

A number of standardised instruments used to evaluate the programme were collected at multiple time points which allowed us to compare the outcomes of the high and low treatment groups over time. Few significant findings emerged from the dynamic analysis. 3 of the 43 (7%) measures were significant in the hypothesised direction including fine motor skills between six and twelve months, and 2 of the HOME subdomains between six and eighteen months.

PFL Implementation Analysis

Attrition

15% of the sample officially dropped out of the programme between the baseline assessment and eighteen months (*High*=19%, *Low*=16%, *LFP*=9%). 17% of the sample were classified as disengaged (*High*=11%, *Low*=21%, *LFP*=19%). No attrition was experienced in the high treatment group or the comparison group and only 2% attrition was experienced in the low treatment group between twelve and eighteen months. Very few individual participant characteristics were associated with programme attrition and disengagement. There is some evidence that more disadvantaged participants were difficult to contact or had dropped out of the programme by eighteen months.

Engagement

Families in the high treatment group received an average of 27 home visits by the *PFL* mentors between programme intake and eighteen months, with each visit lasting 1 hour on average. The majority of participants reported meeting their mentor once a month. Two factors were associated with both the frequency and duration of home visits – the timing of programme entry and cognitive resources. Mothers who entered the programme earlier in pregnancy had more home visits and subsequently spent more time in the programme. Also, mothers with higher cognitive resources engaged in more home visits and had home visits of a longer duration. That mothers in the *PFL* sample with higher cognitive resources displayed higher levels of engagement suggests that engagement may be related to the mother’s ability to understand programme materials and recognise the need for the programme in their lives.

Contamination

A contamination analysis was conducted to determine whether the low treatment group received all or part of the additional services designed for the high treatment group.

These findings indicated that, although the potential for contamination was high, the level of contamination in the *PFL* programme up to eighteen months was quite low and does not bias the eighteen month results.

This story presents the life of a *PFL* child at 18 months based on the data collected.

At eighteen months, Kirsty lives at home with her mother, father and her siblings. Her parents are in a committed long-term partnership. Extended family, such as grandparents, play a significant role in her life. Kirsty attends a formal crèche. Her family is at low risk for problems such as addiction, abuse and family violence. Her father has been out of work for many months and the family is receiving social welfare payments. Kirsty eats appropriate foods for her age and is up to date on her immunisations. At eighteen months of age she is generally in good health, although there is at least one adult in her home who smokes cigarettes. This puts her at greater risk for bronchial issues, such as chest infections, yet her family takes steps to reduce smoking in her presence. Kirsty’s mother is in good physical health. She drinks alcohol, but generally in moderation and she does not use drugs. Her mother is however at risk for depression and anxiety. Kirsty’s mother spends time interacting with her, engaging in activities such as playing, singing and reading. Both her parents use appropriate punishment when disciplining her and are not likely to engage in behaviour that would harm her. Kirsty’s home environment is a safe one, filled with good people and a variety of learning materials. Her mother is not worried about her behaviour; but she is worried about her language development. Yet due to her exposure to books, Kirsty can readily combine words. She is at risk for cognitive delays, however Kirsty is at low risk for physical and socio-emotional delays and is not receiving special services.

The programme is on-going and the impact of the programme continues to be evaluated when the *PFL* infants are 24, 36 and 48 months of age.

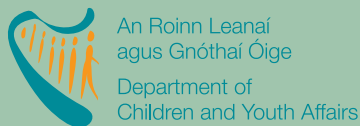
A more detailed report of the eighteen month *PFL* evaluation can be found at the following website under publications:  
<http://geary.ucd.ie/preparingforlife>

preparing for life  
Early Childhood Intervention

18 Month Summary Report



UCD Geary Institute





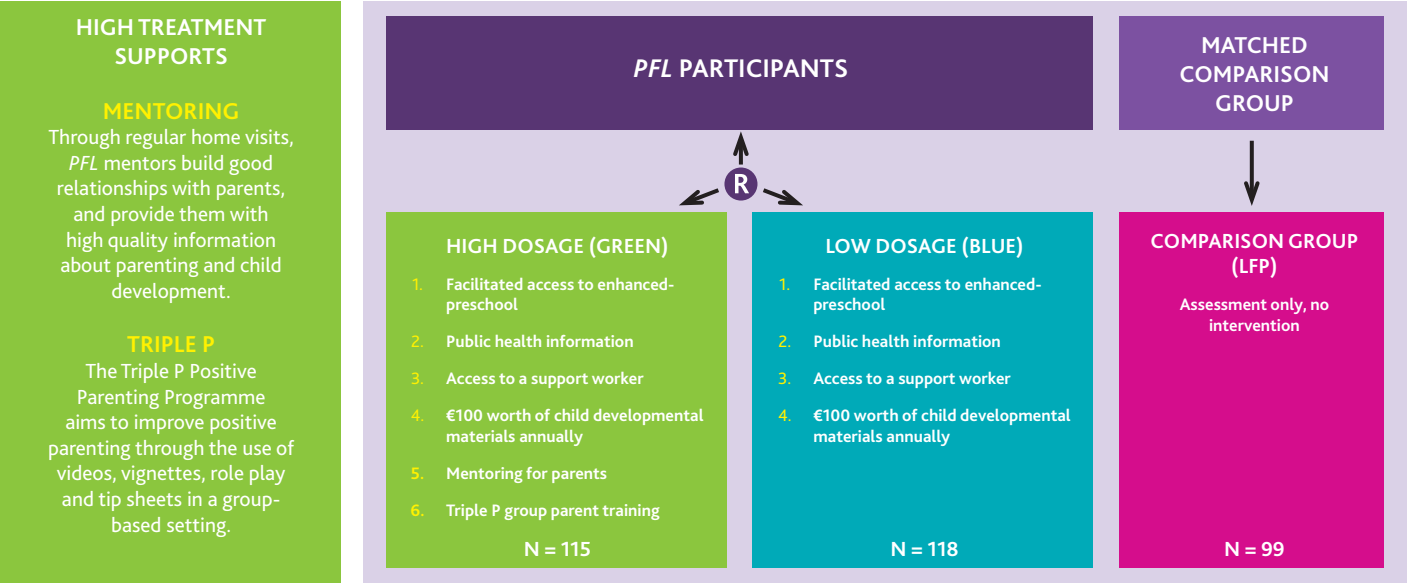
# preparing for life



**Preparing for Life (PFL)** is a prevention and early intervention programme which aims to improve the life outcomes of children and families living in Dublin, Ireland, by intervening during pregnancy and working with families until the children start school. This report highlights the findings from the evaluation of the programme which took place when the *PFL* children were eighteen months old.

## Design of Preparing for Life (PFL)

The programme is being evaluated using a longitudinal randomised control trial design whereby participants from the *PFL* communities were randomly assigned to a high support treatment group or a low support treatment group. A matched comparison group from a different community was also included as an additional control group. This diagram describes the *PFL* services.



## Summary of Previous Results

233 pregnant women were recruited into the *PFL* programme (115 in the high treatment group and 118 in the low treatment group) and 99 women were recruited from a matched comparison community. Analysis of the baseline data across 6 domains showed that the randomisation procedure was successful.

The six month and twelve month evaluations of *PFL* indicated that the programme was progressing well. 257 interviews ( $n_{Low} = 90$ ;  $n_{High} = 83$ ;  $n_{LFP} = 84$ ) were completed at six months and 247 interviews ( $n_{Low} = 83$ ;  $n_{High} = 82$ ;  $n_{LFP} = 82$ ) were completed at twelve months. As found in studies of other home visiting programmes, there were limited significant differences between the high and low treatment groups at both six months (14%) and twelve months (8%). Many of the relationships were in the hypothesised direction, with the high treatment group reporting somewhat better outcomes than the low treatment group. At six months there were significant findings in the domains of parenting, quality of the home environment and social support. However, the programme had no significant impact on pregnancy behaviour, infant birth weight, breastfeeding and child development at six months. At twelve month there were significant findings in the domains of maternal health, child health, child development and social support. There were no significant effects in the domain of parenting.

While attrition from the programme was low and participant satisfaction was high at both six and twelve months, the level of engagement was less than anticipated. Although the risk of contamination was high there was little evidence of contamination between the high and low treatment groups at six and twelve months.

## Aim of the Eighteen Month Evaluation

- To determine whether the *PFL* programme had an impact on parent and child outcomes when the children were eighteen months of age.
- To provide a detailed review of implementation practices in the *PFL* programme regarding attrition, dosage and participant engagement up to eighteen months.

## Results at Eighteen Months

225 interviews were conducted with participating mothers when their children were eighteen months ( $n_{Low} = 80$ ;  $n_{High} = 74$ ;  $n_{LFP} = 71$ ). Families in the high treatment group were compared to families in the low treatment group across eight main domains: Child Development, Child Health, Parenting, Home Environment, Maternal Health & Well-being, Social Support, Childcare, and Household Factors & Socioeconomic Status.

Based on the literature, we hypothesised that treatment effects at eighteen months would be found in the domains of home environment, parenting, child health and child development. The results suggest support for our hypotheses. 21/152 (14%) of the outcomes analysed showed significant differences between the high and low treatment groups. Significant effects were found in the domains of home environment, parenting, child health and child development. We also found limited effects in the domains of social support and maternal health which is noteworthy as other home visiting programmes do not report findings in these areas at eighteen months. There were no significant effects found in the childcare domain.

<b>CHILD DEVELOPMENT</b>	<b>PARENTING</b>
Less likely to be at risk for physical and social delay	More quality interactions with child
Better cognitive development	More concern about language development
<b>HOME ENVIRONMENT</b>	<b>CHILD HEALTH</b>
More likely to have a clean and safe home environment	Better overall health
More learning materials available	More appropriate eating patterns
<b>MATERNAL HEALTH &amp; WELLBEING</b>	<b>SOCIAL SUPPORT</b>
Less likely to binge drink	More support from child's grandparents

A similar number of significant findings were found at eighteen months as at six months, while fewer significant findings were reported at twelve months. This is likely due to differences and similarities in the measures included at each time point. The figure below highlights areas that were significant by domain for each time period.

Summary of Main Findings at Six, Twelve & Eighteen Months						
<i>PFL</i> Low – <i>PFL</i> High	Proportion of Measures Significantly Different					
	Six Months		Twelve Months		Eighteen Months	
	Individual Tests	Multiple Hypothesis Tests	Individual Tests	Multiple Hypothesis Tests	Individual Tests	Multiple Hypothesis Tests
Child Development	0% (13)	0% (2)	7% (28)	20% (5)	16% (25)	0% (6)
Child Health	10% (30)	0% (3)	17% (23)	0% (4)	24% (17)	67% (3)
Parenting	23% (22)	20% (5)	0% (16)	0% (2)	20% (10)	50% (2)
Home Environment	36% (22)	50% (2)	0% (6)	0% (1)	33% (21)	67% (3)
Maternal Health & Wellbeing	5% (20)	25% (4)	4% (28)	25% (4)	5% (19)	0% (3)
Social Support	38% (13)	0% (2)	43% (7)	0% (2)	8% (12)	0% (3)
Childcare	7% (14)	0% (2)	~	~	0% (16)	0% (2)
Household Factors & SES	0% (26)	0% (5)	3% (32)	0% (5)	8% (23)	0% (5)
Total Statistically Different	14% (23/160)	12% (3/25)	8% (11/140)	9% (2/23)	14% (21/152)	19% (5/27)

## Additional Analyses Results

Additional analyses were conducted to explore different aspects of the data not captured in the main analysis. These included a comparison of the eighteen month outcomes of the low treatment group to the matched comparison group and the eighteen month dynamic analysis which examined changes in child and parent outcomes over time.

The results of the low treatment group and matched comparison group analysis support the study design as they suggest that the low treatment group is not systematically better than the comparison group across most domains. Of the 143 items analysed, there were significant findings in the hypothesised direction for 38 measures (27%) and there were findings in non-hypothesised direction for 22 of these measures (15%).