

Research Report: Parenting self-efficacy before and after the Family Links 4-week Parenting Puzzle Workshop

By Elizabeth Harris, BSc

Report Summary:

The data analysed in this research report was collated from 70 parents who participated in the Parenting Puzzle Workshop (PPW). The PPW is a 4-week parenting programme, based on the Family Links 10-week Nurturing Programme (FLNP), but adapted specifically for parents with children under the age of 4. This analysis was focussed on data from sixteen PPW courses that ran between 2015 and 2016.

Using a reliable measure called the Tool to Measure Parent Self-efficacy (TOPSE), parents were asked to rate their parenting confidence (or parenting self-efficacy) across eight identified dimensions of parenting: emotion and affection, play and enjoyment, empathy and understanding, control, discipline and boundaries, pressures of parenting, self-acceptance, learning and knowledge.

Results showed that there was a **statistically significant improvement in parenting self-efficacy** following the PPW, with effect sizes ranging from medium to large for **all eight dimensions** assessed by TOPSE. The most notable improvements were in emotional control, discipline and the perception of external and internal parenting pressures. These findings suggest that the PPW is effective in improving parenting self-efficacy. Further research will help better understanding of how the programme works, and for which *type* of parents and families it is particularly effective.

Family Links is very grateful to the participants who took part in this study and to the practitioners for sharing data which enables increased understanding of how the PPW impacts on vital aspects of parenting.

Family Links is committed to conducting and commissioning rigorous and innovative evaluations of our work with children, families and teachers. If you would like to find out more, please visit us at www.familylinks.org.uk or get in touch at research@familylinks.org.uk.

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Introduction

Parenting is recognised as an important factor for child behavioural and emotional functioning. The Theory of Change underpinning all of the Family Links parenting programmes is premised on evidence that parents act as the mediators of change for improving both child and family outcomes. Measuring how aspects of parenting change following parenting interventions is important for assessing the underlying theories and assumptions of programmes, as well as evaluating the impact that the programme has.

The Family Links Parenting Puzzle Workshop (PPW) was adapted from the Family Links 10-week Nurturing Programme (FLNP) to form a 4-week, condensed version of the FLNP, with an increased emphasis on play and attunement. The PPW is specifically targeted at parents with children under the age of 4. Both programmes are based on four key parenting constructs: 1) self-awareness and self-esteem, 2) empathy, 3) appropriate expectations, and 4) positive discipline strategies. Specifically, the PPW aims to increase parents' understanding of the power of play, promote positive approaches to discipline and boundary setting and explore the value of praise and positive interaction.

This brief report will present findings from analyses of monitoring data from the PPW, collected between 2015 and 2016, on a measure of parenting self-efficacy. It will also draw comparisons with similar data collected as part of an evaluation of the FLNP conducted with Cardiff Flying Start. For more information on this study, please see the Villasden, 2015, paper on our website.

Setting:

Data were collected from sixteen parenting groups running between 2015 and 2016, based on a national opportunity sample of Parent Group Leaders (PGLs) who returned data collection forms. Groups were predominantly run through Children's Centres, and were primarily offered universally within their particular setting, with the exception of a few targeted groups, including a Dad's group and an under 20's group. The majority of parents self-referred, although two out of the sixteen groups had particularly large numbers of parents referred from social care.

Data has only been included in this analysis for the 70 parents who completed both pre and post workshop measures, which equates to 78% of the total parents who enrolled on the programmes. Of these 70 parents, 10 were male, making up 14% of the total sample.

Measures:

Parental self-efficacy was assessed using a measure known as the Tool to Measure Parent Self-efficacy (TOPSE, Kendall & Bloomfield, 2005). This tool was specifically developed to analyse the effectiveness of parenting programmes on improving parenting confidence. The TOPSE has 48 statements making up 8 dimensions or sub scales: emotion and affection, play and enjoyment, empathy and understanding, control, discipline and boundaries, pressures, self-acceptance, and learning and knowledge. The total score of the TOPSE is the average of all subscales. Items are rated on a 11-point

Likert scale from 0 (completely disagree) to 10 (completely agree), and higher scores signify higher levels of self-efficacy.

Data Analysis

TOPSE provides normally distributed data for analysis, and therefore a parametric paired t-test was conducted to assess the difference between pre and post workshop TOPSE scores. A 95% confidence interval was used to determine statistical significance, and effect sizes are reported using Cohen’s *d*, which quantifies the magnitude of change in parent self-efficacy. An effect size of $d=0.20$ denotes a small effect size, $d=0.5$ a medium effect size and $d=0.8$ being large effect size, where values can exceed 1.

Results

As shown in Table 1 and Figure 1, there was a significantly positive increase for each of the eight TOPSE subscales, with the overall difference being highly significant ($d=1.103$, $p<0.001$). All of the eight subscales had either a medium or large effect size, ranging from $d=0.52$ to $d=1.09$, with the most notable improvements being in emotional control, discipline and external and internal pressures.

Table 1: Paired samples t-test of pre and post PPW TOPSE scores

TOPSE score	Sample size (N)	Pre-test mean	Post-test mean	Mean change	Effect size (d^*)	Significance (p)
Emotion & Affection	73	51.17	54.27	3.10	0.52	<0.001
Play & Enjoyment	73	47.47	53.29	5.81	0.76	<0.001
Empathy and Understanding	73	43.94	51.10	7.16	0.85	<0.001
Control	73	35.17	44.64	9.47	1.07	<0.001
Discipline & Boundaries	73	38.01	46.83	8.81	0.99	<0.001
Pressure	73	28.19	38.67	10.49	1.09	<0.001
Self-Acceptance	73	44.44	50.47	6.03	0.69	<0.001
Learning & Knowledge	73	49.74	53.94	4.20	0.56	<0.001

*effect size key: $d=.20$ small, $d=.50$ medium, $d=.80$ large

Figure 1: Graph showing pre and post PPW TOPSE scores

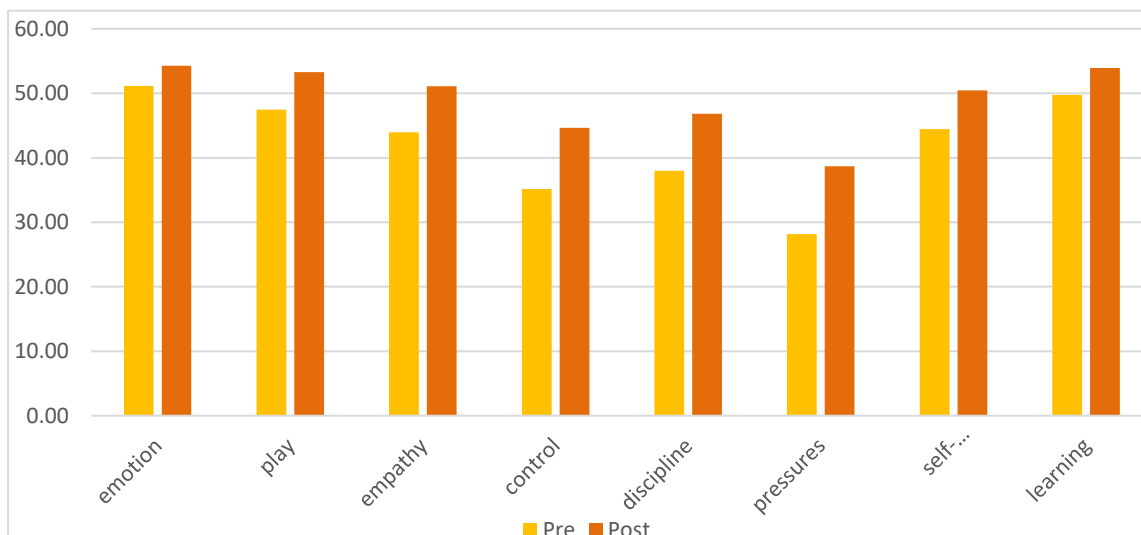


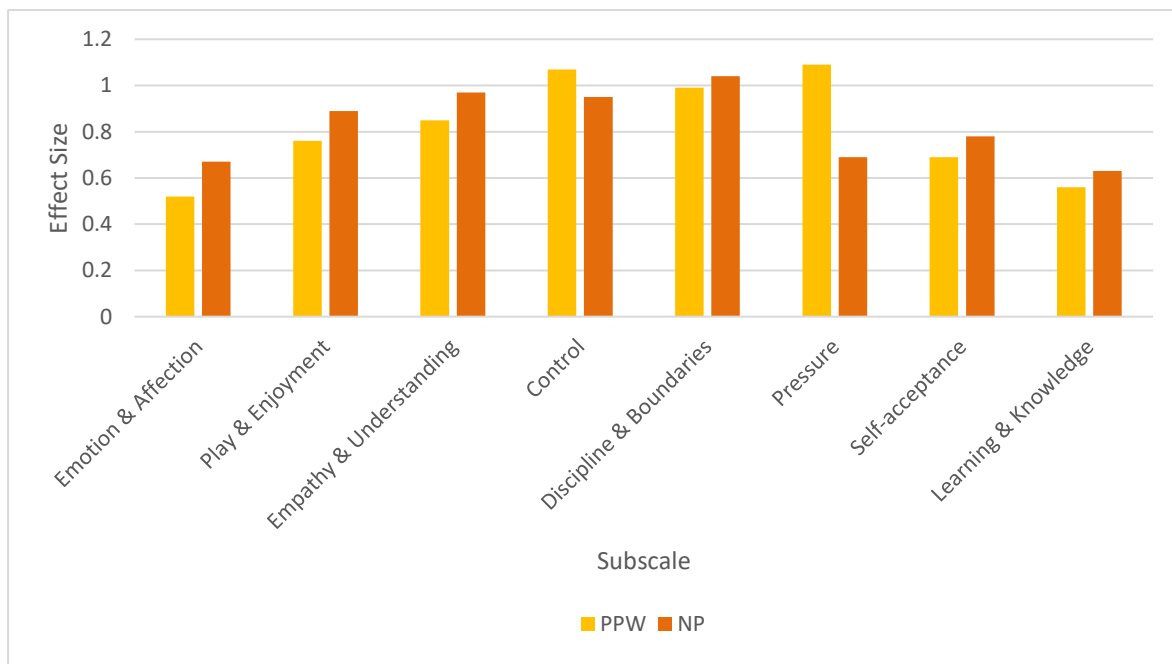
Table 2 shows the results of a paired t-test comparing the pre and post TOPSE scores for the 10-week FLNP (taken from Villadsen, 2015), and Figure 2 compares the effect sizes for the 4-week PPW and 10-week FLNP. Overall, there was a similar trend in the effect sizes of the different subscales between the two programmes. Generally, the 10-week FLNP achieved higher effect sizes than the PPW, with exceptions in the control and internal/external pressures subscales, where the PPW obtained a larger effect size. It is worth noting that the data in Table 2 is likely to be more robust than that in Table 1 due to the higher number of participants - 325 for the FLNP compared to 70 for the PPW.

Table 2: Paired samples t-test of pre and post FLNP TOPSE scores (Villasden, 2015)

<i>TOPSE Scales</i>	<i>Sample size (N)</i>	<i>Pre-test Mean</i>	<i>Post-test Mean</i>	<i>Mean change</i>	<i>Mean change %</i>	<i>Effect size (d)*</i>	<i>Sig (p)</i>
Total TOPSE	325	41.60	49.86	8.27	20%	1.23	<.001
• Emotion & Affection	325	48.39	54.21	5.81	12%	0.67	<.001
• Play & Enjoyment	325	46.35	54.49	8.15	18%	0.89	<.001
• Empathy and Understanding	325	43.38	51.71	8.33	19%	0.97	<.001
• Control	325	33.52	43.89	10.37	31%	0.95	<.001
• Discipline & Boundaries	325	35.98	47.73	11.74	33%	1.04	<.001
• Pressure	325	32.04	41.13	9.08	28%	0.69	<.001
• Self-Acceptance	325	44.17	51.37	7.20	16%	0.78	<.001
• Learning & Knowledge	325	48.93	54.39	5.46	11%	0.63	<.001

*effect size key: d=.20 small, d=.50 medium, d=.80 large

Figure 2: Graph comparing the pre and post TOPSE scores for the 4-week PPW and 10-week FLNP



Discussion and Conclusions:

Results of the statistical analysis carried out shows that there was a significant increase in parent-reported self-efficacy following the 4-week PPW, suggesting that the PPW is an effective intervention for improving parent outcomes. It is likely that these positive changes in parenting have an effect on

children's behavioural and emotional functioning, linked to the programme's Theory of Change, and future research carried out by Family Links will help to formally test this.

It is important to mention that although there was a significant difference between the pre and post TOPSE scores, because of the lack of a control group, we cannot definitively attribute the changes to the PPW without further study involving a counterfactual. Information about the fidelity and dose of programme implementation was also not collected, factors which inevitably impact on the changes in parenting outcomes that are achieved. In addition, the small sample size and inclusion of specialist groups (e.g. Dad's and under 20s group) means that it is difficult to generalise findings. Future study by Family Links using a larger sample and examining demographic and context variables will help to increase the robustness of these findings, and determine which types of parents and families the programme is most effective for, and under what circumstances.

In comparison with TOPSE data from the 10-week FLNP (from Villasden, 2015), both the PPW and FLNP boast similar trends in the effect sizes obtained across the different subscales. Generally, the 10-week FLNP achieved higher effect sizes than the PPW, with exceptions in the control and internal/external pressures subscales, where the PPW obtained a larger effect size. Further study using a larger sample of parents who participated in the PPW would help increase the robustness of this finding. It would also be interesting to formally compare the recruitment and retention rates between the two programmes, and look at how many parents who participate in the 4-week PPW then go on to enrol on the 10-week FLNP. It may well be that a programme of a shorter duration is more appealing to some parents, and helps them to overcome the stigma and barriers associated with attending a programme of longer duration.

References:

Kendall, S., & Bloomfield, L. (2005). Developing and validating a tool to measure parenting self-efficacy. *Journal of Advanced Nursing*, 51(2), 174-181.

Villasden, V. (2015). Parenting Self-Efficacy before and after the Family Links 10-Week Nurturing Programme for Parents. <https://www.familylinks.org.uk/why-it-works#10-week-Nurturing-Programme>.