



The Scottish  
Government

Evaluation of The Extended  
Pre-School Provision for  
Vulnerable Two Year Olds  
Pilot Programme  
Final Report

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**Scottish Government Social Research  
2008**



**EVALUATION OF THE EXTENDED PRE-SCHOOL PROVISION  
FOR VULNERABLE TWO YEAR OLDS PILOT PROGRAMME**

**FINAL REPORT**

**Dr Lisa Woolfson**

**Dr Julia King**

**Department of Psychology**

**Consultant: Professor Kevin Durkin**

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## **EXECUTIVE SUMMARY**

### **Background**

In August 2006 the Scottish Government invited Glasgow, Dundee and North Ayrshire local authorities to take part in a £2 million Extended Pre-School Provision for Vulnerable 2 Year Olds Pilot Programme.

The pilot programme was to run for a two year period with the key aim of providing positive preschool experiences one year early for vulnerable children and supporting their parents. Local authorities were encouraged to develop their own models of delivery within the broad aims of the project.

A research team from the Department of Psychology, University of Strathclyde, headed by Dr Lisa Woolfson was contracted to carry out an evaluation of the programme in the second year of the pilot. The research study ran from April 2007 to September 2008 and evaluated children who participated in the pilot programme between August 2007 and June 2008, the second year of the pilot programme.

### **Aims**

We aimed to explore the impact of the extended pilot programme on cognitive, social, emotional and behavioural developmental child outcomes, as well as the impact on participating parents.

In addition we aimed to identify recruitment criteria and admission procedures used by the participating local authorities as well as staffing, numbers of children, attendance rates and practical issues around programme set-up and delivery.

### **Main findings**

- Parents in the programme showed improved parenting capacity compared to parents in the comparison group
- Children in the pilot showed improved developmental outcomes *but* comparison group children not in the pilot also showed improved outcomes
- Staff gained new learning that would inform future practice with preschoolers.
- Extending a programme to two year olds requires a bedding-in period for effective planning, preparation and staff training before programme start.

### **Methods**

We used both quantitative and qualitative methods to gather information across the three authorities, Glasgow, Dundee and North Ayrshire. We collected data from multiple stakeholders – children, parents, preschool centre staff, heads of centres and local authority childcare strategy managers. Our aim was to build up a coherent picture by triangulating findings from different methodologies and different informants.

We compared child and parent outcomes with a comparison group who did not receive the pilot programme.

Quantitative tools used to measure child outcomes were:

1. Bayley-III Scales of Infant and Toddler Development
2. Goal Attainment Scaling

### 3. The Adaptive Social Behaviour Inventory

Quantitative tools we used to measure parent outcomes were:

1. Parenting Daily Hassles Scales
2. Ryff Psychological Well-being Scales,

We carried out:

- 30 face-to face parent interviews
- 20 face-to-face interviews with heads of centres
- 20 telephone parent interviews
- 15 staff focus groups with centre staff, heads of centres and childcare strategy managers

We collected complete sets of pre- and post- intervention data from:

- 108 children who attended pilot programmes and 66 comparison group children on child cognitive and language outcomes
- from 89 intervention group parents and 61 comparison group parents on their children's social-emotional outcomes and adaptive behaviour

In addition, centre staff in the three authorities completed pre- and post-intervention evaluations of:

- adaptive behaviour of 70 children
- developmental progress of 79 children measured using goal attainment scaling methodology

#### **Findings: programme set-up**

Programme staff overcame early teething problems and viewed the pilot as making a valuable contribution to the lives of participating children and families.

Staff appointed to work together on this new initiative as a team needed time to develop a shared vision, aims and values to inform their day-to-day practice before the two year olds came into their centres.

Staffing this new provision meant extending the experience of most staff to a new area of child development as most were used to working with 3-5 year olds. Staff development and training in working with two year olds before the programme started admitting children was viewed as useful in helping staff plan how best to tailor curriculum content and curriculum delivery to this younger age group.

Some staff felt that they would have benefited from training in working with parents to help them understand the range of needs and experiences of these families and how best to support them in a non-judgmental way.

#### **Findings: programme delivery**

Staff preferred where they were timetabled for regular team planning meetings and for carrying out any necessary administration. Staff felt that staff : child ratios and hours of employment did not always recognise sufficiently that part of their duties were away from the children and that they needed time for this.

Experience of delivering the programme taught staff just how much staff attention vulnerable two year olds need in order to learn to cope with the demands of a preschool programme. Some staff felt that the pace of admitting new children to the

programme needed to be slowed down to allow staff to settle them properly before the next new intake group arrived with similar demands on staff time.

Staff valued training and support as helpful not only prior to the set-up but also throughout the delivery of the pilot programmes. They felt their practice had benefited from the experience of extending their skills to this new age group and that their new learning would also benefit their work with older preschoolers as new skills could be generalised.

### **Findings: programme outcomes**

Results from staff focus groups, scales completed by staff, parent interviews and standardised assessments all triangulated to provide evidence that children in the pilot programmes had learned a range of new skills over the intervention period, particularly in the areas of language and social skills.

Standardised Bayley-III child outcome measures over a seven month period showed significant intervention group progress on cognitive, receptive language, expressive language and social-emotional outcomes with medium to large effect sizes.

These standardised findings triangulated well with goal attainment scaling, adaptive social behaviour scales and parent and staff interview data. Together these findings from different sources and gathered by different methods both qualitative and quantitative, provide convincing evidence that the intervention group made good progress over the evaluation period.

However, when these results were compared with a group of two year olds matched in terms of age, gender and whose homes were in similar areas of disadvantage, but who did not have places on the extended pilot intervention programme, they did not provide evidence that intervention group progress on child outcome measures was significantly different from that seen in the comparison group.

This was possibly due to the short intervention period and also the presence of confounding variables that we were unable to control for. In particular the highly effective banding systems used by the local authorities ensured that priority places in the pilot programmes were allocated to those in their communities who were most in need.

If we consider the likely extent of ongoing risk factors for the intervention group (child protection, maternal depression, drug abuse, developmental disability), it may indeed be viewed as a highly positive result that the intervention group made such good progress.

As well as positive child outcomes, there were also positive outcomes for parents. Results showed improved parenting capacity in parents whose children participated in the pilot intervention programme.

Indeed, intervention group parents' adjustment to the daily hassles of parenting was significantly better than that of comparison group parents. Changes here were in terms of how often parents experienced daily parenting situations as a hassle, and how much of a hassle it was for them.

Parents also gained valuable new insights and understanding into their children's behaviour which led to changes in the way they thought about their role as parents and their behavioural and developmental expectations of their children. They also felt

able to respond better to their children having had some time away from them while the children attended the pilot programme.

Parents learned from a range of experiences including formal and informal observation of their children in the programme, activities brought home by their children, talking to other parents, direct advice from staff in meetings with the key worker and parent support programmes.

When we triangulate the findings about coping with the daily hassles of parenting with findings from parent interviews it suggests that:

- the new skills that intervention group parents learned for managing their children's behaviour
- the new expectations and understanding they had of their children's behaviour
- having some time to themselves

all contributed to the better adjustment of intervention group parents than comparison group parents to the daily hassles of parenting during the 'terrible twos'.

***Changing parents' behaviour towards their children and enhancing parenting capacity is likely to be a highly important outcome for impacting on children's development in the longer term***

## **CHAPTER ONE: HEAD START, SURE START AND THE SCOTTISH PILOT PROGRAMMES**

### **1.1 Overview of report**

In August 2006 the Scottish Government selected Glasgow, Dundee and North Ayrshire local authorities to take part in a £2 million Extended Pre-School Provision for Vulnerable 2 Year Olds Pilot Programme. The Scottish Indices of Deprivation 2003 identified Glasgow City as the most deprived local authority in Scotland, Dundee as the third most deprived area, and North Ayrshire as the seventh most deprived local authority in Scotland.

The pilot programme was to run for a two year period with the key aim of providing positive preschool experiences one year early for vulnerable children and supporting their parents. Local authorities were encouraged to develop their own models of delivery within the broad aims of the project. This report details the findings of the evaluation study carried out by a research team from the Department of Psychology, University of Strathclyde, headed by Dr Lisa Woolfson.

The main aim of the evaluation was to explore the impact of the extended pilot programme on cognitive, social, emotional and behavioural developmental child outcomes, as well as the impact on participating parents. We used both quantitative and qualitative methods to gather information, collecting data from multiple stakeholders – children, parents, preschool centre staff, heads of centres and local authority childcare strategy managers – to build up a coherent picture by triangulating findings from different methodologies and different informants.

Specific objectives were to identify:

- recruitment criteria and admission procedures used by the participating local authorities
- characteristics of the different provisions, environment, staffing, numbers of children, and attendance rates, including an investigation of factors that help and hinder participation
- changes made to original plans for programme delivery, barriers and facilitating factors experienced by childcare providers, practical issues
- impact of the programme on participating children and their parents both qualitatively and quantitatively, and also in relation to a comparison group not receiving the pilot intervention
- views and experiences of parents and staff on the programme's strengths and weaknesses.

Chapter 1 of the report deals with the international research background to the Scottish pilot programmes.

Chapter 2 explains the methods we used. Quantitative methods comprised the new Bayley-III Scales of Infant and Toddler Development, the 'gold-standard' assessment tool for measuring cognitive development, expressive and receptive language as well as social-emotional growth and adaptive behaviour.

Other quantitative child outcome measures described in Chapter 2 are two that were completed by staff, the Adaptive Social Behaviour Inventory and Goal Attainment Scaling. The latter is a valuable tool for addressing the diversity across programmes

that resulted from local authorities and centres matching their programme content and delivery to local community needs in. We also explain in Chapter 2 the quantitative parenting capacity measures we used, Parenting Daily Hassles and the Ryff Psychological Well-Being Scales.

Chapter 2 also outlines the qualitative methods we used – staff and local authority strategy manager focus groups, parent face-to-face interviews and parent telephone interviews.

Chapter 3 reports on the setting up of the programmes, admissions procedures and service delivery as well as barriers to attendance. Its content is based on interviews with heads of centres, heads of services, staff focus groups and parent telephone interviews and documentation received from heads of centres.

Chapter 4 presents both qualitative and quantitative results on child progress outcomes; qualitative results from parent face-to-face interviews and staff focus groups and quantitative results from Adaptive Social Behaviour Inventories, Goal Attainment Scaling and Bayley-III scales.

Chapter 5 reports on parenting capacity findings which includes quantitative results from the Parenting Daily Hassles and Ryff Well-Being questionnaires and qualitative findings from parent interviews on new skills they learned and ways in which their expectations of themselves and their children had changed. Chapter 5 also presents staff focus group views of parenting capacity.

Chapter 6 summarises the main findings and their implications.

## **1.2 Early intervention for pre-schoolers**

Early intervention provision for vulnerable pre-schoolers has a distinguished history. It dates back to the 1960s with the establishment of the High/Scope Perry pre-school study in the USA, which aimed to track effects of early education on children at risk for school failure. This was followed by the Head Start programme which aimed to combat the cycle of poverty by providing disadvantaged three and four year olds with pre-school education and a variety of health care services that would help them begin school on an equal footing with their more fortunate peers. Support was also provided for their parents.

Head Start was further extended in 1995 to the Early Head Start programme which offered pregnant women, and families with infants, access to both centre-based and home-based family development services (Love et al, 2005). Examples of other successful early US intervention programmes include Smart Start in North Carolina, which focused on improving child care quality, helping families to cover the cost of child care, providing support to parents and assisting with access to health care services; and the Carolina Abecedarian Study, which provided high quality, intensive services to infants and pre-schoolers from low-income families until school start.

Emerging from this US background were the various Sure Start programmes which currently run across the United Kingdom. In England, Sure Start programmes aimed to expand the provision of childcare so that it was more widely available; to improve young children's health and emotional development and to provide parental support, offering services which support parenting and help make employment possible.

In Scotland, preschool places for 3 and 4 year olds have been free to all children since 2002. The Childcare Strategy published by the Scottish Executive in 1998 set out a commitment to supporting families and raising children out of poverty. Recognising

the importance of intervention in the early years, this strategy included aims to expand the provision of early years services and to improve the quality of childcare. In 2002, the Scottish Executive Education Department published a review of research findings relating to out-of-home provision for children aged 0-3 (Stephen, Dunlop and Trevarthen, 2003), concluding that for children with challenging family environments, out-of-home provision can offer secure relationships with caregivers and can help families to access other social support services.

The focus of the Sure Start programme in Scotland is on early intervention with children 0-3 years (Scottish Executive, 2000). The aim of the programme is to increase support in deprived areas and to vulnerable families.

To achieve this, funds were allocated to all local authorities in Scotland to enable community-based solutions. There were also other sources of funding available to local authorities in caring for young children and families with young children, such as the Working with Families fund and the Children's Services Development Fund.

Consequently, although the service provision for children aged 0-3 varies by local authority, there are common features. For example, the Scottish Executive guidelines set out three key features for developing effective support and learning experiences with very young children; relationships, responsive care and respect for children (Scottish Executive, 2005a).

### **1.3 Research findings**

#### **1.3.1 Child outcomes**

Research from Head Start, Early Head Start, Smart Start and the Abecedarian study has demonstrated that early intervention can have positive results for vulnerable children's IQ, cognitive, social and emotional development, language skills, concentration and behaviour and educational attainments (Campbell and Ramey, 1995; Abbott-Shim, Lambert and McCarty, 2003; Barnett, 1995; Kazimirski, Dickens and White, 2008; Love et al, 2005).

In addition to short term benefits, longitudinal research demonstrated long term positive effects of early intervention programmes on literacy and social skills (Schweinhart, Montie, Xiang, Barnett, Belfield and Nores, 2005); IQ and school achievement, grade retention, placement in special education and social adjustment (Barnett, 1995; Campbell and Ramey, 1995).

These US findings have been supported by the Effective Provision of Pre-School Education (EPPE) project (1997 to 2003), a large scale longitudinal study carried out in England (Sylva et al, 2004), which reported that pre-school attendees showed higher cognitive attainment, sociability and concentration at school start compared with children without pre-school experience.

Notably, the EPPE project found age of attendance to be important, with those attending pre-school before age three demonstrating higher cognitive and peer sociability gains than those beginning at three years. While the number of months in pre-school was an important factor, the number of sessions, i.e. full-time or part-time, was not.

The concerning issue of possible 'wash out' of positive effects over a period of time was also investigated by the EPPE project. Results from the study when the children reached the early primary school stage indicated that positive effects were not washed

out for cognitive outcomes by age seven, although the size of the effect was less than at school start. There was less convincing evidence, however, of improvements in social behaviour still being maintained at age seven (Sammons et al, 2004).

The EPPE team found that the specific form of pre-school provision influenced outcomes. Effective provision had an educational focus with teachers supporting less qualified staff, and with a high level of parental involvement (Siraj-Blatchford, Sylva, Taggart, Sammons, Melhuish and Elliot, 2003). It provided a balance of free play and staff-led group work. Responsive feedback to children during activities and progress reports to their parents were also features of effective centres as were differentiated learning opportunities and the application of explicit behaviour policies.

The role of the home learning environment was emphasised and the researchers proposed that the amount and quality of pre-school and the home learning environment were elements that policy could address more readily than family characteristics such as socio-economic disadvantage.

### **1.3.2 Parenting capacity**

The Department of Health estimated that four million children living in England failed to meet developmental goals as a result of family stress such as substance abuse, mental illness, domestic violence, social and material factors (Katz, Corlyon, La Placa and Hunter, 2007).

The concept of 'parenting capacity' was used to refer to the ability of the main caregivers in a child's life to understand and prioritise their child's needs, not only in terms of physical care and protection, but also socially and emotionally by ensuring the child experiences warm relationships, secure attachment, opportunities for social relationships, communication and play, and in terms of appropriate cognitive stimulation and the provision of guidance and boundaries for the development of appropriate behaviour (DOH, 2000).

As well as the ability to provide a nurturing and protective environment for the child, the concept of parenting capacity can also cover parental empathic understanding of their child's needs and their understanding of the role that their own personal characteristics play in parenting their child effectively (Donald and Jureidini, 2004). The Scottish Government's new task group, set up to help build parenting capacity as part of the Early Years Framework, views promoting parents' own mental health as part of this overall goal (Scottish Government, 2008).

Parents have been shown to gain parenting skills and confidence by observing staff interaction with children in preschool settings (Kazimirski et al, 2008). Parents of children who took part in Sure Start were found to offer their children more educational and emotional support, to cope better with conflict, to experience reduced parenting stress and to experience less household chaos (Belsky et al, 2006; Love et al, 2005; U.S. Department of Health and Human Services, 2001)

Intervention programmes often provide much needed support and feedback for parents living in deprived areas, which can contribute to their viewing their child in a more positive light, and can provide reassurance about their children's development. Having your preschooler attend a preschool programme can also give parents free time to devote to their other children; catch up with housework or even just rest; it creates the opportunity to return to, or seek employment which can in turn enhance financial security; it also provides parents with the opportunity to meet and form



friendships with people in similar situations to themselves, which may increase their social well being (Kazimirski, 2008).

#### **1.4 The Scottish pilot project for vulnerable 2 year olds**

Recognising the importance of Sylva et al's (2004) findings regarding attending pre-school provision under 3 years of age a £2 million Extended Pre-School Provision for Vulnerable 2 Year Olds Pilot Programme was launched with the aim of providing access to preschool centres one year early for children viewed as vulnerable.

Increased funding was made available for participating local authorities to provide good quality pre-school experiences for vulnerable 2 year olds and for their parents to be supported. Glasgow, Dundee and North Ayrshire local authorities were selected by the Scottish Government to take part in the pilot which was to run for a two year period, starting in August 2006.

The key aims for all pilot programmes were to encourage positive preschool experiences, promote attendance, provide support for parents as well as children and to encourage parental engagement with centre staff. Within this commonality of purpose, local authorities were invited to develop their own models of delivery in response to local needs and expectations.

The present evaluation study of the programme took place in the second year of the pilot, evaluating children who participated in programmes between August 2007 and June 2008.

## **CHAPTER TWO: METHODOLOGY**

### **2.1 Chapter overview**

We used both quantitative and qualitative methods in this evaluation. This approach provided us with an evaluation framework that addressed the commonality of purpose of the different pilot programmes while equally acknowledging the diversity of authorities' responses to the distinctive needs of their own local communities.

This mixed methods approach also enabled us to gather information from different sources - children, parents, preschool centre staff, heads of centres and heads of services – with the purpose of strengthening the reliability of our findings by triangulating results obtained by these different methods and from the different informants.

Quantitative methods for child outcome measures comprised the Bayley-III Scales of Infant and Toddler Development, for measuring cognitive, language and social development; Goal Attainment Scaling and the Adaptive Social Behaviour Inventory. Quantitative measures of parenting capacity measures were the Parenting Daily Hassles Scale and the Ryff Psychological Well-Being Scales. These child and parent quantitative measures are described in sections 2.2 and 2.3 below.

The study design for the quantitative analysis was a quasi-experimental design comprising a pre-existing intervention group and a pre-existing comparison group of children who were not in receipt of the pilot intervention (see section 2.4).

Children in the intervention group comprised those who started attending one of the pilot programmes between August and November 2007, who were aged 2 – 2<sup>1</sup>/<sub>2</sub> years at the time of starting the programme and whose parents consented to participation in the evaluation.

Children in the comparison group were largely comprised Glasgow children of the same age who were eligible for the pilot provision but had not been allocated places, who did not attend any other funded preschool programme for 2 year olds and whose parents had similarly consented to participation in the study.

Child and parent quantitative measures (but obviously not staff measures) were collected for the comparison group too. Baseline child and parent measures were gathered in the autumn term, when the child started in the intervention programme and then in the summer term after approximately 7 months.

Qualitative data (see section 2.5) were collected for the intervention group only. These comprised individual scoping interviews with each centre head; 15 staff focus groups for centre staff, heads of centre and childcare strategy managers; 30 parent face-to-face semi-structured interviews and 20 parent telephone interviews.

We carried out individual interviews with all centre heads during the initial scoping phase of the study from April to July 2007 which allowed us to gather information from them about the setting up, admission to and delivery of the different programmes (see Chapter 3). During the scoping period centre staff helped us to identify and recruit our intervention group sample and worked with our researchers to draw up their own Goal Attainment Scaling frameworks for use in the evaluation.

The tools used in the evaluation are described in more detail below.

## **2.2 Tools: Child outcomes**

### **2.2.1 Bayley-III Scales of Infant and Toddler Development**

The new Bayley-III Scales, developed from the long established Bayley Scales of Infant Development, were used. Researchers administered both the cognitive scales and the two language scales - receptive and expressive language – to the children. Parents completed two scales reporting on child behaviour: the social-emotional scale and the adaptive behaviour scale.

The social-emotional scale is based on the Greenspan Social-Emotional Growth Chart (Greenspan, 2004) and measures how well children have met certain social-emotional milestones. The adaptive behaviour scale is designed to measure the attainment of functional skills necessary for increased independence. It is based on the Adaptive Behaviour Assessment System – 2<sup>nd</sup> Edition (ABAS-II; Harrison and Oakland, 2003) and is divided into ten sub-scales. We used only a subset of these due to time considerations, specifically: communication, functional pre-academics, home living, leisure, self-direction and social.

All Bayley-III scales have high reliability and validity. Reliability is a measure of how confident we can be that a test measure is accurate. A reliability coefficient of .7 and above is usually considered as acceptable (Boyle and Fisher, 2008). Internal reliability coefficients for the cognitive scale for children at aged 24 months are reported in the manual as .96; for receptive and expressive communication are .93 and .96 respectively; social-emotional scale .94 and adaptive behaviour scales ranged from .86 to .92.

These coefficients show that items within each scale are consistent with each other and that they do indeed measure the same type of characteristic. High test-retest reliability coefficients are also reported for all scales, typically from .70s to .90s. Also high inter-rater reliabilities are reported (Bayley, 2006).

In this report Bayley-III results are presented throughout as scaled scores. These are derived from raw scores but are particularly useful because they represent the child's performance relative to his or her same-age peers. Thus scaled scores have an in-built comparison group as the score is a measure of the child's performance relative to typically developing children of the same age.

Scaled scores have a mean of 10 and a standard deviation of 3. Scores of 7 to 10 and 10 to 13 are equivalent to 1 standard deviation below and above the mean, respectively. This means that a scaled score of between 7 and 13 is indeed within the average range for a child of that age (Bayley, 2006).

### **2.2.2. Goal Attainment Scaling**

Local authorities and centres in the pilot programme were encouraged to develop their own models of service delivery as appropriate to the needs of the vulnerable children and parents within their local communities. In order to acknowledge and identify this diversity in goal-setting, but also to provide a common metric that allows different outcomes to be summarised and compared, the evaluation utilised Goal Attainment Scaling (GAS) to complement the standardised Bayley-III measures of child outcomes.

In GAS, a set of scales is developed to record an individual's progress according to a continuum of individualised goals. Originally designed for use in adult mental health programmes (Kiresuk and Sherman, 1968), GAS has equal applicability to child

programmes, e.g. for evaluating a behaviour support programme (Imich and Roberts, 1990) and for intervention programmes for children with developmental difficulties (MacKay et al, 1993; Mailloux et al, 2007; Stewart et al, 2004; Wright et al, 2005).

GAS methodology has been used successfully in a Scottish local authority setting which involved the evaluation of the Renfrewshire Reach-Out Project for disaffected secondary school pupils (Woolfson et al, 2005) and is currently being rolled out to other educational settings within Renfrewshire.

### ***2.2.3 The Adaptive Social Behaviour Inventory***

The Adaptive Social Behaviour Inventory (ASBI) (Hogan, Scott, & Bauer, 1992) is a general measure of the social and behavioural development of pre-school children.

The ASBI was developed with a view of social competence that was distinct from the focus on identifying behaviour problems that characterises other behaviour checklists. The ASBI's conceptualisation of social behaviour avoids pathologising behaviour problems and instead views them within the context of the child's social development, which is a key strength for the purposes of this evaluation.

The ASBI is short (30 items), each item represents a directly observable behaviour, and it is worded to make it easily understandable to parents in low income families (Greenfield, Iruka and Munis, 2004). One of its attractions for this Scottish study, was that it had been used in similar evaluations in England (Sammons et al, 2003), Northern Ireland (Melhuish et al, 2001) and the U.S. (Burchinal and Cryer, 2003), and this could facilitate the drawing of inferences in across-study comparisons.

Although the ASBI was developed for parents to complete regarding the child's behaviour in the home setting, it has also been validated for use in the preschool classroom, not only with teachers but also with teacher aides, and has demonstrated inter-rater consistency (Greenfield et al, 2004). In the present study it was used with preschool staff to complement the Bayley-III social and behavioural parent questionnaire data.

The internal reliability of the original three factor scales identified by Hogan et al (1992) has been supported by independent investigations (e.g. Greenfield et al, 2004), although other researchers have identified different scales in their factor analyses. There is also a suggestion that ASBI scores show low to moderate correlations with child IQ, although not all of the ASBI factors showed equal internal reliability (Hogan et al, 1992). There do not, however, seem to be any data on test-retest reliability and no other study identified in our literature search had utilised the ASBI in the same kind of between-groups repeated-measures design as in the present study.

## **2.3 Tools: Parenting capacity**

### ***2.3.1 Parenting Daily Hassles Scale***

The Parenting Daily Hassles Scale (PDHS) (Crnic and Greenberg, 1990) is a self report measure that lists twenty situations that may regularly occur in households with young children. Participants are asked to rate how often the situation occurs and the extent to which each situation is a hassle. Crnic and Greenberg (1990) report good levels of internal consistency both for frequency ( $\alpha = 0.81$ ) and for the intensity of the hassle ( $\alpha = 0.90$ ).

The PDHS is currently being used by the Department of Health as a tool that social workers can use when assessing children in need and their families (Department of

Health, 2000). It has also been used in many studies, including research with adolescent mothers (East et al, 1994) and homeless families (Karim et al, 2006).

### **2.3.2 Ryff Psychological Well-Being Scales**

The Ryff Psychological Well-Being Scales (PWBS) (Ryff, 1989) include health-related behaviours as well as personal, social and psychological dimensions. The scales measure six domains of psychological well-being: self acceptance, autonomy, environmental mastery, personal growth, positive relations with others and purpose in life.

In 1989, Ryff investigated what she referred to as the Parent Scale of the PWBS which contained twenty items for each of the six constructs. Internal reliability was found to be high ( $\alpha = .86 - .93$ ). Test – retest reliability was also high with correlations ranging from .81 to .88.

The PWBS has been widely used in research. Recently there has been some debate over possible improvements to the factor structure of the scales (Ryff and Singer, 2006; Springer and Hausser, 2006). We used the 42 item version proposed by Abbott et al (2006) devised as a response to the critique and based on a review of the previous attempts at modifying the scales and analysis of data from 1,179 respondents.

## **2.4 Design and analysis - quantitative**

### **2.4.1 Quasi-experimental design**

The quantitative research employed a quasi-experimental design in which two year old children in pre-existing groups were compared to a comparison group.

Randomized designs are the ‘gold standard’ of research studies, but it was not possible to allocate participants randomly to intervention and comparison groups in this study as the pilot programmes were already under way, and disadvantaged children had already been allocated places in them through the admissions procedures described in Chapter 3.

Furthermore, it would challenge ethical guidelines knowingly to prevent a group of children from receiving an intervention which research suggests would be beneficial for both children and parents (Abbott-Shim et al 2003; Borman, 2002; Campbell and Ramey, 1995; Head Start Bureau, 2004, Kazimirski et al, 2008).

Thus, the intervention group was a pre-existing group.

Pre-intervention evaluation was carried out within the child’s first week of attendance at the preschool centre except for a few children for whom centre staff requested an evaluation in the second week to enable settling in. Post-intervention evaluation took place in the Easter term, approximately eight months later.

### **2.4.2 Intervention group composition**

We originally proposed to sample approximately 180 children and their parents from the pilot projects and to recruit a comparison group of 120 children. This was estimated as two-thirds of the total numbers based on initial intake information from the local authorities.

However, it became apparent during the scoping stage that the number of 2 year olds in the project who would start to attend the interventions between August and October 2007, the pre-test phase of the evaluation, was considerably less than this.

Approximately 90 were expected in Glasgow, around 60 in Dundee, and in North Ayrshire only 18 new children were expected to start. In the light of this, target numbers were revised to 120 in the intervention group and 80 in the comparison group plus an additional 10% to cover attrition between pre-and post-testing.

Actual numbers recruited for the intervention group at pre-test phase in October are presented in Table 2-1. Although the sample was smaller than originally envisaged, it comprised a large proportion of the total number of 2 year olds who were admitted to the pilot programmes between August and November 2007.

**Table 2-1: Intervention group composition by local authority at pre-intervention phase**

Glasgow	69
Dundee	46
North Ayrshire	15
<b>Total</b>	<b>130</b>

### 2.4.3 Comparison group composition

As discussed above, a similarly vulnerable group of 2 year olds who had not been allocated to any of the pilots provided a comparison group for the study. These totalled 88 in number.

For comparison purposes, the EPPE project studied a group of ‘home children’. These were children who had no pre-school experience before starting school (Sammons et al, 2002). As the present study was an evaluation of extended pre-school attendance at age 2 years, rather than pre-school provision *per se*, we proposed that the appropriate comparison group would be ‘home 2 year olds’, i.e. children who were not attending pre-school provision at age 2 years.

We recognised that it was likely that many of the comparison group children would nevertheless be in receipt of interventions to support their families, as they too experienced disadvantage. However, for recruitment in the control group, the criterion we applied was that the provision they were currently receiving would not be one of the pilot programmes for 2 year olds, nor comprise any funded pre-school experience at age 2 years as a specific component.

Because members of this group were likely to be involved in some intervention, such as a mother-toddler group or playgroup, it was considered as a comparison group rather than a no-intervention control group.

As there would still be a significant number of disadvantaged 2 year olds in Glasgow who would not be in receipt of this extended preschool provision, it was agreed at the RAG meeting that the comparison group be drawn from Glasgow and that there might also be some similarly eligible youngsters in Dundee who were not yet receiving provision. We were directed to two playgroups in the same areas of disadvantage in Dundee where there were four eligible children from whom we were able to collect pre-intervention comparison data.

Pre-intervention comparison data were thus collected from 80 Glasgow children and their parents who were on waiting lists for places in pilot intervention programmes, or who attended local playgroups in the same areas of disadvantage. These numbers

were supplemented by four comparison group participants from nearby North Lanarkshire and four from Dundee, totalling 88.

This choice of matching the comparison group from within the participating authorities resulted in two non-equivalent groups, a common problem in such evaluations, because the local authority banding systems ensured that those children who were most in need had been allocated intervention group places before other potentially eligible children on waiting lists (see section 2.4.6).

The study design involved recruiting a smaller number in the comparison group than in the intervention group to prevent drawing the research team's time and resources away from the pilot intervention group, any more than was necessary for comparison purposes.

While study designs often assume that intervention and comparison groups need to be of equal sizes, this is not necessarily the case (Schulz and Grimes, 2002). Indeed the Head Start study used a 60:40 ratio for intervention: comparison group also, for the above reasons.

It is recognised that there is no problem if the two groups are of equal variability or indeed if the intervention group shows less variability than the comparison group (Mycroft et al, 2002). The only case where a problem of reliability may arise is where additionally there are violations of homogeneity of variance, with the intervention group showing greater variability than the comparison group. This was not the case in the present study.

#### **2.4.4 The sample at post-test phase**

Post-intervention testing began on the week beginning April 21 2008, immediately after the Easter holidays, following as closely as possible the same order in which children were pre-tested. Thus, those from whom data were gathered early in the pre-intervention phase, were evaluated early in the post-intervention phase.

However, by this point there was attrition from the sample from two sources. Firstly some families had stopped attending their preschool programme and secondly some of those still attending who had participated in the baseline phase, did not participate in the post-test evaluation phase.

Regarding the first source of attrition from the study, i.e. those who left the programme itself, if we look back at the pre-intervention figures in Table 2-1, of the 69 Glasgow children who participated in the pre-testing, 11 no longer attended the pilot intervention programme (16% drop-out); seven Dundee children out of 46 no longer attended (15%) and two North Ayrshire children (13%) had left the programme.

Reasons reported by centre staff for these families having left the programme are presented in Table 2-2. The reasons given provided no overt indications of dissatisfaction with anything to do with the pilot intervention. As these children had attended a pilot intervention programme for at least two months during our evaluation period which may still have been beneficial to the child and or the parents, we decided where possible to try to include them in the post-test phase. We managed then to obtain post-intervention data from six of these 20 children from our sample who had left or dropped out of the pilot programmes.

**Table 2-2: Staff-reported reasons for families having left pilot programmes**

<b>Reason</b>	<b>Number of children</b>
Moved away from area	4
Accepted other nursery place closer to home	2
Accepted other nursery place, reason unknown	1
Family problems	6
Poor attendance followed by drop-out	2
Mother withdrew child as felt too young to cope	1
Reason not known	4
<b>Total</b>	<b>20</b>

Regarding the second source of attrition, i.e. from the evaluation rather than from the programme itself, the researchers tried to prevent this as far as possible and rescheduled 30-50% post-testing appointments due to parental non-attendance on the agreed day/time.

Attendance difficulties at our evaluation probably reflected the somewhat chaotic lives that many of the families lived, and were often part of a broader picture of erratic attendance at the programme. Some appointments were rescheduled three or four times in order to try to retain as many in the sample as we could. Nevertheless a further 36 children for whom we were unable to gather any post-intervention child or parent data had to be removed from the dataset for quantitative data analysis, reducing further the initial numbers in Table 2-1.

An additional eight participants' data were removed from the comparison group because they had started other preschool provision at age two which they had attended for two months or more during the evaluation period.

Final sample breakdown according to local authority is presented in Table 2-3 and according to gender in Table 2-4 below. Mean age of each group at pre-test was 27 months.

**Table 2-3: Intervention group composition of final sample by local authority**

Glasgow	56
Dundee	39
North Ayrshire	13
<b>Total</b>	<b>108</b>



**Table 2-4: Sample participants at post-test phase**

	<b>Intervention group</b>	<b>Comparison group</b>	<b>Total</b>
Male	59	34	93
Female	49	32	81
<b>Total</b>	<b>108</b>	<b>66</b>	<b>174</b>

It should be noted that non-participation in the quantitative post-testing phase did not remove these participants from the sample altogether. Ten of the ‘non-participating’ children are included in parts of the study other than the quantitative child analysis: for five of them we gathered both GAS and ASBI data from staff, for two we gathered GAS only from staff, one parent took part in a semi-structured face-to-face interview (see Chapters 4 and 5) and two parents took part in telephone interviews, as participants who had difficulties attending (see Chapter 3).

Drop-out rate from the evaluation study itself was roughly equal for the two groups, at 17% for the intervention group and 16% for the comparison group. As it is possible that not returning for post-test is itself a predictor of some outcome variable of interest to our study (Tabachnick and Fidell, 2007), we created a dummy variable as recommended by Cohen, Cohen, West and Aiken (2003) in order to compare the pre-test data of those who did not return for the gathering of post-test measures with those who did. We found no significant differences between groups.

#### **2.4.5 Missing data procedures**

Our research team gathered 172 complete sets of pre- and post-intervention data for Bayley-III cognitive, receptive and expressive language scales. Two data sets were missing from children who refused to cooperate with the post-testing, despite our researchers trying to engage them on the tasks on four separate occasions. Centre staff were currently experiencing similar problems in getting these children to follow instructions and cooperate with requests. List-wise deletion of these missing data were employed in the analyses.

The other Bayley-III scales, the Ryff Well-being Scale and the PDH scale were all completed by parents/carers themselves and missing value analysis showed there were variables omitted.

Some parents had omitted complete sets of scales or complete sections. For some, this may have been in error through turning over two pages at once, but for others it may have been rather more deliberate. For example, we were aware that there were parents in the sample who were in the middle of child protection procedures and while they were willing for their children to take part in the evaluation, they were understandably concerned about completing questionnaires about their parenting or their own mental well-being. However, again we created a dummy variable as recommended by Cohen et al (2003) and found no significant differences between those with incomplete data and those participants with complete data.

Where whole sections were omitted, however, we again employed the strategy of list-wise deletion of missing data, accepting that there was a reduced number of datasets available for these particular analyses. There were also questionnaires with randomly distributed missing values and for these we substituted group mean values, as

suggested by Tabachnick and Fidell (2007) to ensure as much of the data as possible was retained for analysis. Similar procedures were followed with the ASBI scales which were completed by centre staff.

#### **2.4.6 Analysis**

Although the intervention and comparison group were matched in terms of geographical area, age and gender composition, comparison of pre-test data indicated that the two groups were not equivalent in their scores on the cognitive, receptive and expressive language scales. This is common in intervention evaluations where an intervention is delivered to those who are most in need and results in non-equivalent groups (Cook and Campbell, 1979). It also suggests that the banding system in operation in the local authorities taking part in the pilot interventions (see Chapter 3) is working effectively.

For example, in Glasgow from where the majority of the comparison group was drawn, many of the families in the comparison group were on the waiting list for the pilot interventions and so seemed to be a good comparison for the intervention group. However, the fact that they were on the waiting list rather than having been given a place is in this case not likely to be due just to the lateness of their application or serendipity, but because of the prioritisation of need procedures in place that ensure that families with multiple indicators of need were offered places first.

Thus mixed analyses of covariance were carried out for quantitative data with group (intervention/comparison) as a between-groups factor, time of testing (pre- post-intervention) as a within-groups factor and pre-intervention cognitive ability as a covariate to adjust for non-equivalence of groups. Test interval between pre- and post-testing was also used as a covariate. Analyses of pre- post measures within groups using paired t-tests were also carried out.

### **2.5 Design and analysis – qualitative**

#### **2.5.1 Staff focus groups**

Fifteen focus groups were held to explore in more detail issues that emerged from the initial interviews with heads of centres. These comprised ten focus groups for centre staff (see Table 2-5 below for breakdown across local authorities); four focus groups for heads of centres, one in each local authority plus an extra one in North Ayrshire due to attendance problems at the initial one; and one focus group with local authority childcare strategy managers.

Focus groups usually comprised three or four participants, although one group had eight participants. The groups for managers and heads of centres were held to explore managerial issues regarding participation in the pilot projects.

Numbers of focus groups in Table 2-5 reflect both the relative proportions of child participants in the study from each local authority and also the geographical spread of the authority, to ensure that location of focus group was not a barrier to staff attendance.

**Table 2-5: Staff focus groups by local authority**

<b>Local authority</b>	<b>Number of staff focus groups</b>
Glasgow	5
North Ayrshire	3
Dundee	2
<b>Total</b>	<b>10</b>

### **2.5.2 Parent face-to-face interviews**

30 semi-structured parent interviews were carried out (see Table 2-6) to investigate mothers' perceptions of their experiences in participating in the pilot programmes and of both child and parent outcomes. Interviews were carried out between January and March 2008, in between the pre- and post-test phases of the evaluation. Children had been in the programme at least three months at the time of this interview.

Interviews were spread across the different local authorities to reflect broadly the proportions of child/parent participants from the different local authorities taking part in the quantitative data analysis (see Table 2-3). Interviews were audio-recorded and then transcribed by a job trainee who worked part-time on a voluntary basis on the study during the interview phase. Enhanced Disclosure Scotland clearance was obtained for this trainee as it was for the team of researchers who visited the centres and collected data directly from the children.

**Table 2-6: Parent face-to-face interviews by local authority**

<b>Local authority</b>	<b>Number of interviews</b>
Glasgow	14
North Ayrshire	6
Dundee	10
<b>Total</b>	<b>30</b>

Analysis of parent interview data was carried out using Sameroff and Fiese's (2000) concepts of remediation, re-education and redefinition. These were found to provide an appropriate and sensitive framework by Woolfson (1999) in an evaluation of an early intervention programme for infants and pre-schoolers with developmental disabilities. Remediation refers to child learning outcomes, re-education refers to new skills parents have learned to help their children as a result of their involvement in the pilot programme. Redefinition refers to ways in which parents have changed in their perceptions and expectations about parenting their child and what that involves.

Interview transcripts were coded following Miles and Huberman's (1994) guidelines for systematic analysis of qualitative data. NVivo software was used for coding, storing and retrieving quotes. Initial data reduction was carried out by preliminary first level coding of transcripts using codes derived from the operational definitions of remediation, re-education and redefinition as in Woolfson's (1999) analysis. Second

level coding was then carried out to identify other emergent themes. Recoding was continued iteratively until all the data fitted within the categories.

Coding checks were carried out across two coders for reliability, with the second coder independently coding 10% of the transcripts. The two coders then reviewed their codings together, clarifying and revising any differences to evolve an agreed consensus on the codes to be used. The agreed coding system was then used by the primary coder on all transcripts.

A further coding check was carried out in order to ensure that there was no subjective bias on the part of the primary coder in the use of coding system and over 90% agreement was obtained. Miles and Huberman (1994) argued that, as well as acting as a reliability check, this procedure helps with clarity of definition of the codes.

Further data reduction was then carried out in order to present the data as matrices. This method of presentation of qualitative data provides immediate access to a rich dataset with the same ease offered by a table of quantitative data. It was recommended by Miles and Huberman (1994) as an effective method of presenting a large volume of qualitative data and was previously utilised in Woolfson's (1999) study.

### 2.5.3 Parent telephone interviews on barriers to attendance

Also between January and March 2008, between pre- and post-testing, ten regular attenders and ten poor attenders were identified by heads of centres and were interviewed by telephone by our researchers (see Table 2-7). In terms of area breakdown, we aimed to interview one parent per centre.

*Table 2-7: Parent telephone interviews by local authority*

Local authority	Regular attenders	Poor attenders
Glasgow	5	6
North Ayrshire	1	0
Dundee	4	4
<b>Total</b>	<b>10</b>	<b>10</b>

This was not possible for all centres, e.g. for example in North Ayrshire we were working from a smaller pool of possible parents who participated in the study (15) and we were unable to obtain consents from one parent per centre for this. Similarly some Glasgow centres had only a few participants in the study from whom to recruit potential participants for telephone interviews. Furthermore, some centres had no poor attenders; for example, all the North Ayrshire parents who agreed to participate in telephone interviews were indeed good attenders. Interviews have been audio-recorded, transcribed and coded.

## 2.6 Summary

We used both quantitative and qualitative methods to gather information across the three authorities, Glasgow, Dundee and North Ayrshire.

We collected data from multiple stakeholders – children, parents, preschool centre staff, heads of centres and local authority childcare strategy managers – using

standardised assessments, questionnaires, individual face-to-face interviews, individual telephone interviews and focus group interviews.

We compared child and parent quantitative outcomes with a comparison group who did not receive the pilot programme.

Our aim was to build up a coherent picture by triangulating findings from different methodologies and different informants.

## **CHAPTER THREE: PROGRAMME SET-UP, ADMISSIONS, CONTENT AND DELIVERY**

### **3.1 Chapter overview**

In this chapter we report on the numbers and characteristics of the children taking part in the pilots, the admissions procedures that were put in place, content of pilot programmes, staffing, space and furnishing and attendance.

Findings presented here are based on:

- 20 individual semi-structured interviews with the heads of all participating centres that took place during the preliminary scoping exercise April-July 2007
- Documentation provided by centre heads
- 15 staff focus groups that took place between January and March 2008 with centre staff, heads of centres and local authority childcare strategy managers (reported in section 2.5.1)
- 20 parent telephone interviews on barriers to attendance.

It should be noted that while all focus groups did not raise the same issues we acknowledge that an issue raised in one particular local authority or in one particular centre may have been common to other local authorities or centres.

### **3.2 Location of pilot programmes and places offered**

In Glasgow, the majority of pilot programmes were located in the east end of the city, previously identified as an area of social deprivation lacking in pre-three services in a toddler scoping exercise (McCormack, 2006). The east end services involved in the pilot were located in Bridgeton, Parkhead, Shettleston, Easterhouse and Garthamlock, with further programmes located in Robroyston and Provanmill in the north, and Castlemilk in the city's south side. Glasgow's extended pilot provision involved five nursery schools that had not previously offered a provision for 2 year olds, and four family learning centres which already provided for 2 year olds but participation in the pilot allowed them to increase the number of places available for this age group. The details are presented in Table 3-1.

In Dundee, the pilot involved two nursery schools, one nursery class in a primary school and one preschool centre (see Table 3-2). None of these had previously offered a provision for 2 year olds.

In North Ayrshire, the extended pilot programme involved three primary schools with nursery classes that had not previously offered a provision for 2 year olds. These were located in Irvine, Kilwinning and Cumbernauld. Two local authority centres in Kilbirnie and Saltcoats which had already previously offered provision for 2 year olds participated in the pilot and this increased the number of places for 2 year olds in each centre. A voluntary sector nursery in West Kilbride and a private nursery in Ardrossan also participated in the pilot. Both had previously offered 2 year old provision and funding from North Ayrshire allowed them to increase the number of places available (see Table 3-3).

**Table 3-1: Participating centres in Glasgow**

<b>Centre</b>	<b>No. of places</b>	<b>No. of children in pilot</b>	<b>New staff</b>	<b>New provision for 2 year olds</b>
<b>Acredyke Nursery</b>	<b>25<sup>1</sup></b>	<b>25</b>	<b>3</b>	<b>Yes</b>
<b>Elba Lane Nursery</b>	<b>30</b>	<b>42<sup>2</sup></b>	<b>3</b>	<b>Yes</b>
<b>Budhill Family Learning Centre</b>	<b>10</b>	<b>15</b>	<b>2</b>	<b>No</b>
<b>Bellrock Nursery</b>	<b>30</b>	<b>43</b>	<b>3</b>	<b>Yes</b>
<b>Kincardine Nursery</b>	<b>30</b>	<b>40</b>	<b>3</b>	<b>Yes</b>
<b>Molendinar Family Learning Centre</b>	<b>10</b>	<b>14</b>	<b>2</b>	<b>No</b>
<b>Bridgeton Family Learning Centre</b>	<b>15</b>	<b>18</b>	<b>3</b>	<b>No</b>
<b>London Road Nursery</b>	<b>30</b>	<b>48</b>	<b>3</b>	<b>Yes</b>
<b>Castlemilk Family Learning Centre</b>	<b>15</b>	<b>10</b>	<b>3</b>	<b>No</b>

Numbers of children in Tables 3-1, 3-2 and 3-3 are the numbers of children who took part in the pilot programmes over the entire period of the pilots including the initial period one year before the evaluation start. These are not then the same numbers of children who were attending centres and who were available to take part in the evaluation itself from August – October 2007 as presented in Table 2-1.

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<sup>1</sup> 25 places means places that are spread across morning and afternoon sessions, for example this could be 10 morning places and 15 afternoon places.

<sup>2</sup>It should be noted that the same place could be used by more than one child in the pilot over the time period. For example, a child might take up a place only temporarily so that same place could then be taken up another child. Hence number of children in pilot can exceed number of places in these tables

*Table 3-2: Participating centres in Dundee*

Centre	No. of places	No. of children in pilot	New staff	New provision for 2 year olds
Fintry Nursery School	24 <sup>3</sup>	<sup>4</sup> 54	4	Yes
Frances Wright Preschool Centre	20	27	4	Yes
Park Place Nursery School	40	97	4	Yes
Rowantree Primary	30	43	4	Yes

*Table 3-3: Participating centres in North Ayrshire*

Centre	Location	No. of places	No. of children in pilot	New staff	New provision for 2 year olds
Corsehill Primary School	Kilwinning	20	30	2	Yes
Cumrae Primary School	Isle of Cumrae	10	17	2	Yes
Garnock Valley Early Years Centre	Kilbirnie	20	48	2	No
Springvale Nursery	Saltcoats	15	15	1	No
Stanecastle Primary School	Irvine	20 <sup>5</sup>	18	2	Yes
Busy Bees Nursery	Ardrossan	5	9	1	No
West Kilbride Nursery	West Kilbride	5	6	1	No

### 3.3 Space, furnishings and resources

#### 3.3.1 Physical alterations

Four Glasgow nursery schools were purpose-built as part of new school buildings; Acredyke, Bellrock, Kincardine, London Road nursery schools. Only Elba Lane nursery school remained in the original premises. Of the family learning centres,

<sup>3</sup> 24 places means places that are spread across morning and afternoon sessions, for example this could be 12 morning places and 12 afternoon places.

<sup>4</sup> It should be noted that the same place could be used by more than one child in the pilot over the time period. For example, a child might take up a place only temporarily so that same place could then be taken up another child. Hence number of children in pilot can exceed number of places in these tables

<sup>5</sup> These include 10 afternoon places which ceased to be available from December 2007 since there were few children attending the provision



Castlemilk and Molendinar moved to entirely new premises whilst Bridgeton and Budhill Family Learning Centres remained in the original premises. An expansion to provide an additional floor in Bridgeton family learning centre was completed in 2006 which allowed a crèche, a parent class room and a training room to be set up. All centres had one playroom specifically for 2 year olds in the pilot programme, with other facilities shared with the rest of the nursery school

Minor alterations and redecoration were made to three centres in Dundee; Fintry and Park Place nursery schools, Frances Wright preschool centre. No changes were made to Rowantree nursery school. At each centre as for Glasgow, there was one playroom specifically for 2 year olds in the pilot programme, apart from Fintry nursery school where there was use of an additional room. Other facilities were shared with the rest of the provision.

In North Ayrshire only the community nursery in Saltcoats and the voluntary sector nursery did not require adaptations to meet Care Commission standards to provide places for 2 year olds. In the three schools with nursery classes the cost of adaptations averaged £45k per school to adapt spare capacity rooms and create appropriate toilet and changing facilities. The private nursery in Ardrossan required adaptations to a 'quiet room' at a cost of £2k and the local authority centre in Kilbirnie required additional changing facilities at a cost of £16k. As for Glasgow and Dundee, each centre had one playroom dedicated to 2 year olds in the pilot programme and shared other facilities as appropriate.

### **3.3.2 Views of resources from staff focus groups**

Staff in some centres felt that some of the equipment and resources, or quantities, that had been supplied for their playroom were not age-appropriate and that they would have liked to have been responsible for equipping their own rooms at the programme outset.

*'We had lots of...toys ... lots and lots for heuristic play – masses for heuristic play and we very quickly discovered our children were beyond heuristic play. They're still at the stage of filling and emptying but not with the heuristic stuff that had been provided. They just showed very little interest in it – we had masses of the stuff'*

Some centres felt that there was not enough variety of books for the children, for example a variety of both picture books and story books to reflect developmental progress over the year. In two centres, staff mentioned that parents and staff had actually brought in their own books to supplement what was provided.

In some centres, staff mentioned that another difficulty was that they were not provided with basic resources such as crayons, paper, paint, etc. which were needed on a daily basis and which had to be borrowed from the 3-5 playroom. However, heads of services indicated that this was a policy decision both in terms of fiscal management and also to support the integration of the pilot programme into the school.

## **3.4 Admissions procedures**

### **3.4.1 Allocation of places and characteristics of participants**

The extended pilot provision was specifically set up for vulnerable children across all three local authorities. The range of needs that identified vulnerability included having a family member with mental health problems or learning difficulties, parents with substance-abuse problems, and parents who were physically abusive.

Single parents, young parents, and those on income support might also be included in the provision, as well as children with English as an additional language.

There were also individual child vulnerabilities such as speech and language delay, physical disabilities, genetic disorders, behavioural problems, children in care and those who were on the child protection register. Other needs inherent in the geographical location of participating centres were family housing issues and social isolation.

Procedures and criteria whereby children were allocated to programmes varied across the three local authorities.

In Glasgow, places were allocated via referrals from agencies such as health visitors, the Parent and Child Team (PACT), general practitioners, psychologists, psychiatrists and social work services. Some places on Glasgow programmes were allocated through direct parent self-referrals.

Admission panels in Glasgow were typically made up of heads of establishments, officers in charge, business managers of learning communities, as well as health visitors, educational psychologists, social workers and a coordinator. At the panel meeting, the head of the centre banded the children, in consultation with other panel members for confirmation of banding, and then places were allocated.

Glasgow panels followed the Glasgow City Council Pre-Five Admission Policy. Under this policy, children were banded according to the following criteria:

#### **BAND 1**

- Any child considered in need of protection
- Children of very young mothers
- Looked after children

#### **BAND 2**

- Deferred entry to primary\*
- Referral from Pre-School Assessment Team (PRESCAT)
- Referral from psychologist
- Children with additional support needs
- Children whose parents/guardians have special needs
- Children in temporary accommodation
- Travelling children

#### **BAND 3**

- Children of working parents/guardians or in education
- Referrals from external professional agencies
- Children with English as an additional language
- Children in families where there is sole supporter
- Children of families with three or more children under-five

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\* Asterisked criteria applicable to older preschoolers only. Not applicable to 2 year olds for admission to pilot provision

- Multiple birth
- Family stress
- Chronic mental health problems in family

**BAND 4**

- All Glasgow children in pre-school year\*.
- Children who have had their entry to primary deferred as a result of parental/guardian choice and who are eligible for funding

**BAND 5**

- Glasgow children who have reached their third birthday and are eligible for funding\*

**BAND 6**

- Any child who lives within Glasgow City Council and has not been admitted under Bands 1-5

**BAND 7**

- Any child who lives outwith Glasgow City Council and whose parents/guardians wish to enter into an agreement with the Council for the service provided

In addition, a weighting system was used to prioritise applications for full-time places and to offer guidelines for part-time Band 3 places when required (see Table 3-4).

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\* Asterisked criteria applicable to older preschoolers only. Not applicable to 2 year olds for admission to pilot provision

**Table 3-4: Glasgow weighting system**

<b><i>Weighting factor</i></b>	<b><i>Points</i></b>
<b>Children in need of protection or to prevent children being received into care</b>	<b>5</b>
<b>Deferred entry to primary</b>	<b>2</b>
<b>Referral from PRESCAT</b>	<b>4</b>
<b>Parents/guardians in education, training or employment and who qualify for Child Tax Credit</b>	<b>4</b>
<b>Other families with two working parents/guardians</b>	<b>2</b>
<b>Referral from psychologist</b>	<b>4</b>
<b>Parent/guardian or children with additional support needs (not via PRESCAT)</b>	<b>4</b>
<b>Parents/guardians or children with a disability</b>	<b>4</b>
<b>Referrals from professional agencies</b>	<b>2</b>
<b>Children with English as an additional language</b>	<b>2</b>
<b>Sole supporter of family</b>	<b>4</b>
<b>Three or more children under five</b>	<b>2</b>
<b>Multiple births</b>	<b>2</b>
<b>Looked-after children</b>	<b>4</b>
<b>Children in temporary accommodation</b>	<b>3</b>
<b>Travelling children</b>	<b>2</b>
<b>Alcohol or drug abuse in family</b>	<b>3</b>
<b>Family stress</b>	<b>1 point per stress factor</b>
<b>Chronic mental health problems</b>	<b>3</b>
<b>Children living with domestic violence</b>	<b>5</b>

In contrast with the other two authorities, in Dundee a significant number of applications for the pilot provision were direct self-referrals from parents in addition to referrals from agencies such as health visitors, general practitioners and social work services. The exception to this was Rowantree Nursery, where all places were through social services and health visitor referrals, which reflected the needs of the local area.

Prioritisation of all referrals with respect to need and allocation of places was at the discretion of the head of centre. Allocation of places was based on the desire to provide a responsive and proportionate level of support that would promote inclusion, equality and the most effective use of available places.

In Dundee, once an application had been received, the usual procedure was for the parent to discuss with the head their needs and what the centre could offer in terms of number of sessions, either over the telephone or in person. At this point, the parent filled out another form which asked for further information on their personal

circumstances. Once offered a place, parents were then invited for a pre-admission visit.

In both Dundee and Glasgow, the demand for places for vulnerable children was greater than the number of available places throughout the duration of the pilot programme and before, and so there were waiting lists in place. Almost all of the children fell in Bands 1-2, and many children in Band 3 that were offered a place would have remained on the waiting list if the extended provision had not been available.

In North Ayrshire, as for Glasgow, extended pilot places were allocated via referrals from agencies such as health visitors, general practitioners and social work services. Admission panels in North Ayrshire typically comprised heads of centres, health visitors, educational psychologists, a representative from social services and a coordinator. At the panel meeting, the need of each child was assessed in accordance with North Ayrshire's banding system (see below), and the child would either be allocated a place or put on the waiting list.

Where parents approached a centre directly themselves they would be asked to discuss possible placement with their health visitor who would decide whether the child should be referred. However, once the pilot provision was in place there was no longer a waiting list for places. If a child was considered to be an emergency case, for example where there was a risk that the child may be taken into care, a place was allocated automatically.

In North Ayrshire, children were banded according to the following criteria:

**BAND 1**

Children on the Child Protection Register

**BAND 2**

Referrals from social services where:

- the child is the subject of a statutory order
- placement would help the child remain within the family environment rather than be looked after and accommodated by the local authority
- the placement would support the child's return to the family situation

**BAND 3**

Referrals from the Pre-school assessment team (PRESCAT) in relation to serious concerns about aspects of a child's development which could create a significant barrier to learning

**BAND 4**

Referrals from the undernoted agencies where there are serious concerns about the circumstances of the parent or family which would adversely impact on the child:

- Community psychiatric service
- Educational establishments
- Health visitors
- Hearing and visual impairment services
- Medical practitioners

- Psychological services
- Social services
- Associated voluntary agencies

### **3.4.2 Staff focus group views on admissions**

Staff focus groups in Glasgow and Dundee were aware that there were waiting lists for places throughout the duration of the pilot.

*'We turn away 2 year olds parents every single day – constantly'*

At the start of the pilot programme some difficulties were reported in setting up admission procedures that would identify the most vulnerable children, perhaps suggesting a gap between the system of admissions described in the previous section and its practical implementation in extending it to a new population.

*'And we had a very big waiting list of 'normal' local families and trying to sift out the more vulnerable of those without knowing them previously was really quite hard and, see probably now, we've got a better handle on identifying needs, but at the start forms were being handed in and people weren't actually being seen and talked through and they maybe weren't giving full enough information to identify those with needs – that process has improved but at first there was a rush to kind of fill the places'*

As North Ayrshire did not have a waiting list of children requiring immediate placement in the pilot it took some time for some of the centres to reach capacity. In general, admission panels were held every 6 weeks and new admissions would be identified at these meetings. There was no noticeable increase in the number of referrals during the period of the pilot. While some staff found it frustrating that places were not always full to capacity the improved staff : child ratios meant that children and parents were getting a very positive experience.

Heads of centres took responsibility for contacting potential referrers in their own locality to raise awareness of social workers and health visitors. At one centre based in an additional support needs school there was perhaps a local misconception that only children with additional support needs could be allocated a place.

## **3.5 Staffing**

### **3.5.1 Staffing organisation and qualifications**

All staff in the Glasgow centres had either an NNEB Diploma in Nursery Nursing, an SVQ or HNC in Childcare/Child Development. Child Development Officers involved in the provision worked in an adult: child ratio of 1:5. This met, therefore, the minimum Care Commission standards of 1: 5 (The Scottish Executive, 2005b). From January 2008, money from Cash for Kids was used to employ five family support workers to work across the services.

In Dundee, the participating centres all had a Birth to Three coordinator, and childcare workers at each centre were employed by Childcare at Home Dundee, an organisation in partnership with Dundee City Council. Birth to Three coordinators had BA degrees in childcare studies and childcare workers had either an NNEB Diploma in Nursery Nursing or an SVQ in Childcare. Childcare workers worked in an adult : child ratio of 1: 3 or 1: 4.

Staff appointed to work in the North Ayrshire pilot provision received intensive in-service training, and in the private and voluntary nurseries, professional support from North Ayrshire Council Educational Services was offered. In local authority

provisions, staff had an appropriate qualification in Early Education and Childcare. Although initially adult: child ratios were officially 1: 5, in practice they tended to be lower and in any case funding from Cash for Kids was subsequently obtained to employ an additional member of staff to achieve improved ratios.

### **3.5.2 Staffing challenges – views from staff focus groups**

The majority of staff workers mentioned that they had worked very well as a team. An initial lack of enthusiasm from some primary school head teachers was reported but that view changed.

*'I think for us [...] the three heads are totally committed to this. And one of our heads who was quite resistant to it at the start [...] has done a huge turnaround, I mean she's our greatest promoter of having 2 year olds in schools, from someone who said to me ... why would you put ten 2 year olds together?'*

Specific staff challenges in delivering the Dundee provision were mentioned because the Childcare at Home workers who delivered this service were only paid for the hours they worked. Since the staff then started at the same time that children arrived each morning, often the room was not set up, or Birth to Three coordinators had to set it up. There were also difficulties in terms of team-building as it was difficult for Childcare at Home workers to be included in team meetings which were usually run outside their paid hours. Focus groups suggested that an additional 15 minutes in the morning would have been beneficial.

*'That was maybe a wee issue we always had – we started when the children came in and finished when the children finished so we didn't have any proper planning time to set up in the room and things, you know. That was maybe a bit of a sticky issue. I think all of us have said that the whole way through ... maybe even fifteen minutes beforehand just to have a wee chat or set up the room for the day.... I mean, we've coped, we've managed but it would have been good to have time to discuss any issues at the time. You have to wait till Friday, maybe by Friday you've forgotten what it's all about'*

Some head teachers also felt that at the start of the pilot programme staff did not have enough time together to discuss what their values and aims were.

*'I think initially when it started we didn't have enough time, staff didn't have enough time together to discuss what their values were and their aims were. That should have happened I think initially, before children were first in the door. The time to grow as a team, even just to introduce each other! It was a case of here's the staff, here are the children'*

Local authority nursery schools in North Ayrshire were able to increase staff numbers which focus group participants felt had a significant impact on the quality of care they were able to give to both children and parents. It also enabled staff to do outreach work to support parents.

*'We were fortunate in that we got some money from Cash for Kids which allowed us to increase the staffing so we've got three staff for every ten children as part of the pilot and that's a much better ratio – it's good for working directly with the children, but it allows staff to be able to spend time with the parents'*

Heads of centres in all three pilot local authorities felt that the additional workload of the pilot programme had been a significant issue. This ranged from additional administrative work, management time that had to be dedicated to the project and follow-up work that had to be done with agencies such as social services. Some heads mentioned that they were working in their own time in the evenings to keep up with

the additional work load and that they would have benefited from additional administrative support.

Staff in Glasgow worked to a 1: 5 ratio and many centres faced difficulties working to these numbers - for example, where there were children in the programme with additional support needs, or during the initial period of settling in children, or with toilet training since at least one member of staff had to leave the floor to change children. This was also mentioned by some centres in Dundee who had also struggled with staff numbers during the settling-in period and with toilet training, and some heads mentioned that a support worker would have been beneficial.

*'It's a challenge in the sense that it takes quite a substantial amount of staff time to manage that process, and not to be rushing the child. To give them time, for intimate care and to be gentle – so that they're away again from the other children that they're working with. ... I think it's right and proper that staff should be intimately involved and for that age-group of children it's very appropriate, but it's the time that it takes to manage the process - away from the other children that they're responsible for. I don't know if what I'm saying is, 1: 5 isn't a good ratio, maybe 1: 4 would be better'*

Some staff mentioned that supporting children with additional support needs posed a significant challenge. Although staff had coped with the one or two children needing extra support, they felt that pupil support workers would have been beneficial in terms of quality of care for all children and were concerned that if the provision expanded it could be a significant issue.

*'One of the bits that's not been in place is support for children with disabilities under 3. So if you identify a child with special needs – physical, mental, whatever – there is no extra support. And it would be, can you manage that child with the staffing you've got in the room. So if it's a child needing one-on-one, that would be no. So that means that you're discriminating against that family because you can't access pupil support under the age of 3'*

Staff at one centre further mentioned that cleaning and sterilising equipment and resources in the room was very time-intensive and that they struggled to fit in planning work around this and therefore said that they would have liked support for cleaning and sterilising. Table 3-5 summarises focus groups' suggestions for additional support.

**Table 3-5: Types of additional support staff would have liked**

Type of support	Local authority
Administrative support	Glasgow Dundee
Support assistance for additional support needs	Glasgow North Ayrshire
Sterilizing and cleaning support	Glasgow
Support when settling child	Glasgow
Support for toilet training	Glasgow



### 3.5.3 Personal development and training –views from staff focus groups

A range of training opportunities was offered to staff in each local authority and staff were invited to discuss what training they had benefited from, and whether they would have liked additional training. Staff reports of training they would have liked are summarised in Table 3-6.

Staff in Glasgow reported that although they did not get specific training prior to the start of the pilot programme, they did have the opportunity to visit other establishments that already had provision for 2 year olds. The number of centres visited and the time spent in each varied but some centres felt that not enough time had been spent on visits.

In Dundee, some head teachers and Birth to Three coordinators felt that they would have benefited from more support prior to bringing in the children to discuss how to plan for the children’s development and how to implement the provision and, in addition, the opportunity to meet with staff in other local authorities who already had provisions for 2 year olds in place, and an opportunity to get together with other heads to share ideas and knowledge.

Some staff mentioned that the training they had received had not been as helpful as they had hoped since it was universal for Childcare at Home workers, Birth to Three coordinators and head teachers, whereas they would have preferred training that was more tailored to their particular needs and experience.

In North Ayrshire, local authority staff found the intensive in-service training useful and also the opportunity to spend 6 weeks in other establishments that already had provision for 2 year olds in place.

*‘Well, a great opportunity was being able to go out for that 6 weeks and go out to other establishments – and that was invaluable, I would say just to see. And you pick up good things, bad things, things you would do, things you wouldn’t and that was invaluable’*

With the exception of North Ayrshire, the majority of staff reported that they would have benefited from additional training. These covered a range of areas, including training for planning and implementing a curriculum for under 3s, management techniques for challenging behaviour, children with additional support needs and working with parents. Staff at a number of centres felt that they would have benefited from additional training for working with 2 year olds, for example on different types of play experiences for under 3s, on planning learning experiences for this age group and the written work that needs to be completed.

*‘I would have liked more on under-3 play, because I was only ever in 3-5s ... on different types of play for their age-group’*

**Table 3-6: Types of training staff would have liked**

Type of training requested	No. of centres	Local authority
Curriculum and planning	6	Glasgow and Dundee
Additional support needs	2	Dundee
Working with parents	1	Dundee
Behaviour management techniques	1	Dundee

In general, a high level of job satisfaction was reported by staff and some felt that the challenge of setting up the programme had given them a sense of achievement or increased confidence, although in Dundee staff felt disappointed once the decision had been made to end the programme after the pilot phase had ended. Staff felt that working with the 2 year olds had benefited their career development and would give them greater options for their future career.

Others felt that they had learned a lot about child development and their expectations of 2 year olds in particular. On the one hand some staff felt that initially they had expected too much of a 2 year old, whilst others felt they had previously underestimated the ability children of this age. Other aspects that staff reported having learned include the difference between children who just turned 2 and those who were nearly 3 years old and the degree to which 2 year olds can form friendships and care for each other.

*'But they are together as a unit and they're really caring with each other, that's been lovely. I'd kind of anticipated that they'd be more, I suppose a wee bit more egocentric, but they're both. They're both interestingly, they're both, and they really care about each other and care for each other which I hadn't anticipated and that's lovely'*

A positive impact of the pilot programme was that many staff felt that their working practice with 3-5 year olds would change as a result of working with 2 year olds on the pilot programme.

*'It's made me think about my practice and the way that I was...and I would say I'm totally different now. Not totally different, but I'm definitely much more willing to sit back and just say what do you want to do? Rather than having me force....more willing to give it a free reign – you know just open it up and say right, what do you want to do? And I think that's been a huge impact'*

Some staff felt that they now had a greater understanding of the needs of vulnerable families and that their confidence in working with parents had increased.

*'I think just a bigger insight to different families, just to be non-judgmental and quite sensitive because you don't know what's going on at home you can't just tar everybody with the same brush. .. I mean if you know what's going on at home, you know they're maybe having a bad day because so-and-so's happened, and mum's a bit stressed and I think, I never really would have thought like that before. I would have thought oh, they're just playing up'*

### **3.6 Programme content**

In delivering the extended pilot programmes, each local authority aimed to provide a core level of provision for each child and family as well as additional support, matched to individual circumstances, to ensure both the child and family derived maximum benefit from the intervention. The complexity and diversity of the tasks facing the service providers are such that programmes have to be both principled and sufficiently flexible to be responsive to the evolving needs of individual children and their parents. Necessarily, this is reflected in a variety of aspects of implementation.

#### **3.6.1 Programme content: children**

The programmes at the Glasgow centres were informed by guidelines including the Scottish Government's *Birth to three: Supporting all children* guidelines to encourage the development of:

- Strong self-assured, confident children

- Skilful, sociable and effective communicators
- Healthy children, both physically and emotionally their provision:
- Competent learners who respond imaginatively to the world

Learning experiences were evaluated by staff on a daily basis to reflect the needs of the children at any one time.

As for Glasgow, the programmes at the Dundee centres were also informed by the guidelines including the Scottish Government's *Birth to three: Supporting all children* guidelines (see above). Learning experiences were evaluated by staff on a daily basis to reflect the needs of the children at any one time.

The heads of the North Ayrshire centres identified the key parameters that informed

- needs of children and family should be met within their own community
- children should have coordinated packages of care, education and health
- children should have access to a safe stimulating environment on a regular basis
- parents should be supported both individually and through groupwork programmes
- parents should have access to a range of learning opportunities
- parents are the child's prime educators and should be involved in their child's learning

The focus of the North Ayrshire programmes was on 'positive learning experiences' for children, and all local authority staff received training in this area prior to working with the children. This included:

- building relationships
- using the senses
- developing language and creativity
- physical development
- enjoying the environment

These programmes were also informed by guidelines including the Scottish Government's *Birth to three: Supporting all children*. Learning experiences were planned and evaluated by staff on a daily basis to reflect the needs of the children at any one time.

### **3.6.2 Challenges in delivering the programme – views from staff focus groups**

The majority of challenges that staff faced in running the provision were operational and revolved around setting up a new provision. Staff reports of challenges faced are summarised in Table 3-7. The most common challenge that staff reported was in planning the curriculum to offer 2 year olds and, from some centres, uncertainty as to whether staff were delivering learning experiences in the best way with a lack of support or direction in this area.

One centre in particular would have liked much more support and guidance for planning and evaluation of the curriculum than was offered and greater liaison

between similar provisions within the local authority and indeed a greater degree of integration as a whole into the school to which it was attached.

A number of centres in Glasgow and Dundee felt they had brought in children too quickly in the initial stages of the pilot programme which had been a significant challenge because of the intensity of individual support each child needed at that stage.

*‘So there was three new starts, and then maybe they were upset and ... they started on a Monday and then on the Tuesday, you’d be still settling them, and then on the Wednesday you’ve got three more new starting and it just kept multiplying and just kinda got out of control’*

**Table 3-7: Staff reports of challenges of running the provision**

<b>Challenge</b>	<b>No. of centres</b>
Uncertainty over appropriate content of under-3 curriculum	7
Time to complete paperwork and assessment records	5
How to best support children with additional support needs	3
Pressure to bring in and settle children too quickly	3
Dedicating time to parents	2
Teaching children to sit at table for snack time	1

Some centres felt that they did not have sufficient time to complete paperwork and assessment records for the children. Staff at one centre suggested half an hour off the floor each week to alleviate this difficulty. Other challenges faced by staff were how best to dedicate time to address parents’ needs and concerns about parenting their children effectively. Some staff reported that trying to get a group of 2 year olds to sit down for snack was a challenge, but that now they perceived it as one of the successes of the provision.

### **3.6.3 Programme content: parents**

The family learning centres in the Glasgow extended pilots provided a range of services to meet the needs of families. These services included advice on a range of issues such as employment, drug awareness, health and parenting skills. There was also a strong emphasis on the emotional well-being of parents.

In one family learning centre, parents whose children attended the pilot provision were invited to attend weekly parent meetings and a range of classes, for example art, first aid, smoking cessation, parenting skills. Another centre held weekly ‘positive parent’ meetings, pub lunches, and parents could attend courses run by John Wheatley College in child development, first aid etc. A significant amount of support work was also carried out on a one-to-one basis with parents. The Glasgow nursery schools did not set up parent groups during this evaluation study but staff did offer support on a one-to-one basis with parents. At the time of the focus group interviews, Glasgow was in the process of appointing family support workers to set up parent groups in the near future.

Most Dundee centres ran parent groups, held either weekly or every fortnight, which consisted of parent activities with the child such as art, making and using play-dough,

as well as some classes on areas such as health, diet, behaviour, sleep, play, and ideas for activities to do at home. Parents were also consulted about what activities they would like to take part in. Some parent groups focused on activities specifically for parents rather than parenting skills, such as keep-fit, hand massage and card making. A significant amount of support work was also carried out on a one-to-one basis with parents. Parent groups were generally not well attended, and the heads of centres felt that it was the most disadvantaged parents who did not attend for a number of reasons identified later in this chapter.

A particular emphasis of the North Ayrshire provision was on building strong relationships with parents with parent groups held either weekly or every fortnight. These consisted of parents taking part in activities with their children such as arts and craft, making and using play-dough and glupe, as well as some classes on health, diet, child behaviour and play. A particular area of focus of parent groups was to reduce stress and promote well-being, and to this end many parent groups focused on activities specifically for parents such as keep-fit, reflexology, massage, rather than parenting skills. Parents were consulted about what activities they would like to take part in. Group outings, for example, to local parks or swimming baths were also arranged.

In addition to parent group meetings, a very high level of individual support was offered to parent in the North Ayrshire provisions which, in families of strong need, extended to outreach support. This outreach varied according to need, but included key workers accompanying children and parent to appointments with medical specialists, or if there were many appointments due to health issues which parents struggled to keep, staff would assist the parent by making up a diary for them.

Staff might also support parent attendance at an addiction clinic where necessary, for example by going to the first few meetings with them. Support was also given to parents who struggled to bring their child in to the nursery, for example the key worker might meet them and take the bus with them a few times, or alternatively highlight bus times on a timetable. Provisions in North Ayrshire also tried to accommodate parents' needs for child attendance at nursery, for example if a parent wanted to attend college, if possible the child's hours would be arranged to allow for this.

The majority of centres in North Ayrshire were involved in the Fit Ayrshire Babies programme, a joint venture between East, North and South Ayrshire Councils and NHS Ayrshire and Arran, which aimed to 'enable parents to have increased opportunities to engage in and be aware of the benefits and importance of play, physical exercise and social interaction within a culture of enthusiasm, enjoyment and fun'. This involved giving out 'FAB Bags' to parents, containing information and resources for particular activities, for example making and using play-dough.

#### **3.6.4 Staff focus group views on service delivery to parent groups**

Staff focus groups reported that there was a variety of provisions in place for parents and families and intensity of work with parents varied between centres and across local authorities. For example, Glasgow local authority nursery schools were not able to offer parent groups during the early pilot programme which focus groups suggested may have been related to the fact that there was no staff availability, with staff: child ratios at 1: 5 and the full 10 sessions per week being offered in comparison to 8 sessions per week in North Ayrshire and Dundee provisions. However, at the time of

the focus group interview it was noted that Glasgow was aiming to set up parent groups in the near future.

Attendance at parent groups varied between centres with some, particularly in North Ayrshire, reporting good attendance throughout the pilot with others reporting very poor attendance, often with just one or two parents attending on a regular basis. It was felt that for many of the parents, the time their child was in the provision gave them some much-needed time to themselves. Indeed this was a benefit reported by many parents in the semi-structured interviews (Chapter 5) but by the same token equally likely to be a major factor in the low attendance at parent groups. Staff also reported that parents often said they would attend upcoming group sessions, whereas in actuality they consistently did not attend.

*'For some parents it's worked really well – they tried it, wanted to participate and would come every week. There's others that it doesn't matter what you would offer them, they would not come through the door on the Friday. They would bring their child to have an extra session, but they would like to bring their child and not stay'*

In order to overcome attendance problems some staff in Dundee suggested that the ethos of the project could change to have parent groups as a main focus of the provision and parent attendance possibly a condition of the child's place. However, at one centre staff felt that parents would find a group setting too intimidating and stressful, and so the time set aside for group work was used to speak to parents on a one to one, more intensive basis to offer support:

*'I felt in the first year [...] it was just piloting, just pinpointing with that what parents were looking at and families that we were trying to support. But they were actually happy in approaching me and we had a one-to-one and like, 'Lets go and have a wee chat about it' and that's what I used the Fridays for, rather than...You know, once we had built up a relationship it was actually easier just to have a chat with me than...actually to come into a group is another step even further and harder. I thought that was another way, whereas this time we have a few more parents that are quite happy to come but in a sense they are not the ones that I'm wanting because they are quite happy to come in and 'Yes, I do this' and that is off-putting for the ones that I'm really trying to target.*

*So now I'm going to try go back to sort of a balance where one week I'll have anyone who wanted to come along, you know put your name on the list, and maybe the next week it would be a case of saying 'Is there any?'...and speaking to people and saying 'Do you want to come along for a wee chat with me?' and see how it's going even just one-to-one with their child. It's trying different ways and figuring what do we mean, is it a parent group? And the essence of parent work does necessarily need to be a group I think, because I think that the parents we're targeting, it's really hard to join a group for some of them - for some others it's easier to be part of it'*

Focus groups identified some factors that they felt increased the likelihood of attendance at parent groups:

- crèche facility for younger siblings not in provision
- strong staff-parent relationships
- opening up group to whole school to reduce feelings of segregation
- involving parents in selecting topics or activities to be covered
- running groups focused on well-being of parents rather than parenting skills

The majority of centres felt that they had built up good relationships with parents. A number of factors were identified by staff focus groups that they felt had facilitated the development of building positive relationships with parents, including having an

open door policy whereby parents could come in at any time for as long as they wished, the flexibility of staff to be able to devote a significant amount of time to working with parents, the ability of parents to speak to staff in private at any time, running parent groups and giving regular feedback to parents on the progress of children.

*'We're just very, very friendly and the door is open the whole time, you know the door is open the parents can come in, they don't come in and just lift them straight back out the door, if they want to chat they can chat. You know, if the parents need to come in and have a coffee because they've got a problem, there's three of us there so we can free up a person and they know that they can go and discuss any problems if they're having a bad day or they've had some bad news, or whatever'*

Two centres mentioned that they would have liked to have provided more support to parents early on, in order to build up relationships, for example by having home visits prior to starting at nursery or an initial meeting with all parents to explain the programme and the different services on offer.

Staff focus groups identified staff : child ratios were identified as a significant barrier to providing support to parents by many centres in Glasgow and Dundee. One centre had on its staff team someone with family support experience but it was unable to benefit from this since there were not enough staff to allow her to devote time to working with parents.

*'I've got a member of staff in the provision, who her previous post was as a family support worker and has got excellent skills in running parenting groups and things, and I would love to have cover to release her from the playroom for part of the time – particularly when it's a person from that playroom who can work with those parents because they do want that personal contact and I think that could make a big, big difference'*

One centre in Dundee felt that they would have benefited from additional space, as limitations to the space they had meant they were not able to provide a parent room.

### **3.7 Attendance**

#### **3.7.1 Patterns of attendance offered**

In Glasgow, the different settings involved in the pilot programme allowed for a variety of patterns of attendance, including:

- Attendance over term-time only (nursery schools)
- Attendance over the full year (family learning centres)
- Up to 5 part-time sessions of 2.5 hours per week in nursery schools
- Up to 5 part-time sessions of 3 hours or 2-3 full-time sessions per week in family learning centres

When setting up the new provisions in nursery school settings, sessions that ran for five days a week were felt warranted due to the high demand for places.

In Dundee, the different settings involved in the pilot programme allowed for a variety of patterns of attendance, including:

- Attendance over the full year, with the four settings amalgamating into two during holidays
- Up to 4 part-time sessions of 2.5 hours per week

The ninth session was used for parent groups and a crèche facility was in place for parents who attended this session, and the tenth session was set aside for staff development.

In North Ayrshire, the different settings involved in the pilot programme allowed for a variety of patterns of attendance, including:

- Attendance over term-time only (nursery schools, voluntary and private nursery)
- Attendance over the full year (community nursery and early years centre)
- Up to 4 part-time sessions of 2.5 hours per week

When setting up the new provisions in nursery school settings, one day was set aside for intensive work with parents; opportunities for staff development were also provided.

### 3.7.2 Attendance figures

Staff at participating centres provided attendance figures for children in the pilot programmes for the period of the evaluation study (see Table 3-8).

**Table 3-8: Attendance figures**

	<b>Attendance (percentage of sessions attended)</b>
<b>Glasgow</b>	
Acredyke Nursery School	88
Bellrock Nursery School	77
Bridgeton Family Learning Centre	82
Budhill Family Learning Centre	91
Castlemilk Family Learning Centre	73
Elba Lane Nursery School	66
Kincardine Nursery School	79
London Road Nursery School	86
Molendinar Family Learning Centre	53
<b>Dundee</b>	
Fintry Nursery School	81
Frances Wright Preschool Centre	80
Park Place Nursery School	75
Rowantree Primary School	69
<b>North Ayrshire</b>	
Busy Bees Nursery	<b>88</b>
Corsehill Primary School	93
Cumrae Primary School	85
Garnock Valley Early Years Centre	80
Springvale Nursery	<sup>6</sup>
Stanecastle Primary School	
West Kilbride Nursery	good

Outreach work to help bring children to the centre was offered to families in North Ayrshire and in Dundee, through the childcare workers employed by Childcare at Home. West Kilbride Village Nursery offered a bus or taxi service to bring children

<sup>6</sup> Blank cells indicate where numbers not received from centres



to and from the nursery, since the children in the pilot were from outside West Kilbride.

### **3.7.3 Factors that helped and hindered attendance (parent telephone interviews)**

Twenty telephone interviews were carried out with parents who participated in the extended pilot project across the three local authorities. Regular attenders and those with attendance issues were identified by staff. We recruited from these based on geographical spread (see section 2.5.2) and on those who had previously agreed to take part in interviews at pre-test phase when we invited every third parent to take part.

Interviews were audio-recorded, transcribed and analysed. Interviewees were invited to discuss any ongoing difficulties they faced in bringing their child to nursery, whether there had been any difficulties they had overcome, and also what might make it easier for them to bring their child to the centre. Parents of both regular and poor attenders were asked the same questions in a positive manner. Poor attendance was not mentioned during interviews by the researcher in order to avoid parents who had difficulty attending feeling criticised or that they were being called to account for absences.

Barriers to attendance emerging from these interviews are summarised in Table 3-9. As can be seen from the table, these included transport issues such as not having a car or a lack of good public transport and the nursery being a distance from home.

However, lack of transport was clearly not the only barrier to attendance as three parents with attendance problems reported that they lived very close to the nursery which made it easy to bring and collect their child. Other reasons reported were parent or child health problems, younger siblings at home making it difficult for parents to bring a child to nursery, lack of family support to help bring or collect a child and the early start for morning sessions.

*'It would probably be easier if it was afternoon because, you know, I'm a wee bit better in the afternoon when I'm not so rushed'*

One parent who withdrew her child from the programme felt that the child had not settled well initially and that the nursery had been too quick to phone home to ask the parent to pick up the child.

*'I'm not sure, maybe they just...when she was like upset they would phone us instead of try to keep her in a wee bit longer, so we'd have to go down. I think if they kept her in, just spoke to her and that she would have been able to settle in a wee bit more. Like, say like we took her in – say like an hour or half an hour later they would call and say she was upset. But I think that was because...maybe if they just left her for a wee while and...she would have settled, I think'*

Another reason given was the length of sessions offered.

*'It would help if it was longer because I just feel like I'm getting to the nursery and then I'm having to go and collect him'*

One parent felt that there was a lack of personal support from other agencies in general.

*'There's no help or support in that aspect. I know that the nursery....it's got nothing to do with them it's just all these other professionals that are supposed to be out there to help. You know, I suffer from depression and anxiety anyway, for me to overcome my anxieties and fears and stuff...'*

Another parent mentioned in a semi-structured interview, rather than during a telephone interview, that they suffered from depression which made it difficult to bring their child to nursery.

*'I've got depression as well, so most of the time I don't want to really leave the house and get him up and ready for the nursery and stuff [...] it does help until the minute that I have to get up and come and get him again. That's probably the worst part, is having to come back and get him'*

Four parents identified as having poor attendance did not however report any difficulties in bringing their child or identify any reason why their child might have attendance issues, which may reflect the fact that poor attendance was a result of personal issues or chaotic lifestyles.

**Table 3-9: Barriers to attendance reported by parents**

<b>Barrier to attendance</b>	<b>No of parents</b>
Transport issues	4
Younger siblings	3
Early start	2
Parent health problems	1
Child health problems	1
Session length	1
Difficulty getting child out of the house	1
Child didn't settle well	1
Lack of personal support	1
Lack of family support to bring or collect child	1
No difficulty reported or reason given	4

Parents identified a number of factors that helped in bringing their child to the pilot programme, as summarised in Table 3-10. It should be noted that parents could identify more than one barrier or factor helping. Some parents mentioned that having a car made it easy for them to bring and collect their child, while others reported that they lived very close to the centre so did not have far to walk.

Other factors reported that made it easier for parents were having one or more other children to bring to nursery or school at the same time and family support bringing child to nursery, in fact one grandmother interviewed reported that she had taken early retirement in order to look after her grandchildren.

*'Well, I'm actually their gran so I actually retired to look after them. They couldn't afford to put them in a full time nursery'*

One parent reported that they had changed their working hours to night shifts in order to be able to bring their child to nursery.

*'Well, at the moment I'm only working at night-time because I can't during the day because it doesn't fit in with her nursery. So, mainly that – I've had to sort of put work on hold to take her to nursery. She's only there two afternoons for two and a half hours, you know, so it's like five hours a week so there's not enough time'*

**Table 3-10: Factors that help attendance reported by parents**

	<b>No of parents</b>
Short distance between home and nursery	7
Use of a car	5
Family support bringing child	5
Siblings to bring to nursery or school	3

Some parents who identified barriers to attendance mentioned a number of factors that would help overcome the barriers they faced, including assistance bringing their child to nursery on some days, longer hours in the nursery, having a car. One mother reported that accessing the nursery on foot through the school grounds increased her travel time significantly, and in bad weather this was particularly difficult.

*‘Well, really and truly, it would make it so much easier for me if they would make a gate. It’s such a distance to go right round the whole school [...] And on a wet day it’s.....like today with this wind it’s absolute murder getting the pram all the way up there. If they could just make a gate down at the bottom, my life would be so much easier. Me and a hundred other people’*

### **3.7.4 Staff views on attendance**

Staff focus groups were asked what might make it difficult for parents to bring their child to nursery, their perceptions of what factors helped attendance and what might help resolve attendance problems. These findings are presented in Table 3-11. The most common barriers to attendance mentioned by staff were chaotic lifestyles and personal issues, and a lack of parent motivation to bring their child. Some staff felt it was difficult for some parents to go outside.

*‘They maybe don’t have much self-esteem or they don’t like going outside, and I think to get them over that initial hurdle and get them here is the biggest challenge’*

In agreement with parent reports transport issues, including having to walk long distances, were also identified as a barrier to attendance, particularly in Dundee where staff thought this was a significant factor for many parents since they had long distances to travel. In this context, staff felt that bad weather was a significant barrier to attendance for parents who had to walk to the centres.

Child illness and session length were also identified as barriers to attendance in accordance with parent reports in section 3.3.2 above. Staff viewed other commitments such as medical appointments as barriers to attendance for some parents who had regular appointments or whose children had additional support needs.

**Table 3-11: Staff perceptions of reasons for attendance problems**

	<b>No of centres</b>
Chaotic lifestyles/personal issues	7
Lack of parent motivation	6
Transport issues	4
Weather	4
Child illness	3
Session length	2
Other commitments e.g. medical appointments	1

Staff identified a range of factors that they felt had helped attendance, or that might have helped parents resolve attendance problems, as summarised in Table 3-12 . These included outreach support getting to nursery, a full-time place for their child, siblings to bring to nursery or school and flexibility in the length of sessions or adjustment to session arrival times to better suit the parent.

*‘We have one mum who has just had twins, actually her wee one’s in the three to five room [now], but that could have been an issue trying to get all three out in the morning but we make allowances for that and actually what we ended up saying is don’t worry if you can’t get in for say half past nine in the morning or whatever time as long as you are coming along at some stage in the morning and it’s good to see them and I think that’s helped. So there’s been a bit of flexibility there’*

Staff mentioned that for parents who had regular appointments to a crèche facility for siblings helped parents attend appointments and also facilitated attendance at the programme by allowing them to bring all their children to the centre together. Also mentioned was good communication between agencies such as health visitors which enabled staff to understand better reasons for children’s poor attendance and to try and help parents experiencing difficulties.

**Table 3-12: Staff perceptions of factors that help attendance**

	No of centres
Flexibility in length of session/session times	3
Full time place offered	3
Outreach support getting to nursery	2
Communication between other agencies and centre	2
Siblings to bring to nursery or school	1
Crèche facility for other children to enable appointments to be met	1

Some staff felt that children of working parents were the most regular attenders since they had a set daily routine and needed their child to be in nursery in order to work.

*‘The ones that are really good attenders are probably the ones that are working that really, really need the place. The other children, some of them, they’re kind of like that: [key worker’s name] – it’s the weather’. I think like, you know, the working parents they seem to be more like regular attenders than the ones who aren’t working – because obviously they’ve got a set routine. They’ve got to drop the child off at a certain time to get back to work, or you know, come back and collect them’*

In one centre, staff felt that children who were not living with their parents had better attendance and were more motivated to bring their child to nursery.

*‘I would say the regular attenders are the ones that are not living at home with mum, maybe other family – they’re the ones who are here the most... They make more effort to come. I think they appreciate it more’*

One centre that had children with additional support needs felt that all the children attended regularly since the child had a higher level of need, parents were motivated to bring their child.

*We’ve not hit that yet, with the parent that has the issue – we had one of them yes, but at the minute we don’t. So in that respect it’s our children that are quite needy as opposed to the parents being needy so the parents are keen to bring their children along’ ‘The*

*difference we have now from the last time is our parents are aware that their children have some sort of need as opposed to working with parents who perhaps the parent has the need – our parents can see the benefit of how this program helps their children so they want to bring their child along, as opposed*

Staff members of the centre where one mother reported that accessing the nursery on foot was a significant barrier because of the long distance of the path also raised this issue as a significant barrier to parents.

*'Unless they make a quicker route through the building, no. Because what they've actually got to do is come along the road, and come right up round the main road and back past the pitch and down. So they've...most of them have got to come from there and there's not a walk-way through so they're actually having extra distance. And when it's raining there's no way you'd walk your wee one in it – I know I wouldn't'*

### **3.8 Further reflections from childcare strategy managers**

All managers felt that the pilot programme had been very successful in terms of the benefits to families that had taken part, and that it had also raised the profile for working with under 3s. In Glasgow it was reported that the high level of demand for places on the programme had highlighted the fact that more nurseries were needed to cope with the demand.

*'I think ours is going very well, but what it's highlighting is for us I suppose, is that because there's other areas that have started the 2s, the waiting lists is such that we need to open up another nursery in that area just to deal with the 2s. So it's kind of upped the expectation I think, quite a lot'*

In Dundee it was reported that the pilot programme had allowed them to reach families that they would not have been able to access otherwise. In North Ayrshire a major benefit of the project was reported to be that there was no longer a waiting list for places for 2 year olds in need of provision.

It was also felt that the pilot programme had been excellent for staff development, and that each local authority would benefit from the increased understanding of staff in working with vulnerable families, and young children generally, not just 2 year olds. The pilot programme had also led to development of new training for staff in local authorities, for example in North Ayrshire nursery nurses would now be offered training on working with under 3s.

*'We've also used the pilot to raise the profile of working with under 3s in our authority as a very key role for nursery nurses, so we've had a huge programme of in-service training which staff in the pilot have had priority places on, but we've opened the places up on these courses to staff who work with under 3s both in the local authority and in private and voluntary sector. And we've also encouraged nursery nurses who work in nursery classes to attend this training as well and flag it up a bit. Because people who work with 3-5s have a lot to learn from the principles of working with under 3s'*

It was also reported in North Ayrshire and Glasgow that as a result of the pilot programme, the possibility of supplementing future training for supporting parents effectively was being investigated.

*'We want to look at the kind of training that our nursery nurses need to be able to support parents effectively. Now they've done really well as part of the pilot and there's a lot of work going on in our other nurseries but these women come into nursery nurses because they want to work with children - they're trained to work with children. However because of the vulnerability of these children the staff have....a lot of them are very keen to offer*

*that support. Some of it is about knowing what service is there and signposting but they are the ones, the nursery nurse, the key worker builds up the relationship with the parent and we think they are the key person. So we want to look at that.'*

Although the local authority provisions in Glasgow nursery schools did not offer specific programmes for parents during the pilot phase, family support workers had been appointed and ideas for future plans for supporting parents were discussed at the focus group. These included running parent and toddler groups for families on waiting lists for places, arranging pre-admission home visits and greater liaison with other agencies such as the PACT team and running parent groups for children in the provision.

It was indicated by service managers that the duration of the pilot programme would have benefited from being increased since the process of recruiting staff, building work and setting up the provision took a significant amount of time and so the provisions were not all up and running for a full 2 years.

### **3.9 Summary**

Staff perceptions of the pilot programme were positive. Many of the challenges they identified were teething problems associated with setting up the pilot programme as a new provision. Most staff felt they had successfully overcome these challenges.

Time seemed to be a key issue in a number of ways.

Staff pointed up the importance of allowing sufficient time for programme set-up before admitting children - time for completion of building work, developing appropriate admissions procedures, team-building and training staff in working with parents and with this particular age group of children.

In addition they recognised the importance of regular time on a weekly basis for administration and team meetings and also adjusting the pace of admitting new children to the programme to allow staff sufficient time to spend with children to help them settle.

Staff : child ratio was an issue that concerned many staff.

Ongoing training and support were recognised as helpful in the set-up and delivery of the pilot programmes.

## CHAPTER FOUR: CHILD PROGRESS

### 4.1 Chapter overview

We report in this chapter on child progress outcomes in the pilot programme intervention group and compare them with progress in the comparison group.

We do this by triangulating findings from both quantitative and qualitative methods and findings from different stakeholders.

Findings presented here are based on:

- 30 semi-structured parent interviews
- 15 staff focus group interviews
- Quantitative GAS and ASBI evaluations carried out by staff
- Standardised Bayley-III cognitive and language assessments carried out by our research team
- Standardised Bayley-III social-emotional and adaptive behaviour questionnaires completed by parents

### 4.2 Parent views of child progress

Thirty semi-structured parent interviews were carried out across the three local authorities who participated in the extended pilot project (see Table 2-6). Interviews were carried out between January and March 2008, between the pre- and post-test phases of the evaluation which meant that children had been in the programme at least three months when these interviews took place.

Interviews were audio-recorded, transcribed and then coded as described in Chapter 2. All but one family chose to have the mother carry out the interview so the interview sample comprises 29 mothers and 1 grandmother. We have used 'mothers' or 'parents' as a generic term in the report to describe this interview group as this term would seem to reflect the group composition better than the broader term 'carers'.

Interview findings are presented as matrices which provide an accessible visual format that allows the richness of set of qualitative data to be accessed with the same ease offered by a table of quantitative data. Matrix presentation facilitates both an overview of a large amount of interview data, as well as providing a clear audit trail to support the conclusions drawn from the parent interviews.

All 30 parents identified new skills that their children had learned through attendance at the pilot programmes. These examples of child learning are presented in Table 4-1 categorised according to themes, with each theme illustrated by a quote from a parent interview with the number of parents who made a similar point noted in brackets. For example, '*Social skills: Interacting with children (29)*' refers to 29 parents having identified social interaction with peers as an area of child learning through programme attendance. The particular illustrative quote was provided from the interview with Parent 16 [P16] but the other 28 parents said something very similar.

We can see from Table 4-1 that improved social skills and speech were two significant areas in which parents had noted developments. From the social skills column in Table 4-1 it can be seen that this area covered interactions with adults and peers as well as sharing and polite manners. From the 30 interviews, 47 examples of

improvements in these different social skill areas were noted.<sup>7</sup> For speech, 37 examples of new skills in communication and knowledge of nursery rhymes were recorded.

Daily living skills, general intelligence and emotional development were also areas that parents mentioned as having improved with examples in the matrix of growing independence and confidence, better meal-time and sleep behaviours and improved concentration and attention at home.

Furthermore it should not be necessarily assumed from the interview data that the remaining children showed no progress in these areas. It may be that some mothers viewed their children as always developing well in these areas and that they were continuing to make steady progress in attending the pilot programme. Particular developmental areas may have salience for different mothers at different points in time. These data are parental perceptions of their children's progress and reflect their own experiences and personal values.

In addition to the child learning reported in the Table 4-1 matrix, two parents whose children had significant movement and coordination problems commented that the nursery had really improved their child's ability in this area.

*'before when we went to the soft play she would just sit there because her coordination wasn't so good but we took her the other week and she was up and down the rides and stuff, and her coordination's really improved. The girls as well have.....erm, she wasn't that confident in getting up from sitting to standing, they've really, really encouraged her to do that'* [P28]

While comments were overwhelmingly positive in terms of child learning, there were nonetheless a few negative comments. Two mothers felt that there could be more focus on formal learning:

*'In this nursery they're not really focusing on the actual learning of things whereas when you go into the three and four nursery they're more inclined to be saying...this is red, blue, orange, green or whatever else, you know. Maybe it's just the way I'm feeling but I think she just comes here to paint, draw and get covered in sand'* [P13]

Three parents were concerned that the child had picked up bad language or behaviour habits from other children, and another three felt that the nursery had no impact on their child's difficult behaviour.

*'I thought he would have calmed down a bit. But his behaviour and stuff has not changed much at all'* [P20]

Two mothers were critical of toilet training programmes; one parent was concerned that the number of times her child had a toilet accident in the centre depended on which staff were present at the time. Another mother commented that her child used a potty at home and that this was not allowed in the nursery.

*'Err...well when I first started here he was using a potty at home. Erm, and I had brought the potty in hoping he could use that in the toilet and he'd be able to use that but they*

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<sup>7</sup> Mothers gave examples of child progress across more than one area for their child, hence the number of illustrative examples exceeds the number of interviewees



**Table 4-1: Parent interviews - child skill learning**

Social skills	Cognitive skills	Daily living	Speech and language	Emotional
<p><b>Interacting with children (25)</b>                      'She's been learning to make friends more easily now. Before she used to hide whenever someone would try to approach her but she smiles at them now' [P16]  <b>with adults (9)</b>                      'When I took her down the town people would stop and talk to her ... she just clammed up. But see now, when they stop and talk to her she never shuts up – she talks all the time' [P25]</p>	<p><b>General intelligence (16)</b>                      'I have never mentioned that to her, you know, about circles. ... but she said 'oh, these are circles' and she has definitely got that from here and not from me. So, she is obviously absorbing quite a lot of what they are teaching them'. [P9]</p>	<p><b>Toilet training (12)</b>                      'Well, she's now in her pants, she's out of nappies altogether and she only started here in September.' [P25]</p>	<p><b>Speech (23)</b>                      'He can hold a conversation with you now. He's got full sentences and he's just came on leaps and bounds there. He's understood by everybody basically because he's got a good vocabulary.' [P30]</p>	<p><b>Independence (15)</b>                      'Independence has been a big thing for him – just to go off on his own and things and not have me with him.' [P24]</p>
<p><b>Sharing (10)</b>                      'She's a lot better with like sharing, giving to other children sort of stuff' [P19]</p>	<p><b>New learning opportunities (8)</b>                      'I suppose in my house you don't get out like a bucket of sand in your living room and you don't get out big trays of jelly for them to fidget about and play with ... it's benefited him where he's playing with things he would normally not do in my house' [P27]</p>	<p><b>Understanding routines: Daily routine (8)</b>                      'The routine, the routine of coming, that's part of the day – he's learning that' [P6]  <b>Tidying up routine (2)</b>                      'It's definitely benefited him now because in the house ... he knows it's tidy-up time and he'll go and he'll help me tidy up.' [P30]</p>	<p><b>Nursery rhymes and songs (14)</b>                      'He's coming on great with his nursery rhymes. He knows all his nursery rhymes and they are teaching him more nursery rhymes' [P1]</p>	<p><b>Confidence (5)</b>                      'it's totally boosted her confidence and everything' [P11]</p>
<p><b>Manners (3)</b>                      'She's learned that she has to be polite to the other weans. And that's quite helpful, because she does do like please, and thank you and excuse me, now' [P26]</p>	<p><b>Listening attention (7)</b>                      'It's a lot easier for me when she comes home and saying to her, 'right' and she sits and she listens more. She's more content in sitting down and like taking instructions from you than what she was before' [P10]</p>	<p><b>Eating (6)</b>                      'There are certain things that he will actually eat whereas in the past he wouldn't, like he didn't like the feeling of an orange.' [P2]</p>		<p><b>Dealing with frustration(2)</b>                      'Well, it's taught her how to play with other weans without screaming and pushing them over' [P26]</p>
	<p><b>Concentration (3)</b>                      'His concentration is better... if he's got a train track he'll actually try and fit it himself... it didn't go, so he went mental...but he will try now.' [P4]</p>	<p><b>Sleeping (3)</b>                      'She used to have problems sleeping - she's begun sleeping. She gets tired I would say, so she sleeps very well.' [P16]</p>		

*weren't able to do that because of health and safety reasons. Erm, so that made it difficult because he wasn't ready to use a toilet and there was only toilets available' [P5]*

#### **4.2.1 Summary**

All mothers reported that their children had learned a range of new skills throughout the period of their attendance at the extended preschool pilot intervention, particularly in the areas of language and social interaction.

#### **4.3 Staff views of child progress**

##### **4.3.1 Goal Attainment Scaling**

As explained in Chapter 2, in order to acknowledge and identify the diversity of goal-setting across the different centres, but also to provide a common metric that allows different outcomes to be summarised and compared, the evaluation utilised Goal Attainment Scaling (GAS) to complement the standardised Bayley III measures of child outcomes.

We developed a variation to GAS methodology to deal with the commonality of goals within centres in the pilot projects. Using GAS, an individual's progress can be recorded and evaluated according to a continuum of pre-set goals. A five point Likert scale is developed which contains five different goals ranging from most favourable outcome (+2) to least favourable (-2).

The process requires staff firstly to state what the individual's target is for that period. This, the most likely outcome, is given a value of 0 in the centre of the five point scale. Next staff identify what they would consider to be a better outcome than expected for that individual (+1), and what would be the best possible outcome (+2).

Staff are asked to identify the individual's current base level performance at the beginning of the evaluation period at -1 in the scale (Carr, 1979; Imich and Roberts, 1990; MacKay and Lundie, 1998). They are also required to identify one goal below individual's current performance level to allow for the possibility of a worse than expected performance (-2), which can occasionally happen.

At the close of the evaluation period, staff carry out re-assessment of goals in order to determine progress over that period. The scale allows for recognition of individuals who are achieving beyond the goals set for them.

Each of the five points on the scale is operationalised with a specific and achievable verbal descriptor in order to clarify exactly what the target goals are. While goals are individualised, the use of the numerical Likert scale allows for the provision of a common metric to compare data across groups of individuals. The use of this common scale with individual, often diverse, targets allows evaluation to take place then not only at the level of the individual but also at service level by summarising how many service users achieved at or beyond anticipated goals.

In our adaptation of GAS, instead of asking each centre to identify five outcomes for each of five goals for each child participant separately, we asked each centre to draw up a set of *nine* consecutive outcomes that would cover each of their goals for the anticipated range of child developmental needs in each of five goal areas specific to their centre.

The purpose of this was for the centre to have an extended set of scales from which a subset of five should apply to any child attending their centre. This meant that centres did

not have to take time to develop entirely new scales for the study for every child, but instead allowed the evaluation to build upon the commonality of goals for all children within that centre, at the same time still allowing for individual children having very different developmental needs with regard to this area.

Thus, nine point scales allowed for a large range of differing child needs and five points could be selected from the nine, with some children working higher up or lower down the hierarchical ladder of targets. For the occasional child to whom the pre-established targets were not applicable, new targets could be developed. This methodology was economical in terms of centre staff and researcher time.

In our evaluation, then, during Phase 1 (pre-test), our researcher visited all 18 participating centres to help them develop their own local set of goals for measuring child and parent change.

Centres were asked to identify five developmental areas for child and also parents where applicable, that were central to their work. They were then required to produce a nine point scale in each of these areas, i.e. nine consecutive goals, as explained above. For each child participating in the evaluation study, staff then selected a -2 to +2 continuum of five goals from the nine point scale and the identified -1, a baseline point for each child.

Examples of two scales developed for individual children in the study are presented in Table 4-2 below. Staff completed pre-test GAS during the initial pre-test phase from September to December 2007, once children had been in the provision for at least one week. Staff completed post-test GAS during the post-test phase from April to June 2008.

**Table 4-2: Examples of GAS scales**

	<b>Language and communication</b>	<b>Learning to play cooperatively</b>
+2	Ability to tell a complex story	Child is confident and happy to be part of a group
+1	Joins sentences to tell a simple 'story'	Child begins to play with other children in a group
0	Can use a simple sentence	Child shares and interacts with another child without support from key worker
-1	Uses short words and phrases and knows a lot of words	Child engages in solitary play
-2	Mainly non-verbal communication	Child cannot settle

Of the 18 centres taking part in the evaluation study, two did not complete the pre-test GAS evaluations for participating children at their centre. Four from the remaining 16 centres did not complete post-intervention GAS evaluations for their participating children. Thus 12 centres participated in both phases of GAS in the current study, completing pre- and post-intervention evaluations for 79 children. For breakdown by local authority see Table 4-3.

**Table 4-3: GAS evaluation by local authority**

<b>Local authority</b>	<b>Number of children in GAS evaluation</b>
Glasgow	33
Dundee	39
North Ayrshire	7

As can be seen from Table 4-4, a number of common goals were in evidence across centres: language and communication, learning to play co-operatively and toilet training were selected as key goals by over half of the centres who participated in the GAS evaluation phase.

As well as reflecting such commonality, Table 4-4 also shows how GAS accommodates diversity as it can be seen that emotional self-awareness and fine motor skills were key goals only for specific centres. Although there were differences in how different centres expressed their language and communication goals, GAS allows us to summarise the overall progress of the participating centres on their own goals by -recording which children had reached which of their five centre-specific language and communication goal achievement levels from +2 to -2.

**Table 4-4: Commonality of goals by centre**

<b>Goal</b>	<b>Number of centres selecting this as key goal</b>
Language and communication	10
Learning to play co-operatively	9
Toilet training	7
Promoting staff/parent partnership	6
Social behaviour skills	6
Meal time behaviour	5
Separating from parent	5
Gross motor skills	3
Adjusting to nursery routine	3
Emotional self awareness	1
Fine motor skills	1

Table 4-5 summarises progress across goals. Of the 65 children who were evaluated in terms of language and communication, it can be seen from Table 4.5 that staff reported 67% children in their centres to have obtained better outcomes than expected, having achieved +2 and +1 goal levels, and 25% achieved the level of progress expected (level 0). Language goals focused on helping children to developing their basic use of words to communicate their needs, to using sentences to telling a complex story about something that happened to them. These GAS results indicated that 92% children achieved at or beyond the language goals set for them by their centre during the intervention period, an impressive outcome.

Learning to play co-operatively was an important goal for nine centres (see Table 4-4). This reflected goals concerning children learning to participate in a range of play

experiences, develop play skills and cope with social aspects of play such as sharing toys, choosing activities and turn-taking. Results in Table 4-5 showed that 97% children reached goal levels at or beyond those expected (69% reached +1 and +2 levels; 28% achieved the outcome level expected).

Improving child meal-time behaviour was seen as an important goal within five of the participating centres (see Table 4-4). This focused upon developing healthy eating habits, willingness to try new foods and the accompanying social skills associated with meal times. Of the 33 children evaluated within this area, progression to levels beyond those expected was seen in 82%. Furthermore 15% reached anticipated levels, showing excellent improvement in this area (see Table 4-5).

Table 5 shows high levels of progress in the area of social behaviour skills. This category incorporated social competence, learning how to behave appropriately with other children and how to play cooperatively as part of a group. Of 42 children who were reported as working towards social behaviour goals, 59% achieved levels of progress which went beyond the centres' expectations of the children and 29% achieved the desired level which was anticipated by staff.

Five centres viewed separating confidently from parents as an important developmental goal (Table 4-4). Again we see good progress here in Table 4-5, with all except one child achieving at or beyond the targets set.

We can see from Table 4-5 that the majority of children achieved the goals which were set for them or progressed to levels that were beyond staff expectations. Toilet training was the only area in which a lapse in progress was noted. Of the 44 children working on toilet training goals, 2 were said to have lost confidence during the intervention period (-2). Toilet training is notoriously a tricky area with young children and a variety of factors contribute to problems in this area (Stadtler, Gorski and Brazelton, 1999). Even so, 80% children progressed to levels at or beyond those expected in developing toileting skills.

It should be noted that there is considerable overlap between the goals achieved as identified by centres through GAS, child progress reported by parents through interviews in Section 4.2 and child progress reported by standardised measures in Section 4.4. This triangulation of findings from different respondents and by different methods provides a strong evidence base for child progress having taken place during the evaluation period.

Six centres reported an explicit focus on building parenting capacity (see section 1.3.2). Their staff worked to build positive partnerships with parents in order to assist with parental confidence and collaborative participation in their children's development and learning. Thus staff encouraged parents to engage with centre staff, to talk with them about their children, ask for help, take part in parent groups or take advice from staff to help with their parenting skills. 50% parents achieved goal levels in the development of staff/parent partnerships beyond those their centres were have expecting, while 29% were reported as having reached the expected goal level for the period. Parenting capacity outcomes are addressed more fully in Chapter 5.

**Table 4-5: Progress across goals**

	<b>Progress well beyond expected level (+2)</b>	<b>Progress beyond expected level (+1)</b>	<b>Progressed to expected level (0)</b>	<b>Maintained initial level (-1)</b>	<b>Poorer outcome than at start (-2)</b>	<b>Total</b>
<b>Language and communication</b>	19 (29%)	25 (38%)	16 (25%)	5 (8%)		<b>65</b>
<b>Learning to play co-operatively</b>	25 (43%)	15(26%)	16 (28%)	2 (3%)		<b>58</b>
<b>Toilet training</b>	10 (23%)	10 (23%)	15 (34%)	7 (16%)	2 (4%)	<b>44</b>
<b>Promoting staff/parent partnerships</b>	8 (18%)	14 (32%)	13 (29%)	9 (21%)		<b>44</b>
<b>Social behaviour skills</b>	11(26%)	14(33%)	12(29%)	5(12%)		<b>42</b>
<b>Meal time behaviour</b>	19 (58%)	8 (24%)	5 (15%)	1 (3%)		<b>33</b>
<b>Separating from parent</b>	16 (62%)	5 (19%)	4 (15%)	1 (4%)		<b>26</b>
<b>Gross motor skills</b>	3 (12%)	10 (40%)	9 (36%)	3 (12%)		<b>25</b>
<b>Adjusting to nursery routine</b>	15 (57%)	9 (35%)	2 (8%)			<b>26</b>
<b>Emotional self-awareness</b>	1 (14%)	5 (72 %)	1 (14%)			<b>7</b>
<b>Fine motor skills</b>			5 (100%)			<b>5</b>

#### **4.3.1.2 Summary**

Staff at centres in the extended pilot provision reported progress across a range of child goals, particularly in language and social interactional goals.

#### **4.3.2 Adaptive Social Behaviour Inventory (ASBI)**

Staff at participating centres who were familiar with each child were asked to complete ASBI questionnaires for each of the children taking part in the evaluation study. The ASBI (see section 2.2.3) was developed to assess social competence in high-risk children, particularly social behaviours that may be influenced by preschool experiences.

ASBI questionnaire responses were divided into four subscales as described by Hogan Scott, & Bauer (1992): *express* which is a measure of the child’s expression in social situations (sample item ‘is open and direct about what s/he wants’), *comply* which is a measure of compliance with requests (e.g. ‘accepts changes without fighting against them

or becoming upset’), and *disrupt* which is a measure of antisocial and worried behaviour (e.g. ‘gets upset when you don’t pay enough attention’). The fourth subscale was *pro-social*, which is the sum of the *express* and *comply* subscales. Higher scores indicate better behaviour for the subscales *express*, *comply* and *pro-social*, whereas lower scores indicate better behaviour (in terms of lower incidence of disruptive behaviour reported by staff) for the *disrupt* subscale.

Of the 18 centres taking part in the evaluation study, three centres did not complete pre-test ASBI questionnaires. Three from the remaining 15 centres did not complete post-test ASBI questionnaires for their participating children. Thus 12 centres participated in both phases of the ASBI in the current study, completing pre- and post-intervention questionnaires for 70 children. For breakdown by local authority see Table 4-6.

**Table 4-6: ASBI evaluation by local authority**

Local authority	Number of children in ASBI evaluation
Glasgow	38
Dundee	23
North Ayrshire	9

Mean ASBI scores are shown in Table 4-7.

**Table 4-7: Pre- and post-test means (and standard deviations) for teacher reports of adaptive social behaviour**

ASBI measure	Pre-test	Post-test
Express	38.32 (9.78)	49.78 (10.37)
Comply	26.14 (6.95)	34.14 (7.88)
Disrupt	14.87 (4.68)	12.74 (5.04)
Pro-social	64.55 (15.45)	83.93 (17.14)

Paired t-tests showed that progress in behaviour was statistically significant for each of these scales. Positive behaviour subscales of the ASBI showed significant improvement: *express* ( $t(68) = -10.42, p < .001$ ); *comply* ( $t(69) = -10.46, p < .001$ ); *pro-social* scores ( $t(68) = -11.31, p < .001$ ) Each of these showed large effect sizes of  $r = .8$ . There was also a significant reduction in negative social behaviour as measured by the *disrupt* subscale ( $t(68) = 3.99, p < .001$ ), with a medium effect size ( $r = .4$ ).

These findings suggest that participating centres were effective in terms of promoting pro-social behaviour and reducing anti-social behaviour.

Although no prior study using ASBI measures seems to have used the same repeated-measures design (see section 2.2.3), these findings are potentially important since earlier studies have found a lasting impact of pre-school attendance on pro-social behaviour which is maintained throughout Key Stage 2 until Year 6 (Sammons et al, 2008).

#### 4.3.2.1 Summary

ASBI findings show good progress in social behaviour and triangulate well with parent views of child progress and Bayley-III social-emotional scores.

### 4.3.3 Staff focus groups

As with parent interviews, staff views of child progress were very positive. Findings are presented in Table 4-8 with each theme and the number of centres who noted each theme in brackets.

**Table 4-8: Areas of child progress reported by staff**

Emotional	Social skills	Speech and communication	Daily living	Cognitive skills
Independence (4)	Interacting with other children (5)	Speech (7)	Toilet training (6)	Listening (1)
Confidence (8)	Sharing (1)	Communication (3)	Daily routine (4)	
	Clear boundaries (2)		Eating and diet (6)	
	Manners (2)			

Emotional development was a significant area in which staff noted improvements, for example increased confidence and independence.

*‘There’s a big difference...one wee boy was scared of everything when he came in and his confidence has come on a lot – he’s not nearly as frightened’*

As with parent interviews of child progress, improved social skills was an area in which staff had seen developments, which covered interactions with peers, sharing, polite manners and understanding boundaries.

*‘Huge, absolutely huge benefits. I think the biggest one is boundaries – lots of these children have got no boundaries at all. They don’t know that no means no [...] there’s no please and thank-yous, and initially you do come across a bit of...well, tantrums and all the rest of it, but then now – to see those children now – they can say please and thank you and it’s just slowly...’*

Speech and communication was another significant area in which staff noted developments:

*‘Their language skills are coming on, I mean they were very, very poor talkers - you were getting one word - now you are getting phrases and they’re beginning to ask questions and answer back, and that really has come on’*

Daily living skills were also areas that staff mentioned as having improved which included toilet training and eating, for example table manners and diet.

*‘Like for example, in the beginning they used to steal the food from each other’s plates and they would gorge, they would stuff as much food into their mouths as they possibly could and now they’re happy to sit at the table, with their own plate and they take their time – they’re not stuffing food in. So that has been positive as well’*

Children learning daily routines was also seen as a benefit by some centres.

*‘It’s a simple routine – a lot of the children lack routine at home [...] but in here you can guarantee our children will know right, tidy-up time, then song time, then lunch time, then it’s brush your teeth time’*



Many centres perceived a major benefit of the provision to children was that any difficulties or delays, such as speech and language problems or behavioural issues, could be picked up earlier and referrals could be made, whereas if the provision was not in place these problems would not be picked up until at least 3 years of age or later.

*'Another benefit that we've reaped from this is identifying children who need enhanced provision when they turn three [...] And because we have had this experience, some of those children have been identified because they've been enrolled into the nurseries. Especially the parent who doesn't realize how delayed their child is or what their difficulties are, and staff can sensitively begin to kind of...well, broach the subject so that the parent becomes aware that actually, you know, there's some help to you that might benefit you and your child. And that's been a boost'*

As with the parent interviews, it should not be assumed that remaining centres showed no progress in these areas. These data are staff perceptions of children's progress and reflect their own personal experiences and personal values.

#### **4.3.3.1 Summary**

Improvements in social skills and language were areas of noticeable progress highlighted by staff focus groups. These were similar to those reported by staff through GAS methodology and also those reported by parents from semi-structured interviews. Staff focus groups also viewed the children participating in the extended pilot programme as becoming more confident and independent.

### **4.4 Standardised measures – Bayley III**

#### **4.4.1 Cognitive and language skills**

The Bayley-III Scales of Infant and Toddler Development were administered to provide a standardised measure of child progress (see section 2.1). After their children completed the pre-intervention assessments, we gave parents a £10 W H Smith voucher as a thank-you for their time. After completing the post-intervention assessments we gave children an age-appropriate jigsaw.

Children in the pilot programme intervention group ( $N = 106$ ) were evaluated by our researchers in the first week of their attendance at the programme in the autumn term (August-October) and again in the summer term (April-June) after a mean time interval of 7.6 months of pilot intervention programme experience. Data were gathered over a similar time span from comparison group children ( $N = 66$ ) (see Section 2.3.3), who did not attend one of the pilot programmes.

As explained in section 2.2.1, scaled scores reflect performance relative to a child's age. Raw scores obtained on the Bayley-III test items are converted to scaled scores using standardisation scales in the Bayley-III manual. Scaled scores have a mean of 10 and a standard deviation of  $\pm 3$ .). A score of between 7 and 13 ranges from low to high average for a child of any age. Unlike interpretation of change in a raw score, a child gaining a score of 10 at Time 1 and a score of 10 again two years later has made steady progress. A scaled score of 10 tells us that this is age-appropriate and that the child's performance is exactly in the middle of the average range.

Intervention group children showed very good progress in their cognitive and language skills, triangulating well with GAS, ASBI and parent reports of good child progress (see sections 4.2 and 4.3). At pre-test, mean scaled scores for cognitive, receptive and expressive language were 9, 8 and 8 respectively. While these scores were all within the average range, for the two language scales particularly they were at the lower end of that

range. At post-testing however, mean scaled scores had progressed to 10, 10 and 10 respectively, i.e. age-appropriate mean scores right in the middle of the average range.

Cognitive development scaled scores are presented in the bar graph in Figure 4-1 below. Mean cognitive scaled scores for the intervention group are indicated on the pre- and post-intervention bars of the graph, with standard deviations in brackets indicating the spread of scores in the sample around the mean score. Error bars are also provided to show the range within which we can be 95% confident the true mean lies. A paired t-test showed that this difference in cognitive scores between pre- and post-intervention measures was statistically significant ( $t(105) = -6.09, p < .001$ ) and represented a large effect size ( $r = .5$ ).

A similarly significant difference ( $t(105) = -6.01, p < .001$ ) with a large effect size ( $r = .5$ ) was found for receptive language (see Figure 4-2), and for expressive language (see Figure 4-3) ( $t(105) = -7.45, p < .001, r = .6$ ).

In order now to compare intervention group progress with progress in the comparison group ( $N = 66$ ), a mixed analysis of covariance was carried out with group (intervention/comparison) as a between-groups factor and time of testing (pre/post-intervention) as a within-groups factor.

As discussed in Section 2.4.3, the two groups were not equivalent, with the comparison group generally having higher scores, reflecting that the intervention had been targeted at those in greatest need in their communities. Pre-intervention cognitive ability and test interval<sup>8</sup> were used as covariates in order to eliminate these factors as possible confounding variables. (Cognitive ability was not of course used as a covariate for the first analysis of any difference in cognitive ability progress between the groups. For this analysis only, test interval was the sole covariate.)

If the intervention group showed a different pattern of progress from the comparison group, we would expect to see an interaction effect. If however there was no significant difference between the pattern of the two groups' progress across the time interval, there would be no interaction effect.

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<sup>8</sup> In order to address that the two groups were not equivalent as mentioned in Section 2.3.6, we used pre-intervention cognitive ability as a covariate to remove bias. We used test interval (i.e. period between pre- and post-testing) as a covariate to remove this also as a possible confounding variable.

Figure 4-1: Intervention group cognitive progress

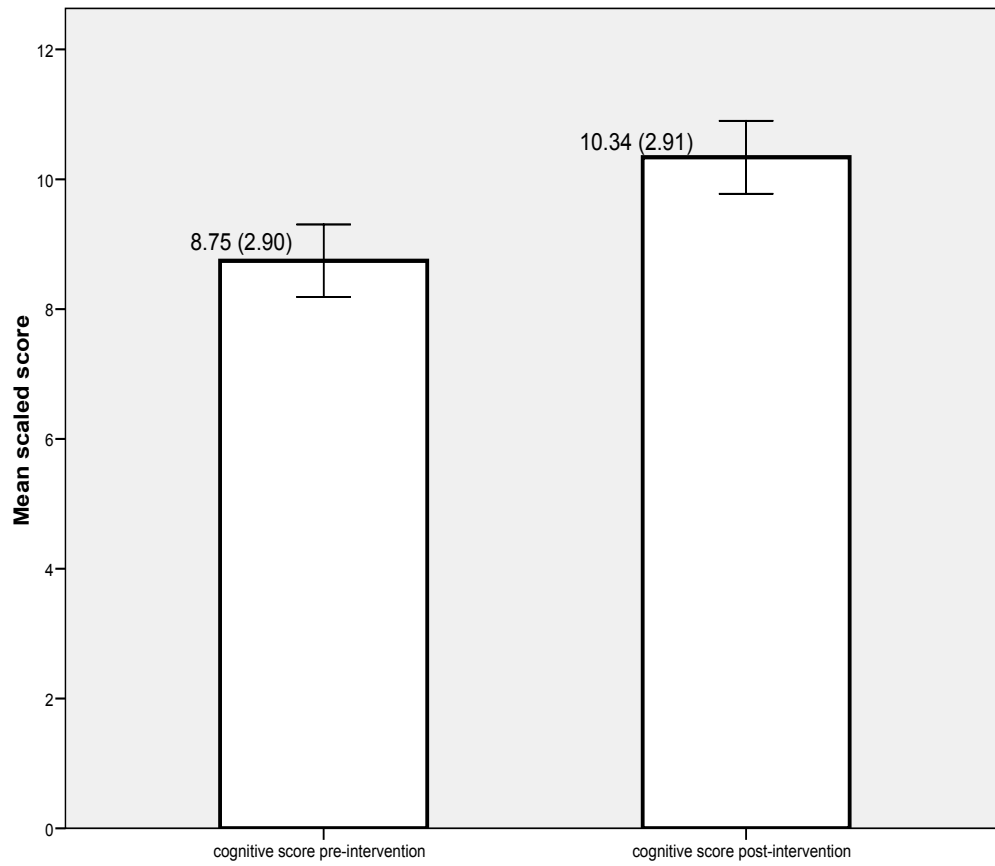


Figure 4-2: Intervention group receptive language progress

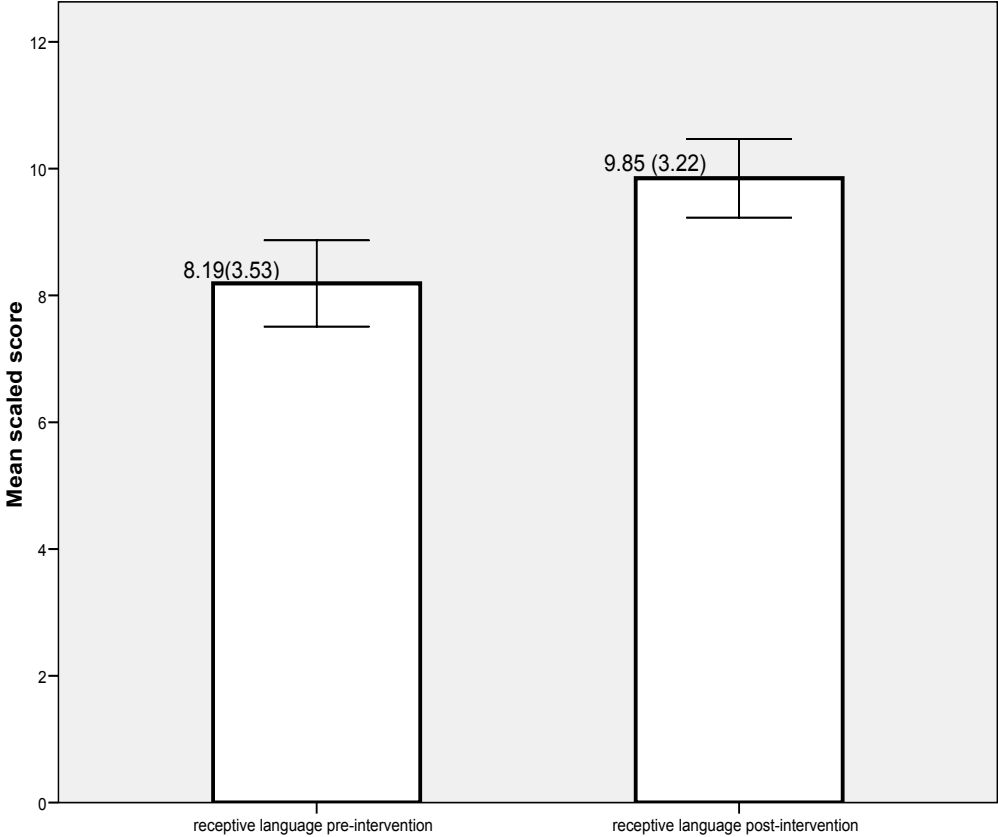
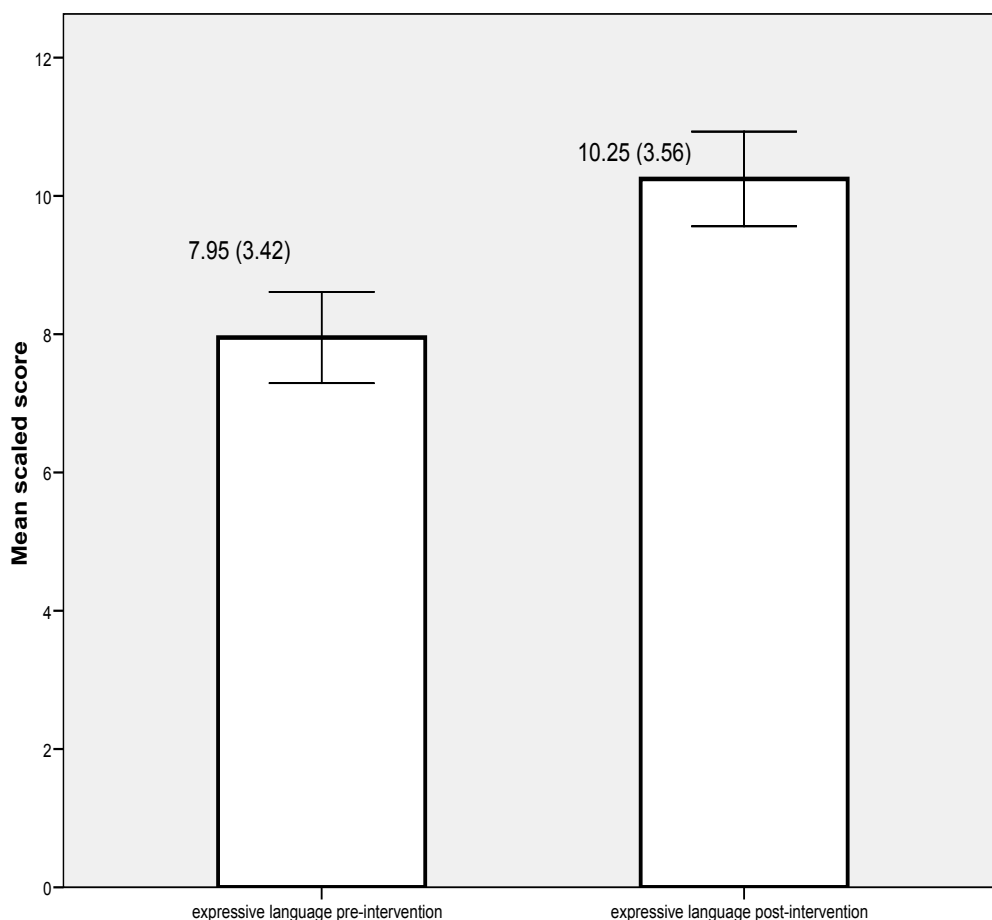


Figure 4-3: Intervention group expressive language progress

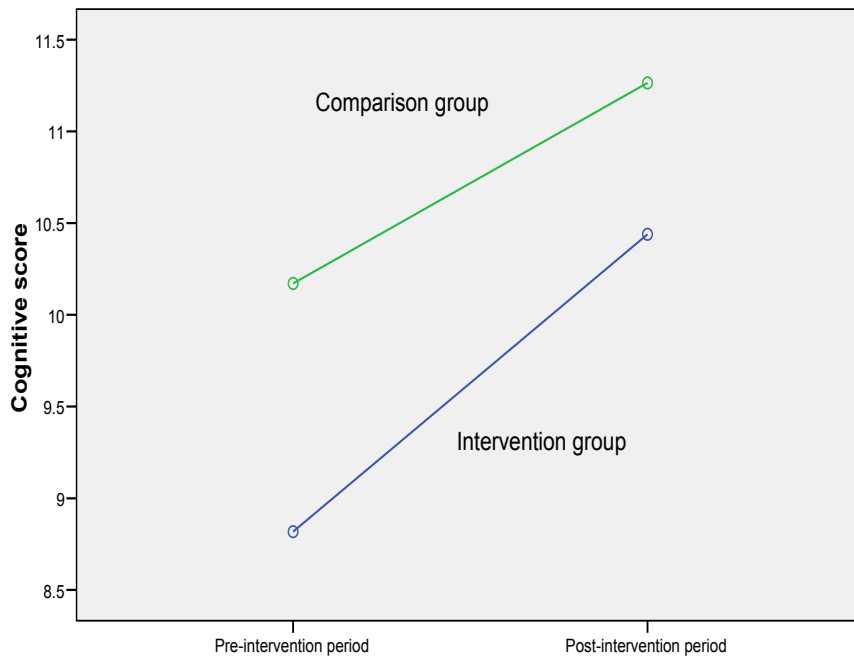


A mixed analysis of covariance (group  $\times$  time of testing with test interval as covariate) found no significant (ns) interaction effect however for cognitive outcomes ( $F_{(1, 169)} = 1.27$ , ns).

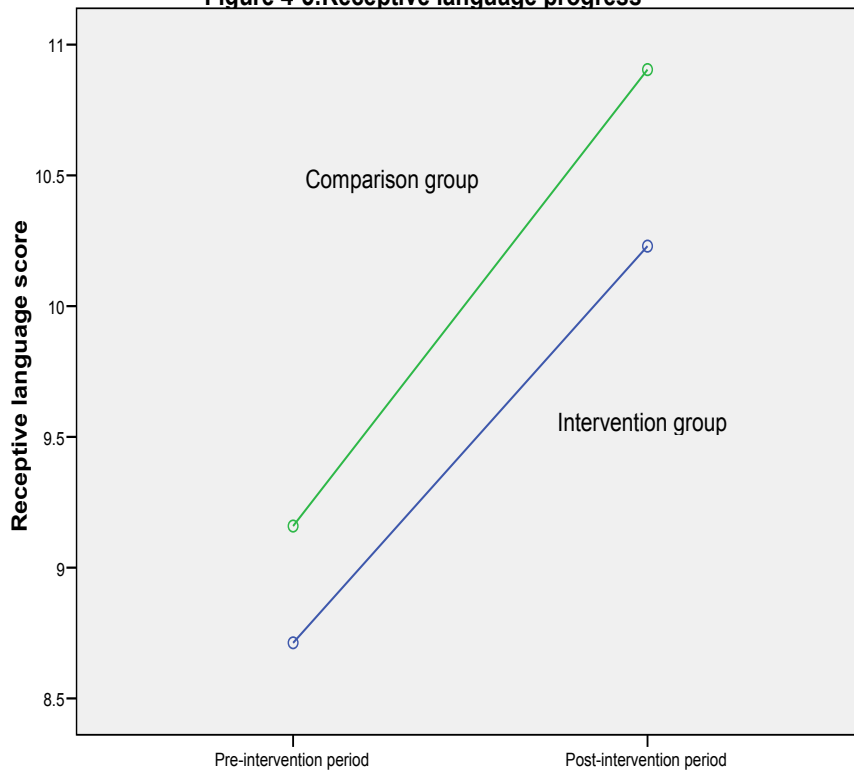
This means that while the intervention group was indeed progressing well between the two time periods (see Figure 4-1), its progress was not significantly different from that of the comparison group who did not attend the intervention programme. This can be seen in the plot in Figure 4-4 where progress in the intervention and the comparison group can be compared, each group showing increased scores at the second testing.

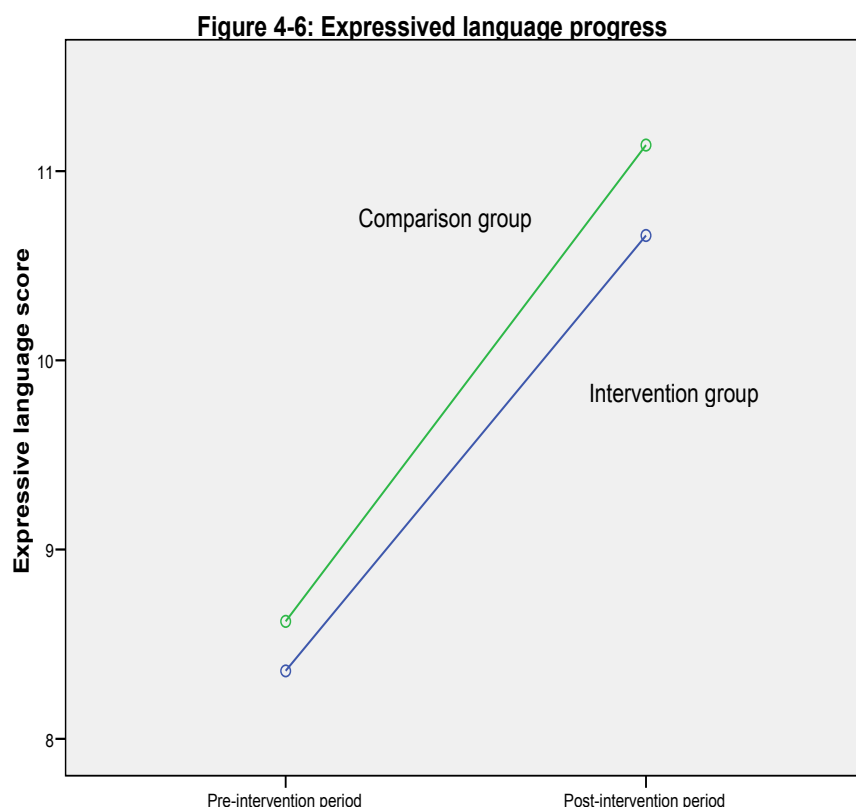
Results for receptive language followed a similar pattern with no significant interaction effect ( $F_{(1, 168)} = 0.24$ , ns), and the same for expressive language ( $F_{(1, 168)} = 0.17$ , ns). For these mixed analyses of covariance, both pre-intervention cognitive ability and test interval were used as covariates as explained on page 59. Group  $\times$  time of testing plots for language are presented in Figures 4-5 and 4-6.

**Figure 4-4: Cognitive progress**



**Figure 4-5: Receptive language progress**





#### 4.4.1.1 Cause for concern

In section 2.2.1 we explained how scaled scores represent the child’s performance relative to same-age peers. We used these scaled scores to identify a ‘cause for concern’ category by defining as ‘cause for concern’ children whose cognitive, receptive or expressive language scaled scores were below the average range for children of their age.

We defined children whose development was within the average range (scaled score 7-13), or above average, as giving ‘no cause for concern’ as their scaled scores indicated that their development seemed to be progressing as expected for a child of that age. Children whose scaled scores were less than seven were identified as in the ‘cause for concern’ category because their development in that area was below the average range.

The purpose of categorising participants in this way was to analyse whether intervention group participation helped move children out of the concern category.

**Table 4-9: Mean percentages of children whose development was cause for concern**

	Intervention group %		Comparison group %	
	Pre	Post	Pre	Post
<b>Cognitive</b>	25	10	8	5
<b>Receptive language</b>	43	18	24	5
<b>Expressive language</b>	48	18	24	9

From Table 4-9, we can see that, as might be expected given that the intervention targeted vulnerable 2 year olds, the percentages of children in the ‘cause for concern’ category were higher for the intervention group, both pre- and post- intervention. The table shows that for cognitive development one quarter of the intervention group came into the ‘cause

for concern' and for receptive and expressive language development, almost half the intervention group came into this category with their development below the average range at pre-test. This reflects that PRESCAT referral was one of the priority factors for gaining a place in a pilot programme (see Chapter 3). A PRESCAT referral means that there is already significant concern about a child's development.

By the end of the evaluation period, in the area of cognitive development the intervention group showed a decrease in the percentage of children in the 'cause for concern' category from pre- to post- intervention, starting at 25% 'cause for concern' initially and reducing to only 10% at the evaluation end (see Table 4-9). McNemar tests showed that this change in the intervention group was indeed statistically significant ( $p = .001$ ). In contrast, the observed decrease in 'cause for concern' in cognitive development in the comparison group (from 8% 'cause for concern' to 5%) was not however statistically significant.

Furthermore, at pre-test, a Pearson Chi-Square test showed a significant association between group (intervention/comparison) and whether or not a cognitive score was a 'cause for concern' ( $\chi^2(1) = 7.62, p=.006$ ); however at post-test there was no longer a significant association.

For each of the language areas, 'cause for concern' dropped down to 18% by post-test. Again McNemar tests showed these were each significant changes ( $p < .001$ ). A Pearson Chi-Square test again showed that at pre-test there was a significant association between group (intervention/comparison) and whether or not receptive language ( $\chi^2(1) = 5.46, p=.019$ ) and expressive language scores ( $\chi^2(1) = 9.14, p=.003$ ) were 'cause for concern'. As for cognitive scores, again at post-test there was no longer a significant association between group and whether or not expressive language score was a 'cause for concern'.

One explanation for these results is that participation in the pilot programme helped move children from the concern category in cognitive and expressive language measures. However the results here should be interpreted with caution as in non-equivalent groups (see sections 2.4.3, 2.4.6 and 4.4.1), regression to the mean could be an alternative explanation for the changes seen in extreme scores.

#### **4.4.2 Social-emotional and adaptive behaviour skills**

The Bayley-III social-emotional scale and Bayley-III adaptive behaviour scales were completed by parents in the first week of children's attendance at the programme and again in the summer term following our researchers administering Bayley-III cognitive and language scales to the child. Data were gathered over a similar time span from parents of the comparison group children who did not attend a pilot programme.

In order to avoid parental literacy difficulties being a possible barrier to participation in the evaluation we asked all parent participants if they would prefer to have the social-emotional and adaptive behaviour skills questionnaires, and also the Ryff and Parenting Daily Hassles questionnaires (see section 5.1 and 5.4) read out. Seventeen parents in the intervention group asked for them to be read out, and four parents in the comparison group<sup>9</sup>.

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<sup>9</sup> We specifically did not ask parents if they had literacy difficulties in order to avoid embarrassment. Some parents said that they would prefer to have the researcher read the questions because they had forgotten their glasses. We do not know whether or not those who opted for having the questionnaires read out had literacy difficulties. Our aim was simply to be inclusive.



Furthermore, we were informed that some centres had a number of parents for whom English was an additional language. Again to ensure that this was not a barrier to participation we arranged translations of information sheets and questionnaires. Centre staff advised us which languages would be needed: Polish, Hindi, Urdu, Punjabi and Cantonese.

However, only the Cantonese translations were used since the Hindi, Punjabi and Urdu speaking parents all stated they would prefer to complete the questionnaire in English, although one parent asked for the questionnaire items to be read out. The Polish-speaking family did not take part in the evaluation.

**Table 4-10: Relationship to child of adult completing social-emotional and adaptive behaviour scales**

	Intervention group		Comparison group	
	Pre	Post	Pre	Post
Mother	97	86	51	49
Grandparent	5	6	10	10
Father	3	2	1	0
Childminder	0	0	1	1
Carer	1	0	0	0
Aunt	0	0	1	1

Table 4-10 shows that social-emotional and adaptive behaviour questionnaires were completed mostly by the children's mothers and grandparents. In two cases, a different person completed questionnaires pre- and post-evaluation. However this was not a great concern in terms of consistency, as Bayley scales report high inter-rater reliability (Bayley, 2006). In all other cases, categories only appear different because people dropped out.

Mean scaled scores for the social-emotional scale can be seen in Table 4-11, showing a similar pattern of progress for the intervention group as was seen for the cognitive and language scales, i.e. statistically significant progress between pre- and post-intervention scores ( $t(88) = -3.58, p = .001$ ) with a medium effect size ( $r = .3$ ). As for post-intervention cognitive and language scores, intervention group mean social-emotional scaled scores were also exactly average (10) showing age-appropriate development in this area post-intervention.

**Table 4-11: Bayley-III social-emotional mean scores (and standard deviations)**

	Intervention group N = 89	Comparison group N = 61
Social-emotional pre-intervention	8.70 (2.77)	9.77 (3.00)
Social-emotional post-intervention	9.89 (3.52)	11.13 (3.19)

Mixed analysis of covariance was carried out as for Bayley-III cognitive and language scales as described in section 4.4.1. No significant interaction effect was found. While the intervention group made good progress in social-emotional development, it was not significantly different from the progress made by the comparison group.

Adaptive behaviour data mean scaled scores are presented in Table 4-12.

**Table 4-12: Bayley-III adaptive behaviour mean scores (and standard deviations)**

Adaptive behaviour subscales		Intervention group	Comparison group
Communication	Pre-intervention	10.58 (3.09)	11.18 (2.68)
	Post-intervention	10.15 (3.43)	11.69 (3.00)
Functional pre-academics	Pre-intervention	10.20 (2.93)	9.87 (2.43)
	Post-intervention	10.04 (3.11)	10.30 (2.40)
Home	Pre-intervention	11.02 (3.13)	10.63 (3.13)
	Post-intervention	10.97 (3.03)	10.80 (3.03)
Leisure	Pre-intervention	9.63 (3.20)	10.40 (2.84)
	Post-intervention	9.84 (3.13)	10.81(2.94)
Self-direction	Pre-intervention	10.48 (3.29)	10.31 (2.56)
	Post-intervention	10.42 (3.52)	10.44 (2.90)
Social	Pre-intervention	10.62 (2.73)	10.50 (2.16)
	Post-intervention	10.15 (2.92)	10.80 (2.77)

Table 4-12 does not provide any evidence of progress in adaptive behaviour for the intervention group over the evaluation period. Indeed, if anything, intervention group post-scores actually appear to be lower than pre-test scores. However, paired t-tests showed that these apparent differences were not statistically significant and so they should be considered as simply due to chance. Thus data in Table 4-12 therefore show that there was no evidence of intervention group progress in adaptive behaviour.

Similarly though, nor do the comparison group scores show any evidence of progress in adaptive behaviour over the evaluation period either. While its post-scores do appear higher than pre-test scores, these variations also were not significant and, like the intervention group's variations, should be considered as simply due to chance. Neither group then showed evidence of progress in adaptive behaviour.

As for cognitive and language scaled scores, there was no interaction effect with both intervention and comparison groups performing similarly. But unlike the other Bayley-III scales previously reported, we found no evidence for significant group progress on measures of adaptive behaviour across the time interval of the evaluation for either the intervention or the comparison group.

#### **4.4.3 What do the Bayley-III results mean?**

Data from all Bayley-III cognitive, language and social emotional scales triangulate well with GAS, ASBI and parent and staff interview data and show that the intervention group made significant progress over the evaluation period. However the Bayley-III results show this progress was not found to be significantly different from that of the comparison group.

It should *not* however be concluded from these data that it made no difference to child outcome measures for these vulnerable 2 year olds whether they attended an extended intervention programme or not. Reasons for this are explained below:

### 1. *Short length of intervention period*

The present study measured progress for participants whose attendance at the preschool programme was for the relatively short period of seven months on average, whereas average length of participant involvement in the US Early Head Start programmes was 22 months (Love et al, 2005).

The Early Head Start programme, for example enrolled approximately one quarter of participants when the mother was pregnant with the remaining families enrolled before the child was 1 year old. Thus, when child Early Head Start cognitive and language outcomes were reported at age 2 and 3 years, children had been in the intervention programme much longer than in our study and even then, effects were reported as 'modest in size' (Early Head Start Evaluation Report, 2006).

Indeed the focus of interest of short-term preschool intervention evaluation studies tends to be rather on longer short-term outcomes such as the impact on child outcomes in the early years of primary schooling, rather than progress between two early preschool periods. To this end, the UK EPPE study reported length of preschool intervention as important for later school outcomes (Sylva et al, 2004)

### 2. *Use of pre-existing groups*

As described in Section 3.4.1, participating local authorities used their own banding systems based on a combination of child and family factors to determine which children and families were most in need of places in their intervention programmes for vulnerable 2 year olds.

Thus as already mentioned in Section 2.3.6, the present study evaluated pre-existing groups as opposed to randomly allocating applicants for places in the extended preschool programme, to intervention and comparison groups. Random allocation as used in Early Head Start is the gold-standard method for such comparisons in order to ensure groups are equivalent in composition. In practice however, as in this case, this is often not possible and non-random allocation to conditions can result in non-equivalent groups (Cook and Campbell, 1979), as in this study.

Results presented in this chapter showed how the groups differed at pre-test on the measures we gathered but it is important to note that there will have been other ways that they differed which were not part of the evaluation, for example, family factors and child protection concerns. Through their interactions with parents and centre staff, our researchers were aware that, as well as children with developmental disabilities, there were children in the intervention group who were the subject of child protection procedures, and children where there was parental drug/alcohol abuse, maternal depression, and paternal imprisonment for criminal activities. This reflected the effectiveness of the local authorities' banding and admission systems in determining that those in greatest need were allocated places in the pilots.

Because this information was incidental, it is not possible to assert unequivocally that this was different for the comparison group. Given that these were exactly the kind of factors taken account of for prioritising admission to the extended pilot programmes (see Section 3.4.1), however, it is likely that the intervention group experienced multiple risk factors to a greater extent than the comparison group.

If we consider the likely extent and severity of these risk factors, it may indeed be viewed as a highly positive result that the intervention group made the progress reported during the evaluation period at a rate comparable to the comparison group children. Perhaps

without attending an extended pilot intervention these children might have fallen further behind in their development.

### 3. *Content of intervention programme*

Intervention group children were not all receiving the same programme across or within the participating local authorities. While there were broad parameters for programme delivery in terms of fulfilling the conditions under which the authorities had gained government funding for the extended pilot programmes, what centres actually provided, their staffing and methods of delivery was decided at the local level to respond to community needs.

Thus variability of content and quality of delivery within the intervention group may be a possible confounding variable. For example, better child language and cognitive development is associated with settings that provided quality child care with better adult : child ratios and that followed teacher education recommendations (Burchinal, Roberts, Riggins, Zeisel, Neebe and Bryant, 2003). Staff changes within the different centres could also be a confounding variable (Hennessy, Martin, Moss and Melhuish, 1992).

Furthermore we were aware that there was considerable variability in the support offered by participating centres in the intervention group to parents. This ranged from intensive outreach, to no parent support programme at all because several centres were still in the process of getting this set up during the period of the evaluation. Programmes that combined a centre-based intervention focusing on child cognitive, language and social-emotional outcomes, with family support such as parenting and parent-child relationships have been found to be the most successful for vulnerable and disadvantaged families (Early Head Start Evaluation Report, 2006).

### **4.5 Summary**

Standardised child outcome measures showed good intervention group progress on cognitive, receptive and expressive language and social-emotional outcomes with medium to large effect sizes.

This finding triangulated well with parent interview, staff focus group, GAS and ASBI results.

However, the study did not provide evidence that this intervention group progress on child outcome measures was significantly different from that seen in the comparison group. This may be due to factors such as the short period of intervention, the presence of confounding variables in the pre-existing group design and variability of programme delivery.

## CHAPTER FIVE: PARENTING CAPACITY

### 5.1 Chapter overview

We report in this chapter on parenting outcomes in the pilot programme intervention group and compare them with progress in the comparison group.

We do this by triangulating findings from both quantitative and qualitative methods and findings from different stakeholders.

Findings presented here are based on:

- Quantitative Parenting Daily Hassles and Ryff Psychological Well-Being questionnaires completed by parents
- 30 semi-structured parent interviews
- 15 staff focus group interviews

### 5.2 Parenting Daily Hassles Scale (PDHS)

Data were gathered from four subscales of the PDHS (see section 2.3.1). This questionnaire was completed by parents at the same time as they completed Bayley-III social-emotional and adaptive behaviour scales (see section 4.4.2). As described in section 4.4.2, translations were provided and all parents were asked if they would prefer to have the questionnaires read out.

Parents reported on the *frequency* of daily situations that can be a ‘hassle’ to parents and also on their *intensity*, i.e. how much of a hassle each situation was for them. Intensity subscales examine *challenging behaviour* and *parenting tasks* respectively.

These scales provide indicators on the extent to which parents perceive the hassles as due to the challenging behaviour of the child and the extent to which the daily burden of meeting the child’s needs are a hassle. Parents are asked to rate questionnaire items such as ‘continually cleaning up messes of toys or food’, and ‘the kids are hard to manage in public’. A high score indicates parents experiencing greater hassle.

Table 5-1 shows pre-and post-intervention mean scores for frequency of hassles which appear higher for the intervention group than the comparison group at intervention start, suggesting that the intervention group parents experience daily parenting as a greater hassle. By the post-test phase the intervention group scores seem to show a decrease in hassle frequency while the comparison group showed a slight increase.

**Table 5-1: Means (and standard deviations) for hassle frequency**

	<b>Intervention group (N = 88)</b>	<b>Comparison group (N = 51)</b>
Frequency pre-intervention	42.75 (9.74)	39.80 (6.89)
Frequency post-intervention	40.90 (9.76)	40.10 (7.59)

Mixed analysis of covariance was carried out as for the Bayley-III analyses in section 4.4.1. The aim was to determine whether these group differences were statistically significant or could have occurred by chance.

As for the Bayley-III analyses, group (intervention/comparison) was a between-groups factor and time of testing (pre/post intervention) was a within-groups factor. Cognitive ability and test interval were covariates as before. If the intervention group showed a

different pattern of progress from the comparison group, we would expect to obtain an interaction effect.

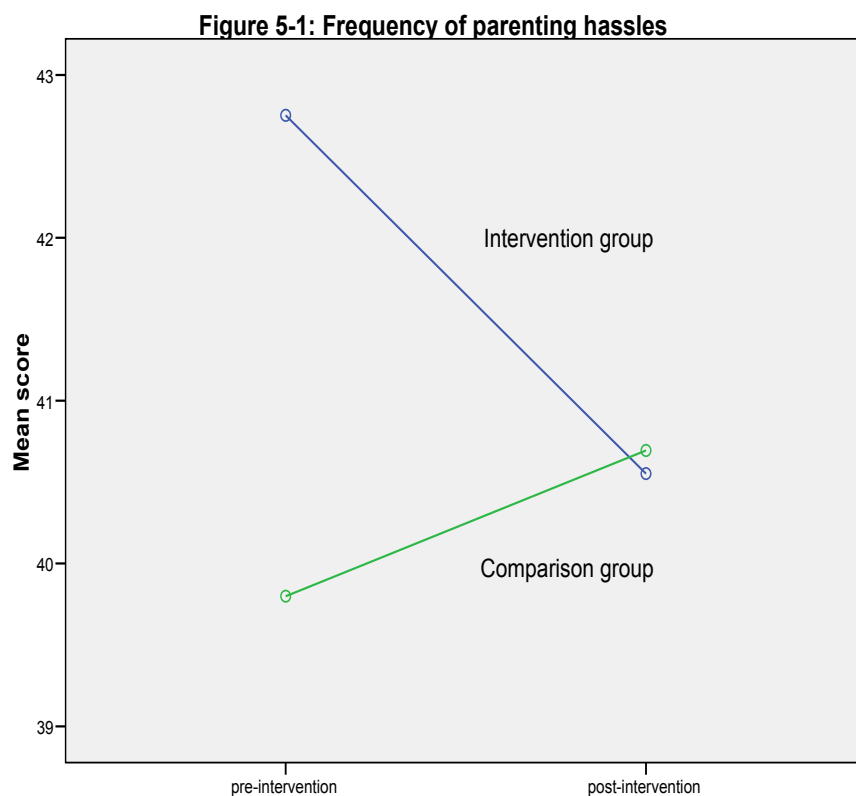
A significant group  $\times$  time interaction effect was indeed obtained, ( $F_{(1, 135)} = 5.19, p = .02$ ). This interaction effect can be seen in the crossover plot in Figure 5-1. Simple effects analysis showed that the intervention group experienced a significant decrease in hassle frequency ( $p = .03$ ) over the period of the evaluation, while this was not the case for comparison group parents.

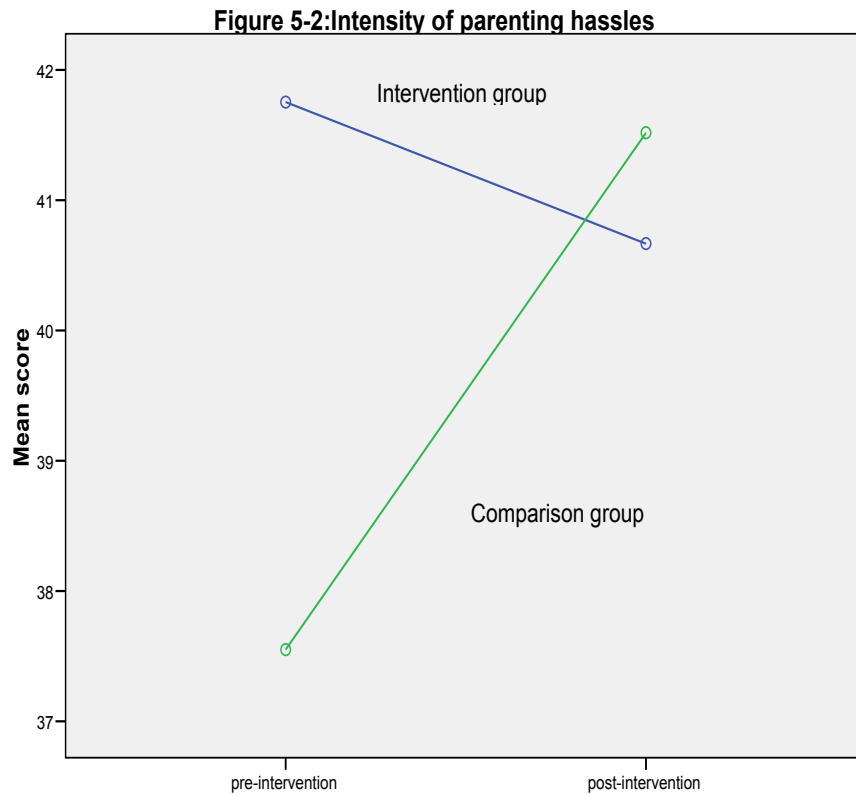
Table 5-2 provides similar data for intensity of hassles.

**Table 5-2: Means (and standard deviations) for hassle intensity**

	<b>Intervention group (N = 84)</b>	<b>Comparison group (N = 54)</b>
Intensity pre-intervention	41.79 (14.87)	37.50 (11.56)
Intensity post-intervention	41.30 (15.33)	40.54 (11.85)

Again a significant group  $\times$  time interaction effect was obtained, ( $F_{(1, 134)} = 5.00, p = .03$ ). This interaction effect can be seen in the crossover plot in Figure 5-2. Simple effects





analysis showed that for hassle intensity, the comparison group reported significantly more hassle by the end of the evaluation period ( $p = .03$ ), which was not the case for the intervention group.

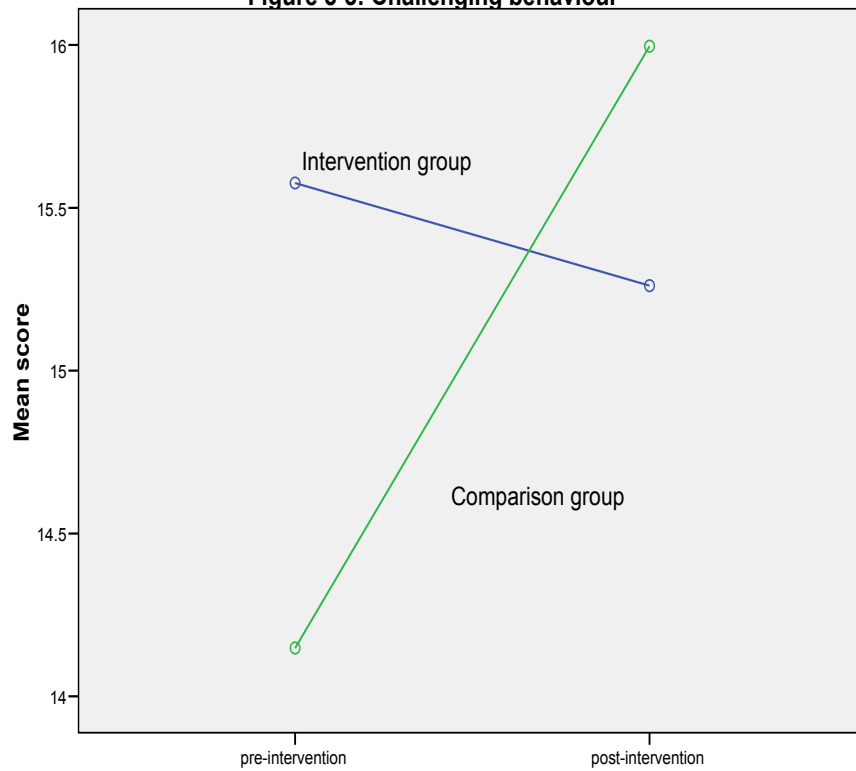
Data for challenging behaviour in Table 5.3 repeated the same pattern.

**Table 5-3: Means (and standard deviations) for challenging behaviour**

	<b>Intervention group (N = 85)</b>	<b>Comparison group (N = 54)</b>
Challenging behaviour pre-intervention	15.58 (5.63)	14.15 (4.83)
Challenging behaviour post-intervention	15.42 (6.22)	15.74 (4.67)

A significant group  $\times$  time interaction effect was again obtained, ( $F_{(1, 135)} = 4.92, p = .03$ ) and is graphically represented in Figure 5-3. As for hassle intensity, simple effects analysis showed a significant increase for the comparison group ( $p = .02$ ) who reported an increase in challenging behaviour, while the intervention group did not.

Figure 5-3: Challenging behaviour

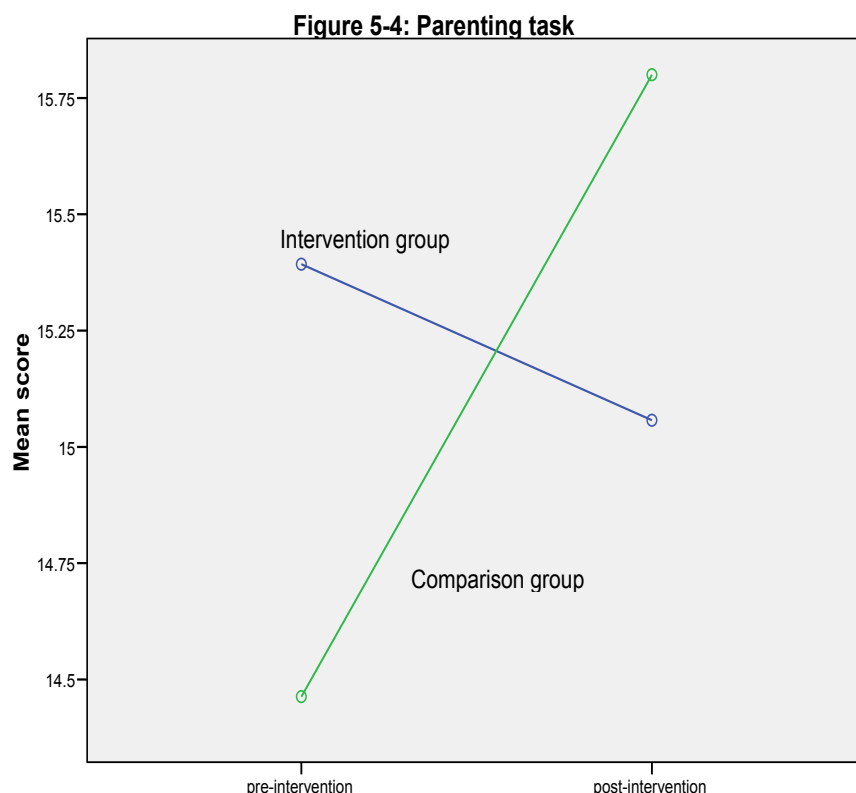


On the parenting task subscale which reflects the extent to which parents view daily parenting tasks as a hassle, the pattern of decrease in perception of hassle for the intervention group and increase for the comparison group was again in evidence (see Table 5-4 and Figure 5-4), although in this case the group  $\times$  time interaction was only of borderline significance, ( $F_{(1, 134)} = 2.96, p = .09$ ).



**Table 5-4: Means (and standard deviations) for parenting task**

	<b>Intervention group (N = 85)</b>	<b>Comparison group (N = 54)</b>
Parenting task pre-intervention	15.40 (6.46)	14.44 (5.12)
Parenting task post-intervention	15.32 (5.60)	15.39 (5.04)



PDHS data showed that comparison group parents experienced an increase in the intensity of daily parenting hassle and the extent to which they felt the child’s behaviour itself was contributing to the hassle.

This increase in parental experience of behaviour problems over the age range 2-3 years is a well-established research finding (e.g. Crowther, Bond and Rolf, 1981; Jenkins, Bax and Hart, 1980; O’Brien, 1996) and has entered common parlance as the ‘terrible twos’. That intervention group parents did not experience greater hassle in these areas and indeed in the case of frequency actually experienced less hassle, suggests that their child’s attendance at the extended pilot programme may have led to improved understanding and management of their children’s day-to-day behaviour, enabling them to cope better with the daily hassles of parenting.

As we were aware that not all centres in the intervention group offered parent groups, we were interested in whether there was a difference in PDHS outcomes for centres that offered parent groups compared to those that did not. However we found no significant findings on this, largely due to the significant interaction effects we can see in the

interaction plots in Figures 5-1 to 5-4 being largely derived from the different patterns of the two groups. As explained in the simple effects analyses above, the comparison group's pattern was of *markedly increased* experience of daily hassles in parenting, the 'terrible twos', which was significantly different from the intervention group's pattern of *small decreases* in experience of hassle. In the intervention group as a whole therefore as there was only a small change in hassle scores, breaking down the group further for analysis did not yield any new insights for us.

### **5.2.1 Summary**

Parents whose children participated in the pilot intervention programme showed improved parenting capacity compared to comparison group participants.

### **5.3 Parent views of new skills learned**

Thirty semi-structured parent interviews were carried out across the three local authorities who participated in the extended pilot project (see Table 2-6) and were audio-recorded, transcribed and then coded as described in Chapter 2.

As explained in Section 4.2, the mother carried out the interview in all but one family and we have used 'mothers' or 'parents' as a generic term in the report to describe this interview group of 29 mothers and 1 grandmother. Interviewees were asked to give examples of any new parenting skills they had learned (re-education as defined by Sameroff and Fiese, 2000) (see section 2.3.2). As was the case for parent views of child progress in Section 4.2, these are presented as matrices with illustrative quotes.

In Table 5-5, mothers gave examples of new skills they had learned for managing their children's behaviour, for activities to undertake at home to support their children's education and development and for better handling of daily living activities and everyday routines.

Table 5-5 shows that 22 mothers gave examples of play activities such as making play-dough, feely boxes, how to organise play with one toy at a time, how to read with and communicate with a two year old in an age-appropriate way. Thirteen mothers provided illustrations of different techniques they had learned to manage their children's behaviour, such as positive discipline, time out in the naughty room and setting clear boundaries. New skills to help manage the daily living tasks of toilet-training and mealtimes are also described in Table 5-5.

*Table 5-5: Examples of parent skill learning from parent interviews*

<b>Management of behaviour</b>	<b>Home learning experiences</b>	<b>Daily living</b>
<p><b>Setting clear boundaries (4)</b>                      'You see with the girls, when they tell him 'No', he knows - do you know what I mean, and he just stops dead what he's doing... So he does, he knows and also I can see that, and seeing what the girls maybe say to him and how they like stand round and say 'No' and seeing the difference. I can do that at home now and he will actually listen to me whereas before he wouldn't' [P2]</p>	<p><b>Messy play (7)</b>                      'I would go down the town and buy like play-dough and that but this week it was that you actually make it. I actually enjoyed doing it along with her you know, and it was like the flour, the salt, the colouring and everything so it was good to....I think, well I would have never know how you make that' [P25]</p>	<p><b>Toilet training (3)</b>                      'He thinks getting his nappy changed is a big game, and he runs about and he won't just lie there and sit, and I think that's because I made it a big game, that was my mistake - I know now to try and rectify that' [P4]</p>
<p><b>Management techniques (4)</b>                      'There's the naughty room, like the minute she starts I say to her 'Do you want to go in the room?' 'No' Right that's fine, and then the next minute she doesn't get asked, she gets put in the room for 2 minutes and if she cries, she cries. [...] So I'm trying like this and I'm trying my hardest to keep to it' [P12]</p>	<p><b>Ideas for play (6)</b>                      'I've picked up a few ideas - just like their feely boxes, you know, their like heuristic play and things like that, erm and obviously, it's one item at a time - one toy to play with - don't have too much out together, play with one, tidy it up' [P6]</p>	<p><b>Eating (1)</b>                      'I actually picked up a tip from one of the other mums who turned round and said don't make it a war, put it down - if they don't want to eat take it away, and then ten minutes later put it back down, if they don't want it take it away. Don't make it a battle ground and say right, sit down, eat. And I did, and now he eats no problem' [P29]</p>
<p><b>Delivery of positive discipline (3)</b>                      'But erm, I've just learned to talk to him differently. Rather than just shouting at him, and moaning, and just like getting so frustrated I've learned to sit and talk to him, and wait a wee bit, just a wee bit...I think because...just watching the way they speak to him. I try and speak to him they way they do. Rather than just getting all frustrated and moaning and shouting at him, I try and talk to him. Because they can do it, I think well if they can do it, then I can do it' [P4]</p>	<p><b>What to teach a two year old (6)</b>                      'You would just be sitting watching but now I can get involved and say 'right where is the map? Where's the house?.. Where's Dora?', Where's boots?, you know what I mean, and they can point everywhere and show me where everything is [P12]</p>	<p><b>Daily routine (1)</b>                      'Well I can get her ready in like 15 minutes now, it used to take four hours' [P26]</p>
<p><b>Managing separation (2)</b>                      'I used to leave my older one with the in-laws, so what they used to tell me was like just hide and go away, you know what I mean. [...] she would be busy playing and I had to run away and just hide. And out here I kept doing the same thing but [key worker's name] said 'no, that's not the way to do things'. I mean it's fine, when it was time to go out, [key worker's name] told me to tell her 'bye, mummy's going out to have a cup of coffee and then she'll come back' so I explained everything to her and she, in the beginning, said no but later on she let me go and gradually things just happened and now she doesn't blink and eyelid if I go out' [P16]</p>	<p><b>How to read with a two year old (3)</b>                      'We're always reading to the kids at home but now reading takes a much more.... I now say things like that's the author and the author is about ...we do all ...but the author is the leader or the man who writes it. So it's much more...I don't know, it's sharper ....sort of [...] Then I tell her about.... we go to the library and see about different books and they're written by the same people. You know, the same person, I would never do that before. I would just pick up a book randomly and see what we fancy, you know' [P10]</p>	<p><b>Health and safety in the home (1)</b>                      'At the nursery we have the odd meetings on a Friday and someone will be coming in to give a talk, about health and safety in the home and that's helped, you know [...] erm...just watching what he does at home - because he went out a couple of weeks ago and he said 'bye mummy, bye mummy' and he was shutting the door back and forward and he put his fingers in the door and I shut the door [...] and one of his hands was around the corner of the door and it jammed. They're better now. It's just learning things like that - watching what he does at home' [P23]</p>
	<p><b>Singing nursery and action rhymes (3)</b>                      'Well the songs, I knew some songs, nursery songs, but I couldn't remember them all. So [child's name] has come home singing some of the songs. I think that helps, them singing songs, they gave us the song sheet away from nursery and I practise with him at home' [P29]</p>	

### 5.3.1 Factors that helped parents learn new skills

A range of centre provisions that had been helpful in learning new skills were described by mothers as presented in Table 5-6.

**Table 5-6: Centre provision for parents – factors that helped parent skill learning**

Centre provision	No. of parents
Advice and support to parent from key worker	12
Formal meetings with key worker	7
Giving activities or information to take home	6
Parent groups	6
Support from other parents in parent room	3
Opportunities to observe staff-child interaction	2

The majority of mothers attributed new learning to advice from their child's key worker, which was either parent-initiated, staff-initiated or jointly initiated advice. Some mothers attributed their new learning to collaborative work with the child's key worker where they were being advised how to use at home the same behaviour management techniques as in the preschool centre. This included general support by the key worker in terms of encouragement towards perseverance with the technique. Some mothers mentioned having picked up ideas on how to manage their child's behaviour from opportunities to observe the staff-child interaction in the playroom, or from informal chats with the key worker when dropping off or collecting their child, whilst other mothers mentioned having picked up ideas or tips on how to manage their child's behaviour or with toilet-training from informal opportunities to observe the staff-child interaction in the playroom or from chatting to other parents in the parents' room. Mothers who mentioned learning to sing nursery rhymes and songs with their child reported that this had been enabled by the nursery staff giving them song sheets to take home so they could learn the words and sing with their children. Some reported learning from staff modelling appropriate behaviour through opportunities to spend time in the playroom - when mothers arrived early to collect their children, for example, they had the opportunity to sing songs along with the children and staff. One parent mentioned that the monthly newsletters they were given each month by staff had been helpful in giving them ideas of what to teach their child.

*'You get the newsletters and that of what they are going to be learning that month and stuff. So you know what to kind of pick up on and teach them and try to help them along. They keep you informed of what's going on and stuff -what they're going to be doing for that month and then kind of what you can help them on and ask them questions about and give you pointers on where to help them with what they are learning' [P9]*

Other parents mentioned that formal meetings with their child's key worker were helpful in giving ideas to teach their child or to promote home learning.

*'I sit down with the key worker every month and discuss different wee gains that they're going to introduce. And I've seen it in action [...] both of us do it together, so she says 'right well we'll do this', then I have to do it in the house as well' [P27]*

Parents who had learned how to engage in messy play with their child had picked up these skills at parenting skills workshops, or parent groups for directed play, where they were taught how to make playdough, glupe, cards and scrapbooks, or were given 'homework' sheets for different activities such as colouring in, and encouraged to do this with their child at home. Parents were very positive about the new activities they were able to do with their child at home, and many parents said how much they had enjoyed it.

*'They taught the parents how to make glupe. It was fantastic so I did that in the house with him and he found that amazing and yesterday they taught us how to make playdough. I've never made playdough from scratch. So that was really good and I went home and made it again and with [child's name] and he loved it. So it was kind of good because I'm able to tie in the nursery at home and do things that he's doing in the nursery at home, I'm learning how to do them as well. So it's a case of he comes and he'll say 'playdough, playdough', I can't turn around and say well I don't know how to do playdough. I can say 'okay, we'll do playdough' [P29]*

Parents from North Ayrshire talked about how beneficial the weekly FAB bags (see section 3.6.3) had been, both in terms of providing ideas for activities they could carry out at home with their child, such as making play-dough, using glupe, playing with skittles, and also in terms of providing the resources for them to do so.

In summary, the main factors that mothers identified as useful in terms of learning new skills were:

- Parenting skills workshops
- Monthly newsletters informing parents what their child will be learning and what activities they will be doing
- Strong personal relationship with key worker
- Opportunities to observe child and staff interaction informally
- Informal chats with key worker when dropping off or collecting child
- Formal meetings with key worker
- Informal opportunities to spend time in nursery
- Parent room where parents could spend time and get to know other parents
- 'Homework' activities for child and parent to complete together

Some parents, however, said that they had not learned any new parenting skills. Eight mothers felt they already had parenting skills prior to their child coming to nursery either having learned the necessary skills with an older child, or in any case already doing everything at home that the nursery did, with the implication that there was nothing left that they might usefully learn.

This seemed to vary across local authorities with 83.3% of North Ayrshire parents reporting learning new skills, 70% of Dundee parents and 57% of Glasgow parents, and may be partly influenced by differing availability of parent support across local authorities (see Section 3.6.3). For example, at the time of the interviews (January to March 2008), the Glasgow centres attached to nursery schools (rather than family centres) were still in the process of appointing a family support worker to run parenting support groups.

#### **5.4 Parent views of changed perceptions and expectations**

In the semi-structured interviews (see section 5.2) parents were asked about redefinition (Sameroff and Fiese, 2000) (see section 2.3.2), specifically whether their expectations or perceptions of their child had changed and whether their perception of their role as parents had changed through attending the extended pilot programmes.

Table 5-6 shows changes in attitudes or beliefs about their child and about parenting. The following themes emerged from the interview data and have been used to organise the matrix in Table 5-7: higher cognitive expectations of child, higher behavioural expectations of child, altered perception of self as parent, greater understanding of child's needs. In this matrix, illustrations of these themes are provided for every mother who gave such an example in her interview. The numbers in the left-hand column of Table 5-7 refer to specific parents, e.g. on the first page of the matrix are the examples of redefinition given by Parents 2, 4, 7 and 9.

It can be seen from Table 5-7 that higher cognitive expectations were reported by a number of parents, who indicated surprise at how much their children had learned since coming to nursery; indeed, some parents had been concerned their children were late developers and had been encouraged by how much they had developed while

**Table 5-7: Parent views of changed perceptions and expectations**

	<b>Higher behavioural expectations</b>	<b>Higher cognitive expectations</b>	<b>Altered perception of self as parent</b>	<b>Greater understanding of child's needs</b>
2		'I could honestly say that come like obviously his pre-school year, he's going to be like advanced enough that I'm going to feel comfortable with him going to school. Whereas possibly if I hadn't put him in Nursery until the summer this year, and he'd only have a year before he goes, I don't think he'd be quite ready'		'I think before it was really quite hard because I was on my own and obviously I had him 24 hours a day, and maybe because I was stressing out as much and I was more tired I didn't have the time to have the one on one time that I do have now and maybe not the patience'
4	'His temper, basically that's...I didn't think, I thought he was just naturally bad tempered and he was always going to be bad tempered'	'It's...I think because I know he can learn, whereas before I just thought [...] he's two and a half, he doesn't speak, doesn't know his own name. People...I mean there's a lot of folk that work with babies, and they're like: oh this baby's...and it's saying hiya, how are you? And it was just nothing. It's so disheartening – thinking he's just not...he's not right, he's slow. And I'd sit and think he's going to nursery, school, and he'll not be able to...he won't know anything, he'll be teased. But now I know he does learn and he can learn, and he wants to learn'	'And then you'll hear things that they....and you think, oh mine used to do that, my god I'm not the only one'	'And he would line up toys and just scatter them and scream and stamp and shout, but now, there's not been much time he's went mental and thrown lots of toys. He touches something he doesn't like, or it's just it won't fit, he gets frustrated and that's when the temper can hit out. It's not as quick - there is actually a reason why he's angry now. As opposed to just...well he sits there quite happy, and then he used to just 'pgh' and you think, what happened? [...] But now, there is a reason. It's because, somebody else has touched his clothes, or because the car won't move or something. You can actually see why, there is a reason why he goes mental. So that to me, I'm a lot more patient with him. It's actually for a reason I know now'
7	'Yeah, erm, like I was really erm.. nervous with him coming - I just wasn't sure as to how he'd cope, how he would associate with other people because as I said he was quite alone all the time and it's just it's been fine so I don't really have any.. like...I won't have any problem going into the next room I won't have any problem with him going to school because I've seen that he can adapt and he's been able to adapt so it's making me a lot less nervous than before'		'You always worry that you are not doing enough or you should be doing things in a different way I think it just gives you a bit more comfortableness that you are taking advice from Nursery teachers - although I am mum I've brought somebody else up but it's always nice to have'	
9		'Maybe the only thing is to bring ...erm teaching...sort of dealing with her a bit more erm...but not in an adult way but in a bit more erm.... showing a bit more respect that she may actually be a quicker learner'		

**Table 5-7 cont'd: Parent views of changed perceptions and expectations**

	<b>Higher behavioural expectations</b>	<b>Higher cognitive expectations</b>	<b>Altered perception of self as parent</b>	<b>Greater understanding of child's needs</b>
10	'I'd even went to see the doctor because she was so shy. I thought maybe there was something kind of up with her why she didn't speak or ...like that class she has come right out her shell altogether. It's brilliant. I'm really, really pleased. [...] No but I was quite scared about her going in because I thought she was too wee and thingmy but it's really, really good for her because she has made lots of friends as well and that's something I thought she would struggle with because she was so shy but it's really, really good'	'She is so, so clever ermm... so I know that she is capable of it now'		
11	'She's more confident, I feel as if she's more confident ...erm because she's quite I think, they say in there that she, I don't know, that she helps a lot'			
12	'I never thought she would settle. I really didn't because she was with me all the time like from when she was born every single day erm... and I just didn't thing she would settle in and like I didn't thing she would mix with the other children because she was always around about adults but I see like she just goes playing with toys'	'I thought she was like a late developer but I mean she seems to be coming on. I'm not saying that she's like saying everything but I know what she is wanting most of the time and it is, aye, my expectations and I think it's the nursery that's done this. I think well it is the nursery obviously because before that she wasn't talking before she came in here'		'That was a testing point for me but then I checked her like a few times and she was fine and she calmed down and then she started like screaming but I just sort of ignored her, I was just like ignoring and she stopped it. The minute I never gave her any attention she stopped it. So I think maybe it's like attention as well'
15	'Yeah, well because she is able to communicate more I think I expect her to be behaving a bit better'			
16	'She couldn't make friends, I mean she used to hide and she used to be quite clingy. I was a bit worried about that because I could see the other children enjoying themselves going a few feet away from their mum playing and then coming back, you know. She wouldn't even want to leave me and go ahead and play. Now she's doing that [...] So I mean when you grow up you need that confidence. I was just worried about her future, you know but then it seems like nothing to get worried about after all. She's fine now'			'I'm more patient with her I would say and I'm not as frustrated. I would say yes, I'm a lot more patient with her and a lot more understanding to her needs'



**Table 5-7 cont'd: Parent views of changed perceptions and expectations**

	<b>Higher behavioural expectations</b>	<b>Higher cognitive expectations</b>	<b>Altered perception of self as parent</b>	<b>Greater understanding of child's needs</b>
17	'I think definitely, yeah, because the interaction with the other children is a huge thing for me because I was thinking if she started nursery and all this and she didn't have any other interaction on a one to one, you know on a daily basis with other children, that she might kind of go the nursery and totally freak out and be all panicky and all that. Whereas she is totally amazing, like I just take her in and wave goodbye and she's fine [...] I think she will definitely cope a lot better at nursery'			
18	'She can do it for other people and I thought then she can do it for me then [...] I just thought she was a spoilt wee girl, that's all'		'Beforehand she was just like no, what she says goes. It was like she was the parent and I was the child'	
21	'I suppose I expect her to be a bit more mature than she was when she started, in terms of sharing and playing – taking turns, waiting for things. Following rules and understanding rules. Because quite often, before she did get away with so much – we just, I mean lots of things I never would have done with my first two, I did with her'		'I think it's the developing bond between her and other adults, which is really lovely to watch, and it's made me realise how significant it is to have good adult interaction and relationships, so it's made me want to make more effort with her because I know how beneficial it is, and yeah it's just so nice for her to have that'	'I think I'm a lot more conscious of the fact that she is an individual child and she's not just the baby of the family that gets left to her own devices, to play in the background while I play with the other two. So yeah, I have a lot more time and patience for her'
25	'And even when I took her down the town people would stop and talk to her. She's always singing and she would just shut up and she wouldn't talk to nobody although she knew them, she just clammed up. But see now, when they stop and talk to her she never shuts up she talks all the time'			'That's right because as I say she knows now that other people have got things to do so you give her her time and then she will let me have my time to tidy up'

**Table 5-7 cont'd: Parent views of changed perceptions and expectations**

	<b>Higher behavioural expectations</b>	<b>Higher cognitive expectations</b>	<b>Altered perception of self as parent</b>	<b>Greater understanding of child's needs</b>
26	'It you're treating them like a grown up then maybe they'll start acting like one, instead of a baby'	'I wasn't expecting her to come on quite so quickly. I mean, I was expecting it to take like, the full year or least a couple of years before like, she had learned what she has now. But, well she does better than most 4 year olds. Because a couple of the neighbours, they don't go to the Nursery, no on a regular basis anyway, and she talks better than they do and she's got a counting a lot – she can count to 10 nearly, by herself. She only gets like, two or three wrong. And there's 4 year olds that cannae do that. So I'm quite amazed at how well she's actually done, in such a short space of time'		
28		'I think [child's name], having seen what she's capable of doing and I see now – I think she'll be fine, I think she will catch up with her development. Erm, especially because the girls are helping bringing her on and catching up with the other kids, and I think she'll be, I think eventually she'll be fine. I think the delay won't cause any long-term effects or anything'	'And also I think the time away from it, because you're getting that break where you're not constantly pulling your hair out and worrying about what you're doing, are you doing it right? They're giving us the view that you are doing it right, so they do. That extra encouragement – it really does help'	'Probably I understand her – I don't get so frustrated with her anymore. Erm, because I did used to get quite annoyed that she wouldn't walk over like erm, if she was going from a smooth surface and there was a metal bar onto a pavement again, she wouldn't walk over the metal bar, but now I can understand a bit better why- because it's a bit different in texture, she's not so sure. So I can understand her and that's giving her more confidence'
29		'I'm expecting a lot more from [child's name]. I don't know if that's a bad thing as a parent to expect more but because he's picked up certain things very, very quickly I think to myself he's going to be quite smart'	'Now when it happens it's a case of I'm trying to tidy up and he's pulling everything out, I'm going well, it is happening to everyone else, it's not me, it's not anything I'm doing it's kids will be kids, it's something they do because other kids are doing it. Whereas before, anything...anytime he played up or he cried or anything, I felt I was doing something wrong. So now I know that there's times he's going to do that and I'm not doing anything wrong'	'It's just because they can't express what they're saying in words or they've got to express it in other ways. Like when they're annoyed or they're bored. They can't tell you mummy I'm really bored, they just start playing up or something, so that made a big difference'
30			'Or they'll tell you they're having terrible trouble and you think, I thought my son was bad but it's not half as bad as what they're going through. So it makes you, it makes you feel you're normal – you're not this abnormal, terrible mother who should be carted away. It's just, this is what kids do, this is the normal thing. So that's good'	

attending the programme. Higher expectations of their children's behaviour were also reported by many parents. Some parents had previously been concerned about how their child would mix with other children and worried that they would have problems making friends. One parent had been concerned about their child's whole future because of his shyness but now felt confident he would mix with other children and have self-confidence as he grew up. Another parent had even taken her child to a doctor she was so concerned about shyness, but now was delighted that the child had fitted in so well and made friends.

A number of parents felt they now had a greater understanding of their children's needs. This included parents who had redefined their perception of their child's difficult behaviour from being a within-child problem of temperament viewing their child just being 'naturally bad-tempered', to viewing this behaviour as possibly due to other reasons, such as frustration, boredom or wanting attention. Some parents now felt that they were 'doing things right' as parents, and now realised that other parents also faced some of the difficulties they did.

#### **5.4.1 Factors that helped change parental perceptions and expectations**

Seven mothers indicated that their perception of their role as parents had changed as a result of attendance at the extended preschool provision, which had resulted from reassurance from nursery staff that they were good parents, or talking to other parents and finding out they were going through similar experiences, or realising that they can effect change in their child. In this context, a parent room where parents could spend time and get to know other parents was helpful to parents.

Time away from their child was enough to give one parent a renewed enthusiasm for their child. Strong, personal relationships with key workers also helped parents both in terms of approaching staff with difficulties they faced, but also in terms of personal support that parents were given which helped them feel understood.

*'You can talk to them about anything – they're really open, they're really great girls, so they are [...] and you feel that if you have a problem or anything, not so much that you can go to them, but they'll understand'[P28]*

The ability to informally observe their children in the playroom benefited many parents and enabled them to redefine their behavioural expectations of their child. For example, many parents reported that prior to accessing the provision they were concerned about their child's social skills and the problems this might cause in their future, whereas simply observing how well they had settled in and getting positive feedback from staff had been a source of great comfort for the parents and they now felt confident that their child would be fine at school or beyond. For some parents, realising how much their child had learned since attending the programme from observation and feedback from staff was sufficient to redefine their cognitive expectations of their child.

Time away from their child benefited families in a number of ways. For example, some parents felt a sense of freedom by having some time to themselves, whilst others mentioned that they had more energy or were less tired. For some parents, attending parent groups had helped them feel more positive in general and that the opportunity to mix with other parents had also helped them feel less isolated or increased their self-confidence. These parents referred to the fact that there was a parent room where

they could relax and meet other parents. Outreach support also helped some families who were struggling with commitments or activities outside the programme.

In summary, the main aspects of the provision that helped to redefine parents' expectations or perceptions of their child, or their self-perceptions are listed below:

- A parent room where parents could spend time and get to know other parents
- Parent classes specifically targeted for parents
- Strong personal relationship between parent and key worker
- Regular meetings with parent to discuss child progress
- Regular, informal meetings with parent to identify areas in which they may need support
- Flexibility for parent to sit in on sessions
- Outreach support

In some North Ayrshire centres, parents were told that their child's nursery place was contingent on them attending weekly parent groups. One parent discussed being initially very resistant to this idea but now being very pleased she had attended the groups.

*'Yeah, my whole thing when [child's name] came and they said the condition is the parent group on Tuesday morning and you need to come and sit for two hours, and I'm thinking well the whole point of me getting a service is to go away and be by myself – why are you making me stay? I was really quite angry and then I thought well if I'm forced to do it I might as well and I actually really enjoy it so I'm quite glad that they did. If it was voluntary I wouldn't have been coming and I would have missed out on an awful lot. I mean it's not just chit-chat you know we've had an aromatherapist in to teach us how to relax and different oils and massage and things like that and just you know, police and a nurse. One of the mums... is deaf and I've learned a hell of a lot of sign language just from talking to her.... You just pick up things. It's better than a course, so aye she's lovely. I've learned an awful lot and I'm really glad - it should be made sort of mandatory for every nursery I would think because it does help you. At the very beginning you're thinking well what this for, this is time for me why are you making me come but it's a good thing. It will really benefit people so....I'd definitely recommend it' [P30]*

Another theme that emerged from the interview data was that of missed opportunities for redefinition. Examples of these from individual mothers are presented in Table 5-8. As can be seen here, some parents viewed the problem of difficult behaviour as located within the child and rather than rethinking this perception when they saw their child behave well in the preschool setting, they adopted other explanations such as split personality [P13], or that preschool staff just don't experience the same bad behaviour [P20, P26]. These perceptions suggested that they missed the chance to redefine the relationship between their management of the behaviour and the resulting child behaviour.

**Table 5-8: Missed opportunities for changing parental perceptions and expectations**

‘She is really different in the nursery than what she is at home. I mean it’s like a totally different child. It’s like a split personality and I’m hoping that’s not the case [...] You do get a bit irate when you come in and they say oh, she’s wonderful, she’s this, she’s that’ and I think.....as I say people just don’t believe it but she does look as though butter wouldn’t melt in her mouth’	[P13]
‘He’s well behaved here, he’s well behaved everywhere else, it’s just with me, I think. Everybody sees a different child than I do. I think the nursery, they’ve never said to me that he’s been badly behaved...so, I guess he’s always good.’	[P20]
‘They’ve not seen it. They don’t seem, well, here she is – I’ve spoken to them and they say here she is a completely different wean from what I see at home. Because she’s, well she gets on really well with the weans and she’s quiet and she does as she’s told and all this. I don’t <i>get</i> it. She’s nuts at home, but they seem to think that she’s fine when she’s here. They don’t see what I do. They see a totally different wean’	[P26]
‘My parenting skills – I don’t know if I’m like a bad parent’	[P12]
‘I was hoping for an even bigger improvement. She has, she’s been the most difficult since out of all of them so far [...] She seems to be, but I think she is probably the worst in the group because they have commented on ‘we’ve had these children that are so good and then there is [child’s name]’	[P15]

Thirteen of the parents interviewed did not feel that their perceptions and beliefs had changed at all. Two of these however were parents of children with developmental delay who reported that they had specifically held back from having expectations of their child and one was a parent for whom a missed opportunity for redefinition was identified as described above. The remaining ten parents seemed to have a positive perception of their child’s development and did not provide any evidence for missed opportunities for redefinition.

### 5.5 Parent interviews - family outcomes

Better family outcomes reported by parents are presented in Table 5-9 according to the emergent themes of family relationship changes, household changes, enhanced parent opportunities and improved parent well-being, with illustrative quotes and the numbers of parents who made a similar comment shown on the matrix. It can be seen from the table that 15 parents reported improved mother-child relationships as a result of the preschool programme which some viewed as due to having more time to themselves allowing them to carry out housework and shopping tasks while their children were busy at the centre. Eighteen mothers reported experiencing a sense of freedom when their children attended the pilot programme.

Some parents said that time away from their children better enabled them to enjoy and value the time they did have together, that they experienced a renewed enthusiasm to interact and play with their child after having had a break from them, or that they felt they showed more understanding and patience with their children. Establishing a daily routine was also helpful for several households. Table 5-9 shows that mothers were very positive about the impact of the preschool provision on them personally and referred to increased self-confidence, more optimism about the future, more self-

confidence and confidence as a parent, more energy and a sense of freedom resulting from the provision were recorded.

Table 5-9: Examples of family outcomes mentioned by parents

Family relationships	Household	New opportunities for parent	Parent well-being
<p><b>Parent-child relationship(15)</b>                      'You get to enjoy when he's coming home and he's learned these new things and it's like I've had like four hours to myself during the day and then you have him at night...and obviously then it's like you get to enjoy him and you've had a break so you're kind of looking forward to him coming home' [P2]</p>	<p><b>Establishing routines (5)</b>                      'I think being in that routine has been the biggest help we've had' [P4]</p>	<p><b>Allows parent to work (3)</b>                      'Because I want to go back to work so I could go do that and things. Because I feel as if going back to work would be a break because it is hard bringing up three kids on your own really' [P12]</p>	<p><b>Sense of freedom (18)</b>                      'it's a relief I guess because it does free me up for work erm but it's...because I'm on my own at the moment with the children ...] it gives me a little bit of freedom that I wouldn't ordinarily have. Even just walking from nursery to the car without a buggy is erm...there is a sense of freedom with that. That's not to say that I don't adore my children it's just that it's difficult if you're on your own with them' [P3]</p>
<p><b>Parent-other child relationship (7)</b>                      'She's less demanding on me now, she's not as clingy as she used to be so she's not round my ankles like she was before, and that's obviously hard for the other two, you know. My son comes home from school and I just can't....I can hardly have a conversation with him some days, before, because she would just be round my ankles all the time asking for things' [P21]</p>	<p><b>Quieter household (3)</b>                      Aye, it made it an awfully – slightly – quieter household... Because she used to be absolutely mental – now she's mental, but it's in a good way as opposed to a bad way' [P26]</p>	<p><b>Financial benefit(3)</b>                      'And financially it's helping us hugely' [P6]</p>	<p><b>More energy (3)</b>                      'I feel as if I'm not strained any more and I've got more energy to do more things with them. I just...like I'm rested more' [P11]</p>
<p><b>Sibling relationships (6)</b>                      'The two of them get on a lot better as well. I think it's because, like...they'd been in the house all the time without anybody else there. They just kind of got under each others feet but they've learned to kind of get on with each other. They tolerate each other a lot more and just kind of be a lot more social with each other. So it's helped a lot. It calms a lot of the arguments between them so that's good' [P10]</p>	<p><b>Home atmosphere(2)</b>                      'I just feel as if there is a more better atmosphere in the house because we've got a wee break from each other' [P11]</p>	<p><b>Allows parent to study (2)</b>                      'So, every time she's in the nursery I'm in library or at home reading or something' [P16]</p>	<p><b>Social support: less isolated (3)</b>                      'it's just speaking to other people. Just normal conversation because a lot of the time, well every day I'm in the house with just the boys' [P4]  <b>Social support: confidence as a parent (2)</b>                      'Speaking to other mums and hearing what they're going through on a daily basis makes me think ok I'm not the only one...other people are finding it hard as well as me. Sometimes if I'm having a hard time and I'm tired or run down I'm thinking why is this happening to me, is there something wrong, am I doing something wrong, is that why I'm struggling - because I'm not a good enough mum? ... It's a wee bit of relief as well in thinking alright okay, I can't be a bad mum then because it's happening to other people and they're not bad mums' [P29]</p>
		<p><b>Allows parent to take up new hobby(1)</b>                      'it means I can look into doing other stuff out with [child's name] to improve my life, to make me more happier which will make him more happier ... I would like to do like a wee class in it. It's just at the local craft shop... I can go back to being me erm....because it kind of got to me because I thought all I was, was a mum. I was nothing else, I wasn't a person, I didn't have a life outside being a mum' [P29]</p>	<p><b>More optimistic about future (3)</b>                      'it's just making me less nervous about coming...it's...making me look forward to things with a lot less stress, a lot of ease' [P7]  <b>Increased self-confidence (1)</b>                      'I suppose confidence-wise it's helped ...just general well being, like comfy with myself to sit in and talk to other people and meet new faces and have different conversations from different walks of life. It's just like opened a few doors as well so I'm happier for that' [P30]</p>

## 5.6 Ryff Psychological Well-Being Scales (PWBS)

The Ryff PWBS (see section 2.2.2) were completed by parents at the same time as Bayley-III social-emotional and adaptive behaviour scales (see section 4.3.2). As described in section 4.3.2, translations were provided and all parents were asked if they would prefer to have the questionnaires read out.

Mean scores and standard deviations for the *autonomy*, *positive relations with others* and *general well-being* scales are presented in Table 5-10.

**Table 5-10: PWBS mean scores (and standard deviations)**

Ryff subscales		Intervention group (N=87)	Comparison group (N=55)
Autonomy	Pre-intervention	30.78 (6.14)	30.62 (4.80)
	Post-intervention	31.24 (6.09)	30.65 (5.90)
Positive relations with others	Pre-intervention	33.09 (5.99)	35.47 (5.04)
	Post-intervention	33.76 (6.00)	35.67 (5.27)
General well-being	Pre-intervention	123.23 (20.27)	129.50 (16.42)
	Post-intervention	125.131 (20.93)	129.33 (14.89)

It can be seen that PWBS scores for pre- and post-intervention appear very similar, suggesting that parents in both the intervention and comparison groups showed little change in psychological well-being over the evaluation period. Paired t-tests confirmed that there were indeed no significant differences between pre- and post-test scores on any of the PWBS and any apparent differences may be considered as due to chance.

## 5.7 Staff views of changes in parenting capacity (from focus groups)

Staff perceptions of the impact of the programme on parents were very positive and are summarised in Table 5-10. The main benefit to parents mentioned by staff was in their well-being, with centres perceiving that parents looked happier or were less stressed. Three centres reported that parents had mentioned enjoying having time to themselves. Another significant impact on parents perceived by staff was their increased confidence, and that they were now able to approach and talk to staff.



**Table 5-11: Staff views of provision impact on parents**

<b>Impact on parent</b>	<b>No. of centres</b>
Parent well-being: looking happier	4
Parent well-being: less stressed	4
Parent well-being: enjoying time away from child	3
Increased confidence	6
Building up friendships	6
Establishing daily routine	1
Removing emotional barriers about school	2
Taking up college course, driving lesson	3

It should be noted that staff focus groups commented here on different aspects of ‘parental well-being’ from that covered by the PWBS parent questionnaire.

*‘For most parents I would say it’s increased confidence is the biggest thing that we see. They come and they’re like shy and they don’t want to engage or whatever right through to they’re asking to do things. When is the next time you’re running that? Or can I come in? And that kind of thing’*

Another positive impact on parents that was mentioned by staff was the fact that some mothers were making friends with other parents.

*‘And they’re actually forming relationships with other parents as well, which actually makes it easier for them to come in and interact. Yeah, you can see that and that’s really nice. They come in and they’re all chatty’*

Other areas where staff felt parents had benefited were in being able to go back to work or take up college courses. One parent had been able to take up driving lessons and successfully passed the driving test as a result of her child being offered a place on the programme. Other benefits mentioned by staff were that bringing their child to nursery taught some parents a daily routine, for example getting out of bed, and that some parents may have had negative perceptions or experiences of schools or establishments in general but this was now being rectified.

*‘I mean one of the big issues that’s always been with parents is that they have emotional barriers about schools and not wanting to be involved in schools and not really having ever seen school as a resource for them as parents, and really what you’re doing with this approach is you’re giving parents the message when their children are babies that the school is a resource and it’s full of things that they can buy into and supports that they can have and that can only play dividends over the years’*

## **5.8 Summary**

Triangulation of quantitative and qualitative data from both parents and staff provided strong evidence of improved parenting capacity in parents whose children attended pilot programmes.

Intervention group parents showed a significantly better response to the daily hassle of parenting the ‘terrible twos’ than comparison group parents.

Intervention group parents learned important new skills for managing their children's behaviour and for encouraging child learning through formal and informal observation of their children in the programme, through activities their children brought home, through talking to other parents, as well as through direct advice from staff in meetings with the key worker and support programmes.

They gained valuable new insights and understanding into their children's behaviour and changed the way they thought about their role as parents and their behavioural and developmental expectations of their children. They responded better to their children having had some time away from them when the children attended the pilot programme.

Triangulation of findings suggests that these new skills and insights as well as having some time to themselves, may have helped intervention group parents adapt better to the daily hassles of parenting a two year old than comparison group parents.

Changing parents' behaviour towards their children and enhancing parenting capacity is likely to be a highly important outcome for impacting on children's development in the longer term

## **CHAPTER SIX: CONCLUSIONS**

This study examined both process and outcomes for an extended pilot programme for two year olds over three local authorities, Glasgow, Dundee and North Ayrshire - the process of setting-up and delivering the extended pilot programme for two year olds and outcomes for children and parents over a seven month evaluation period.

### **Programme set-up**

While there were some initial teething problems associated with setting up these new pilot programmes staff felt they had successfully overcome the challenges and viewed the pilot as making a valuable contribution to the lives of the participating children and families.

Time needed to be allowed for completion of any necessary building adaptations. Staff appointed to work together on this new initiative as a team needed time to develop a shared vision, aims and values to inform their day-to-day practice before the two year olds came into their centres.

Staffing this new provision meant extending the experience of many staff to a new area of child development as they were more used to working with 3-5 year olds. So staff development and training in working with two year olds before the programme admitted any children was viewed as useful to help staff plan how best to tailor curriculum content and curriculum delivery to this younger age group.

Furthermore some staff felt that they would have benefited from training in working with parents to help them understand the range of needs and experiences of these families and how best to support them in a non-judgmental way.

### **Programme delivery**

Staff preferred where they were timetabled for regular team planning meetings and for carrying out any necessary administration. Staff felt that the allocated staff : child ratios and staff hours of work did not always recognize sufficiently that part of their duties were away from the children and that they need time for this.

Experience of delivering the programme taught staff just how much time and staff attention vulnerable two year olds needed in order to learn to cope with the demands of a preschool programme. Some staff felt that the pace of admitting new children to the programme needed to be slowed down to allow staff time to spend with new intake children to settle them properly before the next new intake group arrived with similar demands on staff time.

Staff valued training and support as helpful not only prior to the set-up but also throughout the delivery of the pilot programmes. They felt their practice had benefited from the experience of extending their skills to this new age group and that their new learning would also benefit their work with older preschoolers as new skills could be generalised.

### **Programme outcomes**

Findings from staff focus groups, staff ASBI questionnaire data, staff GAS, from parent interviews and from Bayley-III questionnaires completed by mothers all provided

evidence that children in the pilot programmes had learned a range of new skills throughout the period of their attendance at the intervention, particularly in the areas of language and social skills.

Standardised Bayley-III child outcome measures over a seven month period showed significant intervention group progress on cognitive, receptive language, expressive language and social-emotional outcomes with medium to large effect sizes. These standardised findings triangulated well with GAS, ASBI and parent and staff interview data. Together these findings from different sources and gathered by different methods both qualitative and quantitative, provide evidence that the intervention group made good progress over the evaluation period.

However, when these results were compared with a group of two year olds matched in terms of age, gender and whose homes were in similar areas of disadvantage, but who did not have places on the extended pilot intervention programme, they did not provide evidence that intervention group progress on child outcome measures was significantly different from that seen in the comparison group.

This was possibly due to the shortness of the intervention period and the presence of confounding variables that we were unable to control for in the design of the study. In particular the highly effective banding systems used by the local authorities ensured that priority places in the pilot programmes were allocated to those in their communities who were most in need. This resulted in the two groups not being equivalent - a common problem in real-world research.

However if we consider the likely extent of ongoing risk factors for the intervention group (child protection, maternal depression, drug abuse, developmental disability), it may be viewed as a highly positive result that the intervention group made the progress reported during the evaluation period at a comparable rate to the comparison group.

As well as positive child outcomes, there were also positive outcomes for parents. Results on the Parenting Daily Hassles Scales showed improved parenting capacity in parents whose children participated in the pilot intervention programme.

Indeed, intervention group parents' adjustment to the daily hassles of parenting was significantly better than that of comparison group parents. Changes here were in terms of how often parents experienced daily parenting situations as a hassle, and how much of a hassle it was for them.

Parents also gained valuable new insights and understanding into their children's behaviour which led to changes in the way they thought about their role as parents and their behavioural and developmental expectations of their children. In addition, they felt that they responded better to their children having had some time away from them when the children attended the pilot programme.

Parents learned from a range of experiences including formal and informal observation of their children in the programme, activities brought home by their children, talking to other parents, direct advice from staff in meetings with the key worker and parent support programmes.

When we triangulate the findings about coping with the daily hassles of parenting with findings from parent interviews it suggests that:

- the new skills that intervention group parents learned for managing their children's behaviour
- the new expectations and understanding they had of their children's behaviour
- having some time to themselves

all contributed to the better adjustment of intervention group parents than comparison group parents to the daily hassles of parenting during the 'terrible twos'.

***Changing parents' behaviour towards their children and enhancing parenting capacity is likely to be a highly important outcome for impacting on children's development in the longer term***

### **Summary**

Parents of vulnerable children in the extended pilot programme showed improved parenting capacity compared to comparison group parents. Children in the pilot programme showed improved developmental outcomes but their progress was not significantly different from that of comparison group children.

Staff reported new learning on their part that would inform future practice with preschoolers. Extending a programme to two year olds requires a bedding-in period for effective planning, preparation and staff training before programme start.

## CHAPTER SEVEN: REFERENCES

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