participants felt that the hands-on, personal nature of group rehearsal and role-playing was very beneficial to learning the FLIP IT skills, as can be seen in a sample of their comments:

- *I think the role-playing was the best as we got to practice. Without that, I'm not sure it would have come naturally to me with my kids.*
- *The open discussion where we could talk about our examples and specific situations, that was helpful.*
- *It gave you an idea of how to do it instead of it just being told to do it… we were given an outline of how it may or may not work.*
- *It helps with the group interaction to help remember a lot more of it.*
- *It does take repetition to get used to it. Without the repetition, I don't think it would come as quickly.*
- *So really for me seeing it on paper and being able to practice that there are different ways to handle each situation- that was very helpful for me.*
- *That would help us know what we were actually going to say to them when we first started using it.*
- *I am more of a hands-on person, so definitely doing the role-playing type activities was more helpful for me.*
- *I found the role-playing helpful.*
- *That is why the role-playing was helpful. I have to think about my words to implement it almost one year later.*

Participants also reported that the visual aids were very helpful to them as they learned the FLIP IT steps, as can be seen in a sample of their comments:

- *I really liked the 'emotions' handout that we got. It is something you can take and use while you are with your kids.*
- *The way it [visual aids] depicted every situation. It was clear and concise and did not leave any room for questioning.*
- *I refer back to the paperwork [visual aids] they gave us.*
- *The visual aids and practicing the skills and the posters. Those were all helpful.*
- *I was able to actually use some of the visuals in my home to remind my husband and I of what we needed to do.*
- *I did better with visual aids.*
- *I actually kept all my paperwork from the original training and I can go back and look at it every once in a while.*

Learning FLIP IT skills

Participants were asked to discuss whether or not they learned new skills during the FLIP IT training. Among the 23 comments related to learning new skills, there were 19 comments (83% of total comments) from participants who learned new skills and 4 comments (17% of total comments) from participants who reported that they already knew the skills and were already using the skills identified in the training.

 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

Among those participants who reported learning new skills, comments included:

- *It was talking about feelings.*
- *This lesson helps me to develop better skills that I don't have, helping me be more rooted with the females that I deal with.*
- *The feelings part.*
- *For me personally, I think it will help me because what I tend to do is get mad and ask my son why, where I need to sit back and reflect and give him his own chance to reflect on what he did and what he could have done better, as opposed to just sticking "why" out there and him telling me "just because", and involve his feelings more as to why he may have done something.*
- *It has definitely given me a different look at things from a different perspective on how to handle a situation.*
- *Yes, I definitely see myself using a few of the particular models with the kiddos, kind of working them into the daily routine of everything.*
- *The most helpful I would say was learning how to re-direct my daughter in a way where it is not upsetting either of us.*
- *It helped me learn new techniques.*

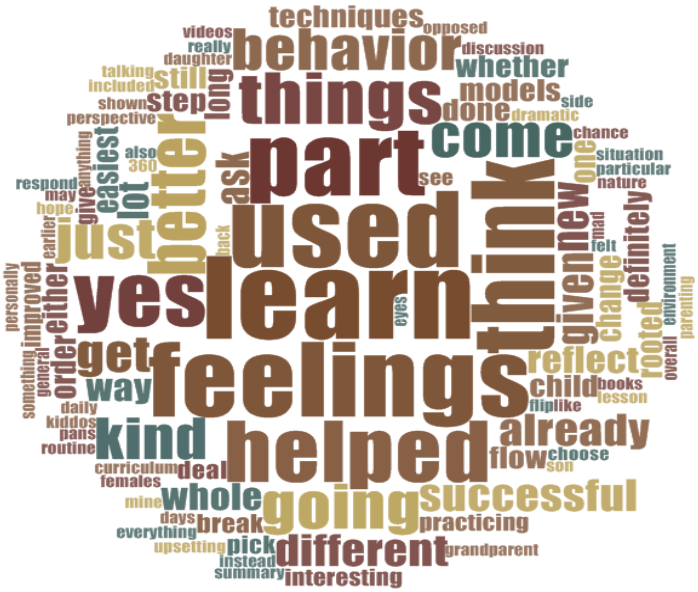


Figure 5: Participant responses regarding learning new skills

Satisfaction with FLIP IT skills

Participants were asked to discuss their satisfaction with the FLIP IT skills they learned. Among the 38 comments related to satisfaction with the FLIP IT skills, participants overwhelmingly responded that they were satisfied (n=37 comments; 97% of total comments) with the FLIP IT skills that they learned. There were no comments (n=0; 0% of total comments) related to being dissatisfied with the FLIP IT skills. One comment (3% of total comments) indicated neutral satisfaction with the skills: (*I think the steps make good sense, but I think like with setting limits, you need to use as few words as possible, and I don't think those kinds of things were really emphasized).*

 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

Among those participants who responded positively, comments included:

- *[I like] the one step of trying to get the children to come up with their own solution.*
- *The skills will be good for transitioning between kids.*
- *I do my best. It's just in the moment I have to remember to stop and think about what I'm doing. That helps me to calm down a little bit so I'm not getting so angry with him if he makes a poor choice. I like that it gives me a minute to step back so I'm not so upset.*
- *I think they [FLIP IT steps] all seem really straightforward and very vital to the process. I think it is really well designed.*
- *It was something that, with practice, started to come more naturally.*
- *It seems to have made our home a lot more peaceful than it was before.*
- *I mainly went to the training and wanted to learn the things for my 4-year-old. Using it up to this point I feel like it is working very well. I have seen a dramatic positive change in her.*
- *[It's been helpful] explaining to him the better way of validating his emotions, but then explaining the correct way of dealing with these situations.*
- *It really has helped out a lot because I use it now, especially during his outburst.*

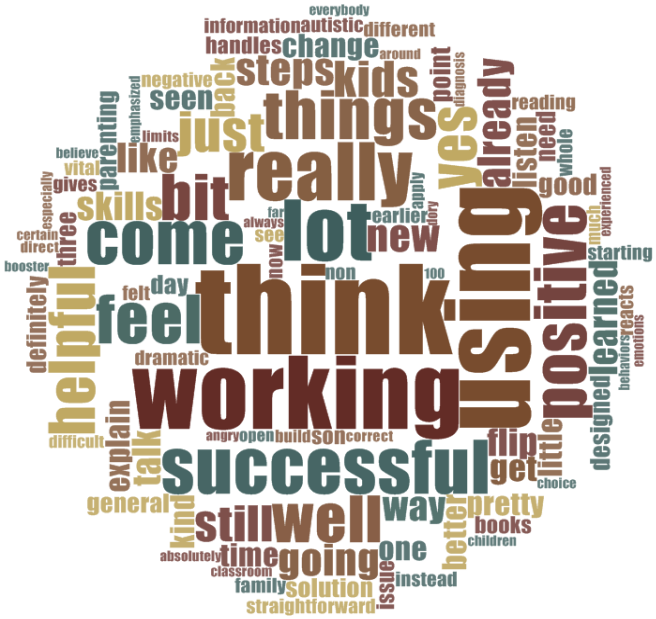


Figure 6: Participant responses regarding satisfaction with FLIP IT skills

Using FLIP IT skills

While participants reported being able to use the FLIP IT skills with their children (33 comments), they were split on whether or not they could easily remember the skills (7 comments that the skills were easy to remember, 6 comments that the skills were hard to remember) or use the skills consistently (20 comments that the skills were easy to use consistently, 16 comments that the skills were hard to use consistently). Similarly, participants made 37 comments about using the skills 'often' and 35 comments about using the skills 'sometimes'.

- *It is not going to be easy to just say, "oh, now this is the way I am going to parent, and this is the way I am going to do this".*
- *I think that is the most interesting part of it, is to get through to their feelings, not just the behavior. I guess I've not before really focused on their feelings causing behavior they are doing. I think just that step alone will help me ease the situation quicker than just saying "go to time out" or however I would've handled it.*
- *For me discussing feelings is a totally different order, so I think as a parent if I tell my kids to stop, they should stop. Getting involved and I'm saying no, that is the end of it and it's not and I break the cycle of whatever behavior they are in. Once that cycle is broken, then I will move in and say why did you do this and why didn't you do the right thing, whatever the right thing was. Let's talk about why we did that. So I don't necessarily follow your order and that is going to be the hard part...to implement that, to talk feelings first.*
- *I have kind of incorporated it in my day-to-day activities. I kind of do it without even realizing "hey, that is FLIP IT". It has just become part of my thing, I guess.*
- *I would like to say it would be in the exact order of the FLIP IT training, but I use them consistently in my own way.*
- *I think I remember to do that 75% of the time now, whereas before the training it was probably more like 10%, so the training definitely clicks me into identifying the emotions first, and trying to get my child to identify their emotion in order to get at the root of what is going on as opposed to the yelling, screaming and meltdowns.*
- *At first I did it with every situation that arose, then it tapered off a little bit. I still have to remind myself to use it in a heated situation with my kids. I would say like with any issue, perhaps 70% of the time I still use the FLIP IT process.*
- *I have had some success using some of the skills I learned.*
- *I only use them when I need them.*
- *We have been using it a lot.*
- *I use them on a daily basis.*
- *Only when we have a behavioral concern.*
- *It used to be a lot more frequently, probably almost daily. We are about to the every 3 or 4 days where we actually have to intervene and do it.*
- *I don't think I used it consistently, but there were moments I do believe that I did practice those methods*
- *On a daily basis I find myself using them.*
- *I think I try to utilize some of the steps, but I can't say I utilize it all the time. There are times I forget to use it. I do try to use it as much as I remember to.*

FLIP IT skills implemented with fidelity

Participants were asked to describe whether or not they implemented the FLIP IT skills with fidelity. Among the 55 comments related to implementing skills with fidelity, participants provided 20 comments (36% of total comments) about using the FLIP IT steps in the way in which they were trained. Participants provided 35 comments (64% of total comments) about modifying and adapting the steps to meet their individual needs.

Among those participants who are implementing with fidelity, comments included:

- *As long as I use them in the order I am supposed to do, he tends to respond better. I can't really improvise. You have to do the whole thing with him. You can't just pick and choose. You have to do each step and his behavior gets better.*
- *If I modify the steps it doesn't go as well, especially at home.*
- *I think it's been pretty consistent to the model, because she is very responsive. The minute you acknowledge how she is feeling then there is a sense of relief for her that "oh good, you understand, now I can talk about it."*
- *I think you need all the steps.*
- *I still follow the program pretty much.*

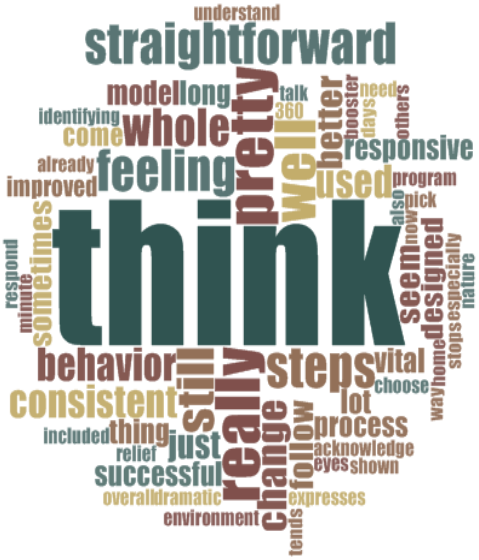


Figure 7: Participant responses regarding implementing the steps with fidelity

Among those participants who are implementing with modifications and adaptations, comments included:

- *For me discussing feelings is a totally different order, so I think as a parent if I tell my kids to stop, they should stop. So I don't necessarily follow your order and that is going to be the hard part...to implement that, to talk feelings first.*
- *If we are out in public I might not give him as many choices. I might just give him one and tell him this is what you have to do.*
- *I kind of take the basis and modify it to fit the circumstance I am trying to use it in. It's not like a huge modification, just tweaking it to which crowd I'm using it for.*
- *Well, it depends on the kiddos. I am not sure how to explain it. I just take the basic principle, to the age group, as some might not understand. So I kind of get on their level to do it.*
- *When my son was a little younger we maybe didn't do the inquiry as much, but we have started doing that more with him.*
- *I would like to say it would be in the exact order of the FLIP IT training, but I use them consistently in my own way.*

 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

- *Yes, at times you have to because when I'm out in public I don't have to do the entire thing I do at home, I have to kind of abbreviate it.*
- *It has probably been adjusted a little bit just based on his own needs and how he is as a kid, and how we are.*
- *Yes. I guess with any child, because every child is different and they all intake what you do and say to them differently.*

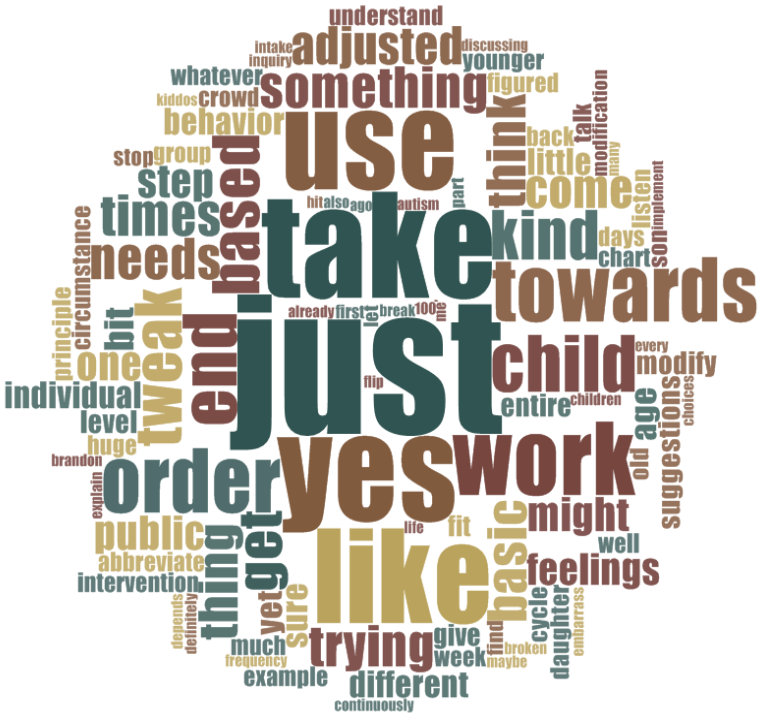


Figure 8: Participant responses regarding implementing with modifications and adaptations

Fit with parenting style

Participants were asked to describe whether or not the FLIP IT skills fit with their personal parenting style. Among the 66 comments related to fit with parenting style, 61 participant comments (92%) related to the FLIP IT steps fitting with their personal parenting style.

Participant comments included:

- *It really does. Especially because it starts with acknowledging her feelings, so making sure she feels validated and she knows that I am on her side, I am not disciplining her for the sake of discipline.*
- *I had already been using several of the steps*
- *It seems like a no-brainer*
- *It makes me think about what is my goal as I'm parenting*
- *FLIP-IT offers the opportunity for you to incorporate your values into what you are working with*
- *I think ultimately we will find ourselves using it as it is a part of what we do with our children*

- *For my parenting style, it is 100% really good*
- *I have kind of incorporated it in my day-to-day activities. I kind of do it without even realizing "hey, that is FLIP IT". It has just become part of my thing, I guess.*
- *I kind of have incorporated it in my day-to-day everything. I am sure there are some situations where I don't need to use it, but it has just become part of my routine.*
- *Yes. Because I think identifying feelings is very important.*
- *I have never looked at a situation and thought that FLIP IT would not work.*

Figure 9: Participant responses regarding fit with their parenting style

Desire for follow-up

Participants were asked whether they felt that some form of follow-up after their initial training session would be helpful, such as booster sessions or coaching. Participants made 46 comments that follow-up would be helpful and desired, compared to 4 comments that were neutral on follow-up. There were 46 comments related to the desire for booster sessions and 36 comments related to the desire for coaching.

- *Yes, I think that [some form of follow-up] would be really helpful.*
- *I think you should have a forum or website where people who have attended the training can log in and have kind of an open mediated chat, where there was a mediator that would be there to respond to questions. I think that would be really helpful.*
- *Absolutely, a refresher course.*
- *It is one thing to talk about examples that we have had, and something else entirely to be able to ask somebody one-on-one "this is what happened, this is what I did, what is a better style?"*

- *The way I see it is that our kids go to school for years and have to keep going back. We are raising kids that change so much, so follow-up should always be helpful.*
- *Yes, I think that would be very helpful too. Especially as he gets older or they come up with different ideas, depending on how it works for the other people. I would definitely be interested in that.*
- *Yes, I definitely think it would. I think it also would be a good chance for people who have actually taken the training to kind of get back together and discuss what works, what didn't work, how they used it in their day to day. I think that is a really good idea.*
- *It would definitely be nice to have a refresher with everyone to brainstorm and see what has worked for everyone and what hasn't worked, and kind of get that chance to discuss it one-on-one. The coach idea would be awesome too.*
- *To get more information again to reiterate the information and then maybe also to problem solve if there are specific things that come up, I think it would be helpful.*
- *Definitely. I think with some children you pull out all your tricks and try as many different techniques as possible and if you are not getting the result you need, it would be great to have a coach to consult with.*
- *There is never a limit on ways to learn how to deal with certain things going on with your kids. I see something different every day in my 3-year-old. Even though she has progressed, there are still things she is learning or new things I am challenged with. So a refresher or booster course to deal with that next stage probably would be a good thing for me.*
- *Yes, I definitely do. I almost considered when my work offered it to do it again, but I thought I really don't want to go through the exact same thing I had already done, because it was an all day, or pretty long training. But I think a booster, where it be online or maybe a 2 hour session, I would definitely do that, yes.*
- *Probably one-on-one approach would help me be more susceptible to the information.*

In addition, participants reported that they believe that teachers and other adults (like grandparents) in children's lives should also be trained in the FLIP IT model (29 comments).

- *It is a really good model. It would be nice to see it more widespread. Is this being considered for pre-school teachers? It got me thinking about how unusual it is for people to think about the way children are approached and spoken to, and problems addressed. It would be really nice to see it become more widespread.*
- *This needs to be able to be consistent at home and school.*
- *I think all teachers should go through the program, to help handle some of the children.*
- *I am also an educator, and I was able to explain it to her [my child] from a perspective of "this is another one of those tools in your toolbox", especially in kindergarten, so she was pretty excited to learn something new and have it be so effective.*
- *I would like to see it used more in pre-schools.*
- *I almost wanted to make sure she [my child] went to a school where this is being used. I would love to see this gain more popularity and kind of be a standardized thing in public school systems because it is so beneficial.*
- *I can see talking with some relatives about it, sure, with the expectation that this is now how we are doing things and we would like you to abide by our wishes. I would feel comfortable telling grandparents they have to abide, like it or not.*

- *We explained to my children's grandparents what we were doing. At first they were sort of "why are we talking about feelings so much?" I explained it to them and said it has really decreased the number of tantrums we have, and if they do get upset it doesn't seem to last as long. So they don't necessarily follow it 100%, but they do the feeling part, which is the part they feel comfortable with doing while there.*
- *Honestly, if I could get some of my family members to come to a FLIP IT training and learn some things for him regarding his special needs, then that would be really beneficial for us.*

Outcomes of using FLIP IT model

Participants unanimously reported that their children experienced positive emotional outcomes (50 comments) and positive behavioral outcomes (40 comments) as a result of using the FLIP IT method with them. In addition, participants reported that the FLIP IT model reduces family tension (16 comments), improves family relationships (22 comments), and increases parents' self-efficacy (44 comments).

Child/family positive outcomes:

- *I have had really good outcomes, so I think they understand you are trying to help them out. They take it really well and feel relieved and ready to move on to the next thing.*
- *I have had great outcomes when I've been using it and incorporating it in my day-to-day routine, so it has definitely been a plus.*
- *We have been very successful. I took it home and started right away. Just yesterday I was in the hospital and my daughter came to visit. Obviously for a 6-year-old being in the hospital is incredibly boring. She was standing on one of the hospital beds, and without realizing it, I started approaching it that way. "Honey, I realize this is incredibly boring for you and you are doing such a good job. This is not a way to be safe in the hospital. What are some things we can do to keep you busy?" She said, "oh my tablet is in my backpack". Then she sat down with a movie, so yeah, it has been great.*
- *It is very empowering for her because she has gotten to a point where she can verbalize "well, mommy I feel really upset because…." So she has been able to take it into her own hands when she has to.*
- *The minute you acknowledge how she is feeling then there is a sense of relief for her that "oh good, you understand, now I can talk about it.*
- *It is not explicitly for bad behavior if that is what you mean. It is not just for rule-breaking behavior. It really works all the time, where even if she is excessively proud of something she has done, even then we will talk about it and we will go from feelings to inquiry, such as "what are some other things you can do?" She builds machines; she wants to be an engineer. So "what are some other things you can do with this machine, or what are some other machines you can build?" So we use the idea of the model in all different ways.*
- *I don't have a lot of behavior issues with my children. When anything comes up, it makes it a lot easier to address things with my kids. It has given them a way to identify their feelings.*
- *I think I hear my kids talking to each other more about how someone's behavior is affecting them and relaying their own feelings to another sibling. I can hear it from*

another room and it makes me feel like they are learning from the model and not having to come and tattletale. They are able to express what is going on with each other.

- *Her behavior has shown a dramatic change, also included with our environment change. Her behavior has been a total 360 in my eyes. She still has her days, but overall she has improved a whole lot.*
- *Using it up to this point I feel like it is working very well. I have seen a dramatic positive change in her.*
- *With the things I have learned in FLIP IT and with me incorporating them into my lifestyle at home, and also her school, I am seeing a big turnaround.*
- *For the most part, it settles the issues quicker. Starting with the identifying of the feelings seems to reduce some of the tension and definitely setting the clear limits. It is okay to be angry; it is not okay to throw things.*
- *My son actually has patience in learning how to change his attitude or his actions and reactions to things. We go through and gently talk to him and then reminding him of a different want to do things. Reasoning with him has helped him with his reactions. He is very intellectual but stunted because of his autism and it has helped him grow emotionally to slow down, back up, re-group and think about it for a second before we freak out and everything is one big emotional ball of temper tantrum.*
- *So it works just as well for non-verbal kids who cannot tell you their feelings. You say 'I know you feel frustrated', and it changes his entire attitude to be validated. Then we move forward into something positive. It really has helped us a lot.*
- *She is not having any kind of behavior issues with him [her brother] because we have been able to give her the tools to think through that before it boils over. I intervene when necessary, so it has really improved their relationship too.*
- *I think using FLIP IT I haven't really had a bad outcome any time I've tried to use it with my kids or even at work. I feel like using it there has always been a positive impact and positive reaction to it. I haven't really experienced a negative one, per se.*

Parent self-efficacy positive outcomes:

- *It has helped me on being more patient.*
- *It makes me think about what is my goal as I'm parenting, am I trying to just get a behavior or am I actually trying to actually teach my child and develop them?*
- *I think it will help me because what I tend to do is get mad and ask my son why, where I need to sit back and reflect and give him his own chance to reflect on what he did and what he could have done better, as opposed to just sticking "why" out there and him telling me "just because", and involve his feelings more as to why he may have done something.*
- *It helps to calm me down. It gives me the ability to not get so frustrated with him. I always tell him we are a team and we will figure it out together. I like that it helps him too. I want him to problem solve and I want him to be able to deal with his own emotions, so this does help.*
- *It has definitely given me a different look at things from a different perspective on how to handle a situation.*
- *I think using it and getting the situation resolved, you feel kind of accomplished like "hey, I can do this" (laughs). So it is kind of relief/accomplishment that I handled the situation.*

 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

- *As I said, I have had great outcomes when I've been using it and incorporating it in my day-to-day routine, so it has definitely been a plus.*
- *One thing, I'm not sure if it's just me myself, but I try before I discipline or anything, I look at myself, and I am not chastising as much.*
- *I think a lot of parents are raised a certain way, and then we don't know what else to do and we raise our children that way. It has made me look at myself as a person and as a father and try to change some of those things.*
- *I feel like any parent that is going through behavior or emotional problems with their child, if they have a chance to do the FLIP IT training, they should do it. The information was very good when it comes to dealing with kids. Especially a single parent, like me. It has relieved a lot of stress, learning how to deal with the child. I was at a point where I didn't know what else to do. So I feel if more parents are able to be involved in the training- that would be great.*
- *I feel I'm doing a better job of parenting than when I am just reacting.*
- *I feel much better having some kind of form of feeling of how to deal with the situation, instead of just 'okay, count down'. It is actually some structure to turning the situation around instead of just appeasing him to just calm down and quiet down.*

Challenges of using FLIP IT model

Participants reported that implementing the FLIP IT model was a challenge, at times (33 comments). Some of the challenges include remembering to use the steps (especially when frustrated/upset), making the FLIP IT steps a consistent tool that is used, and using it around others who are not familiar with the model.

- *I think the hard part is going to be stay dedicated to it. I think there are going to be so many times that we want to focus on something else rather than going through the effort of following through these steps every time and remain consistent.*
- *It takes a while to make something happen, so we have to really think about what we used to do, and it will take doing it every day, every challenge, to really make it natural.*
- *If my nieces and nephews come over and they are not used to this whole thing, and they are right in the middle of my children's ages, so that can be challenging. Then my kids get frustrated that they are not listening. So that, itself, is challenging because those children aren't used to it. My kids are like "no, you have to do so-and-so…".*
- *The biggest challenge for me is being firm. I am so relaxed at times. So it is a matter of me being more firm. She has realized I am not going to give in.*
- *I forget to try them when I'm getting frustrated. When I do remember, they are definitely helpful.*
- *It is always a challenge when he has totally lost it. So it is trying to decide when to just let it go for a while, until he is calm enough to hear anything. When he is really upset, even to say it seems like you are really angry, it just goes over. I guess the biggest challenge is timing when to start through the process. I just don't want to escalate things, so if I can do it without escalating and bring him down quicker. So sometimes it has to start after he has calmed down.*
- *There are times I forget to use it. I do try to use it as much as I remember to.*

 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

Participant Dropout Rate Analysis

Baseline to immediate follow-up

ANOVAs were conducted with dropout status (completed baseline measures but dropped out of study before completing immediate follow-up measures vs. completed both baseline and immediate follow-up measures) as the dependent variable and each of the demographic variables (gender, ethnic minority status, educational level, marital status, socioeconomic status, single parent status, and parenting stress level) as the independent variables. Analyses indicated a significant effect at the $p<0.05$ level for ethnic minority status [$F(1,229)=4.469$, $p=.036$], socioeconomic status [$F(1,229)=11.241$, $p=.001$], and single parent household status [$F(1,229)=9.541$, $p=.002$]. Gender, educational level, marital status, and parenting stress level were not significantly different between the retained vs. dropout groups. Post hoc analyses indicated that ethnic minority participants (m=0.59) were more likely to drop out of the study before completing immediate follow-up measures compared to White participants (m=0.45). Participants who annually earned 125% or less of the federal poverty rate (m=0.63) were more likely to drop out compared to participants who earned more than 125% of the federal poverty rate (m=0.42). Participants from single parent households (m=0.66) were more likely to drop out compared to participants who were not from single parent households (m=0.45).

Baseline outcome measure differences

To determine if the group who dropped out had significantly different outcome measure scores *at baseline* compared to the group that was retained in the study, ANOVAs were conducted with dropout status as the independent variable and *baseline* outcome measure scores (CBCL total, CBCL internalizing, CBCL externalizing, ASQ, PS total, PS laxness, PS over-reactivity, PS hostility, PSI total, PSI parental distress, PSI dysfunctional interaction, PSI difficult child, DECA total, DECA behavioral, DECA initiative, DECA self-regulation, and DECA attachment/relationships) as the dependent variables. Analyses indicated a significant effect at the $p<0.05$ level for ASQ scores [$F(1,199)=5.518$, $p=.020$], PS total scores [$F(1,202)=6.409$, $p=.012$], PSI parental distress scores [$F(1,204)=6.461$, $p=.012$], DECA total scores [$F(1,203)=5.518$, $p=.048$], and DECA attachment/relationships scores [$F(1,203)=8.951$, $p=.003$]. Participants who dropped out of the study (m=75.73) had significantly higher baseline scores on the ASQ compared to participants who remained in the study (m=57.38). Participants who dropped out of the study (m=3.04) had significantly higher baseline scores on the PS compared to participants who remained in the study (m=2.82). Participants who dropped out of the study (m=28.14) had significantly higher baseline scores on the PSI parental distress scale compared to participants who remained in the study (m=25.03). Participants who *remained* in the study (m=46.28) had significantly higher baseline scores on the DECA total compared to participants who *dropped out* of the study (m=43.05). Participants who *remained* in the study (m=46.74) had significantly higher baseline scores on the DECA attachment/relationships scale compared to participants who *dropped out* of the study (m=41.90).

Immediate follow-up to 3-month follow-up

ANOVAs were conducted with dropout status (completed immediate follow-up measures but dropped out of study before completing 3-month follow-up measures vs. completed both immediate and 3-month follow-up measures) as the dependent variable and each of the demographic variables (gender, ethnic minority status, educational level, marital status,

socioeconomic status, single parent status, and parenting stress level) as the independent variables. Analyses indicated a significant effect at the p<0.05 level for ethnic minority status [$F(1,229)=12.085$, $p=.001$], marital status [$F(4,225)=4.935$, $p=.001$], socioeconomic status [$F(1,229)=10.603$, $p=.001$], and single parent household status [$F(1,229)=29.184$, $p=.000$]. Gender, educational level, and parenting stress level were not significantly different between the retained vs. dropout groups. Post hoc analyses indicated that ethnic minority participants (m=0.82) were more likely to drop out of the study before completing 3-month follow-up measures compared to White participants (m=0.61). Never married participants (m=0.86) were more likely to drop out compared to married participants (m=0.61). Participants who annually earned 125% or less of the federal poverty rate (m=0.81) were more likely to drop out compared to participants who earned more than 125% of the federal poverty rate (m=0.61). Participants from single parent households (m=0.92) were more likely to drop out compared to participants who were not from single parent households (m=0.59).

Immediate follow-up outcome measure differences

To determine if the group who dropped out had significantly different outcome measure scores *at immediate follow-up* compared to the group that was retained in the study, ANOVAs were conducted with dropout status as the independent variable and *immediate follow-up* outcome measure scores (CBCL total, CBCL internalizing, CBCL externalizing, ASQ, PS total, PS laxness, PS over-reactivity, PS hostility, PSI total, PSI parental distress, PSI dysfunctional interaction, PSI difficult child, DECA total, DECA behavioral, DECA initiative, DECA self-regulation, and DECA attachment/relationships) as the dependent variables. Analyses indicated a significant effect at the p<0.05 level for PS total scores [$F(1,108)=11.767$, $p=.001$], PSI parental distress scores [$F(1,109)=6.486$, $p=.012$], DECA total scores [$F(1,109)=8.067$, $p=.005$], and DECA attachment/relationships scores [$F(1,109)=13.147$, $p=.000$]. Participants who dropped out of the study (m=2.96) had significantly higher baseline scores on the PS total compared to participants who remained in the study (m=2.53). Participants who dropped out of the study (m=25.55) had significantly higher baseline scores on the PSI parental distress scale compared to participants who remained in the study (m=21.48). Participants who *remained* in the study (m=49.34) had significantly higher baseline scores on the DECA total compared to participants who *dropped out* of the study (m=43.43). Participants who *remained* in the study (m=50.40) had significantly higher baseline scores on the DECA attachment/relationships scale compared to participants who *dropped out* of the study (m=42.41).

3-month follow-up to 6+-month follow-up

ANOVAs were conducted with dropout status (completed 3-month follow-up measures but dropped out of study before completing 6+-month follow-up measures vs. completed both 3-month and 6+-month follow-up measures) as the dependent variable and each of the demographic variables (gender, ethnic minority status, educational level, marital status, socioeconomic status, single parent status, and parenting stress level) as the independent variables. Analyses indicated a significant effect at the p<0.05 level for ethnic minority status [$F(1,229)=4.433$, $p=.036$], socioeconomic status [$F(1,229)=7.921$, $p=.005$], and single parent household status [$F(1,229)=16.156$, $p=.000$]. Gender, educational level, marital status, and parenting stress level were not significantly different between the retained vs. dropout groups. Post hoc analyses indicated that ethnic minority participants (m=0.82) were more likely to drop out of the study before completing 6+-month follow-up measures compared to White participants

(m=0.70). Participants who annually earned 125% or less of the federal poverty rate (m=0.84) were more likely to drop out compared to participants who earned more than 125% of the federal poverty rate (m=0.68). Participants from single parent households (m=0.91) were more likely to drop out compared to participants who were not from single parent households (m=0.67).

3-month follow-up outcome measure differences

To determine if the group who dropped out had significantly different outcome measure scores *at 3-month follow-up* compared to the group that was retained in the study, ANOVAs were conducted with dropout status as the independent variable and *3-month follow-up* outcome measure scores (CBCL total, CBCL internalizing, CBCL externalizing, ASQ, PS total, PS laxness, PS over-reactivity, PS hostility, PSI total, PSI parental distress, PSI dysfunctional interaction, PSI difficult child, DECA total, DECA behavioral, DECA initiative, DECA self-regulation, and DECA attachment/relationships) as the dependent variables. Analyses indicated a significant effect at the $p<0.05$ level for CBCL externalizing scores [$F(1,66)=5.301$, $p=.024$], PSI dysfunctional interaction scores [$F(1,65)=5.084$, $p=.028$], PSI difficult child scores [$F(1,65)=5.141$, $p=.027$], and DECA behavioral scores [$F(1,65)=9.165$, $p=.004$]. Participants who dropped out of the study (m=52.00) had significantly higher baseline scores on the CBCL externalizing compared to participants who remained in the study (m=44.65). Participants who dropped out of the study (m=20.25) had significantly higher baseline scores on the PSI dysfunctional interaction scale compared to participants who remained in the study (m=16.55). Participants who dropped out of the study (m=26.60) had significantly higher baseline scores on the PSI difficult child scale compared to participants who remained in the study (m=21.13). Participants who dropped out of the study (m=52.40) had significantly higher baseline scores on the DECA behavioral scale compared to participants who remained in the study (m=43.04).

Summary of Findings

Overall Results

Based on the results of this evaluation, the FLIP IT parent training model appears to be an effective parenting method for *decreasing* children's behavior problems, anxiety, depression, withdrawal, somatic complaints, delinquent behavior, aggressive behavior, and developmental problems; and *increasing* children's abilities to use independent thought and action to meet his/her needs (initiative), to express emotions and manage behaviors in healthy ways (self-regulation), and to promote and maintain mutual, positive connections with other children and adults (attachment/relationships).

In addition, the FLIP IT steps appear to be an effective parenting method for *decreasing* inconsistent or permissive parenting strategies, harsh or punitive parenting strategies, parent/caregiver distress levels, dysfunctional interactions within the parent-child relationship, and parental beliefs that their child(ren) is(are) difficult to manage.

In focus groups and interviews, parents/caregivers described being *overwhelmingly satisfied* with their overall FLIP IT experience, the FLIP IT training session, and the FLIP IT steps/parenting skills that they learned. They described learning new parenting skills that fit with their own personal parenting style and that they are using (either often or sometimes). Although they identified some challenges with implementing the skills (such as forgetting to use them, not

using them consistently, or needing to adapt/modify them for their personal circumstances), when asked whether or not they and their families experienced positive outcomes, an *overwhelming 100% of comments described positive outcomes*. There was also a strong desire from parents/caregivers for follow-up (such as coaching or booster sessions) to further enhance and hone their skills that they have learned.

Child Outcomes

Based on scores from the Child Behavior Checklist, caregivers reported that their children's overall behavior problems, internalizing problems (e.g., anxiety, depression, withdrawal, and somatic complaints) and externalizing problems (e.g., delinquent and aggressive behavior) *decreased significantly* following the caregiver's FLIP IT training session, with the largest decreases noted at the 6+ month follow-up period.

Based on scores from the Ages & Stages questionnaire, caregivers reported that their children's overall risk for developmental problems *decreased significantly* following the caregiver's FLIP IT training session, with the largest decreases noted at the 6+ month follow-up period.

Based on scores from the Devereux Early Childhood Assessment, caregivers reported that their children's protective factors (initiative, self-regulation, and attachment in relationships) *increased significantly* following the caregiver's FLIP IT training session, with the largest increases noted at the 3-month and 6+-month follow-up periods.

Caregiver Outcomes

Based on scores from the Parenting Scale, caregivers reported that their parenting skills *significantly improved* (and problematic parenting strategies *significantly decreased*) following their FLIP IT training session, with the largest improvements noted at the 3- and 6-month follow-up periods.

Based on scores from the Parenting Stress Index, caregivers reported that their parenting stress levels and parent-child problems *significantly decreased* following their FLIP IT training session, with the largest improvements noted at the 3-month and 6-month follow-up periods.

Dropout Rates

In the current study, analyses indicated that caregivers who were 1) ethnic minorities, 2) low income, 3) from single parent households, or 4) never married- were more likely to drop out of the study compared to caregivers who were not members of these groups. Additional analyses were conducted comparing caregivers' outcome measures scores (e.g., those who dropped out vs. those who remained in the study). Caregivers who dropped out following baseline had significantly higher scores on the ASQ, PS, and PSI parental distress subscale; and lower scores on the DECA and DECA attachment/relationship subscale. Caregivers who dropped out following immediate follow-up had significantly higher scores on the PS, PSI parental distress subscale, and lower scores on the DECA and DECA attachment/relationship subscale. Caregivers who dropped out following 3-month follow-up had significantly higher scores on the CBCL externalizing subscale, PSI dysfunctional interaction subscale, PSI difficult child subscale, and DECA behavioral subscale. All of these results indicated that caregivers who dropped out the study did so at a time when they and/or their children were experiencing higher levels of difficulties compared to participants who remained in the study.

Recommendations

These results of this evaluation suggest that the FLIP IT parent-training model is effective in producing positive child, family, and parent outcomes, and that the outcomes are robust and long-lasting (6-months and beyond following initial parent-training sessions).

As such, the FLIP IT parent-training model is recommended for parents who are experiencing behavior problems, anxiety, depression, withdrawal, somatic complaints, delinquent behavior, aggressive behavior, and/or developmental problems in their children- in order to teach parenting skills and strategies to help reduce and mitigate these problems. Similarly, the FLIP-IT parent-training model is recommended for parents who would like to increase their children's abilities to use independent thought and action to meet their needs, to express emotions and manage behaviors in healthy ways, and to promote and maintain mutual, positive connections with other children and adults- in order to teach parenting skills and strategies that focus on increasing these assets and skills in their children.

The FLIP IT parent-training model is recommended for parents who currently use parenting strategies that are inconsistent, permissive, harsh and/or punitive - in order to teach more appropriate and effective parenting strategies that can more effectively manage their children's behavior. Similarly, the FLIP IT parent-training model is recommended for caregivers who are experiencing high levels of stress related to parenting, dysfunctional interactions with their children, and/or beliefs that their children are difficult to manage- in order to teach more effective parenting strategies and techniques that can reduce these problems.

It is recommended that additional support be provided to parents/caregivers following their initial FLIP IT parent-training session, particularly to those who are at risk of abandoning the method or those who are experiencing significant barriers and challenges in implementing the steps. In particular, booster sessions that are offered at various post-training points (e.g., 3 months later, 6 months later) may be particularly helpful for caregivers. This would give caregivers the opportunity to attempt the skills in their everyday lives and to identify challenges and barriers they face in implementing the model. At these booster sessions, it would be helpful for caregivers to receive guidance and support from either FLIP IT trainers and/or other parents who have mastered the FLIP IT method- to ensure that guidance and support is in line with the philosophy and intent of the FLIP IT method. For caregivers who are experiencing on-going difficulty, it is recommended that coaching sessions be available from FLIP IT trainers and/or other parents who have mastered the FLIP IT method. Ongoing coaching can provide these caregivers with hands-on and specific strategies for their unique circumstances, while providing ample time for learning and mastery of the skills.

Finally, it is recommended that the Ohio Department of Mental Health & Addiction Services continue to sustain and support the work of the Early Childhood Mental Health consultants in offering FLIP IT parent-training sessions in their respective service delivery areas. These training sessions (and potential booster sessions and coaching sessions) have the potential to offer parents effective parenting skills that can improve the lives of their children and family members.

Appendices

References

Abidin, R. R. (1995). *Parenting Stress Index, third edition: Professional manual*. Odessa, FL: Psychological Assessment Resources, Inc.

Achenbach, T. M., & Rescorla, L. A. (2001). *Manual for the ASEBA school-age forms & profiles*. Burlington, VT: University of Vermont, Research Center for Children, Youth, & Families.

Arnold, D. S., O'Leary, S. G., Wolff, L. S., & Acker, M. M. (1993). The Parenting Scale: A measure of dysfunctional parenting in discipline situations. *Psychological Assessment*, 5(2), 137-144.

Bagner, D. M., & Graziano, P. A. (2012). Barriers to success in parent training for young children with developmental delay: The role of cumulative risk. *Behavior modification*,1-22.

Bender, S. L., & Carlson, J. S. (2013). An initial investigation of parenting stress, social-emotional protective factors, and behavior concerns within a Head Start population. *Journal of Educational and Developmental Psychology*, *3*(1), 113-123.

Fernandez, M. A., & Eyberg, S. M. (2009). Predicting treatment and follow-up attrition in parent–child interaction therapy. *Journal of Abnormal Child Psychology*, *37*(3), 431-441.

Holtrop, K., Parra-Cardona, J. R., & Forgatch, M. S. (2014). Examining the process of change in an evidence-based parent training intervention: A qualitative study grounded in the experiences of participants. *Prevention Science*, *15*(5), 745-756.

Kjobli, J., & Bjornebekk, G. (2013). A randomized effectiveness trial of brief parent training six-month follow-up. *Research on Social Work Practice*, *23*(6), 603-612.

Lavigne, J. V., LeBailly, S. A., Gouze, K. R., Binns, H. J., Keller, J., & Pate, L. (2010). Predictors and correlates of completing behavioral parent training for the treatment of oppositional defiant disorder in pediatric primary care. *Behavior Therapy*, *41*(2), 198-211.

Lundahl, B., Risser, H. J., & Lovejoy, M. C. (2006). A meta-analysis of parent training: Moderators and follow-up effects. *Clinical Psychology Review*,*26*(1), 86-104.

Mackrain, M., LeBuffe, P., & Powell, G. (2007). *Devereux early childhood assessment for infants and toddlers*. Lewisville, NC: Kaplan Early Learning Company.

Michelson, D., Davenport, C., Dretzke, J., Barlow, J., & Day, C. (2013). Do evidence-based interventions work when tested in the "real world?": A systematic review and meta-analysis of parent management training for the treatment of child disruptive behavior. *Clinical Child and Family Psychology Review*, *16*(1), 18-34.

Neuendorf, K. A. (2002). *The content analysis guidebook*. New York, NY: Sage Publications, Inc.

Reyno, S. M., & McGrath, P. J. (2006). Predictors of parent training efficacy for child externalizing behavior problems–a meta-analytic review. *Journal of Child Psychology and Psychiatry*, *47*(1), 99-111.

Squires, J., & Bricker, D. (2009). *Ages & Stages Questionnaires, third edition (ASQ-3)*. Baltimore, MD: Brookes Publishing.

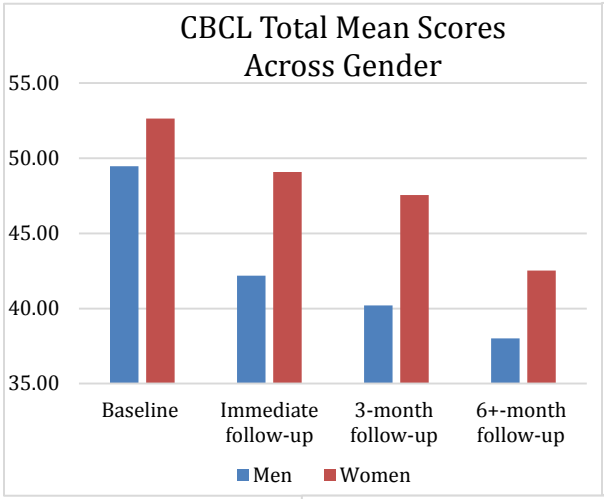
U.S. Census Bureau. (2014). Retrieved from http://www.census.gov/

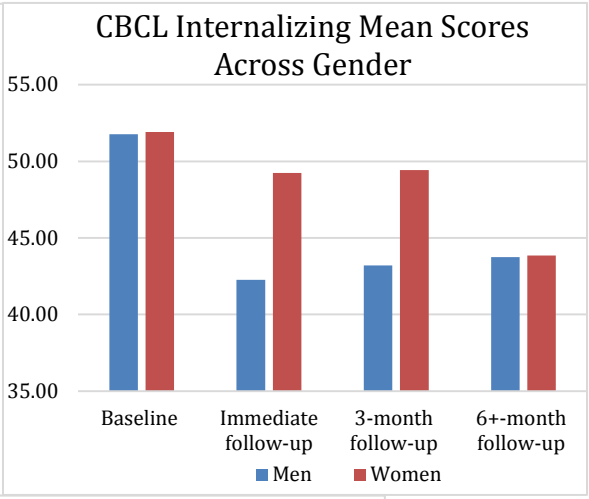
Werba, B. E., Eyberg, S. M., Boggs, S. R., & Algina, J. (2006). Predicting outcome in Parent-Child Interaction Therapy success and attrition. *Behavior Modification*, *30*(5), 618-646.

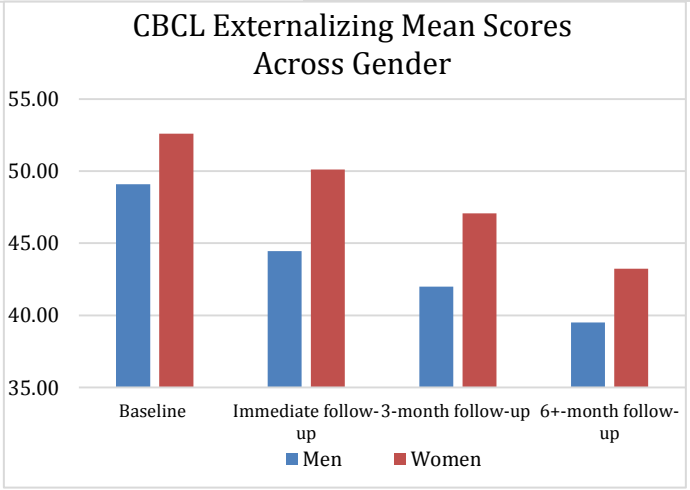
Group Differences by Gender

Table 5: CBCL mean scores over time across caregiver gender

	Men	Women
CBCL, total score		
Baseline	49.48	52.65
Immediate follow-up	42.18	49.08
3-month follow-up	40.2	47.54
6+-month follow-up	38	42.53
CBCL, internalizing		
Baseline	51.76	51.91
Immediate follow-up	42.27	49.23
3-month follow-up	43.2	49.43
6+-month follow-up	43.75	43.85
CBCL, externalizing		
Baseline	49.1	52.59
Immediate follow-up	44.45	50.1
3-month follow-up	42	47.08
6+-month follow-up	39.5	43.23







 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

Table 6: ASQ mean scores over time across caregiver gender

	Men	Women
ASQ, total score		
Baseline	74.72	66.41
Immediate follow-up	49.09	52.10
3-month follow-up	18.00	37.80
6+-month follow-up	15.00	32.73

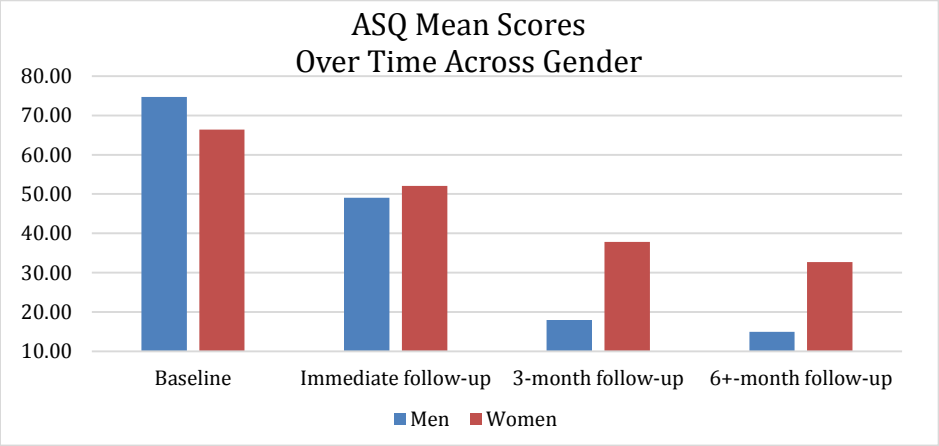
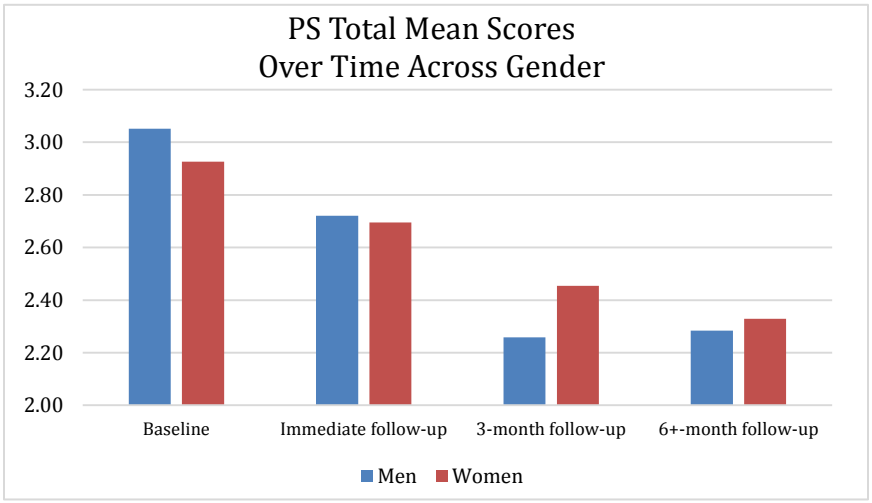


Table 7: PS mean scores over time across caregiver gender

	Men	Women
PS, total score		
Baseline	3.05	2.93
Immediate follow-up	2.72	2.70
3-month follow-up	2.26	2.45
6+-month follow-up	2.28	2.33



 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

Table 8: PSI mean scores over time across caregiver gender

	Men	Women
PSI, total score		
Baseline	67.75	75.31
Immediate follow-up	63.09	69.40
3-month follow-up	43.20	62.50
6+-month follow-up	51.00	60.81

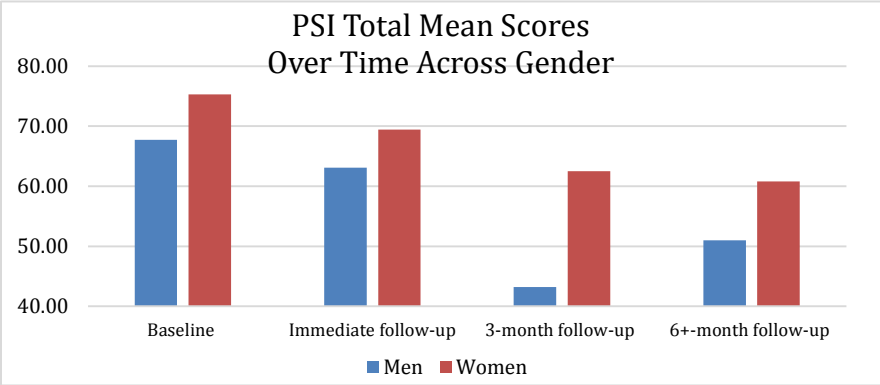
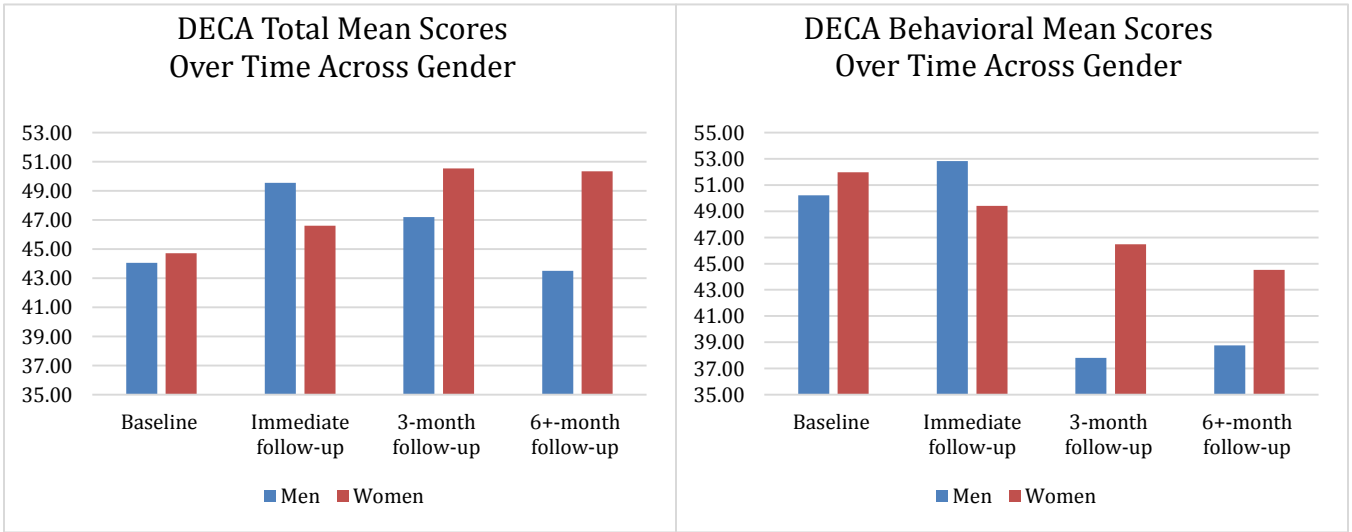


Table 9: DECA mean scores over time across caregiver gender

	Men	Women
DECA, total score		
Baseline	44.05	44.72
Immediate follow-up	49.55	46.60
3-month follow-up	47.20	50.55
6+-month follow-up	43.50	50.35
DECA, behavioral		
Baseline	50.21	51.98
Immediate follow-up	52.82	49.42
3-month follow-up	37.80	46.48
6+-month follow-up	38.75	44.54



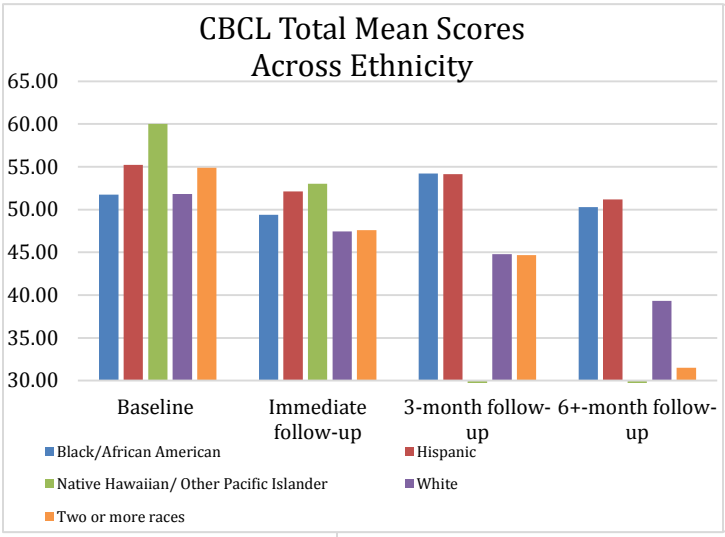
 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

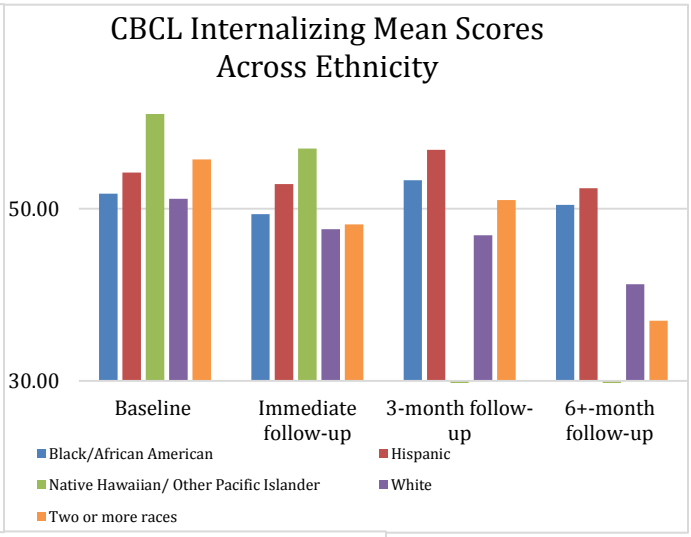
The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

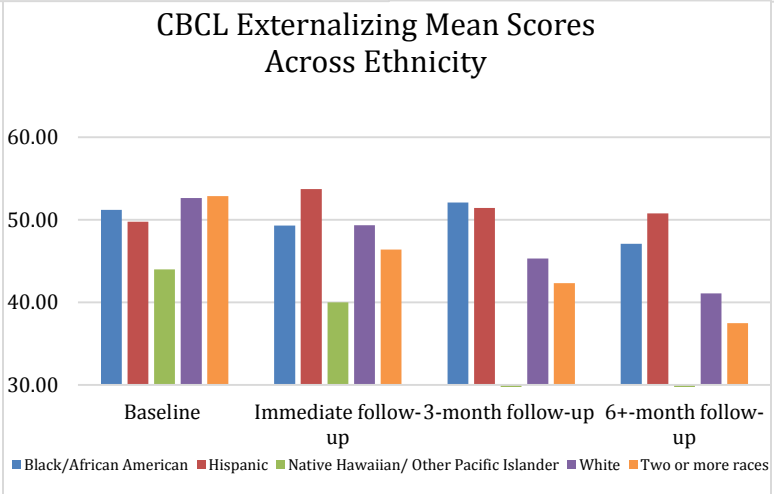
Group Differences by Ethnicity

Table 10: CBCL mean scores over time across caregiver ethnicity

	Black/ African American	Hispanic	Native Hawaiian/Other Pacific Islander	White	Two or more races
CBCL, total score					
Baseline	51.76	55.22	60.00	51.82	54.88
Immediate follow-up	49.37	52.13	53.00	47.43	47.60
3-month follow-up	54.22	54.14	--	44.80	44.67
6+-month follow-up	50.27	51.20	--	39.33	31.50
CBCL, internalizing					
Baseline	51.77	54.22	61.00	51.16	55.75
Immediate follow-up	49.37	52.88	57.00	47.62	48.2
3-month follow-up	53.33	56.86	--	46.92	51.00
6+-month follow-up	50.45	52.40	--	41.23	37.00
CBCL, externalizing					
Baseline	51.20	49.78	44.00	52.66	52.88
Immediate follow-up	49.30	53.75	40.00	49.36	46.40
3-month follow-up	52.11	51.43	--	45.31	42.33
6+-month follow-up	47.09	50.80	--	41.08	37.50







 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

Table 11: ASQ mean scores over time across caregiver ethnicity

	Black/ African American	Hispanic	Native Hawaiian/Other Pacific Islander	White	Two or more races
ASQ, total score					
Baseline	71.44	63.78	55.00	64.03	64.38
Immediate follow-up	65.00	48.75	45.00	47.75	40.00
3-month follow-up	65.00	39.29	--	31.63	23.33
6+-month follow-up	57.50	38.00	--	24.92	17.50

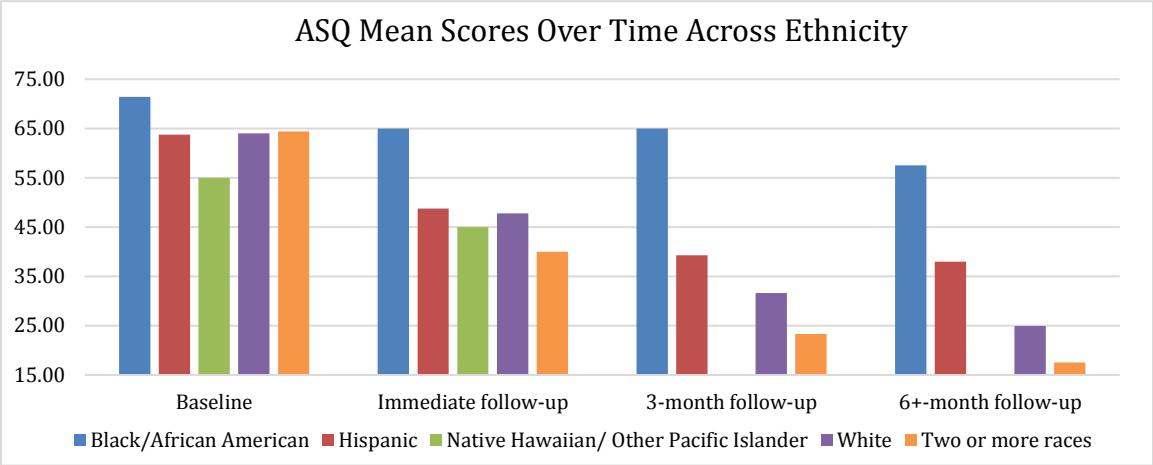
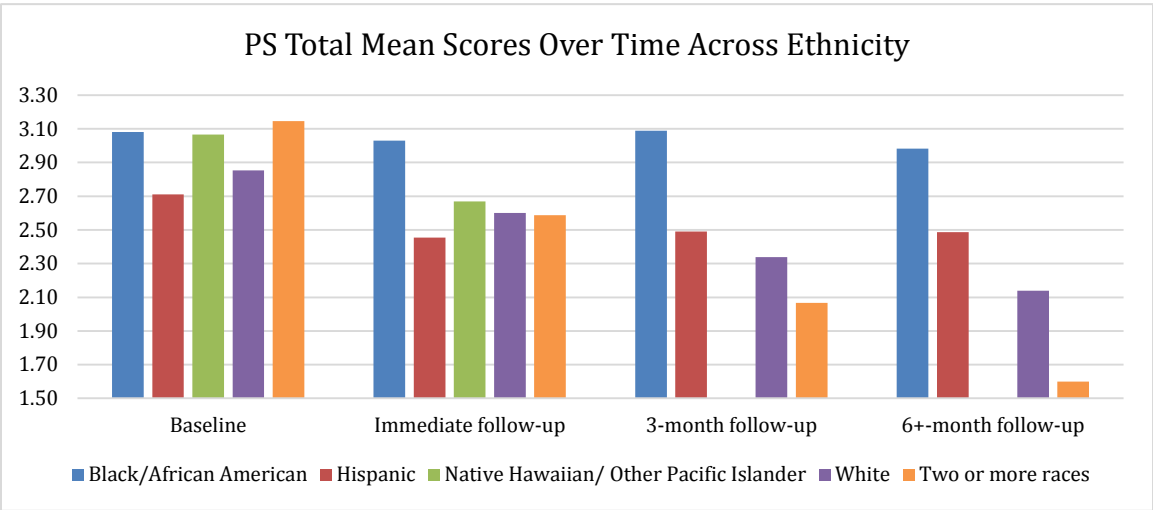


Table 12: PS mean scores over time across caregiver ethnicity

	Black/ African American	Hispanic	Native Hawaiian/Other Pacific Islander	White	Two or more races
PS, total score					
Baseline	3.08	2.71	3.07	2.85	3.15
Immediate follow-up	3.03	2.45	2.67	2.60	2.59
3-month follow-up	3.09	2.49	--	2.34	2.07
6+-month follow-up	2.98	2.49	--	2.14	1.60



 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

Table 13: PSI mean scores over time across caregiver ethnicity

	Black/ African American	Hispanic	Native Hawaiian/Other Pacific Islander	White	Two or more races
PSI, total score					
Baseline	72.26	77.00	75.00	74.95	84.88
Immediate follow-up	75.48	70.13	71.00	66.10	68.20
3-month follow-up	77.11	67.86	--	57.88	48.00
6+-month follow-up	74.75	69.80	--	55.50	36.00

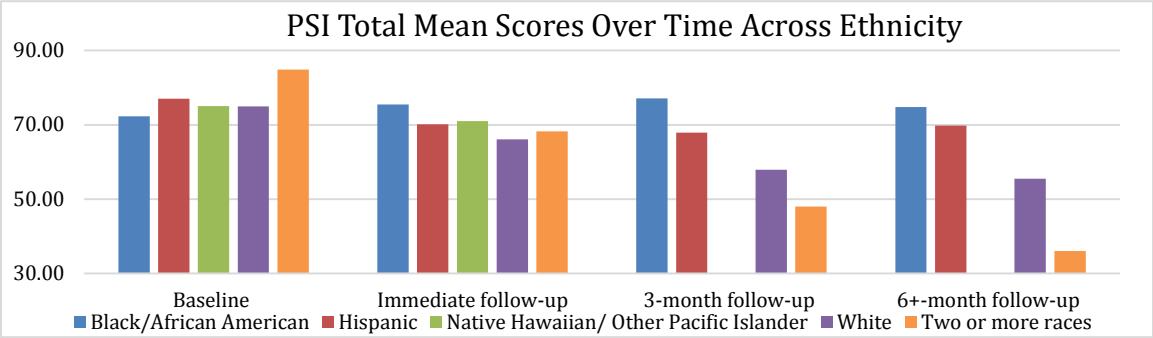
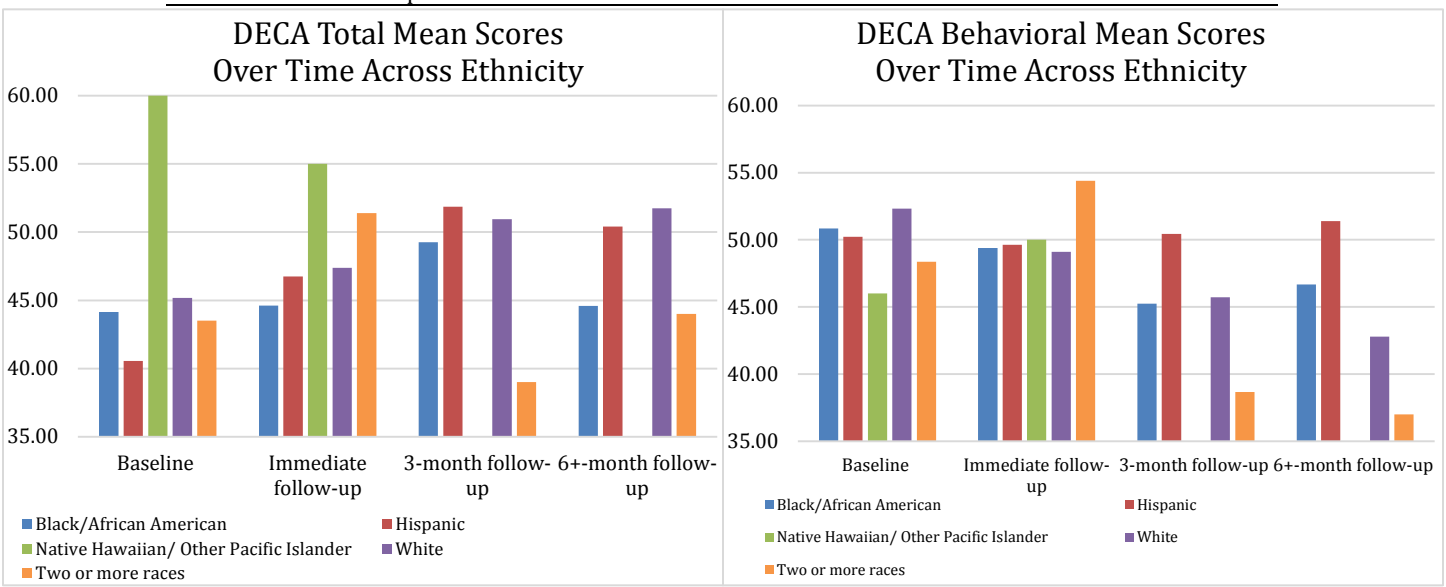


Table 14: DECA mean scores over time across caregiver ethnicity

	Black/ African American	Hispanic	Native Hawaiian/Other Pacific Islander	White	Two or more races
DECA, total score					
Baseline	44.15	40.56	60.00	45.18	43.50
Immediate follow-up	44.61	46.75	55.00	47.39	51.40
3-month follow-up	49.25	51.86	--	50.94	39.00
6+-month follow-up	44.58	50.40	--	51.74	44.00
DECA, behavioral					
Baseline	50.85	50.22	46.00	52.31	48.38
Immediate follow-up	49.39	49.63	50.00	49.10	54.40
3-month follow-up	45.25	50.43	--	45.71	38.67
6+-month follow-up	46.67	51.40	--	42.79	37.00



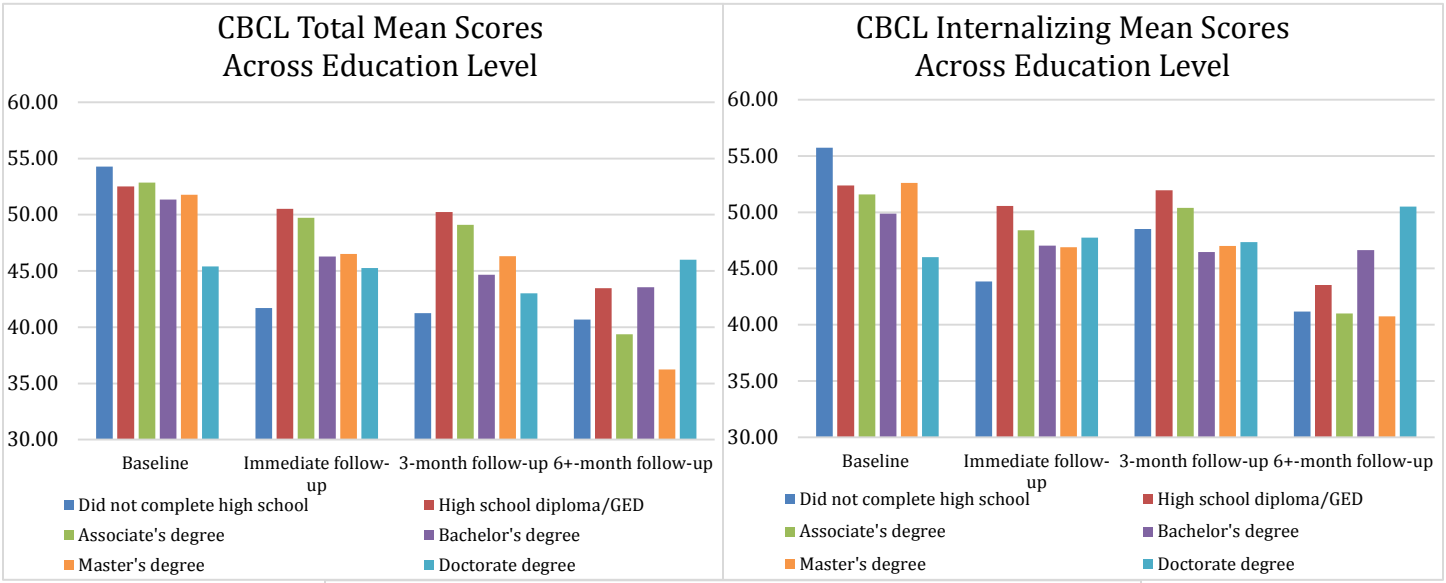
 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

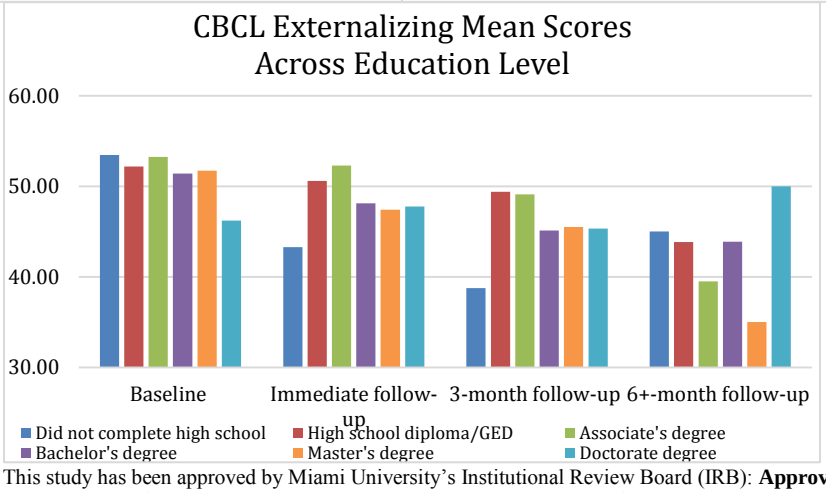
The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

Group Differences by Education Level

Table 15: CBCL mean scores over time across caregiver education level

	Did not complete high school	High school diploma or GED	Associate's degree	Bachelor's degree	Master's degree	Doctorate degree
CBCL, total score						
Baseline	54.27	52.51	52.84	51.13	51.78	45.40
Immediate follow-up	41.71	50.52	49.72	46.28	46.50	45.25
3-month follow-up	41.25	50.24	49.10	44.65	46.30	43.00
6+-month follow-up	40.67	43.48	39.38	43.56	36.25	46.00
CBCL, internalizing						
Baseline	55.73	52.37	51.58	49.88	52.61	46.00
Immediate follow-up	43.86	50.57	48.39	47.04	46.90	47.75
3-month follow-up	48.50	51.95	50.40	46.45	47.00	47.33
6+-month follow-up	41.17	43.52	41.00	46.63	40.75	50.50
CBCL, externalizing						
Baseline	53.45	52.18	53.24	51.42	51.72	46.20
Immediate follow-up	43.29	50.59	52.28	48.12	47.40	47.75
3-month follow-up	38.75	49.38	49.10	45.10	45.50	45.33
6+-month follow-up	45.00	43.86	39.50	43.88	35.00	50.00





 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

Table 16: ASQ mean scores over time across caregiver education level

	Did not complete high school	High school diploma or GED	Associate's degree	Bachelor's degree	Master's degree	Doctorate degree
ASQ, total score						
Baseline	76.25	70.16	80.39	53.00	53.61	29.00
Immediate follow-up	44.38	61.98	58.82	39.79	41.00	13.75
3-month follow-up	18.75	47.89	54.50	25.83	30.50	6.67
6+-month follow-up	39.50	45.48	25.00	21.79	8.75	7.50

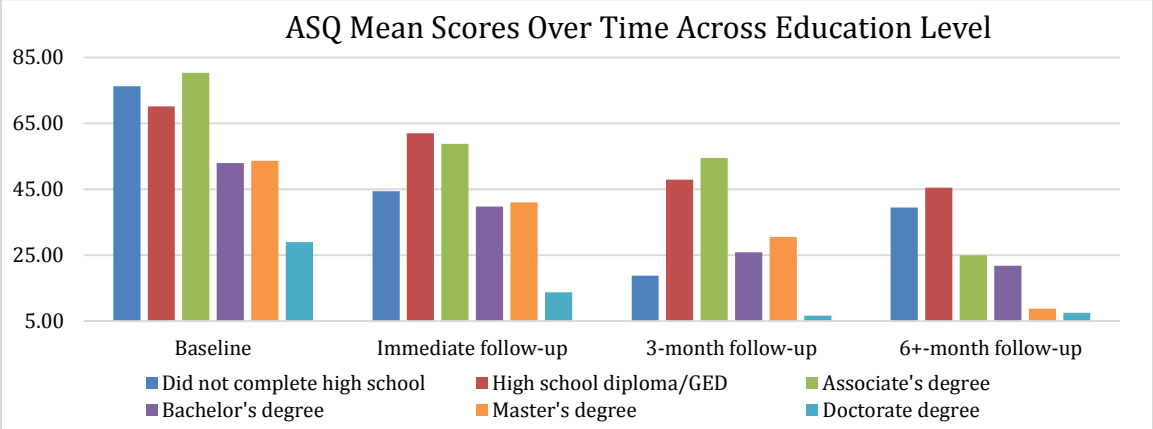
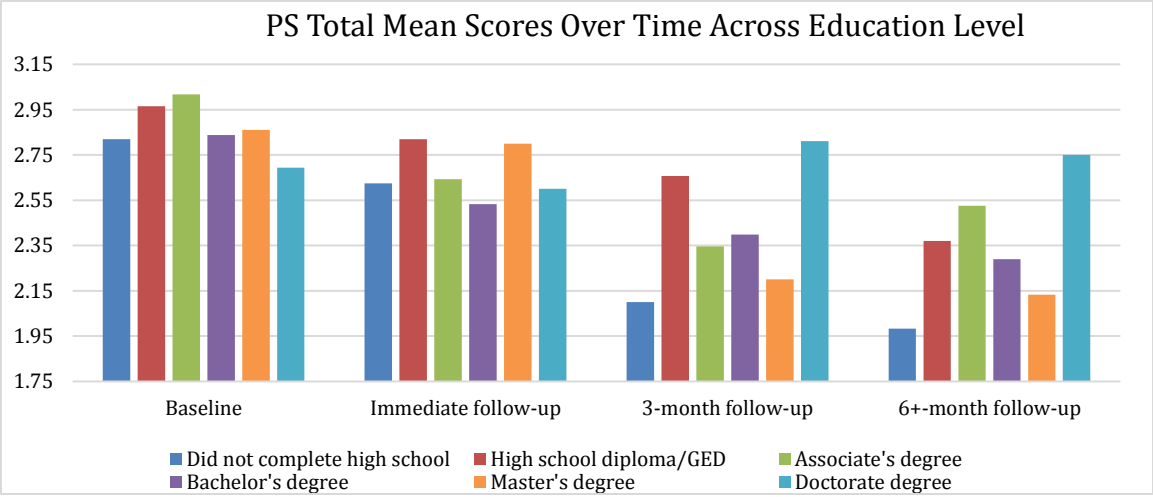


Table 17: PS mean scores over time across caregiver education level

	Did not complete high school	High school diploma or GED	Associate's degree	Bachelor's degree	Master's degree	Doctorate degree
PS, total score						
Baseline	2.82	2.96	3.02	2.84	2.86	2.69
Immediate follow-up	2.62	2.82	2.64	2.53	2.80	2.60
3-month follow-up	2.10	2.66	2.35	2.40	2.20	2.81
6+-month follow-up	1.98	2.37	2.53	2.29	2.13	2.75



 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

Table 18: PSI mean scores over time across caregiver education level

	Did not complete high school	High school diploma or GED	Associate's degree	Bachelor's degree	Master's degree	Doctorate degree
PSI, total score						
Baseline	77.75	75.51	74.84	73.51	71.06	74.20
Immediate follow-up	61.50	71.36	71.17	63.88	68.00	79.75
3-month follow-up	41.75	64.50	73.00	57.29	55.00	74.67
6+-month follow-up	55.50	64.50	60.63	56.76	50.25	76.50

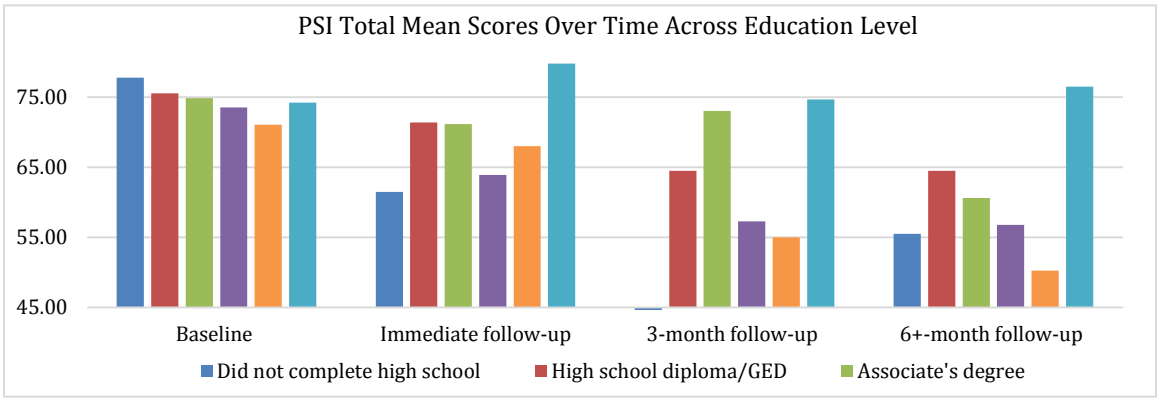
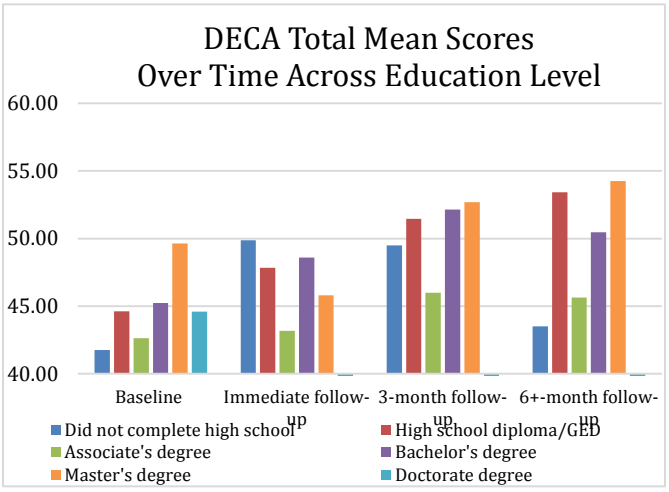
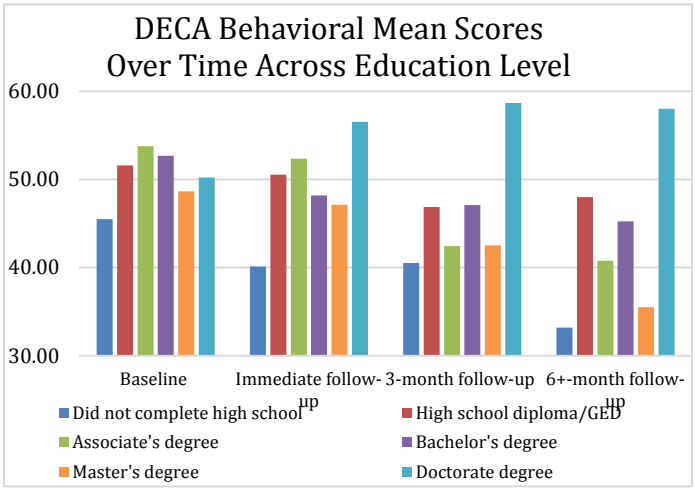


Table 19: DECA mean scores over time across caregiver education level

	Did not complete high school	High school diploma or GED	Associate's degree	Bachelor's degree	Master's degree	Doctorate degree
DECA, total score						
Baseline	41.75	44.62	42.63	45.24	49.63	44.60
Immediate follow-up	49.88	47.83	43.18	48.58	45.80	38.00
3-month follow-up	49.50	51.45	46.00	52.14	52.70	35.67
6+-month follow-up	43.50	53.43	45.63	50.47	54.25	35.00
DECA, behavioral						
Baseline	45.50	51.56	53.77	52.68	48.63	50.20
Immediate follow-up	40.13	50.54	52.35	48.17	47.10	56.50
3-month follow-up	40.50	46.85	42.44	47.10	42.50	58.67
6+-month follow-up	33.17	48.00	40.75	45.24	35.50	58.00





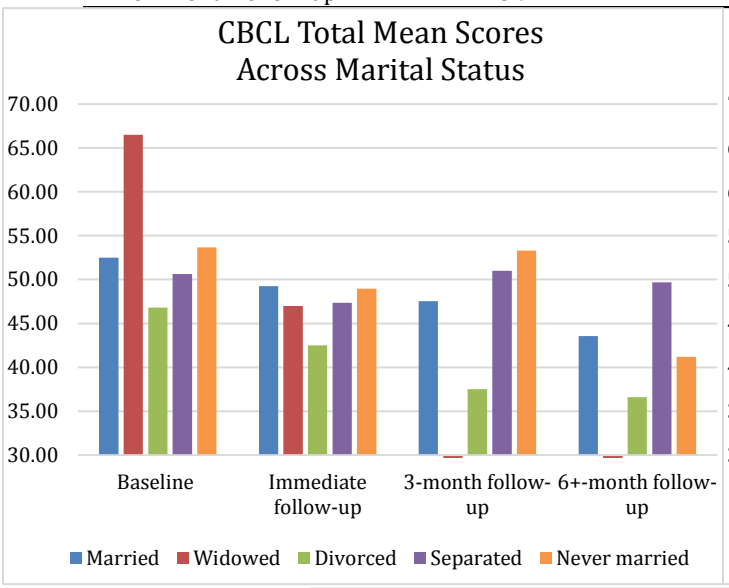
 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

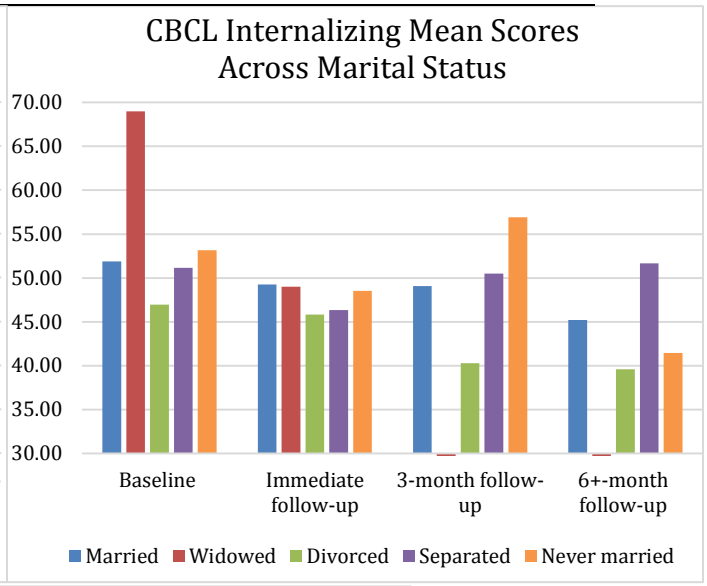
The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

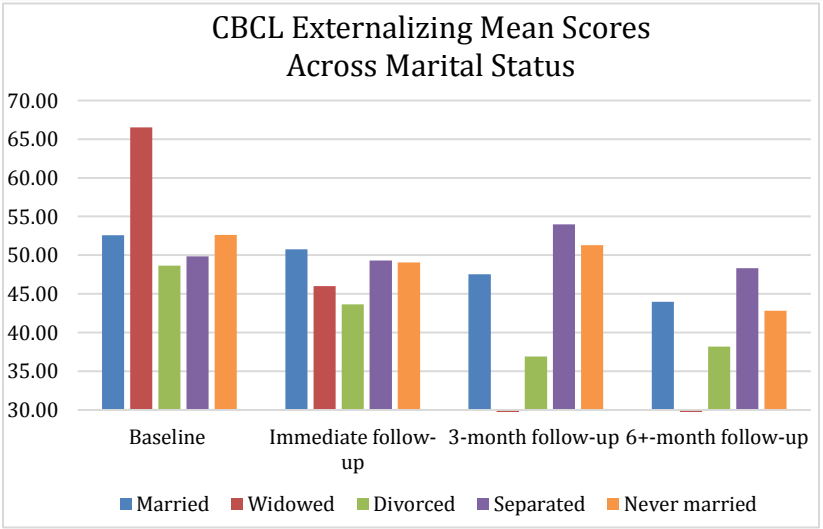
Group Differences by Marital Status

Table 20: CBCL mean scores over time across caregiver marital status

	Married	Widowed	Divorced	Separated	Never married
CBCL, total score					
Baseline	52.49	66.50	46.82	50.64	53.66
Immediate follow-up	49.23	47.00	42.50	47.33	48.96
3-month follow-up	47.52	--	37.50	51.00	53.30
6+-month follow-up	43.58	--	36.60	49.67	41.18
CBCL, internalizing					
Baseline	51.88	69.00	46.95	51.14	53.16
Immediate follow-up	49.27	49.00	45.83	46.33	48.52
3-month follow-up	49.07	--	40.30	50.50	56.90
6+-month follow-up	45.21	--	39.60	51.67	41.45
CBCL, externalizing					
Baseline	52.58	66.50	48.64	49.86	52.61
Immediate follow-up	50.75	46.00	43.67	49.33	49.07
3-month follow-up	47.52	--	36.90	54.00	51.30
6+-month follow-up	43.97	--	38.20	48.33	42.82







 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

Table 21: ASQ mean scores over time across caregiver marital status

	Married	Widowed	Divorced	Separated	Never married
ASQ, total score					
Baseline	65.70	60.00	67.37	50.83	71.94
Immediate follow-up	54.69	20.00	31.25	34.17	58.93
3-month follow-up	38.30	--	14.44	5.00	55.00
6+-month follow-up	29.91	--	14.44	7.50	55.91

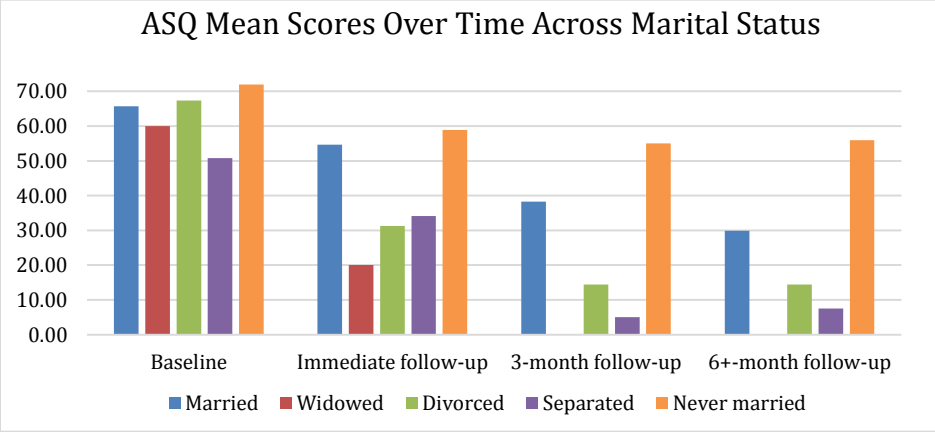
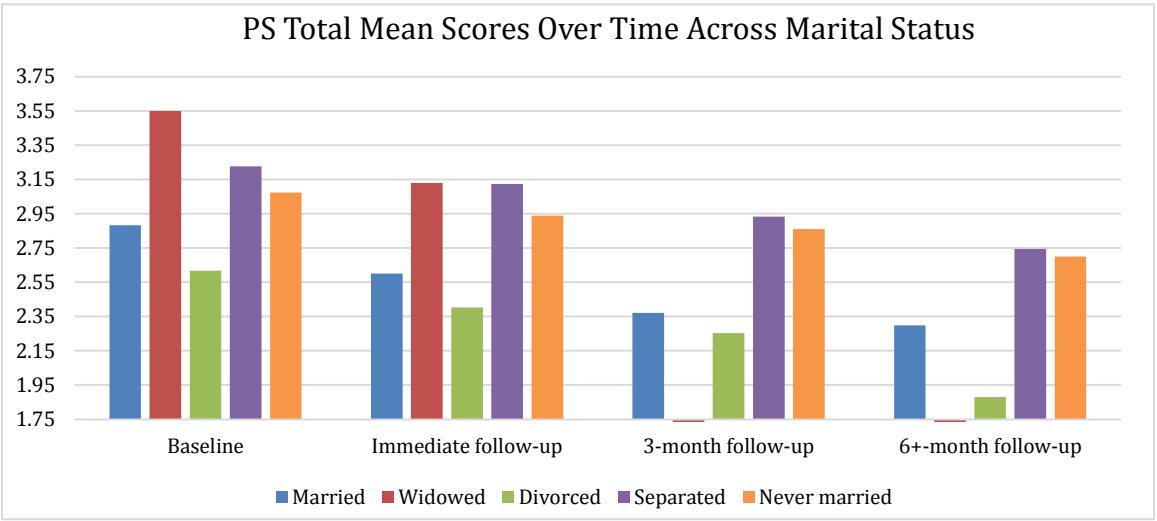


Table 22: PS mean scores over time across caregiver marital status

	Married	Widowed	Divorced	Separated	Never married
PS, total score					
Baseline	2.88	3.55	2.62	3.23	3.07
Immediate follow-up	2.60	3.13	2.40	3.12	2.94
3-month follow-up	2.37	--	2.25	2.93	2.86
6+-month follow-up	2.30	--	1.88	2.74	2.70



 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

Table 23: PSI mean scores over time across caregiver marital status

	Married	Widowed	Divorced	Separated	Never married
PSI, total score					
Baseline	75.85	85.50	64.74	76.31	74.90
Immediate follow-up	72.74	61.00	49.92	67.86	68.89
3-month follow-up	63.22	--	50.80	64.50	60.67
6+-month follow-up	63.03	--	48.00	68.67	59.80

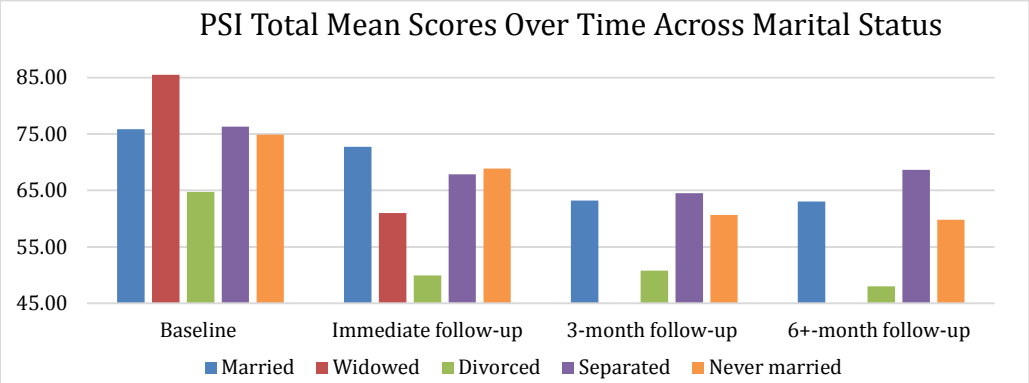
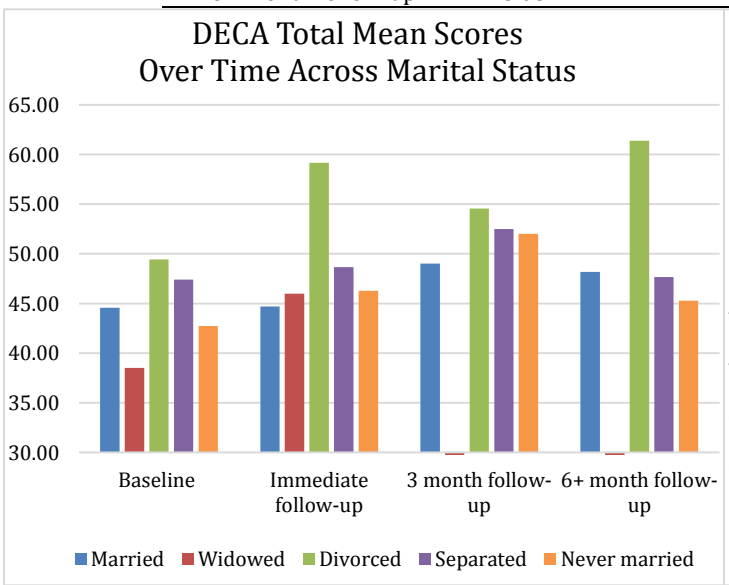
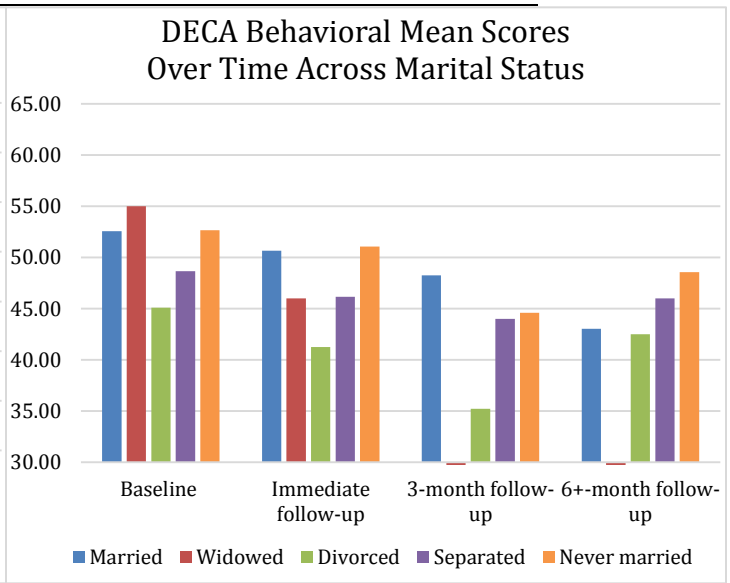


Table 24: DECA mean scores over time across caregiver marital status

	Married	Widowed	Divorced	Separated	Never married
DECA, total score					
Baseline	44.57	38.50	49.45	47.42	42.74
Immediate follow-up	44.70	46.00	59.17	48.67	46.29
3-month follow-up	49.00	--	54.56	52.50	52.00
6+-month follow-up	48.18	--	61.40	47.67	45.27
DECA, behavioral					
Baseline	52.57	55.00	45.10	48.67	52.66
Immediate follow-up	50.66	46.00	41.25	46.17	51.07
3-month follow-up	48.26	--	35.22	44.00	44.60
6+-month follow-up	43.03	--	42.50	46.00	48.55





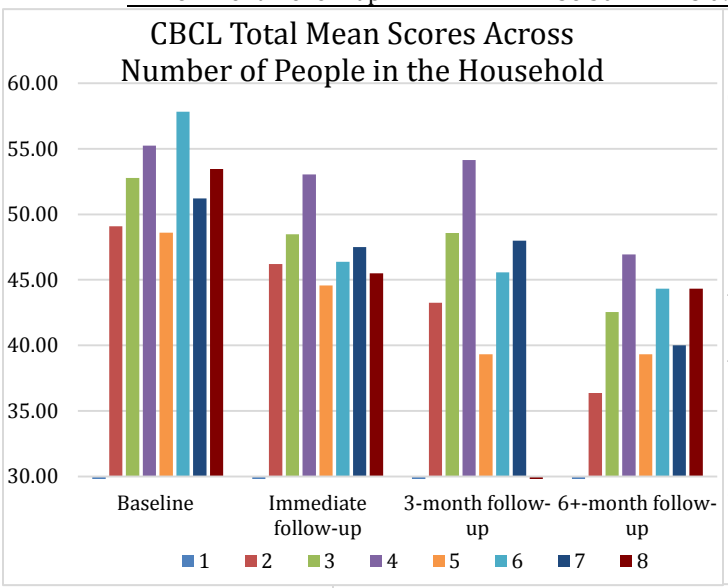
 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

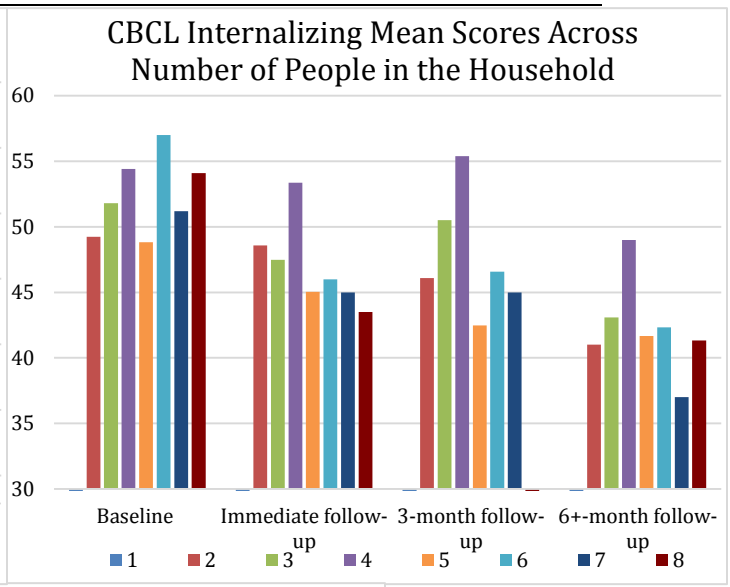
The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

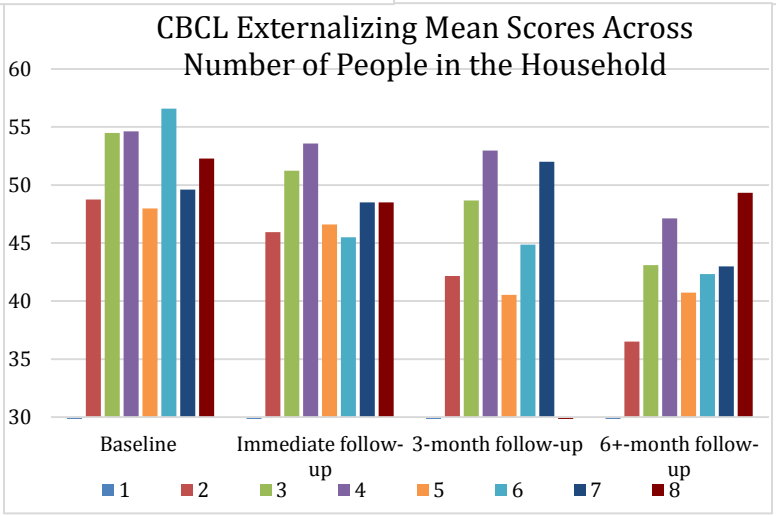
Group Differences by Number of People in the Household

Table 25: CBCL mean scores over time across # of people in the household

	Number of total people in the home							
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
CBCL, total score								
Baseline	--	49.09	52.78	55.25	48.59	57.83	51.20	53.45
Immediate follow-up	--	46.21	48.48	53.03	44.57	46.38	47.50	45.50
3-month follow-up	--	43.25	48.58	54.14	39.33	45.57	48.00	--
6+-month follow-up	--	36.38	42.55	46.94	39.33	44.33	40.00	44.33
CBCL, internalizing								
Baseline	--	49.25	51.80	54.42	48.82	57.00	51.20	54.09
Immediate follow-up	--	48.58	47.48	53.35	45.04	46.00	45.00	43.50
3-month follow-up	--	46.08	50.50	55.38	42.67	46.47	45.00	--
6+-month follow-up	--	41.00	43.09	49.00	41.67	41.67	37.00	41.33
CBCL, externalizing								
Baseline	--	48.75	54.47	54.60	47.98	56.58	49.60	52.27
Immediate follow-up	--	45.95	51.22	53.58	46.61	45.50	48.50	48.50
3-month follow-up	--	42.17	48.67	52.95	40.53	44.86	52.00	--
6+-month follow-up	--	36.50	43.09	47.13	40.73	42.33	43.00	49.33







 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

Table 26: ASQ mean scores over time across # of people in the household

	Number of total people in the home							
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
ASQ, total score								
Baseline	70.00	68.87	64.04	75.74	50.59	71.67	113.00	64.00
Immediate follow-up	--	50.56	53.75	66.29	29.58	40.00	72.50	87.50
3-month follow-up	--	46.36	43.50	50.25	12.67	24.29	10.00	--
6+-month follow-up	--	28.89	48.00	32.33	16.07	30.00	15.00	64.00

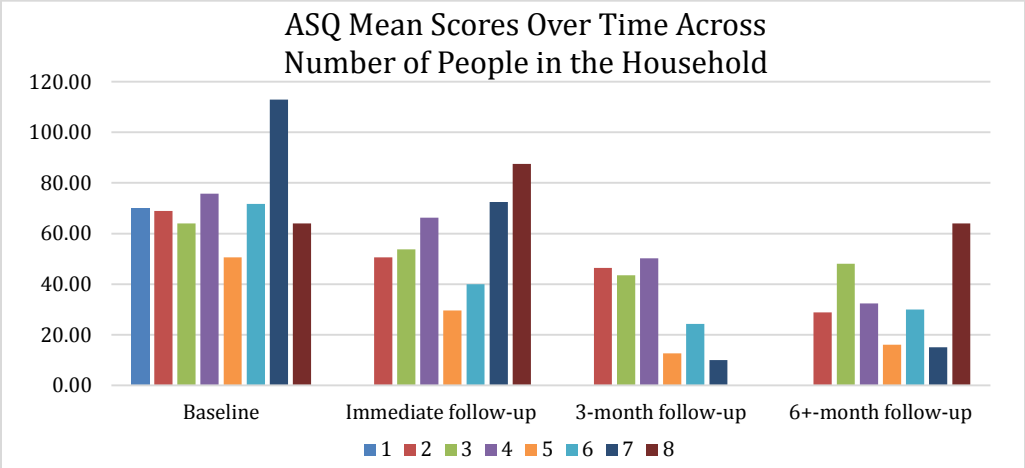
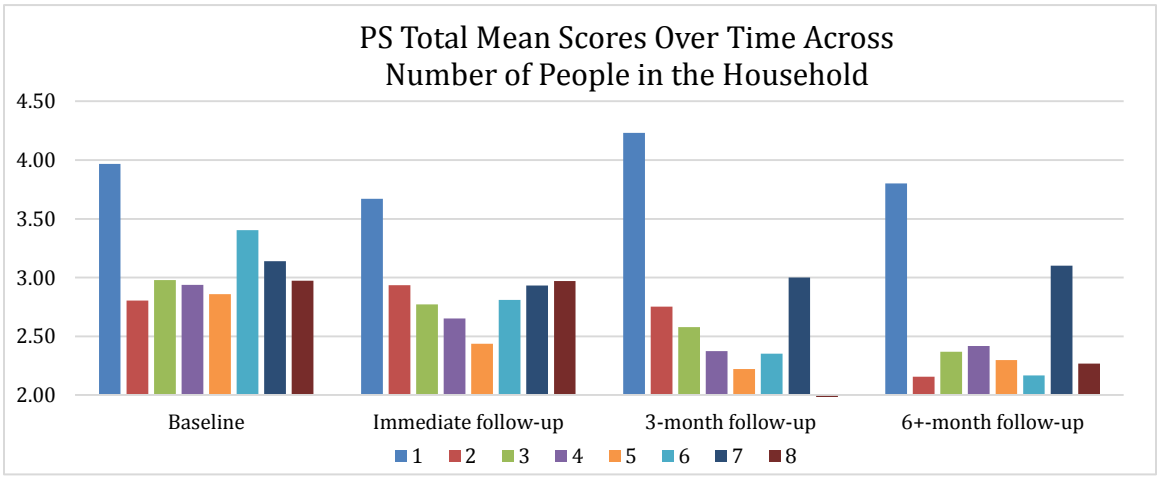


Table 27: PS mean scores over time across # of people in the household

	Number of total people in the home							
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
PS, total score								
Baseline	3.97	2.80	2.98	2.94	2.86	3.40	3.14	2.97
Immediate follow-up	3.67	2.94	2.77	2.65	2.44	2.81	2.93	2.97
3-month follow-up	4.23	2.75	2.58	2.37	2.22	2.35	3.00	--
6+-month follow-up	3.80	2.16	2.37	2.42	2.30	2.17	3.10	2.27



 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

Table 28: PSI mean scores over time across # of people in the household

	Number of total people in the home							
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
PSI, total score								
Baseline	81.00	65.80	76.70	78.34	71.14	81.08	81.00	75.91
Immediate follow-up	--	62.32	63.83	75.06	69.25	64.50	80.25	85.00
3-month follow-up	--	64.08	54.00	68.35	59.63	48.18	70.00	--
6+-month follow-up	--	58.78	55.90	71.60	51.94	48.00	74.00	72.00

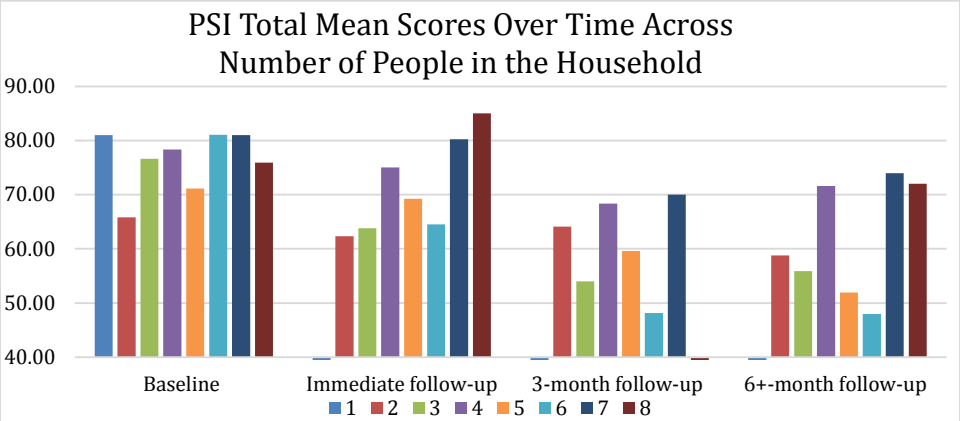
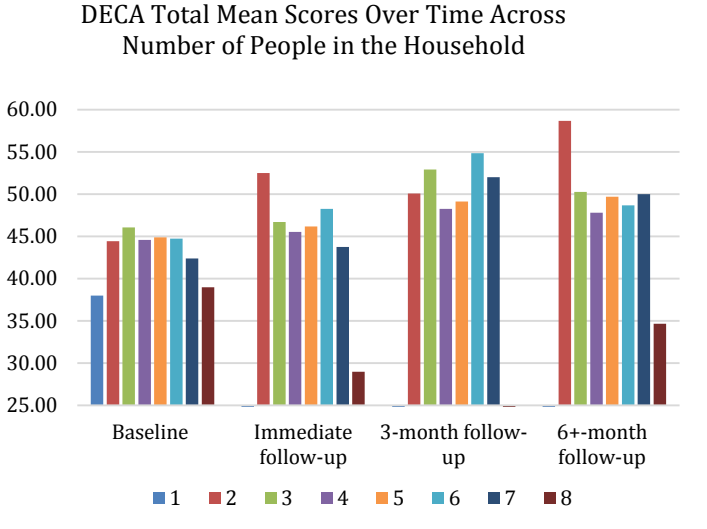
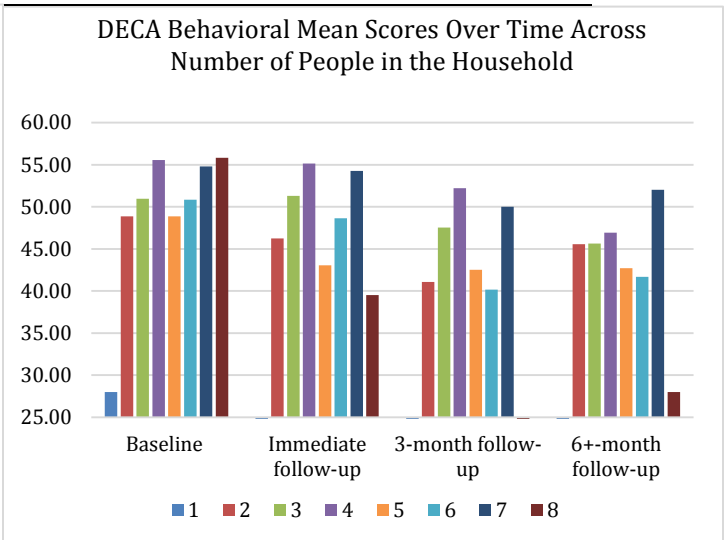


Table 29: DECA mean scores over time across # of people in the household

	Number of total people in the home							
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
DECA, total score								
Baseline	38.00	44.45	46.08	44.57	44.90	44.73	42.40	39.00
Immediate follow-up	--	52.50	46.71	45.55	46.17	48.25	43.75	29.00
3-month follow-up	--	50.08	52.91	48.25	49.13	54.86	52.00	--
6+-month follow-up	--	58.67	50.27	47.80	49.69	48.67	50.00	34.67
DECA, behavioral								
Baseline	28.00	48.87	50.96	55.54	48.86	50.82	54.8	55.82
Immediate follow-up	--	46.22	51.29	55.13	43.04	48.63	54.25	39.50
3-month follow-up	--	41.08	47.55	52.20	42.50	40.14	50.00	--
6+-month follow-up	--	45.56	45.64	46.93	43.69	41.67	52.00	28.00





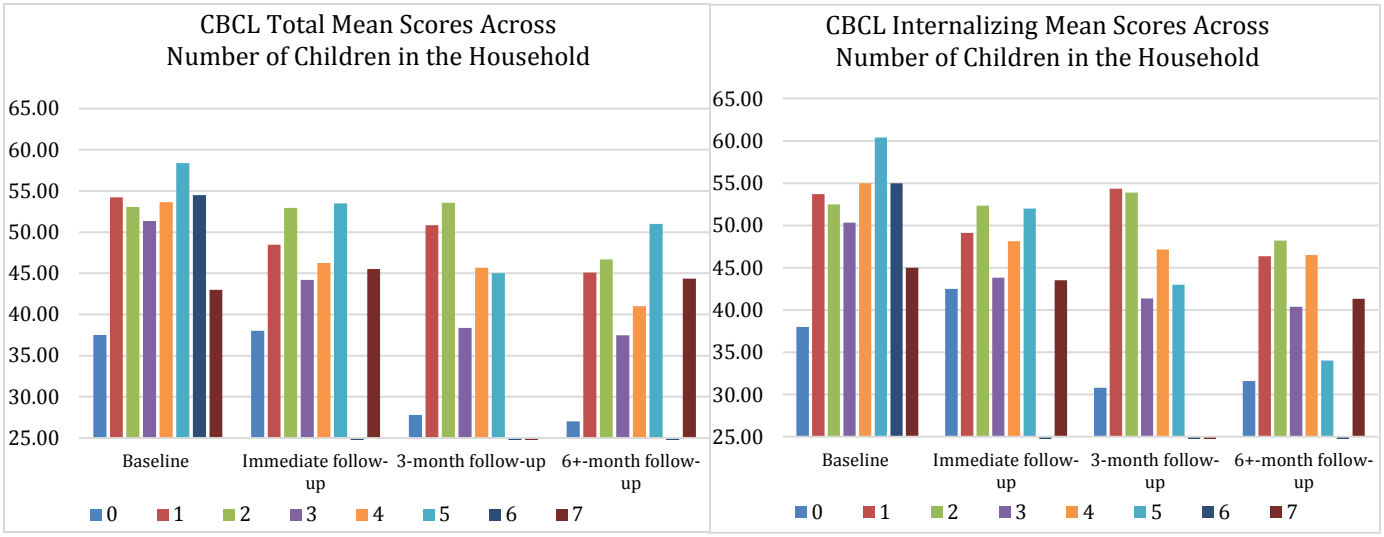
 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

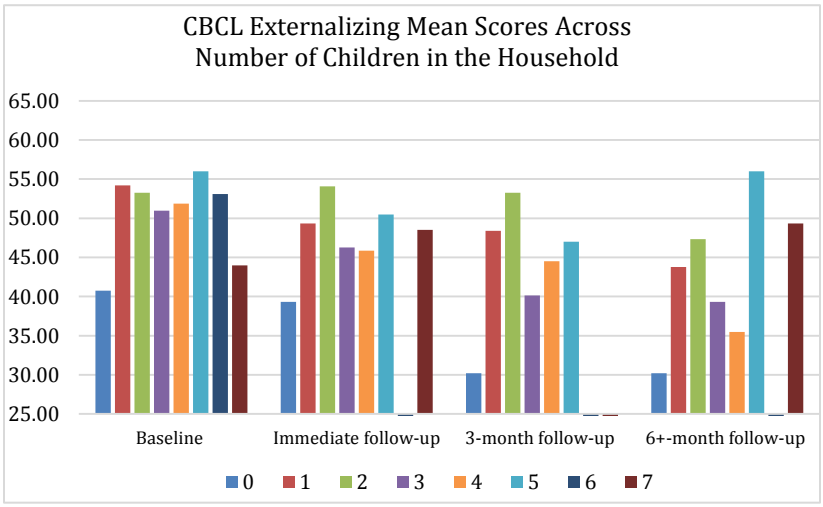
The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

Group Differences by Number of Children in the Household

Table 30: CBCL mean scores over time across # of children in the household

	Number of children in the home							
	0	**1**	**2**	**3**	**4**	**5**	**6**	**7**
CBCL, total score								
Baseline	37.50	54.24	53.05	51.35	53.63	58.40	54.50	43.00
Immediate follow-up	38.00	48.48	52.95	44.18	46.25	53.50	--	45.50
3-month follow-up	27.80	50.83	53.58	38.36	45.67	45.00	--	45.50
6+-month follow-up	27.00	45.07	46.68	37.46	41.00	51.00	--	44.33
CBCL, internalizing								
Baseline	38.00	53.71	52.49	50.33	55.00	58.50	55.00	45.00
Immediate follow-up	42.50	49.13	52.34	43.82	48.13	52.00	--	43.50
3-month follow-up	30.80	54.33	53.88	41.36	47.17	43.00	--	--
6+-month follow-up	31.60	46.36	48.21	40.38	46.50	34.00	--	41.33
CBCL, externalizing								
Baseline	40.75	54.21	53.24	50.98	51.88	56.00	53.10	44.00
Immediate follow-up	39.33	49.35	54.08	46.27	45.88	50.50	--	48.50
3-month follow-up	30.20	48.39	53.25	40.14	44.50	47.00	--	--
6+-month follow-up	30.20	43.79	47.32	39.31	35.50	56.00	--	49.33





 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

Table 31: ASQ mean scores over time across # of children in the household

	Number of children in the home							
	0	**1**	**2**	**3**	**4**	**5**	**6**	**7**
ASQ, total score								
Baseline	20.63	74.76	70.59	61.84	37.50	123.00	57.78	120.00
Immediate follow-up	16.67	62.67	62.05	30.00	29.38	60.50	--	87.50
3-month follow-up	2.00	62.33	45.87	10.71	18.33	60.00	--	--
6+-month follow-up	0.00	57.50	30.00	10.00	7.50	75.00	--	64.00

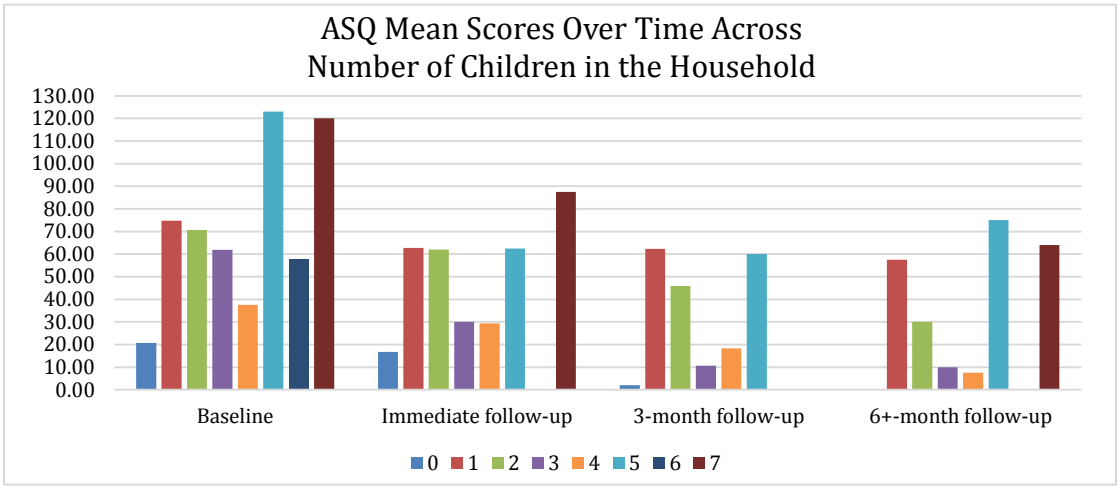
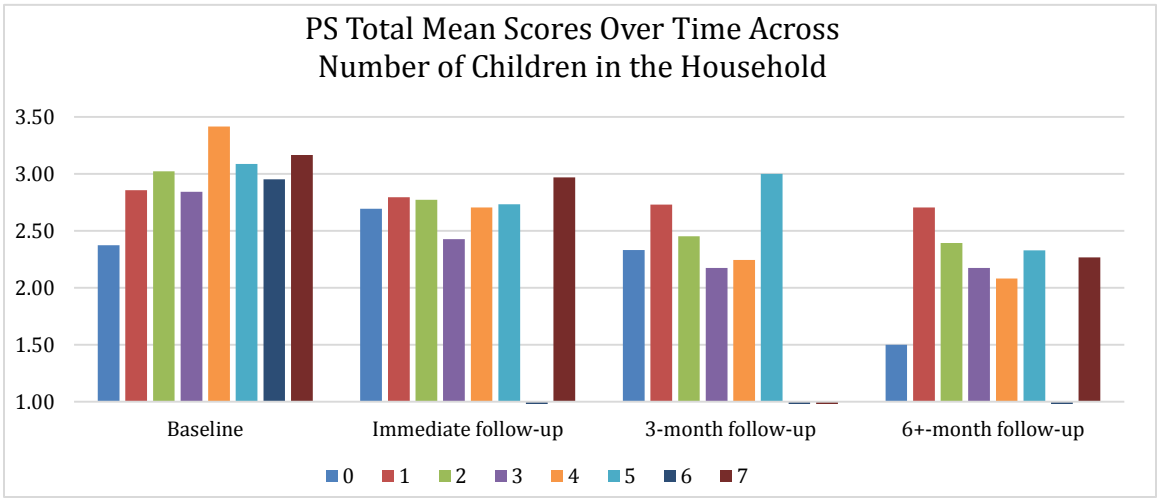


Table 32: PS mean scores over time across # of children in the household

	Number of children in the home							
	0	**1**	**2**	**3**	**4**	**5**	**6**	**7**
PS, total score								
Baseline	2.38	2.86	3.02	2.84	3.42	3.09	2.95	3.17
Immediate follow-up	2.69	2.80	2.77	2.43	2.70	2.73	--	2.97
3-month follow-up	2.33	2.73	2.45	2.18	2.24	3.00	--	--
6+-month follow-up	1.50	2.70	2.39	2.17	2.08	2.33	--	2.27



 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

Table 33: PSI mean scores over time across # of children in the household

	Number of children in the home							
	0	**1**	**2**	**3**	**4**	**5**	**6**	**7**
PSI, total score								
Baseline	45.29	74.69	77.42	74.56	78.25	91.00	71.36	90.00
Immediate follow-up	44.50	65.63	74.73	69.70	60.38	98.50	--	85.00
3-month follow-up	49.00	61.59	68.57	59.00	50.17	36.00	--	--
6+-month follow-up	38.00	64.93	69.78	50.86	46.00	52.00	--	72.00

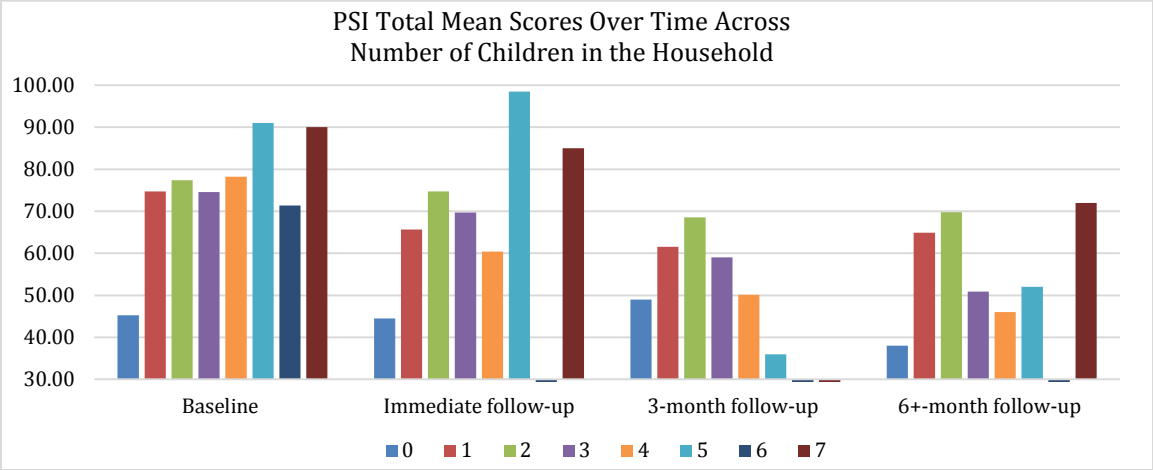
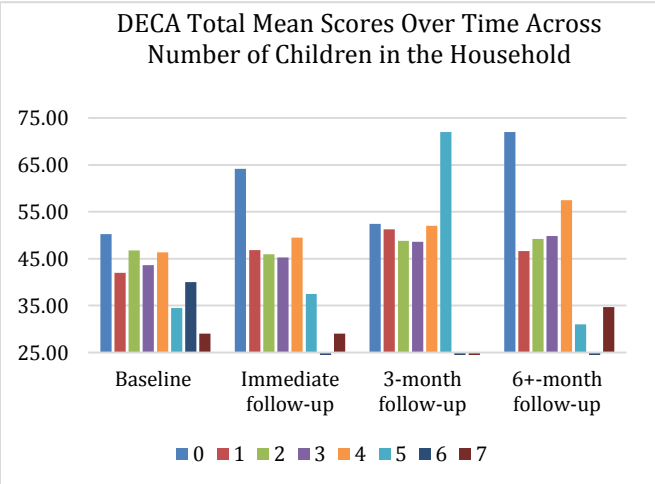
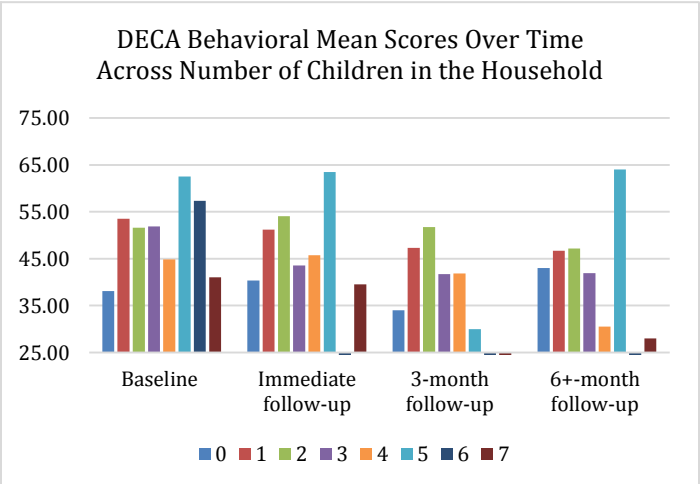


Table 34: DECA mean scores over time across # of children in the household

	Number of children in the home							
	0	**1**	**2**	**3**	**4**	**5**	**6**	**7**
DECA, total score								
Baseline	50.25	41.98	46.74	43.60	46.38	34.50	40.00	29.00
Immediate follow-up	64.17	46.83	45.95	45.26	49.50	37.50	--	29.00
3-month follow-up	52.40	51.29	48.83	48.60	52.00	72.00	--	--
6+-month follow-up	72.00	46.60	49.22	49.86	57.50	31.00	--	34.67
DECA, behavioral								
Baseline	38.13	53.51	51.62	51.85	44.88	62.50	57.30	41.00
Immediate follow-up	40.33	51.20	54.05	43.57	45.75	63.50	--	39.50
3-month follow-up	34.00	47.29	51.74	41.73	41.83	30.00	--	--
6+-month follow-up	43.00	46.67	47.17	41.93	30.50	64.00	--	28.00





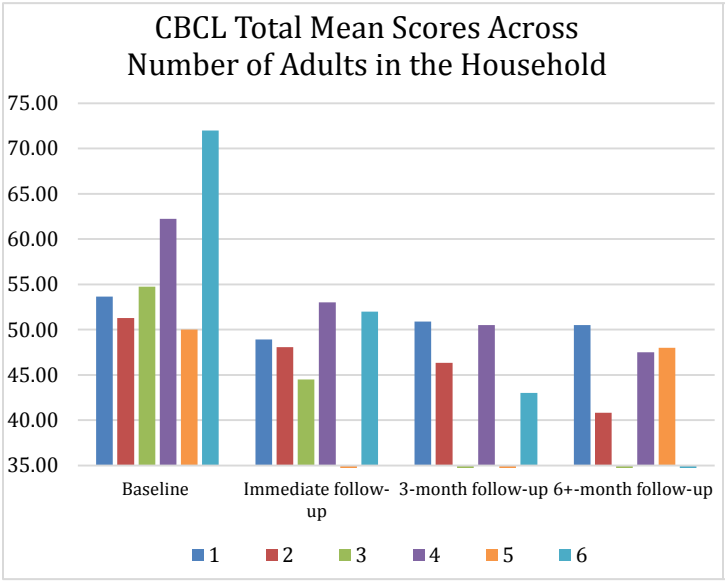
 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

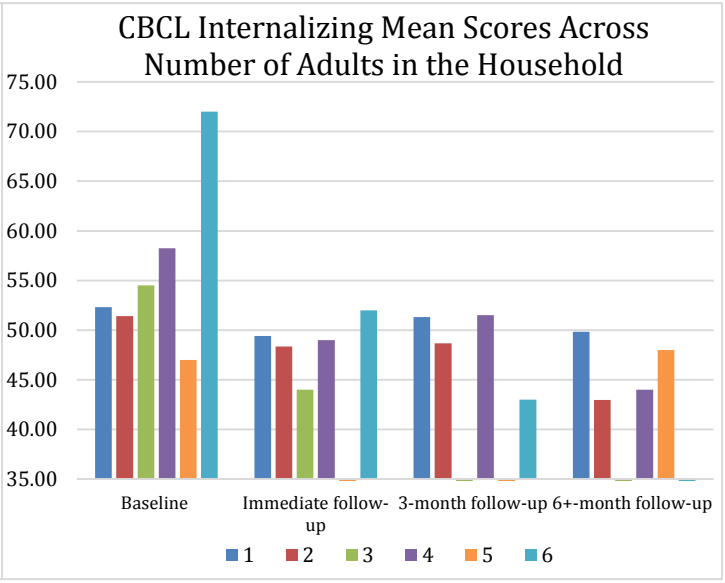
The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

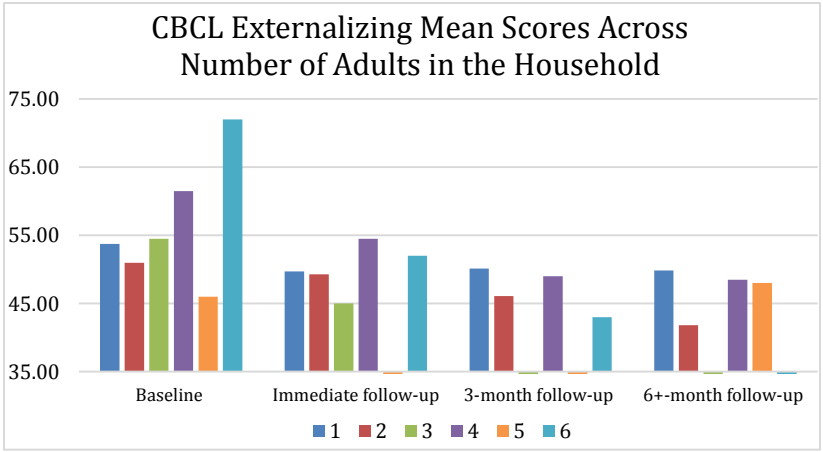
Group Differences by Number of Adults in the Household

Table 35: CBCL mean scores over time across # of adults in the household

	Number of adults in the home					
	1	**2**	**3**	**4**	**5**	**6**
CBCL, total score						
Baseline	53.63	51.28	54.75	62.25	50.00	72.00
Immediate follow-up	48.92	48.06	44.50	53.00	--	52.00
3-month follow-up	50.89	46.32	--	50.50	--	43.00
6+-month follow-up	50.50	40.83	--	47.50	48.00	--
CBCL, internalizing						
Baseline	52.32	51.42	54.50	58.25	47.00	66.00
Immediate follow-up	49.42	48.35	44.00	49.00	--	52.00
3-month follow-up	51.33	48.68	--	51.50	--	39.00
6+-month follow-up	49.83	42.98	--	44.00	49.00	--
CBCL, externalizing						
Baseline	53.76	50.97	54.50	61.50	46.00	74.00
Immediate follow-up	49.71	49.30	45.00	54.50	--	54.00
3-month follow-up	50.11	46.07	--	49.00	--	47.00
6+-month follow-up	49.83	41.81	--	48.50	46.00	--







 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

Table 36: ASQ mean scores over time across # of adults in the household

	Number of adults in the home					
	1	**2**	**3**	**4**	**5**	**6**
ASQ, total score						
Baseline	77.35	59.90	63.75	120.00	60.00	110.00
Immediate follow-up	57.08	49.63	60.00	72.50	--	45.00
3-month follow-up	52.50	34.81	--	25.00	--	5.00
6+-month follow-up	53.57	27.82	--	22.50	75.00	--

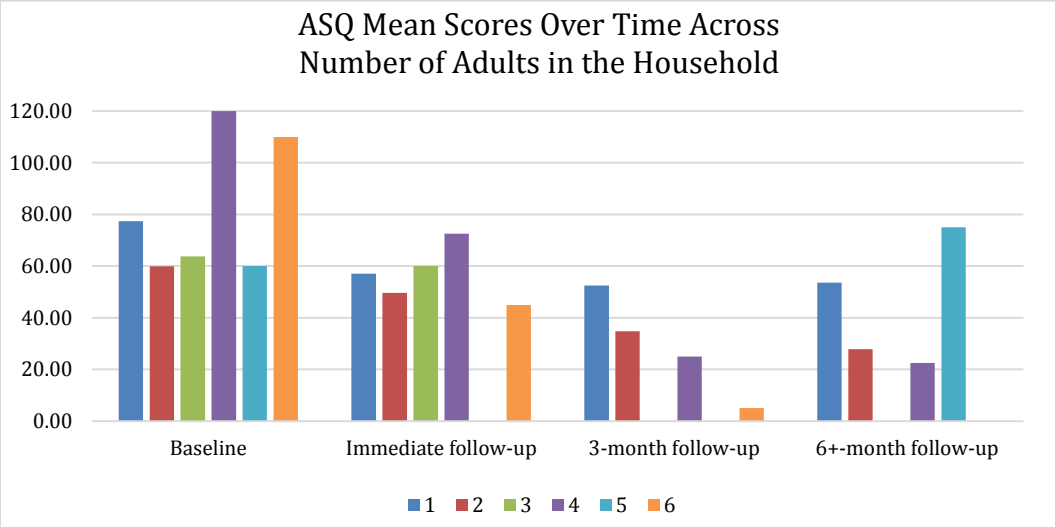
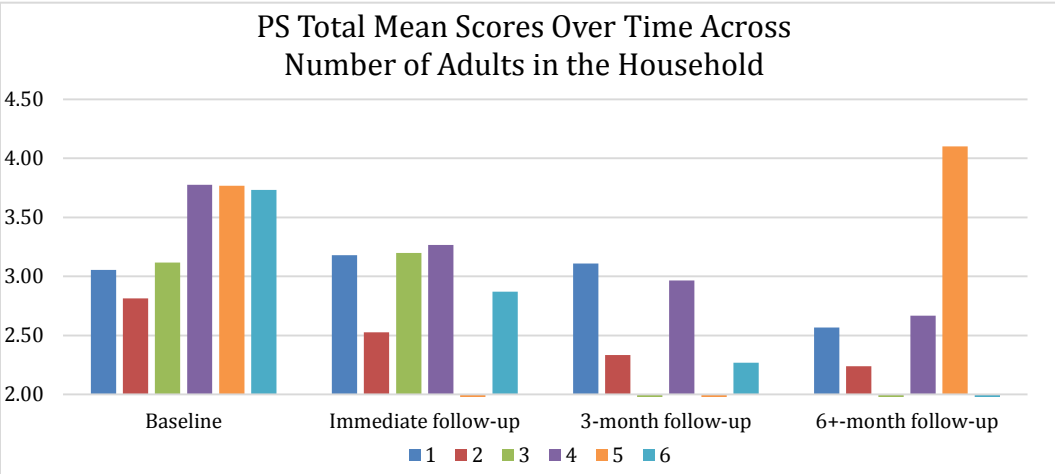


Table 37: PS mean scores over time across # of adults in the household

	Number of adults in the home					
	1	**2**	**3**	**4**	**5**	**6**
PS, total score						
Baseline	3.06	2.81	3.12	3.78	3.77	3.73
Immediate follow-up	3.18	2.53	3.20	3.27	--	2.87
3-month follow-up	3.11	2.33	--	2.97	--	2.27
6+-month follow-up	2.57	2.24	--	2.67	4.10	--



 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

Table 38: PSI mean scores over time across # of adults in the household

	Number of adults in the home					
	1	**2**	**3**	**4**	**5**	**6**
PSI, total score						
Baseline	76.84	73.06	85.67	96.50	71.00	102.00
Immediate follow-up	70.76	67.56	88.00	85.50	--	67.00
3-month follow-up	66.00	60.07	--	69.50	--	54.00
6+-month follow-up	71.29	58.19	--	64.00	65.00	--

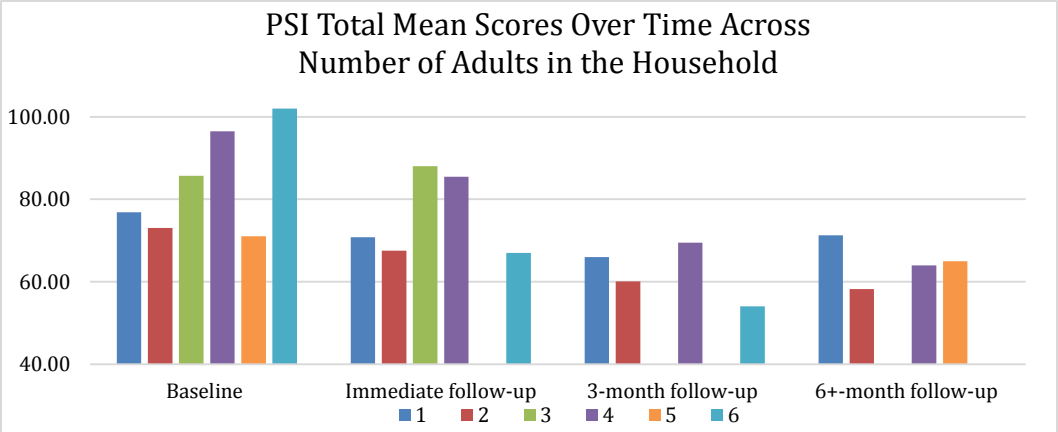
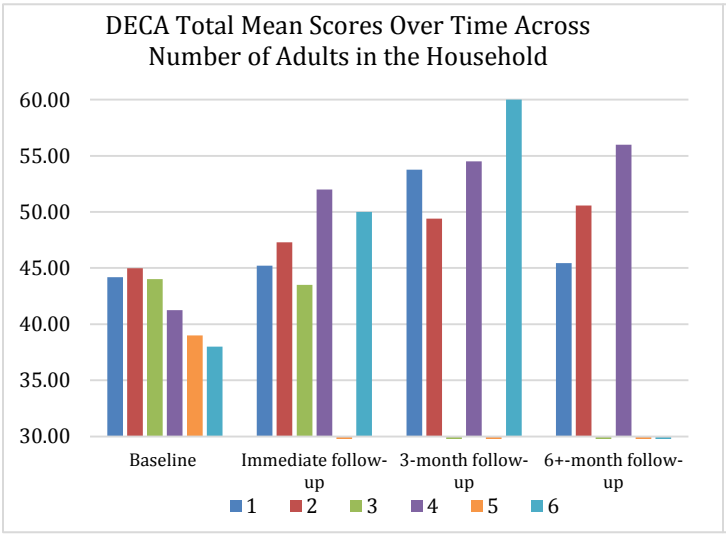
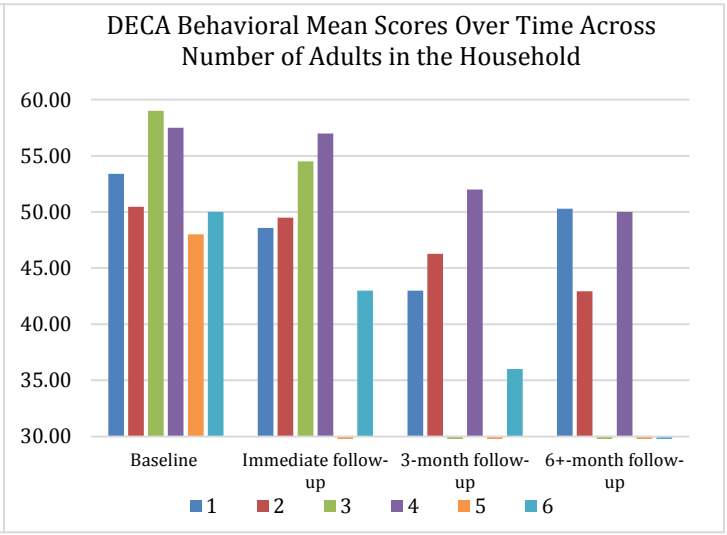


Table 39: DECA mean scores over time across # of adults in the household

	Number of adults in the home					
	1	**2**	**3**	**4**	**5**	**6**
DECA, total score						
Baseline	44.18	44.98	44.00	41.25	39.00	38.00
Immediate follow-up	45.21	47.30	--	52.00	--	50.00
3-month follow-up	53.78	49.40	--	54.50	--	60.00
6+-month follow-up	45.43	50.58	--	56.00	35.00	--
DECA, behavioral						
Baseline	53.39	50.46	59.00	57.50	48.00	50.00
Immediate follow-up	48.58	49.49	--	57.00	--	43.00
3-month follow-up	43.00	46.25	--	52.00	--	36.00
6+-month follow-up	50.29	42.92	--	50.00	48.00	--





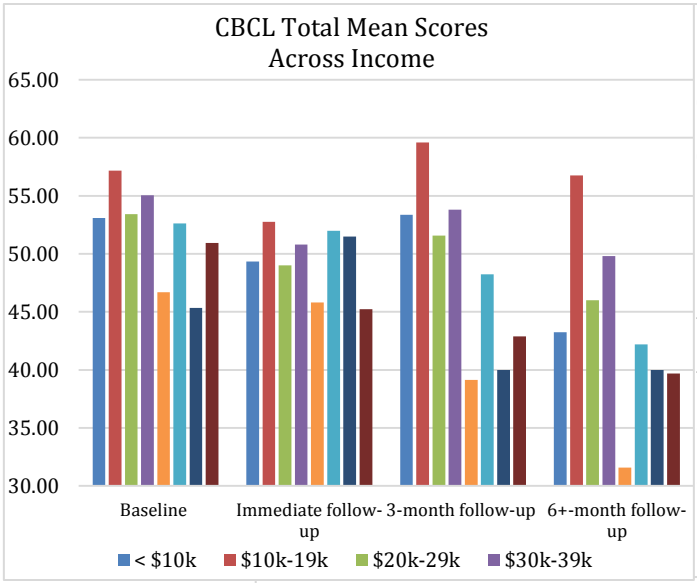
 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

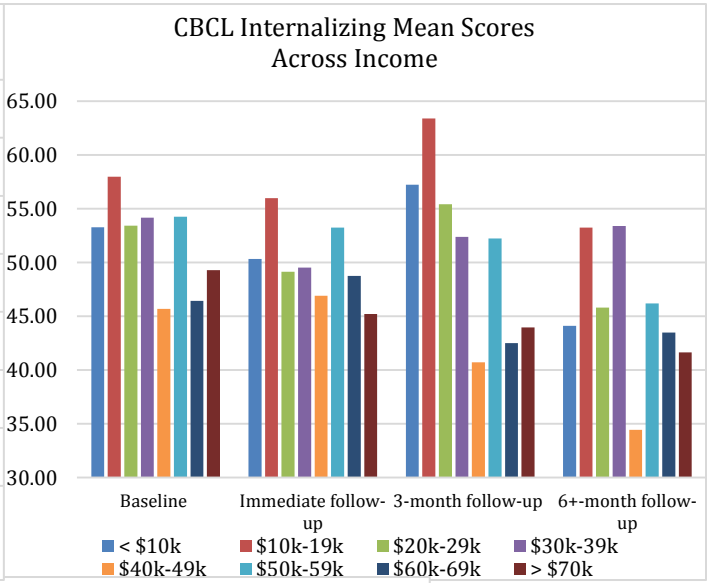
The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

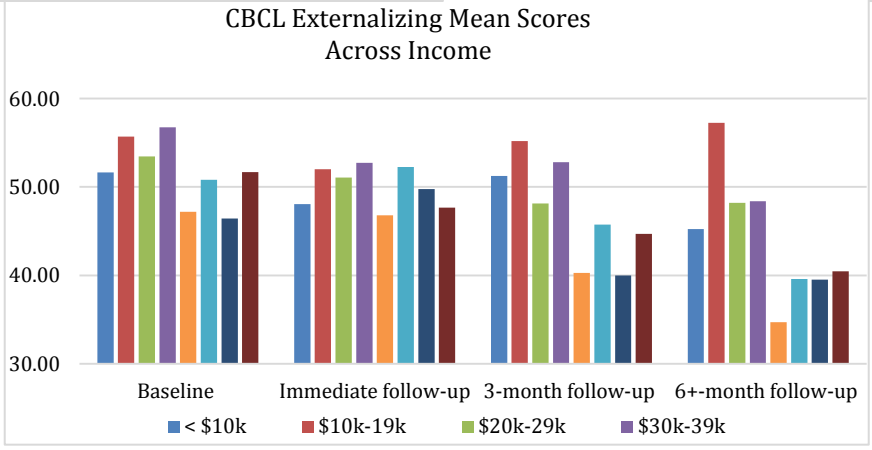
Group Differences by Income

Table 40: CBCL mean scores over time across income

	< $10k	$10k-19k	$20k-29k	$30k-39k	$40k-49k	$50k-59k	$60k-69k	> $70k
CBCL, total score								
Baseline	53.09	57.16	53.42	55.06	46.71	52.64	45.33	50.93
Immediate follow-up	49.33	52.75	49.00	50.80	45.80	52.00	51.50	45.22
3-month follow-up	53.38	59.60	51.57	53.80	39.14	48.25	40.00	42.90
6+-month follow-up	43.25	56.75	46.00	49.80	31.57	42.20	40.00	39.70
CBCL, internalizing								
Baseline	53.27	58.00	53.42	54.19	45.71	54.27	46.44	49.30
Immediate follow-up	50.33	56.00	49.15	49.53	46.90	53.25	48.75	45.22
3-month follow-up	57.25	63.40	55.43	52.40	40.71	52.25	42.50	43.97
6+-month follow-up	44.13	53.25	45.80	53.40	34.43	46.20	43.50	41.65
CBCL, externalizing								
Baseline	51.66	55.72	53.46	56.75	47.18	50.81	46.44	51.68
Immediate follow-up	48.07	52.00	51.08	52.73	46.80	52.25	49.75	47.67
3-month follow-up	51.25	55.20	48.14	52.80	40.29	45.75	40.00	44.69
6+-month follow-up	45.25	57.25	48.20	48.40	34.71	39.60	39.50	40.45







 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

Table 41: ASQ mean scores over time across income

	< $10k	$10k-19k	$20k-29k	$30k-39k	$40k-49k	$50k-59k	$60k-69k	> $70k
ASQ, total score								
Baseline	84.43	65.00	79.63	67.06	47.29	42.27	52.50	60.08
Immediate follow-up	73.00	55.00	54.64	60.00	41.50	43.14	38.75	43.47
3-month follow-up	70.71	51.00	34.00	48.00	31.43	30.00	20.00	26.90
6+-month follow-up	68.00	55.00	31.00	48.33	10.71	26.00	10.00	15.26

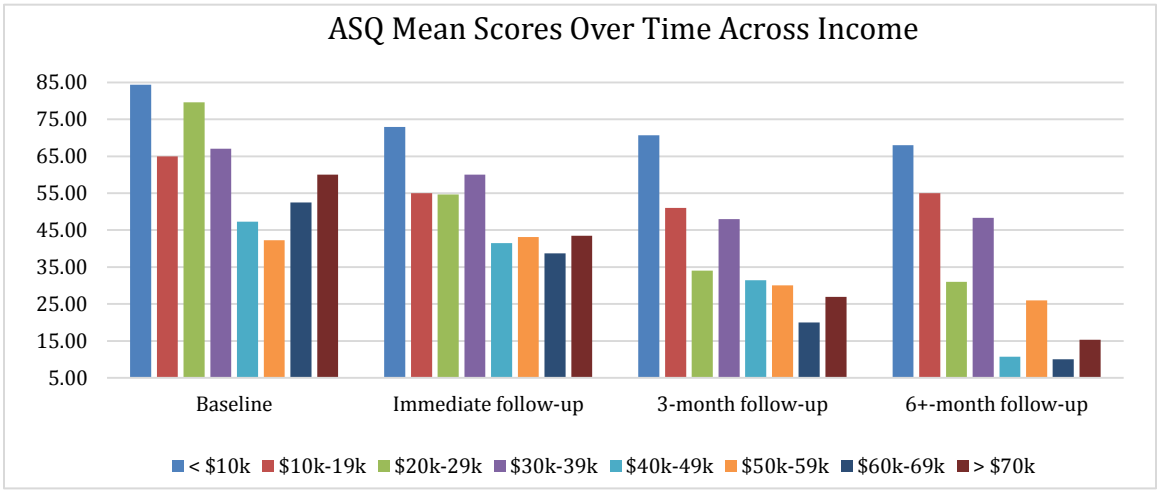
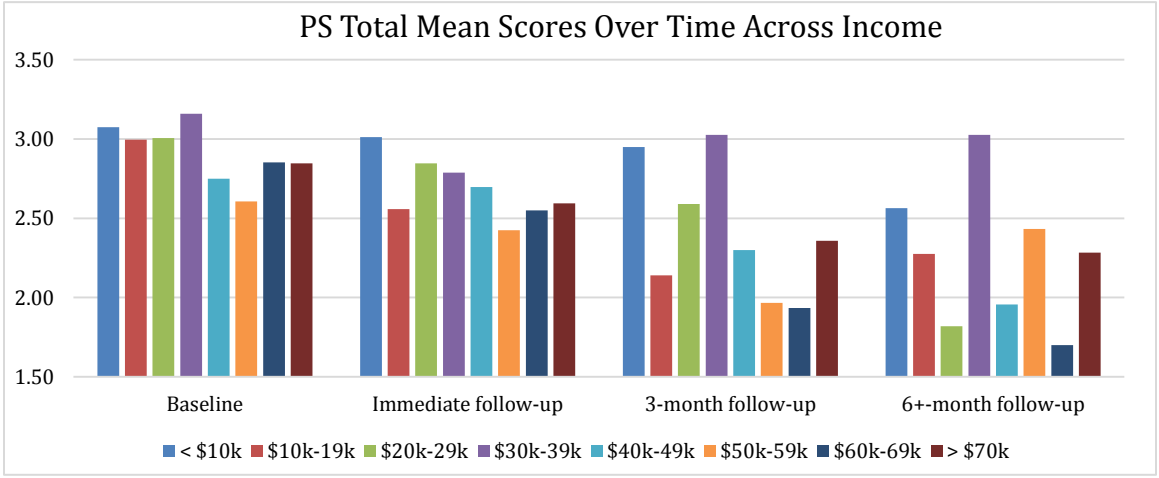


Table 42: PS mean scores over time across income

	< $10k	$10k-19k	$20k-29k	$30k-39k	$40k-49k	$50k-59k	$60k-69k	> $70k
PS, total score								
Baseline	3.07	3.00	3.01	3.16	2.75	2.61	2.85	2.85
Immediate follow-up	3.01	2.56	2.85	2.79	2.70	2.43	2.55	2.59
3-month follow-up	2.95	2.14	2.59	3.03	2.30	1.97	1.93	2.36
6+-month follow-up	2.56	2.28	1.82	3.03	1.96	2.43	1.70	2.28



 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.

Table 43: PSI mean scores over time across income

	< $10k	$10k-19k	$20k-29k	$30k-39k	$40k-49k	$50k-59k	$60k-69k	> $70k
PSI, total score								
Baseline	74.84	75.09	81.55	79.12	71.67	68.64	62.67	73.68
Immediate follow-up	75.47	67.25	68.86	74.27	61.90	64.25	67.50	68.03
3-month follow-up	59.86	67.00	63.57	81.80	51.83	51.00	39.00	61.43
6+-month follow-up	69.38	73.75	60.25	78.60	51.71	53.40	38.50	56.86

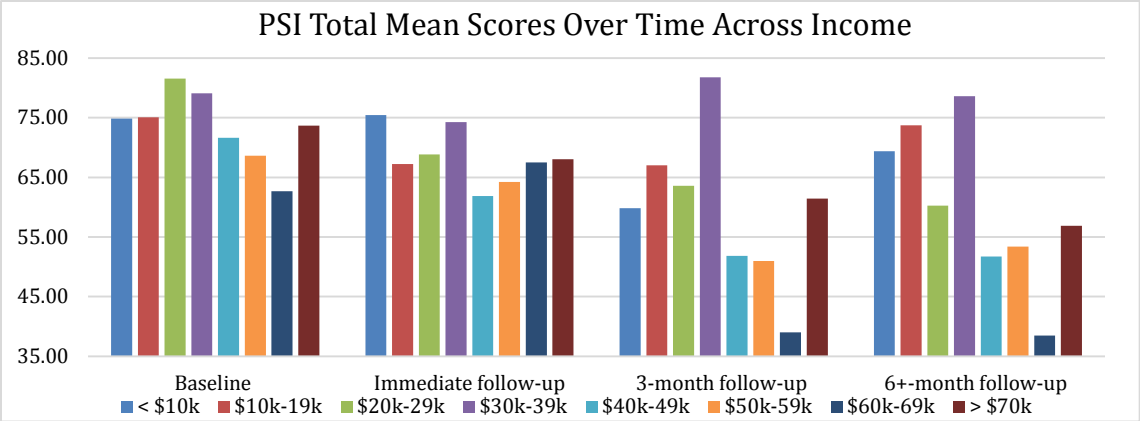
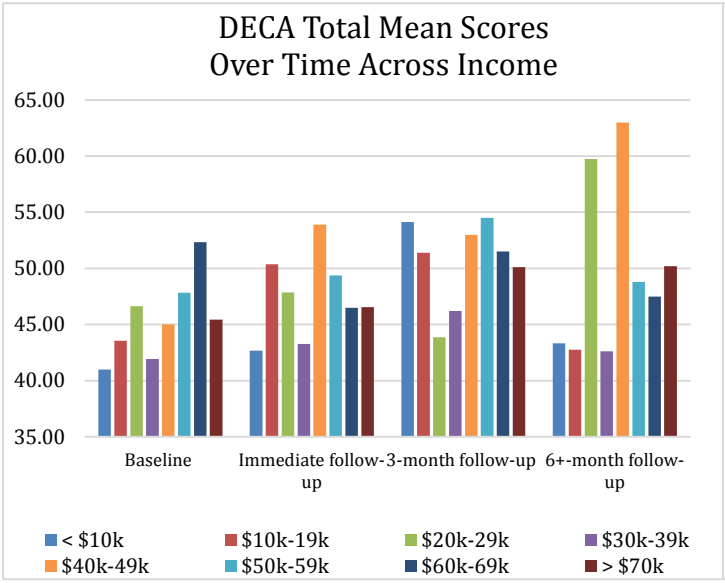
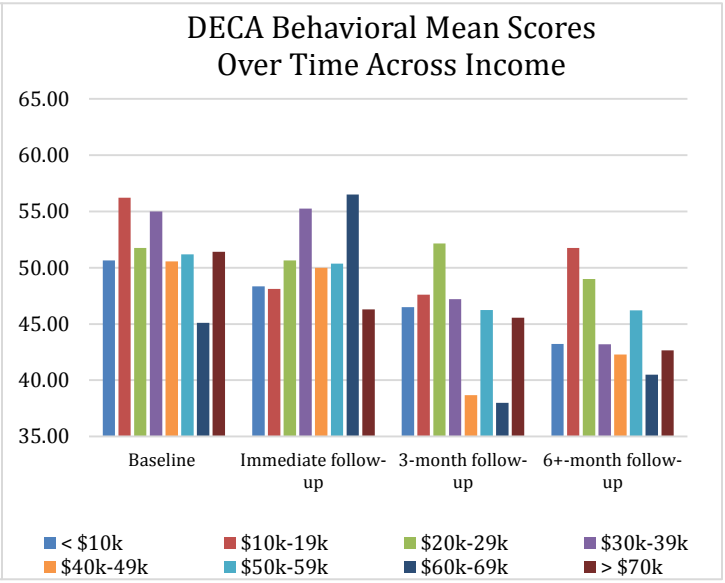


Table 44: DECA mean scores over time across income

	< $10k	$10k-19k	$20k-29k	$30k-39k	$40k-49k	$50k-59k	$60k-69k	> $70k
DECA, total score								
Baseline	40.98	43.55	46.62	41.94	45.00	47.82	52.33	45.43
Immediate follow-up	42.67	50.38	47.86	43.27	53.90	49.38	46.50	46.56
3-month follow-up	54.13	51.40	43.86	46.20	53.00	54.40	51.50	50.10
6+-month follow-up	43.33	42.75	59.75	42.60	63.00	48.80	47.50	50.19
DECA, behavioral								
Baseline	50.66	56.23	51.76	55.00	50.56	51.18	45.11	51.43
Immediate follow-up	48.33	48.13	50.64	55.27	50.00	50.38	56.50	46.31
3-month follow-up	46.50	47.60	52.14	47.20	38.67	46.25	38.00	45.57
6+-month follow-up	43.22	51.75	49.00	43.20	42.29	46.20	40.50	42.67





 This study has been approved by Miami University's Institutional Review Board (IRB): **Approval #00688r**
Institutional Review Board for Human Subjects Research, 102 Roudebush Hall, Oxford, OH 45056; (513) 529-3600

The findings and recommendations of this study may not reflect the views and opinions of the Ohio Department of Mental Health and Addiction Services.