



CIRCLE OF PARENTS  
NATIONAL EVALUATION:  
SUPPLEMENTAL REPORT

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## **Background and Methodology**

Circle of Parents (COP) support groups serve any person in a caregiving role who wants to discuss parenting with other caregivers. These support groups are modeled after standards established by Prevent Child Abuse America and the National Family Support Roundtable. In general, COP support groups are offered at no cost, and honor confidentiality, anonymity, shared leadership, and mutual self-help.

To meet federal reporting requirements, COP evaluates its services using the Protective Factors Survey (PFS). The PFS measures five protective factors: Family Functioning/Resiliency (FFR); Concrete Supports (CS); Social Supports (SS); Nurturing and Attachment (NA); and Knowledge of Parenting/Child Development. With this sample, the PFS was administered before and after caregivers participated in COP support groups. In addition, COP administered a retrospective PFS pretest and posttest following the traditional PFS posttest. Typically, retrospective measures ask participants to answer retrospective pretest items at the time of the administration of a posttest. For this study, the retrospective PFS included both a pretest and posttest, allowing participants to reflect on their level of protective factors both before and after participation in the support groups.

This report, completed by the Institute for Educational Research and Public Service at the University of Kansas, examines the PFS subscale scores. Both the traditional and the retrospective measures were evaluated. The report includes a description of the COP participants in this evaluation as well as an examination of whether participants' levels of protective factors increased during the time of their participation in the support groups.

### **Characteristics of Evaluation Participants**

From 2009 to 2011, 378 caregivers participating in COP parent support groups participated in this evaluation study. These participants represented 10 states, including Colorado, Connecticut, Florida, Illinois, Kansas, Massachusetts, Minnesota, Vermont, Washington, and Wisconsin.

As Table 1 indicates, the evaluation sample was primarily female (81.4%) and non-White (54.9%). Nearly two-thirds of participants were 35 years of age or younger (63.9%) and had two children or less (72.0%). The majority (55.2%) identified as single. Most participants completed high school or below (58.7%) and earned less than \$25,000 annually (63.1%).

With regard to service participation, most participants (72.1%) attended support groups once a week, while less than a quarter of participants attended groups twice a month (10.6%) or once a month (17.0%). The average time between pretest and posttest administration was 106.9 days (range 10-428 days).

**Table 1**  
***Selected Demographics of Participants***

	<i>N</i>	<i>%</i>	<i>M</i>
<i>Sex</i>	377	--	--
Female	307	81.4	--
Male	70	18.6	--
<i>Ethnicity</i>	377	--	--
African American	101	26.8	--
Hispanic/Latino	60	15.9	--
White, non-Hispanic	170	45.1	--
Multiracial/Other*	41	10.8	--
<i>Income</i>	349	--	--
<\$25,000	223	63.1	--
\$25,000+	126	36.0	--
<i>Marital Status</i>	375	--	--
Partnered**	168	44.8	--
Single/Separated***	207	55.2	--
<i>Education</i>	368	--	--
Up to 11th Grade	74	20.1	--
High School/GED	142	38.6	--
>1 Year of College/Vocational School	152	41.3	--
<i>Number of Children</i>	365	--	1.9
0	29	7.9	--
1	120	32.9	--
2	114	31.2	--
3+	102	27.9	--
<i>Age</i>	374	--	32.7
<i>Childhood Exposure to Toxic Events</i>			
No	180	48.6	--
Yes	163	44.1	--
Unsure	27	7.3	--
<i>Frequency of Group Meetings</i>	376	--	1.4
Each Week	271	72.1	--
Twice Each Month	40	10.6	--
Each Month	64	17.0	--
Other	1	0.3	--

\*Multiracial/Other encompasses Native American/Alaskan Native, Native Hawaiian/Pacific Islanders, Multiracial, African Nationals/Caribbean Islanders, and Middle Eastern. \*\*Partnered represents married and partnered participants. \*\*\*Single/Separated represents single, divorced, widowed, and separated participants.

### **Evaluation Findings**

Three sets of analyses were conducted for this study: 1) A comparison of participant pre- and posttest scores on the traditional and retrospective versions of the PFS, 2) an examination of the impact of participant dosage on pre- and posttest scores on the traditional and retrospective versions of the PFS, and 3) a comparison of the traditional and retrospective versions of the PFS. Analyses utilized paired sample *t* tests for group comparisons.

## Pre- and Posttest Results

**Traditional PFS Results.** The results indicated statistically significant differences between pretest and posttest mean scores for Family Functioning/Resiliency,  $t(309)=-7.64$ ,  $p<0.001$ , Social Support,  $t(310)=-4.79$ ,  $p<0.001$ , Concrete Support,  $t(310)=-3.57$ ,  $p<0.001$ , Nurturing and Attachment,  $t(306)=-2.98$ ,  $p<0.01$ , and each individual Knowledge of Parenting/Child Development item,  $p<.05$  (see Table 3). Although most of the differences in subscale scores from pre- to posttest were statistically significant, the change in scores was small. For example, mean scores for Social Support increased from pretest ( $M=5.17$ ,  $SD=1.64$ ) to posttest ( $M=5.61$ ,  $SD=1.35$ ), which represented a mean change of 0.44.

**Retrospective PFS Results.** Analysis of the retrospective PFS indicated statistically significant differences between pretest and posttest mean scores for Family Functioning/Resiliency,  $t(332)=-15.65$ ,  $p<0.001$ , Social Support,  $t(333)=-14.22$ ,  $p<0.001$ , Nurturing and Attachment,  $t(332)=-11.53$ ,  $p<0.001$ , and each individual item of the Knowledge of Parenting/Child Development item,  $p<0.001$  (see Table 3). There was not a statistically significant difference between pretest and posttest mean scores for Concrete Support. Again, these mean score changes, although significant, were small (see Table 3).

Pre- and posttest means on the traditional and retrospective versions of the PFS are reported in Table 2. Significance testing using  $t$  test analyses is reported in Table 3.

**Table 2**  
*Paired Samples Means by Protective Factor*

Protective Factor	Traditional		Retrospective	
	Pretest <i>M</i>	Posttest <i>M</i>	Pretest <i>M</i>	Posttest <i>M</i>
Family Functioning/Resiliency	4.58	5.11	4.39	5.37
Social Support	5.17	5.61	4.66	5.81
Concrete Support	4.93	5.31	5.00	5.10
Nurturing and Attachment	5.95	6.11	5.64	6.21
Knowledge of Parenting/Child Development				
12. There are many times when I don't know what to do as a parent.	4.33	4.87	4.42	4.93
13. I know how to help my children learn.	5.28	5.74	4.90	5.73
14. My child misbehaves just to upset me.	5.00	5.43	4.89	5.44
15. I praise my child when he/she behaves well.	5.74	5.94	5.32	6.14
16. When I discipline my child, I lose control.	5.59	5.78	5.45	5.80

**Table 3*****Paired Samples Statistics by Protective Factor***

Protective Factor	N	Pretest		Posttest		T
		M	SD	M	SD	
<i>Traditional Version</i>						
Family Functioning/Resiliency	310	4.58	1.33	5.11	1.13	-7.64***
Social Support	311	5.17	1.64	5.61	1.35	-4.79***
Concrete Support	311	4.93	1.62	5.31	1.56	-3.57***
Nurturing and Attachment	307	5.95	1.00	6.11	0.81	-2.98**
Knowledge of Parenting/Child Development						
12. There are many times when I don't know what to do as a parent.	309	4.33	1.88	4.87	1.68	-4.60***
13. I know how to help my children learn.	307	5.28	1.56	5.74	1.19	-4.79***
14. My child misbehaves just to upset me.	306	5.00	1.80	5.43	1.62	-3.76***
15. I praise my child when he/she behaves well.	308	5.74	1.37	5.94	1.19	-2.43*
16. When I discipline my child, I lose control.	307	5.59	1.39	5.78	1.34	-2.23*
<i>Retrospective Version</i>						
Family Functioning/Resiliency	333	4.39	1.43	5.37	1.04	-15.65***
Social Support	334	4.66	1.69	5.81	1.22	-14.22***
Concrete Support	335	5.00	1.54	5.10	1.76	-0.97
Nurturing and Attachment	333	5.64	1.20	6.21	0.77	-11.53***
Knowledge of Parenting/Child Development						
12. There are many times when I don't know what to do as a parent.	332	4.42	1.83	4.93	1.80	-4.47***
13. I know how to help my child learn.	334	4.90	1.68	5.73	1.37	-10.56***
14. My child misbehaves just to upset me.	334	4.89	1.83	5.44	1.77	-5.35***
15. I praise my child when he/she behaves well.	333	5.32	1.56	6.14	1.01	-11.61***
16. When I discipline my child, I lose control.	334	5.45	1.44	5.80	1.39	-4.54***

\* $p < 0.05$  \*\* $p < 0.01$  \*\*\* $p < 0.001$ **PFS Results and Dosage**

The range of number of sessions of COP support groups attended was 1 to 20 with an average of 8.9. We compared the bottom quartile (low dose; 6 sessions or fewer) to the top quartile (high dose; 11 sessions or greater) to examine evaluation results related to dosage.

On both the traditional and retrospective versions of the PFS, differences from pre- to posttest were examined for low dose versus high dose participants. In addition, low dose and high dose participants were compared based on their scores on pre- and posttest on both versions of the PFS.

**Traditional PFS and Dosage.** Among participants who attended 6 or fewer group sessions (low dose), there were statistically significant differences between pretest and posttest mean scores for Family Functioning/Resiliency,  $t(56)=2.37, p < 0.05$  (see Table 4). Among participants who attended 11 or more group sessions (high dose), there were statistically significant differences between pretest and posttest mean scores for Family Functioning/Resiliency,  $t(61)=-6.59,$

$p < 0.001$ , Social Support,  $t(59) = -2.31$ ,  $p < 0.05$ , Nurturing and Attachment,  $t(61) = 5.83$ ,  $p < 0.001$ , and Knowledge of Parenting/Child Development items #13,  $t(61) = 3.10$ ,  $p < 0.01$ , #14,  $t(61) = 2.14$ ,  $p < 0.05$ , #15,  $t(62) = 3.81$ ,  $p < 0.001$ , and #16,  $t(62) = 2.20$ ,  $p < 0.05$  (see Table 4). Overall, the results suggest that high dose participants experienced improvements across more protective factors compared to low dose participants.

Examining the traditional PFS pretest responses, there were no statistically significant differences between low dose and high dose participant mean scores (see Table 5). On the traditional PFS posttest responses, there were statistically significant differences between low dose and high dose participant mean scores for Knowledge of Parenting/Child Development items #14,  $t(119) = -2.01$ ,  $p < 0.05$ , #15,  $t(120) = -2.62$ ,  $p < 0.01$ , and #16,  $t(120) = -3.07$ ,  $p < 0.01$  (see Table 5). This indicates that, in general, there were not significant differences between the low dose and high dose participant groups at pretest or posttest on the traditional PFS. However, while differences were not significantly different, group means suggest that, in general, low dose participants rated their levels of protective factors higher at pretest while high dose participants rated their levels of protective factors higher at posttest. In addition to demonstrating improvement over the course of their participation in COP support groups, these trends may indicate that participants who went on to achieve high dosage were experiencing lower functioning or showed greater insight at the time of pretest.

**Table 4**

***Paired Samples Statistics by Dosage and Protective Factor: Traditional PFS***

Protective Factor	N	Pretest		Posttest		M Difference	T
		M	SD	M	SD		
<i>Low Dosage (6 sessions or fewer)</i>							
Family Functioning/Resiliency	57	4.84	1.34	5.22	1.05	0.37	2.37*
Social Support	57	5.30	1.71	5.40	1.44	0.10	0.47
Concrete Support	57	5.12	1.60	5.03	1.66	0.09	-0.35
Nurturing and Attachment	56	6.09	1.02	6.08	0.87	0.01	0.07
Knowledge of Parenting/Child Development							
12. There are many times when I don't know what to do as a parent.	57	4.33	1.99	4.63	1.66	0.30	1.06
13. I know how to help my children learn.	56	5.43	1.70	5.68	1.25	0.25	1.00
14. My child misbehaves just to upset me.	57	5.46	1.73	5.14	1.68	-0.31	1.29
15. I praise my child when he/she behaves well.	56	5.77	1.33	5.71	1.42	-0.05	0.21
16. When I discipline my child, I lose control.	55	5.65	1.42	5.27	1.79	-0.38	1.47
<i>High Dosage (11 sessions or greater)</i>							
Family Functioning/Resiliency	62	4.41	1.16	5.36	1.13	0.94	-6.59***
Social Support	60	5.11	1.40	5.60	1.25	0.49	-2.31*
Concrete Support	63	5.06	1.48	5.20	1.53	0.14	0.59
Nurturing and Attachment	62	5.83	1.09	6.28	0.71	0.45	3.87***
Knowledge of Parenting/Child Development							
12. There are many times when I don't know what to do as a parent.	63	4.68	1.82	5.08	1.69	0.40	1.63
13. I know how to help my child learn.	62	5.11	1.53	5.82	1.21	0.71	3.10**
14. My child misbehaves just to upset me.	62	5.19	1.74	5.71	1.39	0.52	2.14*
15. I praise my child when he/she behaves well.	63	5.62	1.30	6.25	0.76	0.63	3.81***
16. When I discipline my child, I lose control.	63	5.81	1.23	6.11	0.88	0.30	2.20*

\* $p < 0.05$  \*\* $p < 0.01$  \*\*\* $p < 0.001$



Table 5

## Mean Comparison of PFS Responses by Dosage Level: Traditional PFS

Protective Factor	Low Dosage			High Dosage			<i>T</i>
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i> Difference	
<i>Pretest</i>							
Family Functioning/Resiliency	120	4.84	1.34	4.41	1.15	0.43	1.90
Social Support	119	5.30	1.71	5.15	1.39	0.15	0.54
Concrete Support	121	5.12	1.60	5.09	1.49	0.03	0.12
Nurturing and Attachment	119	6.09	1.02	5.84	1.09	0.25	1.32
Knowledge of Parenting/Child Development							
12. There are many times when I don't know what to do as a parent.	120	4.33	1.99	4.68	1.82	-0.35	-1.00
13. I know how to help my children learn.	120	5.46	1.70	5.13	1.52	0.33	1.12
14. My child misbehaves just to upset me.	120	5.46	1.73	5.19	1.73	0.26	0.84
15. I praise my child when he/she behaves well.	119	5.77	1.33	5.62	1.30	0.15	0.61
16. When I discipline my child, I lose control.	118	5.65	1.45	5.81	1.23	-0.15	-0.63
<i>Posttest</i>							
Family Functioning/Resiliency	120	5.22	1.05	5.35	1.12	-0.13	-0.66
Social Support	119	5.40	1.44	5.53	1.30	-0.12	-0.49
Concrete Support	120	5.03	1.66	5.20	1.53	-0.16	-0.57
Nurturing and Attachment	119	6.07	0.86	6.28	0.71	-0.20	-1.41
Knowledge of Parenting/Child Development							
12. There are many times when I don't know what to do as a parent.	120	4.63	1.66	5.08	1.69	-0.44	-1.46
13. I know how to help my child learn.	118	5.68	1.25	5.82	1.21	-0.14	-0.64
14. My child misbehaves just to upset me.	119	5.14	1.68	5.71	1.39	-0.57	-2.01*
15. I praise my child when he/she behaves well.	120	5.72	1.41	6.25	0.76	-0.53	-2.62**
16. When I discipline my child, I lose control.	120	5.33	1.79	6.11	0.88	-0.78	-3.07**

\* $p < 0.05$  \*\* $p < 0.01$  \*\*\* $p < 0.001$ 

**Retrospective PFS and Dosage.** Among low dose participants, the results indicated statistically significant differences between pretest and posttest mean scores for Family Functioning/Resiliency,  $t(54)=6.48$ ,  $p < 0.001$ , Social Support,  $t(54)=7.04$ ,  $p < 0.001$ , Nurturing and Attachment,  $t(53)=5.24$ ,  $p < 0.001$ , and Knowledge of Parenting/Child Development items #13,  $t(56)=4.23$ ,  $p < 0.001$ , and #15,  $t(55)=5.10$ ,  $p < 0.001$  (see Table 7). Among high dose participants, the results indicated statistically significant differences between pretest and posttest mean scores for Family Functioning/Resiliency,  $t(62)=9.21$ ,  $p < 0.001$ , Social Support,  $t(62)=9.09$ ,  $p < 0.001$ , Nurturing and Attachment,  $t(62)=6.81$ ,  $p < 0.001$ , and Knowledge of Parenting/Child Development items #13,  $t(62)=5.71$ ,  $p < 0.001$ , #15,  $t(62)=6.06$ ,  $p < 0.001$ , and #16,  $t(62)=2.01$ ,  $p < 0.05$ . Compared to the traditional PFS, low dose participants demonstrated many more significant improvements from pre- to posttest; this difference is likely related to response characteristics associated with retrospective measures discussed below.

Examining the retrospective PFS pretest scores, there were no statistically significant differences between low dose and high dose participant mean scores (see Table 7). On the retrospective PFS

posttest scores, the results indicated a statistically significant difference between low dose and high dose participant mean scores for Knowledge of Parenting/Child Development item #16,  $t(119)=-2.17, p<0.05$  (see Table 7). This indicates that, in general, there were not significant differences between the low dose and high dose participants groups at pretest or posttest on the retrospective PFS. While differences were not significantly different, in general, high dose participant mean scores on the retrospective posttest were higher than low dose participant mean scores; there was no consistent pattern on pretest scores, likely due to response characteristics of retrospective measures as noted above.

**Table 6**  
*Paired Samples Statistics by Dosage and Protective Factor: Retrospective PFS*

Protective Factor	N	Pretest		Posttest		M Difference	T
		M	SD	M	SD		
<i>Low Dosage (6 sessions or fewer)</i>							
Family Functioning/Resiliency	55	4.19	1.50	5.38	1.04	1.19	6.48***
Social Support	55	4.44	1.65	5.61	1.20	1.16	7.04***
Concrete Support	54	5.14	1.44	4.79	1.76	-0.35	-1.52
Nurturing and Attachment	54	5.61	1.43	6.33	0.68	0.71	5.24***
Knowledge of Parenting/Child Development							
12. There are many times when I don't know what to do as a parent.	56	4.52	1.74	4.82	1.70	0.30	1.02
13. I know how to help my children learn.	57	5.04	1.73	5.81	1.16	0.77	4.23***
14. My child misbehaves just to upset me.	56	5.02	1.95	5.35	1.62	0.34	1.24
15. I praise my child when he/she behaves well.	56	5.16	1.81	6.02	1.12	0.86	5.10***
16. When I discipline my child, I lose control.	56	5.20	1.63	5.41	1.68	0.21	0.92
<i>High Dosage (11 sessions or greater)</i>							
Family Functioning/Resiliency	63	4.53	1.40	5.74	1.09	1.21	9.21***
Social Support	63	4.10	1.68	5.92	1.25	1.81	9.09***
Concrete Support	62	4.96	1.63	4.81	2.07	-0.15	-0.69
Nurturing and Attachment	63	5.48	1.25	6.32	0.81	0.84	6.81***
Knowledge of Parenting/Child Development							
12. There are many times when I don't know what to do as a parent.	62	4.55	1.76	5.13	2.08	0.58	1.85
13. I know how to help my child learn.	63	4.56	1.70	5.78	1.61	1.22	5.71***
14. My child misbehaves just to upset me.	63	5.08	1.75	5.48	1.83	0.40	1.52
15. I praise my child when he/she behaves well.	63	5.22	1.59	6.35	1.08	1.12	6.06***
16. When I discipline my child, I lose control.	63	5.65	1.26	6.00	1.27	0.35	2.01*

\* $p<0.05$  \*\* $p<0.01$  \*\*\* $p<0.001$

**Table 7**

**Mean Comparison of PFS Responses by Dosage Level: Retrospective PFS**

Protective Factor	Low Dosage			High Dosage		<i>M</i> Difference	<i>T</i>
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
<i>Pretest</i>							
Family Functioning/Resiliency	118	4.19	1.50	4.53	1.40	-0.34	-1.26
Social Support	119	4.43	1.64	4.10	1.68	0.33	1.08
Concrete Support	117	5.11	1.45	4.96	1.63	0.15	0.51
Nurturing and Attachment	118	5.57	1.46	5.48	1.25	0.09	0.37
Knowledge of Parenting/Child Development							
12. There are many times when I don't know what to do as a parent.	118	4.52	1.74	4.55	1.76	-0.03	-0.09
13. I know how to help my children learn.	120	5.04	1.73	4.56	1.70	0.48	1.53
14. My child misbehaves just to upset me.	120	5.00	1.94	5.08	1.75	-0.08	-0.24
15. I praise my child when he/she behaves well.	119	5.16	1.80	5.22	1.59	-0.06	-0.20
16. When I discipline my child, I lose control.	119	5.20	1.63	5.65	1.26	-0.45	-1.71
<i>Posttest</i>							
Family Functioning/Resiliency	119	5.41	1.05	5.74	1.09	-0.33	-1.68
Social Support	119	5.59	1.19	5.92	1.25	-0.32	-1.45
Concrete Support	117	4.76	1.75	4.81	2.07	-0.04	-0.12
Nurturing and Attachment	117	6.33	0.68	6.32	0.81	0.01	0.05
Knowledge of Parenting/Child Development							
12. There are many times when I don't know what to do as a parent.	119	4.84	1.69	5.13	2.08	-0.29	-0.82
13. I know how to help my child learn.	120	5.81	1.16	5.78	1.61	0.03	0.11
14. My child misbehaves just to upset me.	119	5.36	1.62	5.48	1.83	-0.12	-0.37
15. I praise my child when he/she behaves well.	119	6.02	1.12	6.35	1.08	-0.33	-1.64
16. When I discipline my child, I lose control.	119	5.41	1.68	6.0	1.27	-0.59	-2.17*

\* $p < 0.05$  \*\* $p < 0.01$  \*\*\* $p < 0.001$

**Comparison of Traditional and Retrospective PFS**

Analyses were conducted to compare the traditional and retrospective versions of the PFS on both participant pretest and posttest response. In addition, change scores from pre- to posttest on the traditional versus retrospective versions were compared. Lack of statistical significance between the traditional and retrospective versions would indicate equivalent participant responding.

**Pretest Comparison.** The results demonstrated small mean differences and a lack of statistical significance between traditional and retrospective pretest scores for Concrete Support,  $t(334) = -0.71$ ,  $p < 0.476$ , and Knowledge of Parenting/Child Development item #12,  $t(329) = 0.184$ ,  $p < 0.001$  and item #14,  $t(330) = 1.26$ ,  $p < 0.207$  (see Table 8). There were, however, statistically significant differences between traditional and retrospective pretest scores for Family Functioning/Resiliency,  $t(333) = 2.39$ ,  $p < 0.05$ , Social Support,  $t(334) = 6.31$ ,  $p < 0.001$ , Nurturing

and Attachment,  $t(329)=4.51, p<0.001$ , and Knowledge of Parenting/Child Development items #13,  $t(332)=3.46, p<0.001$ , and #15,  $t(329)=4.79, p<0.001$  (see Table 8).

**Posttest Comparison.** The results demonstrated small mean differences and a lack of statistical significance for traditional and retrospective posttest scores for Knowledge of Parenting/Child Development items #12,  $t(308)=-0.66, p<0.512$ , #13,  $t(307)=-1.06, p<0.289$ , #14,  $t(308)=0.66, p<0.510$ , and #16,  $t(308)=0.05, p<0.959$  (see Table 8). Analyses indicated statistically significant differences between traditional and retrospective posttest scores for Family Functioning/Resiliency,  $t(308)=-7.56, p<0.001$ , Social Support,  $t(308)=-3.42, p<0.001$ , Concrete Support,  $t(309)=3.04, p<0.01$ , Nurturing and Attachment,  $t(308)=-4.00, p<0.001$ , and Knowledge of Parenting/Child Development item #15,  $t(308)=-3.78, p<0.001$  (see Table 8).

**Change Score Comparison.** Results indicated significant differences between change scores (pre- to posttest change) on the traditional PFS versus the retrospective PFS on all four subscales, Family Functioning/Resiliency,  $t(301)=6.16, p<.001$ , Social Support,  $t(304)=7.46, p<.001$ , Concrete Support,  $t(306)=-3.07, p<.01$ , and Nurturing and Attachment,  $t(300)=5.76, p<.001$ , in addition to two of the Knowledge of Parenting/Child Development items, #13,  $t(306)=3.84, p<.001$ , and #15,  $t(305)=6.04, p<.001$ . In general, results demonstrated significantly larger change scores on the retrospective PFS compared to the traditional PFS, particularly on the Family Functioning/Resiliency and Social Support subscales.

Overall, analyses indicate a number of significant differences among participant responding on the traditional PFS compared to the retrospective PFS. In general, participants rated themselves higher on the traditional pretest (compared to retrospective) and retrospective posttest (compared to traditional). This resulted in significantly larger change scores (pre- to posttest change) on the retrospective PFS compared to the traditional PFS.

These differences reflect several well-known features of retrospective measurement with regard to participant responding. At the time of a true pretest, participants may not feel comfortable responding due to lack of trust in the service provider; this trust has likely been established at the time of a retrospective pretest, potentially resulting in lower pretest responding. In addition, participants may not realize how much growth and learning they could experience as a parent at the time of a true pretest resulting in higher scores. On a retrospective measure, the simultaneous reporting of pre- and posttest scores can result in a larger change score as responding is influenced by a sense of effort and change during the time of intervention (and desire to see that effort reflected in a large difference between pre- and posttest scores).

**Table 8**

*Paired Samples Mean Comparison of Traditional and Retrospective PFS Responses*

Protective Factor	N	Traditional		Retrospective		M Difference	T
		M	SD	M	SD		
<i>Pretest</i>							
Family Functioning/Resiliency	334	4.55	1.33	4.40	1.43	0.15	2.39*
Social Support	335	5.18	1.62	4.65	1.69	0.53	6.31***
Concrete Support	335	4.95	1.60	5.00	1.54	-0.06	-0.71
Nurturing and Attachment	330	5.90	1.01	5.63	1.20	0.26	4.51***
Knowledge of Parenting/Child Development							
12. There are many times when I don't know what to do as a parent.	330	4.31	1.86	4.42	1.83	-0.12	-1.33
13. I know how to help my children learn.	333	5.18	1.60	4.89	1.69	0.29	3.46***
14. My child misbehaves just to upset me.	331	5.00	1.77	4.88	1.83	0.12	1.26
15. I praise my child when he/she behaves well.	330	5.68	1.37	5.30	1.57	0.38	4.79***
16. When I discipline my child, I lose control.	329	5.57	1.36	5.43	1.44	0.14	1.92
<i>Posttest</i>							
Family Functioning/Resiliency	309	5.11	1.13	5.41	1.04	-0.30	-7.56***
Social Support	309	5.61	1.34	5.79	1.26	-0.18	-3.42***
Concrete Support	310	5.32	1.56	5.05	1.79	0.26	3.04**
Nurturing and Attachment	309	6.10	0.81	6.24	0.77	-0.14	-4.00***
Knowledge of Parenting/Child Development							
12. There are many times when I don't know what to do as a parent.	309	4.86	1.68	4.92	1.83	-0.06	-0.66
13. I know how to help my child learn.	308	5.74	1.19	5.82	1.31	-0.08	-1.06
14. My child misbehaves just to upset me.	309	5.44	1.62	5.39	1.83	0.05	0.66
15. I praise my child when he/she behaves well.	309	5.96	1.18	6.18	1.02	-0.22	-3.78***
16. When I discipline my child, I lose control.	309	5.79	1.34	5.78	1.43	0.00	0.05

\* $p < 0.05$  \*\* $p < 0.01$  \*\*\* $p < 0.001$

**Table 9**

*Paired Samples Mean Comparison of Change Scores for Traditional and Retrospective PFS Responses*

Protective Factor	Traditional			Retrospective		<i>M</i> Difference	<i>T</i>
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Family Functioning/Resiliency	301	0.51	1.20	1.01	1.17	0.49	6.16***
Social Support	304	0.45	1.61	1.18	1.51	0.74	7.46***
Concrete Support	306	0.40	1.83	0.05	1.73	-0.35	-3.07**
Nurturing and Attachment	300	0.15	0.93	0.58	0.93	0.42	5.76***
Knowledge of Parenting/Child Development							
12. There are many times when I don't know what to do as a parent.	306	0.54	2.07	0.49	2.09	-0.05	-0.39
13. I know how to help my children learn.	306	0.46	1.67	0.86	1.48	0.40	3.84***
14. My child misbehaves just to upset me.	305	0.42	1.95	0.50	1.90	0.09	0.70
15. I praise my child when he/she behaves well.	305	0.21	1.49	0.84	1.33	0.63	6.04***
16. When I discipline my child, I lose control.	305	0.19	1.51	0.34	1.44	0.14	1.48

\* $p < 0.05$  \*\* $p < 0.01$  \*\*\* $p < 0.001$

**Summary**

This supplemental report contributes to the knowledge gained from the Circle of Parents national evaluation through examining subscale-level scores on the Protective Factors Survey (PFS), building on the item-level analyses previously conducted. The national evaluation included nearly 400 caregivers across 10 states attending Circle of Parents support groups. Analyses were conducted to examine three primary areas of inquiry: 1) Did participants in COP demonstrate an improvement in protective factors? Do participant scores vary by survey administration method (traditional vs. retrospective)?, 2) What was the impact of participant dosage on pre- and posttest scores?, and 3) How do the traditional and retrospective versions differ in measuring participant levels of protective factors?

Participants demonstrated statistically significant improvement from pre- to posttest on nearly all subscales and items of the PFS on both the traditional and retrospective versions. In addition, on the traditional PFS, participants appeared to benefit from greater attendance with high dose participants (11 sessions or greater) showing more significant improvement than low dose participants (6 sessions or fewer); dosage results were less clear on the retrospective PFS, likely related to response characteristics of retrospective measures. Analyses did not reveal significant group differences between participants who went on to complete low versus high dosage. The PFS appears to be a viable outcome measure for Circle of Parents support groups and caregivers appear to experience an increase in their levels of protective factors during their time of participation.

Analyses revealed significant differences between participant responding on the traditional versus retrospective PFS such that participants rated themselves higher on the traditional pretest (compared to retrospective) and retrospective posttest (compared to traditional) resulting in significantly larger change scores (pre- to posttest change) on the retrospective PFS compared to the traditional PFS. A number of factors could have contributed to these differences in

responding on the traditional and retrospective versions of the PFS. Evaluation results using the retrospective PFS should be interpreted with caution given that these factors were not included in the study.

