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An Evaluation of the Incredible Years School Readiness Parenting Programme Delivered in Welsh Schools

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**An Evaluation of the Incredible Years
School Readiness Parenting Programme
Delivered in Welsh Schools**

Kirstie Louise Pye

**A thesis submitted to the School of Psychology, Bangor University, in partial fulfilment
of the requirements of the degree of Doctor of Philosophy.**

30th November 2015

This PhD was funded by Bangor University (School of Psychology and 125th Anniversary Scholarship) and the Children's Early Intervention Trust (formerly Incredible Years Cymru charity).

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Table of Contents	Page
Title page	i
Declarations	ii
Acknowledgements	vi
Table of Contents	vii
List of Tables	x
List of Figures	xi
List of Appendices	xii
Summary	13
Chapter 1 – General Introduction	14
Thesis structure	15
School readiness	15
The role of parents	16
Parenting programmes	16
The IY series	16
The IY parenting programmes in Wales	17
The IY School Readiness parenting programme	19
Chapter 2 – Study 1: School readiness: A review of the dimensions and predictors of a complex construct	21
Introduction	22
School readiness theories	22
Moving forward	25
Readiness of the child	26
Readiness of the home, school, and environment	30
Conclusion	37
Chapter 3 – Evaluating the Incredible Years School Readiness Parenting Programme: Study methodology	39
Background and aims	40
Method	41
Home visit guidelines	51
Chapter 4 – Study 2: The Play And Reading Observation Tool (PAROT): Validation of a measure of parent-child interactions that promote school readiness	55

Abstract	56
Introduction	57
Method	60
Results	67
Discussion and conclusion	73
Chapter 5 – Study 3: Evaluating the Incredible Years School Readiness Parenting Programme: Short-term outcomes (6-months)	76
Introduction	77
Method	82
Results	88
Discussion	99
Conclusion	100
Chapter 6 – Study 4: Evaluating the Incredible Years School Readiness Parenting Programme: Longer-term outcomes (12-months)	102
Introduction	103
Method	103
Results	105
Discussion	109
Implications and conclusion	111
Chapter 7 – Study 5: Parent and school feedback on the Incredible Years School Readiness Parenting Programme: A process evaluation	118
Introduction	119
Method	120
Results	122
Discussion	129
Conclusion	131
Chapter 8 – General discussion	132
Objectives and outline of the thesis	133
Summary of research findings	133
Relevance of research findings and implications	136
Study strengths	139
Study limitations and future directions	139
Chapter 9 – Conclusion	142

References	145
Appendices	164

List of Tables		Page
Table 4.1	PAROT parent behaviour categories, with definitions and examples	61
Table 4.2	PAROT parent subcategories, with definitions and examples	62
Table 4.3	PAROT child behaviour categories, with definitions and examples	63
Table 4.4	Technical standards and procedures used to validate the PAROT	66
Table 4.5	Spearman correlations of PAROT parent and child categories for reading and play tasks combined	70
Table 4.6	Internal correlations of the PAROT final 8 composite categories for reading and play tasks combined	71
Table 4.7	Intra-class correlations of the PAROT categories for code-recode and inter-rater reliability for reading and play tasks combined	72
Table 4.8	Spearman's correlation coefficients of the PAROT parent category scores for combined reading and play tasks with PSoC parent measure	72
Table 4.9	Spearman's correlation coefficients of the PAROT child category scores for combined reading and play tasks with parent-reported SDQ and ECBI measures	73
Table 5.1	Observation time data for reading and play at baseline and follow-up	
Table 5.2a	Family characteristics at baseline for control and intervention conditions; baseline equivalence assessed using one-way ANOVA	89
Table 5.2b	Family characteristics at baseline for control and intervention conditions; baseline equivalence assessed using chi-square	89
Table 5.3	Equivalence of groups (intervention and control) at baseline using one-way analysis of variance	91
Table 5.4a	Primary parent outcome measures: summary of 6-month results using analysis of covariance	93
Table 5.4b	Primary child outcome measures: summary of 6-month results using analysis of covariance	94
Table 5.5	Secondary outcome measures: summary of 6-month results using analysis of covariance	95
Table 5.6a	Subgroup results of primary parent outcome measures: summary of 6-month results using analysis of covariance	96

Table 5.6b	Subgroup results of primary child outcome measures: summary of 6-month results using analysis of covariance	97
Table 5.7	Subgroup results of secondary outcome measures: summary of 6-month results using analysis of covariance	98
Table 6.1	Observation time data for reading and play at baseline, six-months, and 12-months	106
Table 6.2	A summary of short and long-term findings	109
Table 6.3	Per-protocol (n=31) observation measures: summary of 12-month results for families with complete data using analysis of covariance	112
Table 6.4	Per-protocol (n=31) parent-report measures: summary of 12-month results for families with complete data using analysis of covariance	113
Table 6.5	Intention-to-treat (n=32) observation measures: summary of 12-month results for all intervention families using analysis of variance	114
Table 6.6	Intention-to-treat (n=32) self-report measures: summary of 12-month results for all intervention families using analysis of variance	115
Table 6.7	Per-protocol (n=25) observation measures: summary of 12-month results for families with complete data using analysis of variance	116
Table 6.8	Per-protocol (n=25) parent-report measures: summary of 12-month results for families with complete data using analysis of variance	117
Table 7.1	Descriptive data on the number of sessions attended by parents	122
Table 7.2	A summary of parent responses in relation to schools readiness skills	123

List of Figures		Page
Figure 1.1	The IY Parenting Pyramid	18
Figure 5.1	Consort diagram of the numbers of families involved in the study	86
Figure 6.1	Consort diagram: flow of participants in the study	107
Figure 7.1	Consort diagram: flow of parents and group leaders	120

Appendices	Page
A. Copy of the ethics approval email	165
B. Study introductory letter to schools: Phase 1	167
C. Study introductory letter to schools: Phase 2	169
D. School consent form	171
E. Table of resources provided to schools	173
F. Information for schools to explain the study to parents: Phase 1	175
G. Information for schools to explain the study to parents: Phase 2	178
H. Parent expression of interest form	181
I. Parent information sheet (intervention condition): Phase 1	183
J. Parent information sheet (intervention condition): Phase 2	186
K. Parent information sheet (control condition): Phase 1	189
L. Parent information sheet (control condition): Phase 2	192
M. Parent consent form	195
N. Group video recording consent form	197
O. Personal Data and Health Questionnaire (PDHQ)	199
P. Information for parents about the home observation	203
Q. PAROT coding sheet	205
R. PAROT training manual	207
S. Strengths and Difficulties Questionnaire 3/4	245
T. Eyberg Child Behaviour Inventory	248
U. Parent Sense of Competence	251
V. Parent thank you letter	254
W. Parent evaluation questionnaire	256
X. Parent semi-structured interview questions	259
Y. End of programme parent certificate	262
Z. Parent final thank you letter and debrief	264
AA. Group leader evaluation questionnaire	266
BB. Group leader focus group questions and notes	269
CC. Group leader cost and time diary	276
DD. Parent responses to semi-structured interview	278

Summary

Growing numbers of children are arriving in school without the necessary social and self-regulatory skills to engage effectively with the school environment and a lack of these skills can predict low academic achievement and poor relationships with peers and teachers (Chapter 1). Parents play a major role in developing children's readiness for school. Strong, positive parent-child relationships ensure that children form good relationships with peers and teachers. These relationships help children to settle into school, reduce conduct problems, and lead to good academic attainment.

Early intervention in the preschool years is an effective way to prepare children for school and prevent later academic failure. The Incredible Years (IY) programmes are evidence-based, effective programmes for improving child outcomes. Although there are longer IY programmes that address the needs of children with conduct and behavioural difficulties, there is a need for a shorter programme that can be delivered universally to parents as their children start school. The IY School Readiness parenting programme was developed for this purpose, but its effectiveness has never been researched.

This thesis reports on the first evaluation of the IY School Readiness programme. The first study provides a review of literature on the concept of schools readiness (Chapter 2), followed by the study protocol (Chapter 3), providing details of the methods of the evaluation. Chapter four presents the development and validation of a new observation tool for evaluating parent-child interactions during child-directed play and interactive reading, the Play And Reading Observation Tool (PAROT). The main programme evaluation is presented as a third study, a comparison of intervention and control families' outcomes (Chapter 5). The programme was effective in increasing key verbal parenting behaviours in the context of reading and play that are important for children's readiness for school. The final two chapters include longer-term findings of the programme (Chapter 6) and feedback from parents and schools (Chapter 7). Parent attendance was good and positive feedback was received from the parents and schools involved in the study. The final chapter of the thesis provides a summary of research findings, including implications and future research directions (Chapter 8).

CHAPTER 1
GENERAL INTRODUCTION

Thesis Structure

This thesis consists of eight chapters, including three papers currently in preparation for submission for publication. This first chapter puts the research into context and explains why the IY School Readiness parenting programme was developed. The first study (Chapter 2) is a literature review of the concept of school readiness, including a discussion of the dimensions of school readiness and the factors that may predict school readiness. The following chapter provides details of all elements of the project, including measures, recruitment, and data collection (Chapter 3). The second study describes the development of a new observation measure designed to evaluate parents-child interactions in the home during child-directed play and interactive reading (Chapter 4). The third study (Chapter 5) describes the main outcomes from the study, comparing families who attended the programme with control condition families, followed up six months after the baseline visits. Chapter six presents longer-term outcomes at 12-months after the baseline visit, whilst chapter seven provides an overview of feedback obtained from the parents that attended the programme and the group leaders who delivered the programme. Finally, the thesis concludes with a discussion of the findings of the thesis, the implications of these findings, and some recommendations for future research and implementation of the programme (Chapter 8).

School readiness

The term school readiness refers to the skills that facilitate a child's transition to school; however, a concrete definition of school readiness is much debated (Aiona, 2005; Carlton & Winsler, 1999; Dockett & Perry, 2009). Recent definitions portray school readiness as a multidimensional concept, incorporating health and physical development, cognitive skills, academic knowledge, socio-emotional competence, and language and communication skills (Blair, 2002; Jenkins, 2003; Kiernan et al., 2008; Meisels, 1998; 1999). The National Education Goals Panel (NEGP) has provided a basis for defining school readiness and for the development of appropriate measures for assessing children's school readiness. The NEGP proposed five main dimensions of children's school readiness: physical well-being and motor development, social and emotional development, approaches toward learning, language development, and cognition and general knowledge (Kagan et al., 1995; NEGP, 1991). Since the work of the NEGP, the two main dimensions of school readiness that have emerged are cognitive/academic skills, such as memory, concentration, knowledge of colours, letters, and numbers, and socio-emotional competence, including regulation and expression of emotions, social skills, and problem-solving (Duncan et al., 2007; Fantuzzo,

Bulotsky-Shearer, Fusco, & McWayne, C, 2005; High, 2008; Raver, 2002; Sasser & Bierman, 2011; Stacks & Oschio, 2009). The second chapter of this thesis provides a more detailed discussion of the concept of school readiness.

The role of parents

Parents play an important role in the development of children's school readiness skills (Fan & Chen, 2001; High, 2008; Lau, Li & Rao, 2011; Meisels, 1999; Walsh, 2005). Positive relationships between parents and their children result in children forming good relationships with peers and teachers in school (Howes et al., 2008). These relationships ensure children settle well into school, reduce conduct problems, and lead to good academic attainment (Fantuzzo & McWayne, 2002). Positive parent-child interactions that are structured and responsive to the child's needs are positively related to children's readiness for school (Connell & Prinz, 2002). In addition, positive parental behaviours including parental engagement, routine, aspirations and warmth have a significant effect on children's socio-emotion skills (Kiernan et al., 2008).

Parenting programmes

Children's readiness for school is not considered as the individual responsibility of the parent or carer, but as a joint responsibility of parents, teachers, childcare professionals, and also the Government (Aiona, 2005; Docket & Perry, 2009; High, 2008; Meisels, 1999; Hair, Halle, Terry-Humen, Lavelle & Calkins, 2006). Providing high quality early interventions for families is part of the joint responsibility in preparing a child for school (Ramey & Ramey, 1998; Bierman et al., 2008). Parenting programmes are an important method of intervening to support parents and to enhance parenting and have been recognised in a number of recent Government policy documents. The 'Every Child Matters' report highlights the Government's intention to support parents and carers to improve the lives of children (Department for Education & Skills, 2004). An independent review of early intervention was recently commissioned and subsequent reports have put forward a strong case for early intervention (Allen, 2011a; 2011b).

The IY series

IY is a series of programmes for parents, children and teachers, developed over the last 30 years in Seattle by Dr. Carolyn Webster-Stratton. The programmes were originally developed as a clinic-based treatment for child conduct disorder but have since been

demonstrated to be effective for both the treatment and prevention of conduct disorder (Webster-Stratton, 2011). The IY series use the principles of social learning theory (Bandura, 1977), with the aim of increasing the frequency of socially desirable child behaviours by reinforcing these behaviours, and decreasing the frequency of non-desirable, problem behaviours. Group leaders use the same underpinning principles to support changes in parenting behaviour, including the principles of praise, encouragement, and modelling of desirable behaviours (Webster-Stratton, 2011)

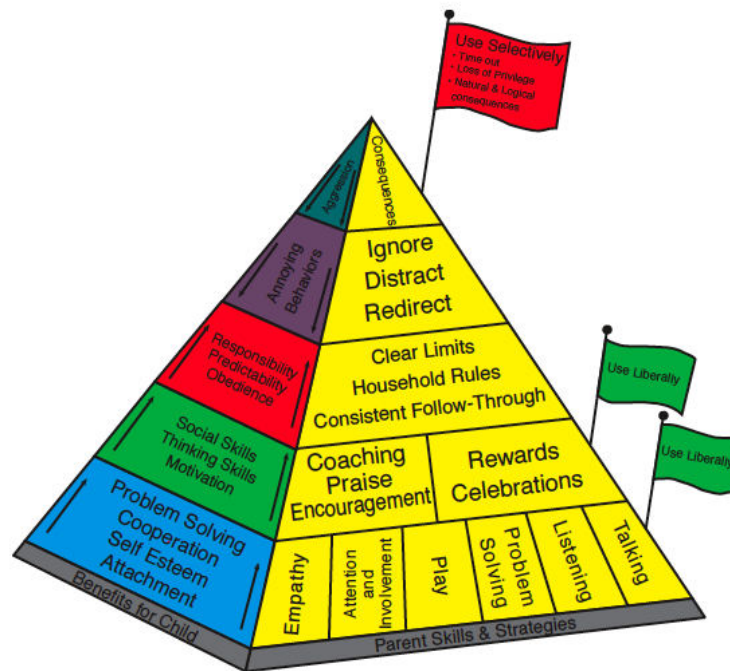
The IY parent, child and teacher programmes have been researched for over thirty years and demonstrated good outcomes in trials with high standards of evidence and long-term follow-up. The extensive global research conducted by Dr. Webster-Stratton and independent researchers has demonstrated significant improvements in child conduct problems and parenting (Hutchings et al. 2007; Reid, Webster-Stratton & Baydar, 2004; Scott, Spender, Doolan, Jacobs & Aspaland, 2001; Webster-Stratton, 1998). The US Office of Juvenile Justice and Delinquency Prevention identified the IY BASIC parenting programme as a “promising” Blueprints programme for violence prevention (Incredible Years – Parent, 2015). Blueprints programmes have been reviewed by an independent panel of evaluation experts and promising programmes meet the minimum standard of effectiveness, based on intervention specificity, evaluation quality, intervention impact and dissemination readiness. The IY BASIC parenting programme is also one of only two programmes identified by the National Institute for Health and Clinical Excellence (NICE) as effective for the treatment of conduct disorder (NICE, 2007).

The IY parenting programmes consist of weekly two-hour sessions delivered by trained practitioners. The broad aims are to: promote positive parenting, improve parent-child relationships, reduce critical and physical discipline, increase the use of positive parenting strategies (see Figure 1.1), help parents to identify social learning theory principles for supporting the development of prosocial behaviour and managing challenging behaviour, and improve home-school relationships. The programmes use a collaborative approach, encouraging parents to learn from one another, using methods including role play, modelling, group discussion, homework, and reviewing of DVDs of model family behaviours (Webster-Stratton, 2011).

The IY parenting programmes in Wales

The Parenting Action Plan (PAP, Department for Training and Education, 2005) was developed in 2005, setting out the Welsh Government’s intentions with regards to supporting

mothers, fathers and carers with raising children in Wales. Since the launch of the PAP the Welsh Government fund training across Wales for staff to deliver the IY parent programmes. This support has enabled a range of IY programmes to be delivered and evaluated across Wales.



Parenting Pyramid®



Figure 1.1. The IY Parenting Pyramid (Webster-Stratton, 2011)

The evaluation of the IY parenting programme within Sure Start areas with parents of three and four year old children demonstrated significant improvements in child behaviour, parental mental health, and positive parenting (Hutchings et al., 2007) with benefits maintained at the 18 month follow-up (Bywater, Hutchings, Daley, Tudor-Edwards & Whitaker, 2009). Further positive outcomes have been demonstrated following the evaluations of the IY toddler and baby programmes, with modest short-term improvements in the mental well-being of intervention parents, reduced negative parenting and child deviance (Griffith, 2011), and positive changes in sensitive parental responding (Jones, 2013).

The IY School Readiness parenting programme

The IY School Readiness programme is a short, universal parenting programme designed to promote preschool children's school readiness by enhancing their language and social skills (Webster-Stratton, 2011). The four-session programme (two-hours per week), delivered to groups of up to 12 parents, is based on the effective components and collaborative delivery style of the other IY programmes.

There are two parts to the programme. The first two sessions promote child-directed play with the aim of helping parents to promote children's social, emotional, and cognitive school readiness skills. The programme encourages parents to promote the development of their children's social skills such as developing friendships, sharing, helping, waiting and taking turns, and emotional regulation skills such as building emotion vocabulary, expression of feelings, and emotional regulation. The programme also teaches parents to encourage their children's academic skills such as numbers, colours, and shapes and how to expand their children's attention span and build their self-esteem.

The final two sessions are on interactive reading. This teaches parents how to encourage social, emotional, academic and problem solving skills through interactive reading. Parents are encouraged to make reading enjoyable, to help develop their children's imagination when reading books, and to build their children's self-confidence in their ability to read. The two interactive reading sessions are based on the reading with CARE building blocks: C – A – R – E (Webster-Stratton, 2011). Parents are taught to Comment and describe pictures, Ask open-ended questions, Respond with encouragement and praise, and Expand on what the child says.

The work reported in this thesis is the first known evaluation of the IY School Readiness parenting programme (Webster-Stratton, 2011). The aim of this PhD was to establish a battery of measures to evaluate the IY School Readiness programme, explore the effectiveness of the programme for parents of 3 - 5 year old children, and detect any difficulties or barriers in implementing the programme. Based on the content of the IY School Readiness programme, it was hypothesised that parents would demonstrate a positive change in verbal behaviours (academic, social, emotional, and problem solving coaching) after attending the programme. It was also hypothesised that parents would report improved child behaviour and parenting self-competence after attending the programme and that parents and group leaders would report an improved home-school relationship.

Providing high quality early interventions for families is important for preparing a child for school (Ramey & Ramey, 1998; Bierman et al., 2008). School-based programmes to promote social-emotional learning are associated with positive results such as improved attitudes about the self, others and the school, enhanced prosocial behaviour, reduced conduct and internalising problems, and improved academic performance (Durlak, Weissberg, Dymnicki, Taylor & Schellinger, 2011; Bywater & Sharpley, 2012) There is also strong evidence of the impact of positive parenting on school readiness (Connell & Prinz, 2002; Fan & Chen, 2001; High, 2008; Kiernan et al., 2008; Lau et al., 2011; Meisels, 1999; Walsh, 2005). The following chapter summarises the current research for school readiness, including a breakdown of the term and the predictors of school readiness.

CHAPTER 2

STUDY 1

School readiness: A review of the dimensions and predictors of a complex construct¹

This chapter presents the first Thesis paper currently in preparation for publication
Pye, K. L., Hutchings, J., & Bywater, T. (2015). School readiness: A review of the dimensions and predictors of
a complex construct

Introduction

School readiness is a frequently used term in current educational literature and there has been much discussion about the need for children to be “ready” for school in order to achieve academic success (Kagan, 1990; National Education Goals Panel, 1991). Despite an emerging consensus amongst researchers, educators and policy makers about the importance of school readiness, how the child will become ready and exactly what school readiness means continue to have no definitive answers. There seem to be large discrepancies in the way that parents, teachers and early childhood caregivers define school readiness. Aiona (2005) highlights the difficulties that arise when defining whether a child is ready for school and believes that there should be an agreed definition of school readiness amongst educators, parents and policy makers in order to move forward on ways to assess children’s readiness for school.

It seems that not all children are successful in making the transition to formal schooling. A national survey of problems identified by teachers during the transition to kindergarten revealed that teachers reported 48% of children as having difficulties in adjusting to school (Rimm-Kaufman, Pianta, & Cox, 2000). The importance of assessing children as they begin school in order to determine a common ground “readiness” for school is apparent (Aiona, 2005), however, how is it possible to assess such a concept when there is no clear definition as to what exactly school readiness means?

This literature review sought to find some possible answers pertaining to the concept of school readiness in order to provide a clearer definition of the term. It was also of interest to examine the factors that may be the most influential predictors of school readiness, in terms of risk and protective factors and to discover which children tend to be better prepared and why. This review was conducted to provide a current overview of research on the concept of school readiness.

School readiness theories

At one time, readiness had two distinct concepts: readiness for school and readiness to learn (Carlton & Winsler, 1999). Readiness to learn refers to the developmental milestone at which the child is ready to learn and acquire information and material. Readiness for school involves also being able to adapt and succeed in a typical school environment (Carlton & Winsler, 1999). This historic way of defining school readiness suggests that school readiness is related solely to the child’s individual readiness and these traditional ideas about school readiness derive from the assumptions of the nativist and empiricist perspectives.

Nativist/Idealist perspective

The nativist perspective is drawn on Arnold Gesell's maturational views that a child will be ready to learn when they are ready (Gesell, 1940). Children will be ready to start learning when they have matured enough to engage in learning-related behaviours such as sitting quietly, concentrating on work, interacting with peers and responding to commands given by the teacher (Meisels, 1998). This perspective is often described as an "idealist" perspective, as it conceptualises development in such abstract terms, emphasising the development of the child as an internal process rather than focusing on the impact of external factors in the child's environment. External factors such as parental nurturing, educational input, and socio-economic status are proposed to have only minimal effects on the child's readiness for school. These external influences may have a positive or negative effect but ultimately, they make little difference. This view, however, does not entirely dismiss the role of the environment in relation to a child's readiness for school, but more so highly accentuates the role of internal development. This perspective suggests that a teacher's role is to nurture the child's natural development, allowing them to naturally unfold.

In summary, this nativist or idealist perspective on children's school readiness proposes that a child is ready to learn when they are ready and external factors have minimal effects on this process. Instead, children will develop the ability to sit quietly and concentrate in the classroom and engage with peers and adults as a result of a natural, internal process. All children are thought to follow the same natural stages of development, but some are thought to develop at a faster rate due to genetic make-up. This nativist perspective dominated the literature for many years and according to this perspective, all children will be ready to learn eventually, but some children are ready sooner than others.

Empiricist/Environmental perspective

The empiricist perspective takes a contrasting stand on the definition of readiness. Rather than readiness being an internal process whereby children are ready to learn when they have matured sufficiently, the empiricist or environmentalist viewpoint focuses on what the child does and how the child behaves (Meisels, 1998). Instead of a natural process of developmentally unfolding, this perspective concentrates on those specific skills or experiences that a child needs in order to be ready for school. Kagan (1990) refers to this approach as "readiness for school" as opposed to "readiness for learning."

The focus is on a set of skills that need to be acquired before a child starts school. This set of skills includes knowledge of colours and shapes, letters of the alphabet, how to

spell one's name, and counting to ten. It is proposed that these skills and knowledge are acquired and enhanced through support and education. Children can be trained in this set of skills and appropriate assessments can determine whether or not a child can demonstrate these skills, therefore reflecting their readiness for schools. Those children who are unable to demonstrate that they have mastered these skills may not be ready for school and may require additional support to make the transition to school. This perspective believes that readiness is an end point that children and educators can strive for and that there are certain criteria determining this readiness.

Constructivist perspective

This more contemporary perspective opposes the nativist viewpoint that readiness to learn is something internal, depending on the maturation of the child or the empiricist viewpoint that a specific set of skills can be learned or acquired in order for a child to be ready for school. The constructivist approach defines readiness in relation to sociocultural factors looking at the setting of the child. School readiness from this viewpoint is based on a set of ideas or perceptions that may be held by the parents, teachers and people in the community of the child, in relation to the child's readiness for school (Meisels, 1998). In contrast to the empiricist's ideas about training and assessing the child on a set of skills, this perspective shifts the focus of assessment away from the child and to the community in which the child is living. A child who may be ready in one particular school or community may not be ready in another school or community. This viewpoint argues that the environment of the child needs to be considered in order to obtain a fair assessment of the child's readiness.

Interactionist perspective

It is thought that readiness for school should not be the sole responsibility of the child but should also involve the school being ready for the child. A recent paper giving perspectives on assessing school readiness suggested that school readiness should be a 2-fold concept focusing on the developmental readiness of the child and also how ready and committed the school is to addressing individual needs (Aiona, 2005). Meisels (1998) describes this final perspective on readiness as interactionist. Here, readiness is described as a bidirectional concept that involves the child's learning including their skills, knowledge and ability, in addition to the schools ability to meet the needs of all children.

This viewpoint proposes readiness as an outcome of the interaction between children's prior experiences, their genetic make-up, their maturation, and the environments and experiences they are exposed to. The interactionist perspective incorporates the ideas of the three other perspectives (nativist, empiricist, and constructivist) by addressing the importance of how the child develops naturally but with recognition that the ideas or perceptions of the child's environment can effect the way in which children learn and develop. Kagan (1990) refers to this approach as "readiness for learning" as opposed to "readiness for school", with emphasis on helping all children to become ready learners. This perspective of school readiness can also be expanded to a three-concept definition, involving an interaction between the readiness of the child, the readiness of the home and the readiness of the school (Dockett & Perry, 2009).

Moving forward

It seems that it may not be possible to determine a single definition of school readiness and there now seems to be emerging consensus suggesting that school readiness is a multi-dimensional concept that not only relies on the qualities that a child brings to school but also depends upon the context of the child. Although varying definitions of school readiness exist, the National Education Goals Panel (NEGP), as directed by the US government, formulated a framework that is thought to cover these variations and provides a more comprehensive definition of school readiness. The panel defined three key components of school readiness in line with the interactionist perspective: readiness in children, readiness in schools, and readiness in families and communities (National Education Goals Panel, 1991).

Despite this more contemporary three-fold definition of school readiness, it continues to be a difficult task to determine what makes a ready child or a ready home or a ready school. More current research and initiatives are increasingly based on this three-concept definition of school readiness. For example, the Wisconsin school readiness indicator initiative suggests that learning and development are intertwined and that learning aids development rather than development stimulating learning (Jenkins, 2003). This initiative puts heavy focus on the fact that readiness is something that involves the child, the home, and the school. These are the three areas that are to be explored in this review.

Readiness of the child

The NEGP identified five dimensions in relation to the first key component, readiness in children: physical wellbeing/motor development, social and emotional development, learning approaches, language development, and cognition/general knowledge (Kagan et al., 1995).

The first dimension, physical wellbeing and motor development includes factors such as child's fitness, growth, and health status, while the second dimension, social and emotional development refers to the skills needed to form relationships, express feelings and self-regulate emotions. Approaches to learning include being persistent, motivated, open, and curious to the learning experience. The fourth and fifth dimensions are more academic aspects of school readiness. Language and cognition are closely connected, although there are various theories about the nature of this connection (Chomsky, 1995, Croft & Cruse, 2004). Language involves the use of sounds, grammar and vocabulary in line with a set of rules that is used to communicate knowledge and information. Language development is thought to build upon existing cognition, the mental ability to learn and acquire knowledge. In terms of the NEGP dimensions, language development refers to verbal skills such as listening and speaking as well as literacy skills such as reading and writing. Cognition and general knowledge refers to knowledge of colours, shapes, and numbers (Kagan et al., 1995).

Physical wellbeing and motor development

Research suggests the important role of children's health for school readiness and success. A review of contributing factors to school readiness identified the following as potential important influences: low birth weight, immunisations, poor nutrition, unintentional injury, lead exposure, dental decay and emotional and behavioural problems (Halle, Zaff, Calkins & Geyelin Margie, 2000). Data from the Early Childhood Longitudinal Study-Birth Cohort study has found that poor infant health explains a significant portion of ethnic disparities in math and reading skills at age four (Lynch, 2011).

A qualitative study compared the school readiness beliefs of teachers, parents, and administrators in Hawaii (Grace & Brandt, 2006). The study involved conducting 24 parent/teacher focus groups and administering a survey on the views of school readiness. Parents, teachers, and administrators believed that social-emotional development, language and communication, disposition to learn, school-related behaviour, and health and wellbeing were more important factors for school success than academic knowledge. Physical health and wellbeing was deemed the most important factor for school success. Another study

asked teachers to complete a survey about readiness for kindergarten (Heaviside, 1993). Teachers were asked to rate 15 qualities and then to select the three qualities that they felt were the most important for a child to be ready for kindergarten. The most important quality for kindergarten readiness was physical health, closely followed by having the ability to communicate needs and wants verbally, and followed by having enthusiasm and curiosity for new activities.

Social and emotional development

Social-emotional development includes the child's experience, expression, and management of emotions and the ability to establish positive and rewarding relationships with others (Cohen, Onunaku, Clothier, & Poppe, 2005). The ability of young children to manage their emotions and develop social skills is thought to be an important prerequisite for social adjustment and school readiness (Denham et al., 2013; Denham, Bassett, Zinsser, & Wyatt, 2014). Self-regulatory skills are thought to bring about many of the behaviours that are related to school success. Self-regulation refers to a range of characteristics and abilities and a child with self-regulatory skills is able to focus his attention, manage his thinking and behaviour, and control his emotions and feelings (Bronson, 2000). Research highlights the importance of emotional self-regulation and its incorporation into prevention programmes (Blair, 2002; Blair & Diamond, 2008). Blair (2002) proposed a neurobiological model of neural plasticity relating emotionality to school readiness. In this article it was suggested that children displaying highly negative emotions may be at risk for poor school readiness and that a home/school environment designed to promote emotional competence and self-regulation should result in a better adaptation to school.

Research was conducted to evaluate the Ready To Learn (RTL) programme, a curriculum focusing on teaching kindergarten children prerequisite learning skills. The RTL programme was developed based on a large body of research demonstrating the impact of children's social competence skills on school readiness and success (Brigman & Webb, 2003). One of three prerequisite learning skills to be taught was that of social skills, including learning to be encouraging to self and to work persistently and cooperatively. Social skills were taught in this curriculum, on the basis of what was already known about prerequisite learning skills in previous research relating to school success (Brigman & Webb, 2003). Two valid and reliable outcome measures were used: a listening comprehension test, and a teacher-rated behaviour checklist, including a social skills subscale. Results showed a significant positive difference between children who received RTL curriculum compared to a

control group in relation to a total behaviour score, which included the social skills subscale. This RTL evaluation provides evidence that teaching social skills as part of a curriculum can result in enhanced school success. The results of this study suggest the importance of social skills as a component of school readiness.

Another study investigated the negative impact of social problems on children's school readiness (Fantuzzo et al., 2005). Children (N=210) from low-income families were recruited from a large, urban Head Start programme. The study found that children who exhibited socially disruptive behaviours early in the year showed lower levels of cooperative, engaged, and attentive learning behaviour in classroom. The findings suggest the importance of social competence in children.

A recent short-term longitudinal study sought to determine the association between social information processing, social competence and school readiness in 198 preschool children (Ziv, 2013). In this study, school readiness was assessed using two indicators of schools readiness: approaches to learning, as reported by teachers, and early literacy skills, using a child vocabulary assessment. Social information processing was assessed through child interviews, whilst social competence was reported by teachers. The results demonstrated that both social information processing and social competence are positively related to school readiness. Children who viewed social encounters in more competent ways were reported to possess more competent social behaviours and seem to be better ready to perform in school both academically and in relation to their approaches to learning. The findings of these studies emphasise the importance of children's social and emotional development for school success.

Many years of research have highlighted the importance of children developing a secure attachment with their main caregiver in the early years (Bowlby, 1988) and secure attachment has been linked to schools readiness and school success (Commodari, 2013; Geddes, 2006). Secure attachments enable children to manage their emotions, have self-understanding and self-confidence, and to have empathy and understanding of others and these qualities are thought to promote positive engagement with learning. Securely attached children are able to trust and rely on teachers, form relationships with peers, and engage in learning opportunities. Insecure attachments, however, may have negative consequences for children making the transition to school. This is often the case for Looked After Children (LAC) and other vulnerable children (Geddes, 2006). Repeated change between carers and foster homes may cause feelings of separation and emotional abandonment for many LAC and other vulnerable children. These children may display frustration, be easily distracted in

the classroom, find it difficult to trust others, struggle to engage in learning activities, and often arrive in school with negative expectations (Geddes, 2006). For this reason, there is a high level of concern about the school readiness of vulnerable children and it has been long recognised that education is an important part of planning for LAC (Jackson 1987). For many of these children, school staff can become their first experience of long term, reliable and trustworthy adults and it is important that schools develop curriculums aimed at a child's specific social and emotional needs. Facilitating social and emotional development in the context of reliable and trustworthy relationships may enable such children to achieve in school (Geddes, 2006).

Learning approaches

Approaches toward learning have been defined as the individual characteristics and behaviours that children show while taking part in learning activities including behaviours such as persistence, motivation, attentiveness, flexibility, and organization (Fantuzzo et al., 2007; McWayne, Fantuzzo, & McDermott, 2004). Many recent studies have shown that approaches to learning are negatively related to children's problem behaviour and positively related to their positive social skills (Bulotsky-Shearer, Fernandez, Dominguez & Rouse, 2011; Fantuzzo et al., 2005). It is thought that children who are more motivated to learn are more likely to be ready for school. Berhenke and colleagues (2011) studied observable indicators of motivation in relation to outcomes of school readiness. Children (N=131) were observed on emotion and task behaviour states whilst completing challenging tasks and puzzles during their kindergarten year. School readiness was assessed using teacher-reports of student-teacher relationship, academic competence, and various learning-related behaviours including social competence, self-regulation, hyperactivity, and interpersonal and work-related skills. Berhenke et al. (2011) found that motivation indicators such as high levels of persistence and emotional expression are good predictors of school readiness.

Language development

Language and literacy skills developed in early childhood may be crucial for later success in school. A longitudinal study examined the contributions of mother's and children's oral language to children's school readiness in 75 low-income mother-child dyads (Cristofaro & Tamis-LeMonda, 2011). Mother and child language was assessed by counting the utterances during a 10-minute interaction in the home when children were 36 months old. Mother and child lexical diversity was also assessed when the children were 36 months old.

At prekindergarten (60 months), children were assessed on their print knowledge, letter-word identification, math skills, and sustained attention, combined into a single factor of school readiness. Structural equation modelling suggested that maternal language supports children's developing language skills, which in turn are related to children's school readiness, suggesting the importance of including language skills as a component of child school readiness.

Another study examined the indicators of school readiness collected at 12, 24, 36, and 54 months for a large sample of children (N=1,064; Justice, Bowles, Pence Turnbull, & Skibbe, 2009). Children were classified as to whether they displayed any expressive or receptive language difficulties at each of the four time points. Kindergarten teachers rated children's academic and social skills and behavioural problems. The results showed that measures of school readiness across nearly all dimensions were significantly lower for children who exhibited depressed language performance at specific points of time. These findings suggest the importance of identification of language difficulties at school entry.

Cognition and general knowledge

The fifth dimension as identified by the NEGP is cognition and general knowledge, and includes academic skills required for school success, such as knowledge of colours, shapes, numbers and objects. Walker and MacPhee (2011) assessed academic skills in relation to social skills and motivation skills. Measures included parent- and teacher-reported social skills, parent-reported and child-assessed mastery motivation skills (persistence and goal orientation), and academic measures (communication, cognition, reading and math) in samples of both preschool children (N = 199) and children entering elementary school (N = 344). The results found strong significant correlations between the three domains of school readiness in both samples of children. These results suggest a multi-dimensional approach to supporting school readiness, incorporating academic, social, and motivation skills.

Readiness of the home, school, and environment

Many key risk and protective factors have been identified as being important predictors of children's school readiness and success. These factors will now be discussed in more detail.

Early childcare and education

High quality preschool education has been thought to contribute to children's school readiness and has been recognised by many as an important protective factor in determining a child's readiness for school (Cote et al., 2013; Dickinson & Porche, 2011; Dobbs-Oates, Kaderavek, Guo & Justice, 2011; Magnuson & Shager, 2010). High quality early childhood services that are provided over many years are thought to improve children's cognitive, academic and social skills. Burchinal and colleagues (2009) conducted a meta-analysis of published studies on early childcare and identified 20 early care and education projects. Quality of early childcare was measured by widely used observation tools. The meta-analysis found that children in high quality early care and education projects, have slightly better language, social skills and academic outcomes. They concluded that the quality of children's early care and education may be related to cognitive, academic, language and social skills when controlling for background characteristics. Another study used data from the UK Millennium Cohort Study to test how different forms of childcare at nine months of age play a role in the development of cognitive skills and behaviour in children at age three. Mothers included in the study were working when their children were nine months old. The results suggested that formal group care was positively associated with school readiness, as measured by the six subtests of the Revised Bracken Basic Concept Scale, including children's concepts of colours, letters, numbers/counting, sizes, comparisons, and shapes (Hansen & Hawkes, 2009). The findings of another study suggested that attending preschool in general may be a significant predictor of children's school readiness, in particular children's cognitive abilities (Kiernan & Mensah, 2008). However, the quality of the preschool and its influence on school readiness was not assessed in this study.

Two important aspects of the quality of children's preschool classroom experience are individual children's engagement and the teacher's interactions in the classroom (Williford, Maier, Downer, Pianta & Howes, 2013). A recent study examined how these two aspects of the quality of the preschool experience are related to children's gains in school readiness skills (Williford et al., 2013). The sample consisted of 605 children from low-income backgrounds and 309 teachers from state- and federally-funded preschool programmes. The quality of children's engagement and teacher interactions were assessed by direct observations in the classrooms. Two main outcomes of children's school readiness were assessed: emergent literacy skills (print knowledge and phonological awareness) and self-regulation (inhibitory control and working memory). As hypothesised, both children's individual engagement and the quality of teacher-child interactions at the classroom level

were individually predictive of children's school readiness skills. The results suggest the importance of the quality of preschool environments, specifically for children from low-income backgrounds.

Peer play interactions

Positive peer play interactions are also thought to contribute to children's readiness for school. Fantuzzo and McWayne (2002) studied the relationship between peer play interactions in a family context and dimensions of school readiness. Low-income families of 242 preschool children were recruited and teacher and parent versions of the Penn Interactive Peer Play Scale (PIPPS) were administered in order to identify children's peer behaviours in the context of play. School readiness was assessed on classroom learning behaviours, classroom self-regulation and classroom problem behaviours. Results demonstrated that children who played interactively at home were rated as playing collaboratively in school. These children were also found to have positive approaches to learning. Conversely, children who exhibited disruptive peer play at home had a negative attitude towards learning and were unable to persist in tasks. These children were also reported by teachers as being disruptive and dysregulated with peers in school. These findings suggest the importance of encouraging positive peer interactions in both the home and school environments.

The home environment

The quality of the home environment is another potential predictor of school readiness (Jeon, Buettner, & Hur, 2014). A recent study examined the contribution of the home environment quality to school readiness, as partly mediated by the child's language skills (Forget-Dubois et al., 2009). The study predicted that a home environment offering various stimulating experiences and learning opportunities during infancy may contribute to school readiness, partly through its effect on early child language skills. Socioeconomic status was included as a distal measure of home environment quality, using data on parental education and household income obtained during home interviews with mothers. Exposure to reading was included as a proximal measure of stimulation in the home setting. The mothers reported on how often they looked at books and read with their children and how often children looked at books by themselves. School readiness was assessed using a validated test of academic knowledge and an assessment of general cognitive ability. Language skills were measured using an expressive vocabulary checklist. The results of this study found that the home environment of the child had direct effects on children's school readiness, and indirect

effects via the language and literacy skills of the child. These results suggest that a stimulating family environment may have a positive effect on school readiness both directly and through its effects on language skills.

Family involvement within the home may also contribute to children being ready for school. A recent study found that families' involvement in the home environment was positively related to child self-control, responsibility, and cooperation (Hindman, 2009). In addition, parent availability within the home is thought to contribute highly to school success. Kiernan and colleagues (2008) explored the factors likely to predict children's school readiness, as measured by teacher reports of children's cognitive and socio-emotional skills. Living within a household where parents are married and present, is thought to contribute to better cognitive ability prosocial behaviour in children. A longitudinal study examined the immediate and long-term effects of parental availability on children's school readiness (Booth, 1999). The families of 80 children attending schools in rural Swaziland were interviewed at home three times over a period of nine years. Information was collected on a number of factors including the family structure at home. The measure of school achievement was grade level as children only progressed to the next level if they had successfully met the academic goals. The study found that in households where fathers were absent, children were less prepared for school than children with families at home, especially for boys. When compared with other characteristics of the home, parental availability was one of the top predictors of school success.

Maternal supportiveness is another potential important predictor of school readiness. Maternal supportiveness includes behaviours often characterised by engaged attention, emotional flexibility, encouragement of autonomy, and being sensitive and positive (Davis & Logsdon, 2011). A study examined the longitudinal relationship between maternal supportiveness as a predictor of children's school readiness at age 5 (Brophy-Herb, Zajicek-Farber, Bocknek, McKelvey & Stansbury, 2013). The sample included 1,258 children and their mothers and measures included maternal supportiveness and cognitive school readiness. Maternal supportiveness (parental sensitivity, parental stimulation of children's development, and positive regard) was assessed during observed mother-child interactions when the child was 14-, 24- and 36- months old. Cognitive school readiness was measured when the child was 60-months old using standardised assessments of cognitive academic competence. Results supported the hypothesised connections between initial and later increases in maternal supportiveness with later cognitive school readiness. Maternal supportiveness also

partially mediated the effects of demographic risk on school readiness. The results suggest that enhancing early maternal supportiveness may benefit children's early learning readiness.

A further study examined data on 723 families to determine whether the effects of father's supportive parenting on children's academic and social school readiness are greater when mothers are least supportive (Martin, Ryan, & Brooks-Gunn, 2010). Mothers' and fathers' parenting, including supportive presence and stimulation of cognitive development, were assessed during video-taped parent-child interactions. The results indicated that fathers' supportiveness had larger benefits for children at lower levels of mothers' supportiveness for both academic and social school readiness outcomes. These findings suggest the importance of father supportiveness for children's academic and social school readiness.

Despite the positive findings on the importance of parent availability and supportiveness during childhood, conflicting co-parenting has been thought to interfere with the development of children's school readiness. Cabrera and colleagues (2012) examined the long-term associations between co-parenting and preschool children's school readiness. Conflict, communication, and shared decision-making were assessed as components of co-parenting and math, literacy, and social skills were assessed as indicators of school readiness in a large sample of 5,650 children and their biological mothers. Co-parenting conflict was negatively related to children's academic and social skills whilst co-parenting shared-decision making was positively related. The findings suggest that co-parenting conflict may have detrimental effects on the development of social and academic skills in preschool children.

Research suggests a significant role of positive parental behaviours including parental engagement, routine, aspirations and warmth on children's socio-emotion skills (Kiernan et al., 2008). Further research has also suggested a link between parental engagement and another component of children's school readiness: language and literacy skills. A randomised trial examined the efficacy of the Getting Ready intervention; a school readiness intervention aimed to support parental engagement with children through home visits (Sheridan, Knoche, Kupzyk, Edwards & Marvin, 2011). The results of the study supported the effects of the intervention in promoting language and literacy skill development, as reported by teachers.

Parental control strategies have also been thought to predict children's school readiness. Walker and MacPhee (2011) collected data on 543 at-risk, low-income children and their families. The sample included two groups of children: preschool children and school transition children (children entering elementary school). Parent-reported control styles were modestly but significantly associated with academic indices of school readiness,

including communication, cognition and, reading and math for the preschool sample but not for the school transition sample.

Another key protective factor in the home environment is partnership stability. Parent partnership instability was examined in relation to children's school readiness in a sample of 2,295 children and 2,936 mothers (Cooper, Osborne, Beck, McLanahan, 2011). Partnership instability was measured by summing the number of co-residential and dating transitions during the first five years following the child's birth. Children's school readiness was measured using an assessment of verbal ability and a checklist of behaviour problems at age five, including externalising, internalising, attention and social problems. Both types of partnership instability (co-residential and dating) were associated with less verbal ability and more externalising and social problems. These findings emphasise the role of parent relationship stability in promoting children's school readiness.

There is an abundance of research suggesting a link between family socioeconomic status and children's school readiness. One study examined school readiness in children at school entry and how it predicts first-grade outcomes (Hair et al., 2006). School readiness was measured according to the NEPG five dimensions of children's readiness. Hair et al. (2006) found that children from more advantaged backgrounds such as those who had a higher family income had better school readiness outcomes on all five dimensions than children from less advantaged backgrounds such as those who were born to a teenage mother or were born at a low birth weight. Another study examined the link between socio-economic status and school readiness in 164 mother-child dyads (Dotterer, Iruka & Pungello, 2012). Socio-economic status was positively correlated with school readiness, as measured by children's pre-academic knowledge and cognitive abilities. However, the sample only included African American and European American families, thus limiting the generalisability of the findings to other racial and ethnic groups. Doyle and colleagues (2011) examined socioeconomic status in relation to teacher reports of school readiness in a disadvantaged urban community of Ireland. School readiness domains included physical health and well-being, social competence, emotional maturity, language and cognitive development, and, communication and general knowledge. The study found that coming from a relatively higher socioeconomic background does not act as a protective factor for children living in a disadvantaged community for most of the school readiness domains. These findings suggest the important role that the neighbourhood may play in children's school readiness skills. In a further study, socioeconomic status was examined as a potential predictor of school success (Booth, 1999). The findings suggested socioeconomic status was

not a significant predictor of school success either alone or when interacting with parental availability. However, all children in this study came from rural families, therefore leaving little room for variation in socioeconomic status.

Another potential factor relating to school readiness is housing stability and how often families move home during the course of a child's life. Ziol-Guest and McKenna (2014) assessed the relationship between housing instability and school readiness outcomes prior to school entry in a large cohort of preschool children (N=2810). Housing instability was defined as moving house three or more times during a child's first five years of life. School readiness measures included an assessment of child language and literacy skills and parent reports of behaviour problems. Moving house three or more times during a child's first five years of life was significantly associated with increased attention problems, and internalising and externalising behaviour problems, but only among poor children. However, no significant associations were found for housing stability and language and literacy measures of school readiness. These findings suggest the importance of housing stability as a key protective factor in determining children's school readiness, especially for children from low-income families.

Another interesting factor in relation to children's school readiness is the experience of parents during their exposure to the school environment. There is minimal research in this area of school readiness; however, parents' own experiences in school are likely to have a strong effect on their children's academic experiences and success in school, given that the majority of parents have spent many years in the school setting (Eccles & Harold, 1996). It has been suggested that childhood memories are triggered as parents prepare their own children for school (Putallaz, Costanzo, & Klein, 1993).

In a longitudinal study on parental availability, other important home-related predictors of school success included the amount of time available to do homework, the frequency of parents reading to their children at home, the presence of an aid for schoolwork, and the frequency of children eating breakfast (Booth, 1999).

Home-school links

Although there are apparent school- and home-related predictors of school readiness, a positive home-school relationship may also contribute to school readiness. Parental involvement with the school is thought to be a strong predictor of school readiness (Hindman, 2009; Kingston, Huang, Calzada, Dawson-McClure & Brotman, 2013). Good relations between the home and the school are vital for children's smooth transition to school (Carlton

& Winsler, 1999) but some parents are not actively involved in their child's education and see the school as a separate entity to the home. A home-school match on the beliefs, morals and practices of teachers and parents in relation to child rearing is also thought to be important for children's school readiness. Barbarin and colleagues (2010) studied the home-school match of parents and teachers of 310 ethnically diverse children making the transition from pre-kindergarten to kindergarten. They sought to assess the home-school match in child-rearing beliefs in relation to school readiness skills of children. Children's school readiness was assessed by their academic and social-emotional competence at the start of kindergarten. The study found that matches between home and school beliefs were more common than mismatches but that there were still many parents who had beliefs that differed from teachers. Using a categorical indicator of home-school match, they also found that children tend to have better outcomes when the home and school show warmth and support and have similar child-centred beliefs.

Conclusion

There is an abundance of research in the area of school readiness, especially in relation to the concept of school readiness and the risk/protective factors that predict a smooth transition to school. The literature suggests that school readiness is a multi-dimensional concept, incorporating five main dimensions in relation to children's readiness for school. The NEGP conceptualised five main dimensions of children's school readiness, including physical well-being and motor development, social and emotional development, approaches toward learning, language development, and cognition and general knowledge (Kagan et al., 1995; NEGP, 1991). These five dimensions have provided a basis for defining school readiness and have enabled the identification and development of appropriate of measures for assessing children's school readiness.

More current research has emphasised the important role of social-emotional development for subsequent school success (Blair, 2002; Brigman & Webb, 2003; Denham et al., 2013; Denham et al., 2014; Fantuzzo et al., 2005; Ziv, 2013). Social skills and self-regulatory skills are thought to bring about many of the behaviours that are related to school success (Blair, 2002, Brigman & Webb, 2003). Walker and MacPhee (2011), however, called for a multi-dimensional approach to supporting school readiness, incorporating academic and motivation skills in addition to social skills. At the same time, however, children's health may affect how well a child learns, and some children may have language difficulties that may affect a smooth transition to school. Therefore the five-dimension definition provided by

the NEGP may be optimal in order to move forward with assessing children's readiness for school and in determining those factors that may be predictive of school success.

The literature has identified many key risk and protective factors that may be predictive of school readiness and success. Predictive factors include the quality of preschool education (Cote et al., 2013; Dickinson & Porche, 2011; Dobbs-Oates et al., 2011; Magnuson & Shager, 2010); positive peer play interactions (Fantuzzo & McWayne, 2002); the quality of the home environment (Forget-Dubois et al., 2009; Jeon et al., 2014); parent involvement, availability, and supportiveness (Booth, 1999; Davis & Logsdon, 2011; Hindman, 2009; Martin et al., 2010; Sheridan et al., 2011), family socioeconomic status (Dotterer et al., 2012; Hair et al., 2006), and parent involvement with the school (Hindman, 2009). These findings suggest the important roles that the school and home environments play and provide support for a three-fold definition of school readiness: readiness in the child, readiness in the school, and readiness in the home.

CHAPTER 3

Evaluating the Incredible Years School Readiness Parenting Programme: Study methodology

This chapter explains the design and procedure of the evaluation of the IY School Readiness parenting programme in Wales. This section outlines the recruitment procedures, evaluation set up, measures used, home visit structure and study design.

Background and aims

Growing numbers of children are arriving in school without the necessary social and self-regulatory skills. A lack of these skills can predict low academic achievement and poor relationships, leading to conduct problems. Early intervention in preschool years is an effective way to prepare children for school success and prevent later academic failure.

Although there are longer IY programmes that address the needs of parents of children with conduct problems, there is a need for a shorter, universal programme that can be delivered to parents as their children start school. Dr. Webster-Stratton developed the IY School Readiness programme for this purpose, but the effectiveness of the programme has never been researched. This will be the first evaluation of the IY School Readiness programme. The study will evaluate the effectiveness of the programme with families of 3 - 5 year old children living in areas of North Wales.

IY School Readiness programme

The IY School Readiness programme is a universal parenting programme that can be offered to all parents as their children start school. The programme runs for four weeks (2 hours per week) for parents of preschool children aged 3 - 5 years. The programme has two parts to help parents to support their children's readiness as they first start school:

Part 1 - Child-directed play

Strengthen children's social, emotional and cognitive skills through play

Part 2 – Interactive reading

Encourage social, emotional, academic and problem solving skills with books

Parents will get support to prepare their child for school by encouraging child-directed play, interactive reading, and strengthening home-school links. Parents learn these principles through facilitator-lead group discussion, videotape modelling, role-play, and rehearsal of techniques, both within the group and through homework assignments.

The groups are run by trained and certified group leaders from a school-based setting and all parent group sessions are videotaped to ensure implementation fidelity. The aims of the programme are to: 1) Improve children's school readiness, 2) Prevent children from developing later conduct problems and academic underachievement, and, 3) Enhance home-school relationships.

Aims of the study

The aims of the study were to:

- 1) Establish a battery of measures to evaluate the IY School Readiness programme
- 2) Explore the effectiveness of the IY School Readiness programme for parents of 3 - 5 year old children
- 3) Detect any difficulties or barriers in implementing the programme

Hypotheses

The specific hypotheses of the study were as follows:

- 1) Parents will demonstrate a positive change in parent verbal behaviours, in relation to academic, social, emotional, problem-solving coaching, following attendance on the programme
- 2) Parents will report improved child behaviour and parenting self-competency after attending the programme
- 3) Parents and group leaders will report an improved home-school relationship

Method

Participants

Approximately 72 participants were to be recruited to take part in the research. To be eligible for the study, families had to meet the following criteria:

Inclusion criteria

- Live in the vicinity of one of the participating schools
- Child aged 3 - 5 starting nursery or reception class
- Primary caregiver able to attend the programme for 4 weeks

Design

This was a pre-test post-test non-equivalent group design, whereby both the control and intervention participants were compared, however, the groups were assigned by cluster on a 'first come first serve' basis rather than through randomisation. The schools were to be recruited in two phases. In each phase, the first four schools to sign up to the study and attend the training were to be allocated to the intervention condition and the following two schools to sign up were to be allocated to the control condition.

Intervention and control condition participants were assessed on all of the measures prior to the start of the programme. The intervention condition participants then received the programme for four weeks, followed by a first follow-up visit for both intervention and control conditions at 6-months after baseline. The intervention and control condition participants then received a final follow-up visit at 12-months post baseline.

Procedure

Following ethical approval by the School of Psychology, Bangor University (approval number: 1628; 2010; see Appendix A), up to twelve schools (8 intervention and 4 control) in North Wales were to be recruited in partnership with Gwynedd and Conwy education authorities. As recommended by the education authorities, schools received an introductory letter about the study (see Appendix B & C) and were asked to complete a school consent form in order to participate in the study (see Appendix D). Schools were allocated to intervention and control conditions on a first come first serve basis. In Phase one, six schools were to be recruited, with the first four allocated to the intervention condition, and the following two schools allocated to the waiting-list control condition. In Phase two, six schools were to be recruited with the first four allocated to the intervention condition, and the following two schools allocated to the waiting-list control condition. Schools were provided with all resources to deliver the programme (see Appendix E).

Participating schools were asked to give information (see Appendix F & G) to all families of 3 - 5 year old children starting nursery or reception class in September 2010. Schools invited parents to attend the IY School Readiness programme and to participate in the evaluation. Schools asked parents to complete an expression of interest form (see Appendix H) to participate in the project and the research. Once participation had been confirmed the schools gave the participants' details to the researcher. Each school were asked to recruit approximately 6 parents, giving a total of 72 parents (12 schools x 6 parents).

The research team conducted a 1-hour baseline visit to all families during September 2010 (Phase 1) or February 2011 (Phase 2). During the baseline visit, the research and the parenting programme were explained to the family and an information sheet was given (see Appendices I – L). The parents were asked to complete a study consent form (see Appendix M) and a further consent form for permission to video record the programme group sessions (see Appendix N). Subject to written consent, the parent were then asked to complete a semi-structured interview regarding the background and demographics of the family (see Appendix O) and received information about being observed whilst playing and reading with their child (see Appendix P). The parent and child were observed for up to 30-minutes using an observation tool to measure parent and child verbal behaviours (see Appendix Q & R). Parents were asked to complete two parent-report child behaviour questionnaires (see Appendix S & T), and a further parent-report self-competence questionnaires (see Appendix U). Parents received a thank you letter at the end of the visit (see Appendix V).

Intervention schools delivered the programme for parents in September/October 2010 (Phase 1) or March 2011 (Phase 2). Two trained and certified group leaders delivered the programme within each school. One or two members of staff at each school received training to deliver the programme to parents of nursery or reception class children, and in one school the member of school staff delivered the programme with a trained worker from a local Flying Start service.

The research team conducted a first follow-up visit to all families at six months post-baseline (March 2011 for Phase 1 or August 2011 for Phase 2). The visit was similar to the baseline visit, lasting one hour and consisting of the same questionnaires and observation procedure. The intervention condition parents were asked to complete additional measures to provide feedback on the programme (see Appendix W & X) and they received an end of programme certificate (see Appendix Y). The research team conducted a final follow-up visit to all families at 12-months post-baseline (September 2011 for Phase 1 or February 2012 for Phase 2). The visit again lasted one hour and consisted of the same questionnaires and observation procedure as the baseline visit. Parents received a final thank you letter and debrief (see Appendix Z).

Families received a Welsh or English book (dependent on their preferred language) to read together during each observation. The child was allowed to keep the book at the end of each visit as a thank you to the family for their participation in the study. The families received 3 books in total for their participation in the research (one at each visit).

Participating families and schools received a report at the end of the study, providing an overview of general results.

Measures

To evaluate the effectiveness of the programme, the following outcome factors were assessed: sociodemographic history, child behaviour, parenting competency, and parent-child interaction. These were assessed using a number of techniques, including questionnaires, semi-structured interview, and direct behavioural observation. Participant and group leader responses to the intervention were also evaluated. The following measures were used to assess dimensions of school readiness:

Demographics – (semi-structured interview)

- ✓ Personal Data and Health Questionnaire (PDHQ; Hutchings, 1996)

Child Behaviour – (questionnaires)

- ✓ Strengths and Difficulties Questionnaire 3/4 (SDQ 3/4; Goodman, 2005)
- ✓ Eyberg Child Behaviour Inventory (ECBI; Eyberg & Ross, 1978; Eyberg, 1980)

Parenting Competence – (questionnaire)

- ✓ Parent Sense of Competence (PSoC; Mash & Johnston, 1983)

Parent-child Interaction – (direct observation)

- ✓ Play And Reading Observation Tool (PAROT; Pye, Bywater & Hutchings, in preparation)

Administration and Scoring Information

Personal Data and Health Questionnaire (PDHQ; Hutchings, 1996)

This is a semi-structured interview to obtain basic socio-demographic and general health data on family members (see Appendix O). The interview is conducted with the primary caregiver and covers aspects of the child's health and development, parent relationships, quality of housing, income, and education.

Administration

The PDHQ represents a semi-structured interview administered by the researcher, and answered by the primary caregiver. The full assessment was only administered at baseline,

taking approximately 5-10 minutes to administer. At follow-up one and two, a shortened version was administered to assess any change in circumstances since the previous visit.

Socio-Economic Disadvantage (SED-6; Hutchings, 1996)

Data for the SED-6 is derived from answers given on the PDHQ. The SED-6 is designed to assess matters concerning family socio-economic status. Six socio-economic risk factors are measured: employment status, marital status, number of children, maternal education, housing, and area of residence (high/low crime); these were selected based on the findings of Dumas and Wahler (1983), and Rutter and Quinton (1977).

Scoring

Based on the answers provided on the PDHQ, the six SED-6 factors were coded as follows:

- i. Employment status of primary provider: employed = 0, dependent on benefits = 1.
- ii. Marital status: married/cohabiting = 0, single parent = 1.
- iii. Number of children: small family size = 0, large family size = 1 (based on the findings of Brown and Harris (1978), three or more children represent large family size).
- iv. Maternal education: education beyond 16 = 0, education up to 16 = 1.
- v. Housing circumstances: good quality/secure = 0, poor quality/ overcrowded/insecure = 1 (this rating is made on the basis of responses given by the primary caregiver in the interview, and during the research observations).
- vi. Area of residence: low crime = 0, high crime = 1.

Strengths and Difficulties Questionnaire 3/4 (SDQ 3/4, Goodman, 2005)

The SDQ is a brief behavioural screening questionnaire to be completed by the primary caregiver. A slightly modified version of the original SDQ was used for the study – the SDQ 3/4 (see Appendix S). The SDQ 3/4 was specifically devised to use with parents of 3 and 4 year-old children. It includes 25 items on psychological attributes, some positive, others negative. The items are based on 5 scales: 1) emotional symptoms, 2) conduct problems, 3) hyperactivity/inattention, 4) peer relationship problems, and 5) prosocial behaviour. Twenty-two items on the SDQ 3/4 are identical to the original SDQ, the item on reflectiveness is softened, and 2 items on antisocial behaviour are replaced by items on oppositionality. An impact supplement on the back of the questionnaire asks whether the respondent thinks the child has a problem, and if so, enquires further about chronicity, distress, social impairment, and burden to others.

The follow-up version of the SDQ 3/4 includes not only the 25 basic items and the impact question, but also two additional follow-up questions for use after an intervention. “*Has the intervention reduced problems?*” and “*Has the intervention helped in other ways, e.g. making the problems more bearable?*” To increase the chance of detecting change, the follow-up version of the SDQ asks about 'the last month', as opposed to 'the last six months', which is the reference period for the standard versions. The follow-up version also omits the question about the chronicity of problems.

Administration

The scale was self-administered and took approximately 5-10 minutes to complete.

Scoring

The 25 psychological attributes were rated as either “*Not True*” “*Somewhat True*” or “*Certainly True*”. “*Somewhat True*” was always scored as 1 but the scoring of “*Not True*” and “*Certainly True*” varied with the item. The score for each item was generated using a transparent overlay. A total difficulties score was generated by summing the scores from all of the scales except the prosocial scale. The resultant score could range from 0 to 40 (and was counted as missing if one of the component scores is missing). Scores were then interpreted as normal, borderline and abnormal according to cut-off scores.

When scoring the impact supplement, the items on overall distress and social impairment were scored from 0 (“*Not at all*”) to 2 (“*A great deal*”) and were then summed to generate an impact score ranging from 0 to 10. Responses on the questions to chronicity and burden to others were included in the impact score. When respondents answered “*no*” to the first question on the impact supplement, they were asked to not complete the questions on resultant distress or impairment; the impact score was automatically scored zero in these circumstances.

Interpretation

A higher total difficulties score indicated a higher report of difficult behaviours. A higher impact score indicated that the difficult behaviours were having a high impact on the family.

Reliability and validity

The scale has previously demonstrated good stability as assessed by internal consistency (mean Cronbach’s alpha: 0.73), cross-informant correlation (mean: 0.34), and test-retest stability after 4–6 months (mean: 0.62; (Goodman 2001). In terms of discriminant validity, high SDQ scores have been associated with a strong increase in psychiatric risk (Goodman 2001).

Eyberg Child Behaviour Inventory (ECBI; Eyberg & Ross, 1978; Eyberg, 1980)

This 36-item parent report assesses the occurrence of problem behaviours in children (see Appendix T). Each behaviour is rated on two scales: a 7-point Intensity scale, measuring the frequency of particular behaviours, and a *Yes-No* Problem scale that asks whether the parent perceives the behaviour to be a problem.

Administration

The scale was self-administered and took approximately 5-10 minutes to complete.

Scoring

The Intensity scale items were scored from 1 (“*Never*”) to 7 (“*Always*”). A total score for Intensity was calculated by summing the circled responses for all 36 items (minimum score = 36, maximum score = 252). Missed responses were counted as 1 (“*Never*”) and summed as before. If four or more items were missing the scale became invalid and could not be scored.

For the Problem scale circled “*YES*” responses were totalled to give the total Problem score (minimum score = 0, maximum score = 36). Missed responses were counted as a “*NO*” response and summed as before. When there were four or more missing items the scale became invalid and could not be scored.

Interpretation

Both scales of the ECBI are continuous such that higher scores on the scale indicate a greater level of conduct-disordered behaviour and greater impact on the parent. Based on the 1980 normative data, clinical cut-off scores of 127 or more for Intensity and 11 or more for Problem scales were used.

Reliability and validity

The scale has previously demonstrated good stability, with reliability coefficients from 0.86 (test-retest) to 0.98 (internal consistency) (Robinson, Eyberg & Ross, 1980). The ECBI has shown good convergent validity, with ECBI scores being significantly correlated with scores on the Child Behaviour Checklist (Achenbach & Edelbrock, 1986) and the Parenting Stress Index (Abidin, 1990). The ECBI has also been shown to discriminate well between children with and without conduct problems (Eyberg & Ross 1978; Baden & Howe 1992).

Parent Sense of Competence (PSoC; Mash & Johnston, 1983)

The PSoC is a parent-report questionnaire developed to assess parenting self-esteem (see Appendix U). The questionnaire has 17 items that measure two subscales: parent

satisfaction (e.g. “*A difficult problem in being a parent is not knowing whether you’re doing a good job or a bad one*”), and parent self-efficacy (e.g. “*Being a parent is manageable, and any problems are easily solved*”).

Administration

The scale was self-administered and took approximately 5-10 minutes to complete.

Scoring

Items were rated on a 6-point scale ranging from “*strongly agree*” (1) to “*strongly disagree*” (6). Scoring for items 1, 6, 7, 10, 11, 13, 15, and 17 were reversed so that for all items, a higher score indicated greater self-esteem.

Interpretation

The scores were summed (after reverse scoring the above items) to give a total score. A higher score indicated greater parenting self-esteem.

Reliability and validity

In a normative study of 297 mothers and 215 fathers of 4- to 9-year-old boys (Johnston & Mash, 1989), Cronbach’s alpha coefficients were calculated for the total score and for each factor. For the entire sample, the total score (16 items) revealed an alpha of .79; the satisfaction factor (9 items) yielded an alpha of .75; and the Efficacy factor (7 items) revealed an alpha of .76.

Play And Reading Observation Tool (PAROT; Pye et al., in preparation)

This is an observation measure designed to assess the quality of the behavioural interaction between the parent and child. Twelve behaviour categories are used in this coding tool including eight parent and four child categories:

Parent categories

- 1) Descriptive Comment
- 2) Open-ended Question
- 3) Closed Question
- 4) Encouragement
- 5) Labelled Praise
- 6) Unlabelled Praise
- 7) Critical Statement
- 8) Reflection/Expansion

Child Categories

- 1) Positive Response
- 2) Negative Response
- 3) Neutral Response
- 4) Spontaneous Vocalisation

Four of the parent categories (descriptive comment, open question, closed question, and encouragement) are organised according to five school readiness subcategories: academic, social, emotion, problem-solving, and other. The PAROT also contains four child categories: positive response, negative response, neutral response, and spontaneous vocalisation. In total there are 28 categories: 24 parent and four child categories (see Appendix Q & R).

Observational coding was continuous and resulted in frequencies of each behaviour per specified interval. Each behaviour category was clearly defined and accompanied by a series of examples, specific guidelines to aid discrimination between categories, and decision rules.

Coding/Procedure

For the current research, PAROT was used to code the interaction between the parent and child at home for a total of 30 minutes. The following conditions were required of the family during the observation: television to be switched off, no telephone calls out, incoming calls to be answered briefly, unexpected visitors to call back later, both the parent and child to be in the same room for the duration of the observation, and no books to be used during the play observation. The 30-minute observation was in two parts: 15 minutes of observing the unstructured play between the primary caregiver and child and 15 minutes of observing the primary caregiver and child reading together. One of three bilingual books was used at each time point and the child kept the book at the end of each visit as a thank you.

Scoring

The total frequency of each behaviour was taken as the dependent variable.

Parent feedback

Parent feedback about the programme was obtained using the parent evaluation questionnaire (see Appendix W) and a semi-structured interview (see Appendix X), both specifically developed for the purpose of this study.

The parent evaluation questionnaire was developed to obtain quantitative data on aspects of the home-school relationship following attendance on the IY School Readiness programme. Parents rated 7 items including, how comfortable they felt talking to, and how well they were heard by, the teachers and school, whether they felt the relationship with teacher and the school had improved, and their likelihood to approach the school since attending the programme. Parents rated these on a five-point scale from *strongly agree* to *strongly disagree*. Parents also rated the problems they faced when attending the programme

on a five-point scale from *not at all* to *very much*, and were asked an open question regarding the skills they thought were important for their child to be ready for school.

The parent semi-structured interview comprised of eight questions about the parents' opinions and perceptions of the programme. Parents were asked how supportive and useful they found the programme and whether the programme had led to any changes in their own behaviour, their child's behaviour, or their relationship with their child. Parents were also asked how they felt about their child's transition to full-time school since attending the programme and whether they felt the programme had any benefits to the school. Finally, parents were asked about the effect of the programme on their relationship with the school and whether they had any suggestions to change or improve the programme for future parents.

Group leader feedback

Feedback from group leaders was obtained using the group leader evaluation questionnaire, again designed specifically for the purpose of this study (see Appendix AA). One questionnaire was administered to each set of group leaders at every school during the final supervision session. The questionnaire asked group leaders to rate four items in relation to the home-school relationship, including how comfortable they felt talking to parents, how well they were heard by parents, whether the relationship between the parents and the school had improved, and whether parents were more likely to approach the school since they attended the programme. Items were rated on a five-point scale ranging from *strongly agree* to *strongly disagree*. The group leaders also rated ten further items in relation to certain aspects of the programme, including weekly supervisions, materials, videotape examples, role play, group discussion and interaction, ease of implementing and effectiveness, overall feeling about the programme, likelihood to run the programme again, and any barriers they faced in delivering the programme. Group leaders were also asked what they liked most and least about the programme and how we could improve the programme for delivery in other schools.

Group leaders who attended the last weekly supervision session were also asked to discuss their experience of delivering the programme during a focus group. Leaders were asked a series of questions and the discussions were recorded in written note-form and also on a video recorder (see Appendix BB). The questions in the focus group related to the group leaders' overall opinion of the programme, the perceived benefits to themselves, the school, the parents and the children, the parent-school relationship, barriers or difficulties in

implementing the programme and recommendations or future implementation. Finally, leaders were asked to complete a brief time and cost diary (see Appendix CC).

Data analysis

Demographic data

Sample characteristics were analysed and differences (if any) between the two conditions, intervention and control were established.

Analysis of behaviour outcomes

Two types of analyses were conducted: 1) An 'intention to treat' analysis was undertaken whereby all families are included according to trial allocation, irrespective of uptake of intervention. Those lost to follow-up were included, assuming no change since their last follow-up; 2) A 'per protocol' analysis using parents with complete data at every time point. Differences between intervention and control conditions follow-up scores were explored using analysis of covariance (ANCOVA). Effect sizes were calculated using Cohen's (1988) guidelines.

Analysis of parent semi structured interviews and group leader focus group data

The open-ended question and interview data were analysed using thematic analysis, in order to identify, analyse and report themes within the data (Braun & Clarke, 2006). Data were reviewed and organised by question and thematic analysis enabled the development of the data from a broad reading towards discovering specific patterns and developing themes.

Home visit guidelines

Participant database

When the research team received the list of names, their details were entered onto the participant database. The researcher contacted all participants to confirm participation in the study and all participating families were assigned a study identification number (irrespective of whether they later declined to take part or withdraw from the study). This identification number was entered at the top of all correspondence and measures and the study identification numbers, names and contact details, including child name and date of birth, were all entered into the participant database. In accordance with the Data Protection Act,

the participant database was encrypted with a password that was only accessible to the research team.

Appointments

Parents were contacted by telephone to establish whether or not they were still interested in taking part. If parents were still interested, a baseline appointment was made.

Basics of call:

- Who forwarded their names and why.
- Brief explanation of the study and the programme (4 week course, 3 home visits etc.)
- If they want to take part in the research, explain that a 1-hour home visit needs to be arranged with them involving completing a series of questionnaires and being observed interacting with their child for 30 minutes.
- Arrange a convenient time for first baseline visit (anytime between 9am-5pm).
- Explain that both they and the index child will have to be at home for the visit.
- Ask about preferred language for speaking and reading (mention that they will receive a book at the end of each visit as a thank you)
- Say who will come for the visit
- Ask for child's name and date of birth
- Get address and directions to house (if necessary)
- Explain that a letter of confirmation will be sent in the post with the date and time of the visit, as well as our contact details

Spiel

Hello, this is X from the Incredible Years Centre at Bangor University. I have been given your name by X who said that you might be interested in attending the IY School Readiness programme and take part in the research we're conducting here. We are in your area X (e.g. next week), and we would like to arrange a visit to come and see you in your home. During the first visit we will give you some questionnaires to fill in and we want to observe you and your child interacting together with toys and books. The visit should take about an hour in total.

Go through the available time slots in the timetable to schedule both appointments, and then tell them who will be coming to see them.

So, X will be coming to see you on X for the first visit. We will send out a confirmation letter in the post with the date and time for you, and it will have our contact number so that you can get in touch if anything crops up and you are unable to keep the appointment.

Thanks and goodbye

A letter of confirmation was sent in the post the same day.

Preparing packs for baseline visits

The baseline packs comprised all documents required to complete the visit and all materials were provided bilingually (Welsh and English). The study identification number and the name of the school were written on the front label of the folder. The name, address, and scheduled time of visit were entered on the front cover sheet inside the pack. Street maps were then either photocopied or printed, with the participant address clearly highlighted. One map for each participant was included in the baseline pack.

Baseline visit materials required

- Baseline measures folder included the following documents:
 - Baseline front cover sheet
 - Map
 - Information sheet and consent form x 2
 - Additional contact details form
 - Change of address form and freepost envelope
 - Personal Data and Health Questionnaire
 - Strengths and Difficulties Questionnaire
 - Eyberg Child Behaviour Inventory
 - Parenting Sense of Competence
 - Guidelines for observation visit
 - 1 x book for child
 - 6 PAROT observation sheets (1 sheet per 5 minutes)
 - Participant thank you letter
- Additional items:
 - Video camera and charger
 - Tripod
 - Stopwatch

- Pens/Pencils
- Mobile Phone (& credit)
- Clipboard
- Sat Nav
- ID badge

Scoring and inputting

When baseline visits were complete, all participant folders were stored in a locked filing cabinet when not in use. All measures were scored accordingly and the individual scores from each measure were then inputted into the existing SPSS file. All measures were double scored (e.g. scored up manually, and then checked against SPSS), and all inputs double-checked by another person within the research team.

Security and confidentiality

All documents that included participant names and contact details were either filed away in a locked filing cabinet or shredded. When not in use, all participant folders were kept in a locked filing cabinet at all times. The participant database, which contained the family contact details, was encrypted with a password that was only accessible to the research team.

Follow-up appointment

Researchers conducted two follow-up visits to the family every six months after the initial baseline visit. First and second follow-up visits were conducted in a similar manner as the baseline visit. After all visits were complete and all data had been scored and inputted, the data was prepared and analysed.

CHAPTER 4

STUDY 2

The Play And Reading Observation Tool (PAROT): Validation of a measure of parent-child interactions that promote school readiness²

² This chapter presents the second Thesis paper currently in preparation for publication
Pye, K. L., Bywater, T., & Hutchings, J., (2015). The Play And Reading Observation Tool (PAROT):
Validation of a measure of parent-child interactions that promote school readiness

Abstract

Research Findings: This study reports on the development and validation of an observation measure, the Play And Reading Observation Tool (PAROT), to assess the key components of school readiness during play and reading parent-child interactions within the home learning environment. Home observations were conducted with 46 pre-school children (*M* age (months) = 45.85) and their parents, who had signed up to attend the group based Incredible Years (IY) School Readiness parenting programme. The structured observations included up to 15 minutes each of joint play and reading. Frequencies of parent and child verbal behaviours were coded using the PAROT. The PAROT demonstrated high internal reliability, with eight composite categories formed. The measure achieved good code-recode and inter-rater reliability, and limited concurrent validity. The PAROT's psychometric properties showed promise. The measure was successful in assessing play and reading parent-child interactions and measuring key dimensions of school readiness.

Practice or Policy: The PAROT has the ability to assess parent-child interaction in both reading and play contexts, separately and/or in combination, and allows the measurement of specific key elements of school readiness.

Introduction

School readiness

The definition of school readiness, the skills that facilitate a child's transition to school, is much debated (Aiona, 2005; Carlton & Winsler, 1999; Dockett & Perry, 2009). Recent definitions describe a multidimensional concept, incorporating health and physical development, cognitive skills, academic knowledge, socio-emotional competence, and language and communication skills (Blair, 2002; Jenkins, 2003; Kiernan et al., 2008; Meisels, 1999). Two main dimensions have emerged i) cognitive/academic skills, such as memory, concentration, knowledge of colours, letters, and numbers, and ii) socio-emotional competence, including emotional regulation and expression, social skills, and problem-solving (Duncan et al., 2007; Fantuzzo et al., 2005; High, 2008; Raver, 2002; Sasser & Bierman, 2011; Stacks & Oschio, 2009).

The role of parents

Parents play a major role in developing children's school-readiness (Fan & Chen, 2001; High, 2008; Lau et al., 2011; Meisels, 1999; Walsh, 2005). Strong, positive parent-child relationships ensure that children form good relationships with peers and teachers (Howes et al., 2008). These relationships help children to settle into school, reduce conduct problems, and lead to good academic attainment (Fantuzzo & McWayne, 2002). Positive parent-child interactions that are structured and responsive to the child's needs and emotions relate positively to school readiness, and to the development of social and communication skills (Connell & Prinz, 2002). Children starting school also have better social and academic skills if their parents have encouraged their social development from an early age (Walker & MacPhee, 2011).

A positive home learning environment encourages academic attainment as well as longer-term positive mental health and wellbeing (Sammons et al., 2007). Parents that engage in constructive learning activities with children, use complex language, and are responsive, are related to better child developmental outcomes (Bradley, 2002; Kiernan et al., 2008). Two important learning environments are in the contexts of joint play and reading (Ginsburg, 2007; Tomopoulos et al., 2006; Wasik & Bond, 2001).

The importance of play and reading

Joint play engages parents with their children providing an opportunity to promote

cognitive, physical, social, and emotional development (Bredekamp & Copple, 1997; Ginsburg, 2007; Savina, 2014). Pretend play develops memory and story-telling abilities, enhancing children's emerging literacy skills (Pellegrini & Galda, 1993). Child led play builds children's confidence and self-esteem, and develops a positive parent-child relationship (Webster-Stratton & Reid, 2009).

Shared reading is another important activity that encourages children's school readiness skills (Farrant & Zubrick, 2013; Wasik & Bond, 2001), but *how* shared reading is conducted is as important as how often parents read with children (Kassow, 2006). Children develop greater vocabulary when parents engage in conversations that go beyond the explicit content of the book (DeTemple & Snow, 1996). A comparison of mothers, story-readers versus story-tellers, found that children whose mothers were storytellers developed better language skills, further demonstrating the importance of expanding on the words in the book (Britto, Brooks-Gunn, & Griffin, 2006).

Certain parental behaviours during play and reading are thought to enhance parent-child interactions. Descriptive commentary, problem solving and socio-emotion coaching are parenting behaviours that are encouraged in parent training programmes (Hutchings, Gardner, & Lane, 2004; Hutchings & Gardner, 2012; Sanders, 1999; Webster-Stratton & Reid, 2009). Parent training encourages parents to use open rather than closed, yes-no questions during shared play and reading. (Arnold, Lonigan, Whitehurst, & Epstein, 1994; Lonigan & Whitehurst, 1998; Webster-Stratton, 2011; Whitehurst et al., 1988). Responding with encouragement, giving praise, and expanding on what the child says are also important parent behaviours (Huebner & Meltzoff, 2005; Lonigan & Whitehurst, 1998; Querido, Bearss, & Eyberg, 2002; Webster-Stratton, 2011).

Measuring parent-child interactions

Methods of assessing parent-child interactions during play and reading include parent interviews, parent-report questionnaires and direct observation. Direct observation is the most valid way of assessing interactions, as it can provide a real-time objective account of behaviour (Cummings, Davies, & Campbell, 2000). Few observation tools exist to assess components of the parent-child relationship (Aspland & Gardner, 2003) specifically for reading or play with preschool children; three are briefly outlined here.

The Dyadic Parent-Child Interaction Coding System (DPICS; Robinson & Eyberg, 1981) is a valid and reliable observational measure that has been used to evaluate parent-child interactions in pre-and post-intervention assessments of parent training programmes

(Hutchings et al., 2007; McGilloway et al., 2012; Webster-Stratton, Reid, & Hammond, 2004). The DPICS involves continuous frequency of 37 parent and child behaviours during sessions of structured and unstructured play. However, the DPICS has not been validated for assessing parent and child behaviours in the context of reading, and the manual clearly lists storybooks as inappropriate toys for DPICS observations because one aim is to assess the extent that the activity is child led (Eyberg, Nelson, Duke, & Boggs, 2005). The DPICS also does not code the specific parenting behaviours thought to encourage school readiness, such as academic, socio-emotional, and problem solving coaching.

The Child/Home Early Language and Literacy Observation (CHELLO; Neuman, Koh, & Dwyer, 2008) was developed for observing reading-related behaviours in children aged 0-5 years. The CHELLO assesses the early home literacy environment by observing adult vocabulary building, verbal encouragement and storytelling but it does not measure child behaviour.

The Adult-Child Interactive Reading Inventory (ACIRI; De-Bruin-Parecki, 2006) measures both adult and child reading behaviours across three categories: enhanced attention to text, promoting interactive reading, and using literacy strategies. Adult and child behaviours are scored on a 0-3 scale based on how frequently behaviours occur.

Existing tools code parent-child interactions during *either* play or reading but do not assess the mutual parenting behaviours that promote school readiness (cognitive/academic skills and socio-emotional competence) during both shared play and reading activities. There is therefore a need to develop an observation tool to assess parenting behaviours relevant to both play and reading. The development of a new tool is important as it could be used to evaluate the effectiveness of interventions that aim to enhance school readiness by improving the quality of parent-child interactions in both situations.

Programme to enhance parent-child interaction and school readiness

The IY School Readiness parenting programme for parents of children aged 3-5 years is a four-session programme (weekly two-hour sessions) delivered to groups of up to 12 parents. The programme includes the same core components as in the other well established and strongly evidence based IY programmes, including discussion, observation of videos, role-play, and home assignments, (Webster-Stratton, 2011). The use of descriptive commenting, open questions, reflecting/expanding on child speech, encouragement and praise are encouraged during shared play and reading (Webster-Stratton, 2011) to promote four dimensions of school-readiness: academic, emotion, social, and problem-solving skills.

Rationale for study

The Play And Reading Observation Tool (PAROT) was developed to assess core components of the IY School Readiness programme during shared play and reading parent-child interactions. This article reports the psychometric properties of the PAROT.

Method

Participants

Forty-six nursery (n=44) and reception class (n=2) school children (22 boys, 24 girls) and their primary caregivers (1 father, 45 mothers) participated in the study. Children's age ranged from 33 to 56 months ($M = 45.85$, $SD = 5.23$) at baseline, and caregivers were aged between 21 and 51 years ($M = 33.33$, $SD = 6.54$). Families were recruited by primary schools (N = 10) in two counties in North Wales, UK. Nine schools delivered teaching mainly through the medium of Welsh and almost half (45.70%) of the participating families spoke Welsh as their first language.

Measures

The Play And Reading Observation Tool (PAROT)

The PAROT is a direct observational measure of frequency and type of parent-child verbal interactions during sessions of play and reading within the home environment. The measure was developed in line with the content of the IY School Readiness programme, in order to assess coaching principles such as descriptive commenting, open questions, reflecting/expanding on child speech, and encouragement and praise, as taught to parents during the programme. The PAROT contains eight primary parent verbal behaviour categories: descriptive comment, open question, closed question, encouragement, labelled praise, unlabelled praise, critical statement, and reflection/expansion (see Table 4.1), with four of these (descriptive comment, open question, closed question, and encouragement) organised according to five school readiness subcategories: academic, social, emotion, problem-solving, and other (see Table 4.2). The PAROT also contains four child categories: positive response, negative response, neutral response, and spontaneous vocalisation (see Table 4.3). In total there are 28 categories: 24 parent and four child categories.

Table 4.1

PAROT parent behaviour categories, with definitions and examples

Parent Category	Definition	Examples
Descriptive comment	This is a statement or phrase that describes or refers to what the child is doing or an object or a toy.	You're putting the cow in the barn. You've chosen a purple crayon.
Open-ended question	This is a comment expressed in question form that clearly asks for further information (i.e. more than a one-word answer).	Tell me more...? What do you think might happen next?
Closed question	Any question that requires only one word as an answer. An expected answer for a closed question may be "yes/no", a nod of the head.	What animal is that? Are you okay?
Encouragement	A statement or phrase that expresses approval, appreciation, or positive acknowledgment of the child's efforts, attributes or product.	There you go! You've remembered all your letters!
Labelled praise	A specific verbalisation that expresses a favourable judgment upon an activity, product, or attribute of the child.	I like the way you sit so quietly. You have some great ideas.
Unlabelled praise	A non-specific verbalisation that expresses a favourable judgment on an activity, product, or attribute of the child.	Good work. Good girl.
Critical statement	A verbalisation that finds fault with the activities, products, or attributes of the child.	That's naughty. That's a horrible thing to do.
Reflection / expansion	A statement/question that repeats all or part of the child's preceding verbalisation or expands on what the child has just said.	Child: His name is Peter. Parent: Yes, it is Peter. Child: The toy box is full Parent: Oh, is it full?

Table 4.2

PAROT parent subcategories, with definitions and examples

Parent Subcategory	Definition	Examples
Academic	Any reference to colours, numbers, shapes, sizes, positions, concentrating, reading, drawing, colouring, listening etc.	That's the red car. Do you want to read a book with me?
Emotion	Any reference to emotions e.g. happy, sad, angry, frustrated, worried, calm, proud, excited etc.	You look really angry. Do you think he's excited?
Social	Any reference to social skills e.g. helping, sharing, team work, being friendly, taking turns, waiting, etc.	You're helping your sister build a tower. That's so friendly.
Problem-solving	Asking a child to think, plan, organise, generate ideas, solutions or consequences.	Can you think of a way that you both can play with the ball?
Other	Anything that does not relate to academic, emotion, social or problem solving skills.	We are going to play for bit longer. How about tomorrow?

Observed behaviours are coded each time they occur by making a tally mark in the appropriate category box on the coding sheet. Each coding sheet is used to record the frequency of behaviours across a 5-minute interval. Parent and child categories are coded simultaneously and continuously for a period of up to 15-minutes for reading, and up to 15 minutes for play. The PAROT manual contains definitions and examples of categories, and guidelines/decision rules for when to use each category.

Table 4.3

PAROT child behaviour categories, with definitions and examples

Child Category	Definition	Examples
Positive response	Any positive response by the child in relation to what the parent has just said/asked.	Parent: There are lots of animals in that picture. Child: The tiger's my favourite!
Negative response	Any negative response by the child in relation to what the parent has just said/asked.	Parent: Why don't you share the toys? Child: I hate sharing!
Neutral response	Any response by the child that is not directly in response to what the parent has said.	Parent: How many trains can you see? Child: I can't wait for tea.
Spontaneous vocalisation	Any vocalisation made by the child that is not in response to the parent speaking.	Child: I can't wait to go to Grandma's later.

Parent Sense of Competence (PSoC; Gibaud-Wallston & Wandersman, 1978; Mash & Johnston, 1983)

The PSoC was used to explore the concurrent validity of the PAROT parent categories, as previous studies have shown that improvements in self-reported parenting behaviours are reflected in increases in observed positive parenting behaviours (Bywater et al., 2009; Hutchings et al., 2007; McGilloway et al., 2012). The PSoC is a 17-item parent-report questionnaire measuring two subscales: parent satisfaction and self-efficacy. Items are rated 1 (strongly agree) to 6 (strongly disagree). Scores are summed giving a total parent self-competence score, with a higher score indicating greater competence. The questionnaire has good reliability (total score $\alpha = .79$, satisfaction $\alpha = .75$, efficacy $\alpha = .76$; Johnston & Mash, 1989). The current study confirmed good reliability (total score $\alpha = .83$, satisfaction $\alpha = .83$, efficacy $\alpha = .81$).

Strengths and Difficulties Questionnaire 3/4 (SDQ3/4; Goodman, 2005)

The SDQ 3/4 year version was used to explore the concurrent validity of the PAROT child categories using baseline data, as previous studies have found that mother report of child behaviour problems at home and direct observation of child behaviours are two variables that are strongly related (Hutchings et al., 2007; Webster-Stratton & Eyberg, 1982). This 25-item child behaviour questionnaire for parents of 3-4 year-old children has five sub-scales: emotional, conduct, hyperactivity, peer problems, and prosocial. The items are rated as “not true”, “somewhat true”, or “certainly true” on a 0-2 scale. A ‘total difficulties’ score is derived by summing the scores from the hyperactivity, emotional, conduct, and peer problems scales. Higher scores indicate greater levels of difficulties. The conduct and total difficulties scores were of particular interest in this study. The SDQ has good internal consistency (mean $\alpha = .73$), test-retest stability ($r = .62$), and discriminant validity (Goodman, 2001). The current study confirmed good reliability (total difficulties $\alpha = .76$, conduct $\alpha = .83$).

Eyberg Child Behaviour Inventory (ECBI; Eyberg & Ross, 1978; Robinson et al., 1980)

The ECBI was used to explore the concurrent validity of the PAROT child behaviours. A previous study found that children who have more behaviour problems on the ECBI are those whose behaviours are more negative when interacting with their mothers (Webster-Stratton & Eyberg, 1982).

This 36-item parent-report questionnaire measures the occurrence of problem behaviours in children across two sub-scales: intensity and problem. The intensity scale was of interest in this study as it measures problem behaviour frequency. Items are rated 1 (never) to 7 (always); scores are summed giving a total intensity score. Higher scores indicate greater levels of problem behaviour. The scale has good reliability from 0.86 (test–retest) to 0.98 (internal consistency; Robinson et al., 1980). The current study confirmed good reliability ($\alpha = .92$).

Procedure

Following ethical approval by School of Psychology, Bangor University (approval number: 1628), the measures were piloted by visiting a volunteer parent who had a child attending nursery class within a local school. The pilot study enabled the PAROT measure to be tested within a 30-minute observation, and for any inconsistencies within categories to be

resolved. The pilot study also determined the feasibility and acceptability of administering all measures within a 1-hour home visit.

For the main study, schools were recruited in partnership with Gwynedd and Conwy education authorities. The Children's Early Intervention Trust and Bangor University funded the study. Parents consented to be observed at home, pre- and twice post-attendance on the IY programme (total observations $N = 120$). Forty-six parents were observed at baseline, 43 parents completed observations at first follow-up (6 months post-baseline), whilst 31 parents completed observations at second follow-up (12 months post-baseline).

Prior to initiation of data collection, the primary coder (first author) observed video-recorded parent-child dyads from pre-recorded IY materials until code-recode reliability reached at least 70% agreement over two weeks. The primary coder trained a secondary coder with prior experience of observation coding systems. Training involved reading the PAROT manual and attending a training session, which included tasks to assess category understanding. Short video-recorded parent-child interactions were used for coding practice during training. Training continued until coders' inter-rater reliability reached at least 70% agreement on all 28 categories. Seventy per-cent agreement was reached with approximately 30 hours of training. Regular coder supervision ensured maintenance of at least 70% agreement.

During home visits, the parent and child were observed for a maximum time of 30 minutes, including 15 minutes of reading and 15 minutes of play. All observations were coded live with 52% ($n = 24$) of families consenting to be video recorded during the observations. Each dyad was given a book in their preferred language (either Welsh or English) and were asked to look at the book together for as long as they could up to a period of 15 minutes. After 15 minutes the parent was asked to play with their child and their toys for a further 15 minutes. The primary coder live-coded all home visits ($N = 120$), and the secondary coder (blind to the intervention) live-coded 24% of visits ($n = 29$) for reliability purposes. In order to check code-recode reliability the primary coder double coded the first nine baseline observations after two-weeks (the live observations were re-coded using the video recordings).

Data Analysis

Based on Yohalem and Wilson-Ahlstrom (2007), technical standards (see Table 4.4) were followed to establish the psychometric properties of the PAROT. These standards were

adapted and used in a previous observation tool study (Pechman, Mielke, Russell, White & Cooc, 2008). For this study, all analyses were conducted for the reading and play tasks separately and combined. As the separate reading and play analyses yielded similar results, the results are presented for reading and play combined.

Table 4.4

Technical standards and procedures used to validate the PAROT – adapted from Yohalem and Wilson-Ahlstrom, 2007, p.16.

Element	Definition	Procedures
Construct validity	The degree to which a tool accurately measures a specific construct.	The constructs of the tool were formed based on the content of the IY School Readiness programme and other reliable and valid observation tools.
Score distributions	The dispersion of scores from multiple observations for a specific category/scale.	The distributions of the scores were examined for each category. The majority of scores were non-normally distributed.
Internal reliability and validity of scale structure	The cohesiveness of categories and the extent to which categories statistically group together in expected ways to form composite categories.	The tool could not be factor analysed due to the large number of categories and small sample size. Spearman correlations were used to determine related categories and to combine categories to form composite variables.
Code-recode reliability	The extent to which the primary coder observes the same behaviours of the same observation at different times.	Intra-class correlations were conducted to verify inter-rater agreement between the primary and secondary coders.

Inter-rater reliability	The agreement of different trained coders when observing the same behaviour at the same time.	Intra-class correlations were conducted to ensure code-recode reliability for the primary coder.
Concurrent validity	The extent to which constructs of a tool are related to similar constructs of other validated measures.	Spearman correlations were used to assess concurrent validity. The child categories of the tool were correlated with parent-reported SDQ and ECBI measures and the parent categories were correlated with the PSoC.
Predictive validity	The extent to which a tool is able to successfully predict related outcomes.	Analyses of predicted validity were not conducted, as outcome information is not yet available.

Baseline data (n=46) were analysed to assess internal and code-recode reliability and concurrent validity. Baseline and follow-up data for 29 visits were analysed to assess inter-rater reliability.

Results

Pilot study

The results of the pilot suggested that the PAROT measure was appropriate for assessing parent and child verbal behaviours within a 30-minute observation. No inconsistencies within categories were found and no further developments to the measure were required prior to the main study. The measures were deemed acceptable by the parent and child and administering the measures was feasible within a 1-hour home visit.

Data preparation

Prior to the main analyses, the total times for reading and play were examined across all families. Some families were not observed for a total 30-minute period (15 minutes of reading and 15 minutes of play) as some parents or children wanted to end the observation

early. Seventeen families (37%) completed 15 minutes of interactive reading (M time = 10.65, SD = 4.08), compared to 40 families (87%) who completed 15 minutes of shared play (M time = 14.02, SD = 2.79). It was not possible to analyse the data using summed frequencies of observed behaviours for the 30-minute period. Therefore, the summed frequencies were calculated pro-rata for five minutes each of reading and play. The results were therefore analysed by using the total frequency for each behaviour category across a total time of 10 minutes (five minutes of play and five minutes of reading).

It was not possible to factor analyse the 24 parent and four child categories as the ratio of participants to variables was less than the minimum required (Field, 2009). Therefore a combination of theory, initiative, and correlations were used to organise the categories into final composite categories. Initially, the subcategory ‘other’ (see Table 4.2) was removed from the tool prior to the analyses, as it was not deemed relevant in relation to observing dimensions of school readiness. Critical statement (see Table 4.1) was also removed, as its functionality was questionable in terms of measuring outcomes of the programme. Baseline frequencies of categories were examined prior to conducting reliability and validity analyses in order to detect any categories displaying low frequencies. All four school readiness subcategories of encouragement (academic, social, emotion, and problem-solving) demonstrated very low frequencies at baseline, therefore these were combined to form one main category ‘encouragement’ with no school readiness subcategories. For descriptive comment, open question, and closed question, the frequencies of the school readiness subcategories ‘emotion’ and ‘social’ were low in comparison to ‘academic’ and ‘problem-solving’ subcategories. Emotion and social were therefore combined to form one subcategory ‘socio-emotion’. Labelled and unlabelled praise were combined to form a new composite variable “praise”; this was due to low baseline frequency of labelled praise and also based on previous studies combining these categories in the DPICS (Bywater et al., 2009; Hutchings et al., 2007; Webster-Stratton, 1998). The analysis therefore included 12 parent categories, located in six primary parent categories:

1. Descriptive comment – academic, socio-emotion, problem-solving
2. Open question – academic, socio-emotion, problem-solving
3. Closed question – academic, socio-emotion, problem-solving
4. Encouragement
5. Praise
6. Reflection/expansion.

Of the four child categories: positive response, negative response, spontaneous vocalisation, and neutral response, the latter was removed prior to the main analysis due to very low baseline frequency and having little functionality within the observation tool, in terms of measuring outcomes of the programme. The main analysis therefore included a total of 15 categories (12 parent and 3 child categories).

A Shapiro-Wilk test confirmed violation of the assumption of normality for 12 of the 15 PAROT categories (W range: 0.55-0.97), therefore non-parametric analyses were conducted. The .01 significance level was considered preferable to .05 in order to reduce the risk of type I error when conducting multiple analyses on one data set (Feise, 2002).

Internal reliability

Spearman's correlation coefficients explored category relationships and informed the formation of new composite variables (see Table 4.5). The three academic subcategories (descriptive comment academic, open question academic and closed question academic) were almost all significantly positively correlated; therefore they were combined to form a new composite variable "academic". The three socio-emotion subcategories showed similar correlations, therefore forming another new composite variable "socio-emotion". Significant positive correlations were also found for the three problem-solving subcategories, and these were also combined to form a third composite variable "problem-solving". Further analysis showed encouragement was positively correlated with total praise ($r = .36, p = .015$), therefore forming a final composite variable "encouragement/praise". Reflection/expansion and the three child categories remained as stand-alone variables. The final eight composite variables comprised five parent composite categories, academic, socio-emotion, problem-solving, encouragement/praise, and reflection/expansion, and three child composite categories, positive response, negative response and spontaneous vocalisation.

Spearman's correlations between these variables (see Table 4.6) suggests that parents who use more academic coaching also use more socio-emotion coaching, and parents who coach their children socio-emotionally tend to reflect and expand on what the child says. Parents who use problem-solving coaching also encourage and praise their children. Children who vocalise spontaneously whilst interacting with their parents tend to respond more negatively, whilst those children who display less spontaneous vocalisations tend to respond more positively to their parents.

Table 4.5

Spearman correlations of PAROT parent and child categories for reading and play tasks combined

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Descriptive comment academic		.267	-.003	.393**	.149	.146	.264	.357*	.124	-.102	.021	.121	.235	.023	-.103
2. Descriptive comment socio-emotion			.145	.063	.243	-.006	.164	.356*	.188	.277	.333*	.263	.041	.117	.115
3. Descriptive comment problem				.096	-.028	.472**	-.055	-.164	.647**	.207	.275	.131	.148	-.121	.001
4. Open question academic					.051	.294*	.295*	.387**	.071	.000	.189	.230	.357*	-.131	-.399**
5. Open question socio-emotion						.035	-.067	.133	.127	.199	-.056	-.093	-.039	.220	-.054
6. Open question problem							.155	.159	.454**	.192	.180	.315*	.624**	-.069	-.365*
7. Closed question academic								.339*	-.049	.300*	.216	.369*	-.008	.096	-.080
8. Closed question socio-emotion									-.133	.051	.222	.315*	.156	.025	-.299*
9. Closed question problem										.310*	.234	.105	.100	.007	.043
10. Encouragement											.653**	.152	.052	.115	-.061
11. Praise												.196	.146	-.184	-.104
12. Reflection/expansion													.376**	.191	.095
13. Child positive response														-.083	-.230
14. Child negative response															.156
15. Child spontaneous vocalisation															

* $p < .05$; ** $p < .01$

Table 4.6

Internal correlations of the PAROT final 8 composite categories for reading and play tasks combined

	1	2	3	4	5	6	7	8
1. Academic		.315*	-.057	.051	.279	.256	.065	-.188
2. Socio-emotion			.114	.237	.360*	-.189	.096	.108
3. Problem-solving				.479**	-.103	.067	-.221	-.113
4. Encouragement/praise					.045	-.005	-.083	.000
5. Reflection/expansion						.257	.315*	.145
6. Child positive response							-.112	-.298*
7. Child negative response								.363*
8. Child spontaneous vocalisation								

* $p < .05$; ** $p < .01$

Observer reliability

Code-recode reliability was performed on the nine double-coded (live followed by video recorded) observations by the primary coder. Intra-class correlations revealed high code-recode reliability ($> .9$) for all eight composite categories (see Table 4.7).

Inter-rater reliability was performed on the 29 live reliability observations coded by both the primary and secondary coders. Intra-class correlations revealed high inter-rater reliability ($> .8$) for all eight composite categories (see Table 4.7).

Concurrent validity

Parent variables

Spearman's correlations for the five PAROT parent categories with the PSoC (table 8) showed that socio-emotion was significantly positively correlated with PSoC total score and satisfaction sub-scale at the $p = .05$ significance level (see Table 4.8).

Reflection/expansion was significantly correlated with PSoC efficacy at the $p = .01$ significance level. No significant correlations were found for academic, problem-solving or encouragement/praise with any of the PSoC scales.

Table 4.7

Intra-class correlations of the PAROT categories for code-recode and inter-rater reliability for reading and play tasks combined

PAROT category	Intra-class correlations	
	Code-recode (n = 9 observations)	Inter-rater (n = 29 observations)
Academic	.990	.878
Socio-emotion	.970	.875
Problem-solving	.999	.884
Encouragement/praise	.992	.935
Reflection/expansion	.997	.926
Child positive response	.999	.984
Child negative response	.960	.928
Child spontaneous vocalisation	.997	.914

Table 4.8

Spearman's correlation coefficients of the PAROT parent category scores for combined reading and play tasks with PSoC parent measure

	1	2	3	4	5	6	7	8
1. PSoC total		.904**	.836**	.164	.308*	.049	.110	.274
2. PSoC satisfaction			.562**	.144	.316*	.112	.106	.202
3. PSoC efficacy				.128	.210	-.066	.093	.386**
4. Academic					.315*	-.057	.051	.279
5. Socio-emotion						.114	.237	.360*
6. Problem-solving							.479**	-.103
7. Encouragement/praise								.045
8. Reflection/expansion								

* p < .05; ** p < .01

Child variables

Spearman's correlations were conducted for the three PAROT child categories with SDQ total difficulties, SDQ conduct sub-scale, and ECBI intensity (see Table 4.9). Negative child response was significantly positively correlated with SDQ conduct and SDQ total difficulties at the $p = .05$ significance level. ECBI intensity scores were not significantly correlated with any PAROT child categories.

Table 4.9

Spearman's correlation coefficients of the PAROT child category scores for combined reading and play tasks with parent-reported SDQ and ECBI measures

	1	2	3	4	5	6
1. SDQ conduct		.889**	.735**	-.053	.355*	.196
2. SDQ total difficulties			.821**	-.061	.306*	.055
3. ECBI intensity				-.062	.289	.093
4. Child positive response					-.112	-.298*
5. Child negative response						.363*
6. Child spontaneous vocalisation						

* $p < .05$; ** $p < .01$

Discussion and conclusion

There is no existing measure that assesses both reading and play in one observation tool; the PAROT was developed for this purpose. The intention of this study was to develop and examine the psychometric properties of the PAROT in assessing parent and child behaviours that promote school readiness (cognitive/academic skills and socio-emotional competence) during both shared play and reading. The results are promising, confirming the reliability and limited validity of the PAROT as an observation measure for this purpose.

The internal correlations at the individual level for all categories confirmed the internal reliability of the PAROT measure. Eight composite categories were successfully formed based on a combination of the internal correlations results, theory, and logic. The final eight composite categories correlated well with each other, confirming the internal reliability of these composite categories.

Both coders maintained a minimum of 70% overall agreement for both inter-rater and code-recode reliability. Observer reliability was further confirmed by high intra-class correlations on each category. The PAROT demonstrated limited evidence of concurrent validity with two parent and one child categories with the SDQ, ECBI, and PSoC, in line with previous research (Hutchings et al., 2007; Webster-Stratton & Eyberg, 1982).

Limitations and future studies

Despite these promising findings, some study limitations exist. The study involved a relatively small sample of 46 parent-child dyads and data from most in more than once at different time points; therefore they should be interpreted with some caution. However, the reliability and some degree of validity of the PAROT were confirmed despite this limitation. Participating families resided in North Wales, and therefore results may not be generalisable. The discriminant validity of the PAROT is yet to be established.

The primary coder (first author) coded all data, with a small subsample of the data (24%) coded by the second coder for reliability purposes. Future studies should involve additional trained coders to enable more data to be second coded to further demonstrate the reliability of the PAROT. Ninety-eight percent of primary caregivers were mothers; future studies should include more fathers to compare differences in parent-child interaction between same, and different, sex parent-child dyads.

The observations data were analysed pro-rata for a total time of 10-minutes (5 minutes of play and 5 minutes of reading). The intention was to observe all families for a total time of 30-minutes (15 minutes of play and 15 minutes of reading). Unfortunately, a 30-minute period was too long for some families. The majority of families (n=40) completed 15-minutes of play whilst being observed but only 17 out of 46 families managed to complete 15-minutes of reading. This suggests that 15-minutes may have been too long a period in which to read the presented book. Future studies could involve a shorter observation time for reading or the introduction of additional books during a 15-minute period.

Clinical implications

The tool demonstrated promising results in terms of its psychometric properties and builds on previously developed observation tools, while filling an identified need for a tool of this kind. The PAROT has the unique ability to assess parent-child interactions in both reading and play contexts, and allows the measurement of specific key elements of school readiness (academic, socio-emotion and problem-solving). Existing observation tools do not

enable assessment of key school readiness-related behaviours in the contexts of play and reading. The importance of positive parent-child interactions in terms of developing good child behavioural and academic outcomes and specifically school readiness is apparent (Fantuzzo & McWayne, 2002; Howes et al., 2008). The PAROT may be useful in measuring the frequency of parent behaviours known to enhance school readiness pre- and post-attendance on the IY School Readiness parenting programme and other similar parenting programmes for parents with preschool children. The tool is currently being used as a primary outcome measure in the first evaluation study of the IY School Readiness parenting programme.

Key messages:

- Parents play a major role in the development of children's school readiness
- Positive parent-child interactions enable children to settle better into school
- Parent-child shared play and reading are important learning contexts
- The IY School Readiness parenting programme promotes key parent behaviours in shared play and reading
- No existing measure assesses parent and child behaviours during play and reading.
- The PAROT observation tool is unique in that it enables measurement of key mutual parenting behaviours that promote school readiness during *both* shared play and reading.

CHAPTER 5

STUDY 3

Evaluating the Incredible Years School Readiness Parenting Programme: Short-term outcomes (6-months)³

³ This chapter presents the third Thesis paper currently in preparation for publication
Pye, K. L., Hutchings, J., & Bywater, T. (2015). Evaluating the Incredible Years School Readiness Parenting Programme: Short-term outcomes (6-months)

Introduction

Over recent decades, the term “school ready” has been of growing political interest not only in England and Wales, but internationally (Kagan, 1992; NEGP, 1991; Allen, 2011a; 2011b). Its definition has been debated but it is commonly viewed as a multidimensional concept that includes health and physical development, cognitive and academic skills, socio-emotional competence, and language and communication skills (Blair, 2002; Jenkins, 2003; Kagan, Moore, & Bredekamp, 1995; Kiernan et al., 2008; Meisels, 1999). The main areas of school readiness that have emerged are: i) cognitive/academic skills, such as memory, concentration, knowledge of colours, letters, and numbers, and ii) socio-emotional competence, including emotional regulation, social skills, and problem-solving (Duncan et al., 2007; Fantuzzo, Bulotsky-Shearer, Fusco, & McWayne, 2005; High, 2008; Raver, 2002; Sasser & Bierman, 2011; Stacks & Oschio, 2009).

Parents play a vital role in preparing children for formal schooling and are encouraged to start preparing their child from a very early age, especially in relation to cognitive/academic and socio-emotional school readiness (Fan & Chen, 2001; High, 2008; Lau et al., 2011). Parents can encourage both of these sets of skills by playing and reading with their children (Ginsburg, 2007; Farrant & Zubrick, 2013). Research also suggests the importance of parents talking to their children, as children whose parents talk to them more gain vocabulary at a quicker rate than their peers (Hart & Risley, 1995).

Preparing a child for school is no longer considered only as the individual responsibility of the parent or carer – it is now framed as a joint responsibility in which parents, teachers, childcare professionals, and the government play important roles (Aiona, 2005; Docket & Perry, 2009; High, 2008; Meisels, 1999; Hair et al., 2006). Part of this joint responsibility in preparing a child for school involves providing high quality early intervention and support for families (Ramey & Ramey, 1998; Bierman et al., 2008).

The UK government has identified parenting programmes in a number of recent policy documents as being important means of intervening to support parents and to enhance parenting. The ‘Every Child Matters’ report states that the Government intends to put supporting parents and carers at the heart of its approach to improving children’s lives (Department for Education & Skills, 2004). A more recent influential report recommends a more central role for early intervention in UK policy and practice, and a framework has been suggested for assessing early intervention programmes targeting children from troubled families (Allen, 2011a; 2011b). Similar recommendations have been put forward by the US

government. The National Education Goals Panel (NEGP) was established in 1990 to report on progress towards six education goals. In its first goal, the act specified that all children in the United States will start school ready to learn (Kagan et al., 1995). The goal also stated that all children will have access to high quality preschool programs that can help prepare them for school and parents will have access to the training and support they require in order to support their children (NEGP, 1995).

In light of these recommendations, many parenting programmes and initiatives have been developed and evaluated. However, relatively few have been designed specifically to support parents in preparing their children for school. Examples of some that have are outlined below.

Parents as Teachers (PAT)

Parent as Teachers (PAT) is a US programme focusing on supporting a parent's role in promoting school readiness and healthy development. This parent-education programme is for parents with children from birth to age three and parent educators help parents to strengthen their parenting skills through home visits. The PAT programme has a long history of evaluation research and the programme has been found to improve children's overall school readiness, as rated by teachers using an assessment of seven areas, including symbolic development, communication, working with others, math and physical knowledge, learning to learn, physical development, and conventional knowledge (Pfannenstiel, Seitz & Zigler, 2003; Zigler, Pfannenstiel & Seitz, 2008). Pfannenstiel and colleagues (2003) found the programme to be effective in helping impoverished parents prepare their children for school and similar findings were reported in a replication of the study (Zigler et al., 2008).

Home Instruction Program for Preschool Youngsters (HIPPY)

HIPPY is an evidence-based two-year early intervention programme that aims to help parents with limited formal education prepare their four- and five-year-old children for school (Baker, Piotrkowski, & Brooks-Gunn, 1999). The programme currently operates in ten countries worldwide and involves home visits, supplemented by group meetings, using a structured curriculum approach. Baker and colleagues have reported findings from several related research studies that suggest the effectiveness of HIPPY in children's school performance (Baker, Piotrkowski, & Brooks-Gunn, 1998). In 2008, the Australian Government began a five-year rollout of HIPPY and a recent two-year longitudinal evaluation of this rollout was conducted (Liddell, 2011). The study, whilst not a randomised

controlled trial (RCT), included an intervention condition and a matched comparison condition and recruited 446 families across 14 sites. The evaluation found significant positive effects of HIPPY on the child's school readiness in terms of the teacher-reported parent's contact with the school and the fewer parent-reported child peer problems. In addition, teachers were three times more likely to report that the HIPPY child's parents were more involved in the child's learning and development.

Supporting Parents on Kids' Education (SPOKES)

SPOKES is a UK programme for supporting parents of children aged 5 to 6 years, as their children learn to read. During 12 weekly group sessions, parents are taught simple teaching strategies to use when reading with their child. The two main strategies taught are 'Pause Prompt Praise' and the 'whole language' approach to reading. This programme was implemented in combination with the IY parent programme and was found to significantly improve children's reading scores (Sylva, Scott, Totsika, Ereky-Stevens, & Crook, 2008). A more recent RCT, the Helping Children Achieve (HCA) study, assessed the effectiveness of three different parenting programmes, including SPOKES (Beckett et al., 2012). The study found an increase in positive parenting, and a reduction in negative parenting using a parent self-report questionnaire. Parents also reported improvements in their child's reading ability. The Institute of Effective Education, University of York is currently conducting an independent evaluation of the SPOKES programme, funded by the Education Endowment Foundation (EEF; see http://www.york.ac.uk/iee/research/SPOKES_evaluation.htm).

Triple P - Positive Parenting Program

The Triple P Positive Parenting Program was originally developed in Australia based on social learning, cognitive behavioural and developmental theory (Sanders, 1999). It is a multi-level system of interventions for parents and families with children aged 0 to 12 years and is used in 25 countries around the World. The goals of Triple P include: strengthening parental confidence, prevention of child maltreatment and children's social, emotional and behavioural problems and promotion of school readiness. Evidence suggests that Triple P is an effective intervention in reducing child behaviour problems (Sanders, 1999), however, the school readiness components that have been developed for Triple P but have not yet been evaluated.

Families and Schools Together (FAST)

FAST is an early intervention and parent involvement programme, aiming to strengthen families and children and reduce the incidence of child problems (McDonald, Billingham, Conrad, Morgan, O, & Payton, 1997). Pre-K FAST is the preschool aged programme for parents with children aged 3 to 6 years, designed to ensure that children enter school ready to learn. During 10 weekly sessions, parents share parenting and school readiness ideas with other parents and participate in group problem solving. Several US-based RCT's have been conducted, with suggested improvements in parent- and teacher-reported child behaviours (social skills, attention span, and academic competence and performance) and increased parent involvement in school (Kratochwill, McDonald, Levin, Young Bear-Tibbetts, & Demaray, 2004; Layzer, Goodson, Bernstein, Werner & Creps, 2001; McDonald et al., 2006). However, these studies have limitations and FAST are currently completing a large-scale RCT in the United States measuring the programme effectiveness in 52 sites over a five-year period. No UK-based RCT has been conducted to date.

The IY Series

The IY series are evidence-based programmes for parents, teachers, and children that promote social–emotional competence to prevent, reduce, and treat behaviour and emotion problems in young children (Webster-Stratton, 2011). The IY BASIC parenting programme (for parents of children aged 2 to 8 years) was recommended by NICE (2007) as a group-based parenting programme for the management of children with conduct disorder. The IY BASIC parenting programme also has Blueprint for Violence Prevention “promising” status (Incredible Years – Parent, 2015). The IY parent programmes are based on principles of social learning theory and groups are co-led by two trained leaders. In groups, parents are encouraged to identify important parenting principles and work together to problem solve common parenting challenges using cognitive behavioural techniques. Parents are shown pre-recorded video-clips of parent-child interactions and group discussions take place regarding key parenting behaviours demonstrated in the clips.

The IY School Readiness parenting programme (Webster-Stratton, 2011) is a short, universal programme that can be offered to *all* parents. The four-session programme (two-hours per week) is delivered by schools to groups of up to 12 parents of children aged 3-5 years. The IY School Readiness programme is based on the effective components and collaborative delivery style of the other IY programmes. Sessions are delivered using a range

of methods including facilitator-led group discussion and observation of video clips of parents and children to promote discussions, followed by rehearsal of parenting skills (role-play) and homework assignments. The programme consists of two parts:

1. Child-directed play – strengthening parent-child relationships and children’s social, emotional, and cognitive skills through play
2. Interactive reading – encouraging social, emotional, academic and problem-solving skills with books

The programme encourages parents to build their children’s language skills by coaching them using descriptive commenting, open-ended questioning, reflecting/expanding on child speech, encouraging and praising during shared play and reading (Webster-Stratton, 2011). The aim is to promote four dimensions of school-readiness: academic, emotional regulation, social, and problem-solving skills. The broad aims are to: i) improve children’s school readiness by enhancing their language, reading, and social skills, and ii) enhance home-school relationships.

The IY School Readiness parenting programme is one of the few programmes available in the UK specifically designed to support parents as their children start school. This paper reports on the first evaluation of effectiveness of the programme. Previous work has demonstrated that the IY programmes are cost-effective, efficacious and culturally acceptable in North Wales (Bywater et al., 2009; Charles, Edwards, Bywater & Hutchings, 2013; Charles, Bywater, Edwards, Hutchings, & Zou, 2013; Griffith, 2011; Hutchings et al., 2007; Hutchings et al., 2011; Hutchings, Martin-Forbes, Daley & Williams, 2013). This study builds on previous IY work in Wales by evaluating the IY School Readiness parenting programme with parents of 3-5 year old children living in North Wales, UK.

The aims of the study are to explore the effectiveness of the programme in terms of improving parent-child interactions, child behaviour and parental self-competence. We hypothesise that parents who have attended the programme will use more key verbal parenting behaviours when interacting with their children including academic, socio-emotion, and problem solving coaching, encouragement/praise and reflection/expansion. We also hypothesise an increase in child positive behaviours and a reduction in child negative behaviours when interacting with their parents in the contexts of reading and play. Parent-reported child behaviour and parenting competency will also be explored in order to detect any change following attendance on the programme.

Method

Participants

Forty-six nursery school children (22 boys, 24 girls) and their primary caregivers (1 father, 45 mothers) participated in the study. The majority of children were of nursery class age ($n=44$), with only two children in the reception class. The majority of children ($n=45$) had received no special needs provision, with only one child having received one-to-one help with their speech. Almost half (45.70%) of the participating families spoke Welsh as their first language.

Families were recruited by 10 primary schools in Gwynedd ($n=9$) and Conwy ($n=1$) counties in North Wales, UK. The total number of pupils in the schools ranged from 95 to 305 ($M = 173.67$, $SD = 59.67$) and the average nursery class intake ranged from 11 to 49 children ($M = 26.67$, $SD = 12.14$). The majority of schools ($n=7$) had a percentage of pupils receiving free school meals above the county average and nine schools delivered teaching mainly through the medium of Welsh.

Design

This was a small sample, pre-test post-test repeated measures study, in which both control and intervention conditions were compared, however, conditions were assigned on a 'first come first serve basis' rather than through randomisation (see allocation procedure section for more information).

Measures

Measures included a direct observation of parent-child interactions, parent-report questionnaires of child behaviour and parent self-competence, and a semi-structured interview.

Primary outcome measure

Parent-child interaction

The Play and Reading Observation Tool (PAROT; Pye et al., in preparation)

The PAROT was used to measure parent-child interactions during a 30-minute home observation. The PAROT is a direct observational measure of parent-child interactions during 15 minutes each of shared play and joint reading undertaken within the home environment. It contains five parent verbal behaviour composite categories: academic coaching, socio-emotion coaching, problem-solving coaching, encouragement/praise, and

reflection/expansion and three child verbal behaviour categories: child positive response, child negative response, and child spontaneous vocalisation. Each PAROT coding sheet is used to record the frequency of parent and child verbal behaviours across a 5-minute interval, by making a tally mark in the appropriate category box. Coding is continuous for a period of up to 15-minutes with parent and child categories being coded simultaneously. The PAROT has demonstrated good reliability and validity as a measure for assessing parent-child interactions in both reading and play contexts (Pye et al., in preparation).

Secondary outcome measures

Child Behaviour

Two parent-report questionnaire measures were used to assess the occurrence of problem behaviours in children, as a demonstration of pro-social behaviour indicates a child is more school ready (Raver, 2003).

Strengths and Difficulties Questionnaire 3/4 (SDQ3/4; Goodman, 2005)

The SDQ 3/4 version is a 25-item questionnaire completed by parents of 3-4 year old children and comprises five subscales: emotional, conduct, hyperactivity, peer problems, and pro-social. The items are rated as “not true”, “somewhat true”, or “certainly true” on a 0-2 scale and a total difficulties score is derived by summing the scores from the hyperactivity, emotional, conduct, and peer problems scales. Higher total difficulties scores indicate greater levels of difficulties, with a score of 0-15 classified as normal, 16-19 borderline, and 20-40 classified as abnormal. The SDQ has good internal consistency (mean $\alpha = .73$), test-retest stability ($r = .62$), and discriminant validity (Goodman, 2001). The present study confirmed good internal consistency (total difficulties $\alpha = .76$).

Eyberg Child Behaviour Inventory (ECBI; Eyberg & Ross, 1978; Robinson et al., 1980)

The ECBI is a 36-item parent-report questionnaire with two subscales: intensity and problem. The intensity scale was of interest in this study as it measures the severity of problem behaviours. Items are rated 1 (never) to 7 (always) and scores are summed giving a total intensity score. Higher scores indicate greater levels of problem behaviour and a clinical cut off score of 127 or more for Intensity was used based on the 1980 normative data. The scale has good reliability from 0.86 (test–retest) to 0.98 (internal consistency; Robinson et al., 1980) and the present study confirmed good internal consistency ($\alpha = .92$).

Parent self-competence and self-efficacy

Parent Sense of Competence (PSoC; Gibaud-Wallston & Wandersman, 1978; Mash & Johnston, 1983)

The PSoC was used to assess parenting self-competence and self-efficacy as parents who perceive themselves as more effective tend to involve themselves in their child's education at the preschool level (Pelletier & Brent, 2002) and engage in direct interactions with their children (Mash & Johnston, 1983). This parent-report questionnaire has 17 items on two subscales: parent satisfaction and parent self-efficacy. Items are rated on a 6-point scale from 1 (strongly agree) to 6 (strongly disagree) and scores for all 17 items are summed giving a total score, with a higher score indicating greater self-competence. The questionnaire has previously demonstrated good reliability (total score $\alpha = .79$; Johnston & Mash, 1989). The current study also demonstrated good reliability (total score $\alpha = .83$).

Demographics

Personal Data and Health Questionnaire (PDHQ, Hutchings, 1996)

The PDHQ is a semi-structured interview designed to obtain basic socio-demographic and general health data of the family. The interview is administered by the researcher and answered by the primary caregiver, covering aspects of family structure, the child's health and development, quality of housing, income, and education. The full assessment, administered at baseline, takes 5-10 minutes whilst a shortened version is administered at follow-up to assess any changes since baseline.

Procedure**School allocation to condition**

Following ethical approval by the School of Psychology, Bangor University (approval number: 1628; 2010; see Appendix A), ten primary schools were recruited across two recruitment phases in partnership with Gwynedd and Conwy education authorities. Schools were allocated to intervention and control conditions on a first come first serve basis. In phase one, six schools were recruited, with the first four allocated to the intervention condition, and the following two schools allocated to the waiting-list control condition. One of these control schools withdrew from the study before parents were recruited, leaving four intervention schools, and one control school.

Six schools were recruited in phase two, including the control school from phase one and three newly recruited schools in the intervention condition, and a further two schools in

the waiting-list control condition. The school involved in the control condition in phase one and the intervention condition in phase two, recruited two separate samples of parents, therefore not confounding the results.

Upon recruitment to the study, all schools were briefed on the study aims, research design, and parent recruitment procedure. Schools also received a timeline for parent recruitment and delivery of the subsequent programme.

Inclusion criteria

Families were eligible for inclusion in the research if they had a child aged 3-5 years in the nursery or reception class of a participating school and lived in the catchment area of that school. Eligible families included those in which the primary caregiver was able to attend the programme for four weeks at the school.

Parent/family recruitment

Participating schools were asked to provide information to parents including a flyer and study information sheet, to all parents of 3-5 year old nursery or reception class children. Parents were invited by the school to attend the IY School Readiness programme and to participate in the evaluation. Parents signed up by completing an expression of interest form supplied by the school. When completed, these forms along with parental consent were passed to the researcher. The researcher arranged an initial visit with families to obtain signed parent consent. The schools recruited a total of 46 families to take part in the study (see Figure 5.1). Thirty-two of these families were allocated to the intervention condition and 14 families to the control condition.

Data collection

The first author collected measures during two home visits: one after they had signed up to the study (baseline/pre), and another six months later (follow-up/post). Parents in the intervention condition attended the programme in the interim. The parents in the waiting-list control condition were offered the opportunity to attend the programme after the 6-month follow-up. Semi-structured interview, questionnaire, and observational measures were collected during home visits. Questionnaires were completed through the medium of English, although semi-structured interviews and observations were conducted using the preferred

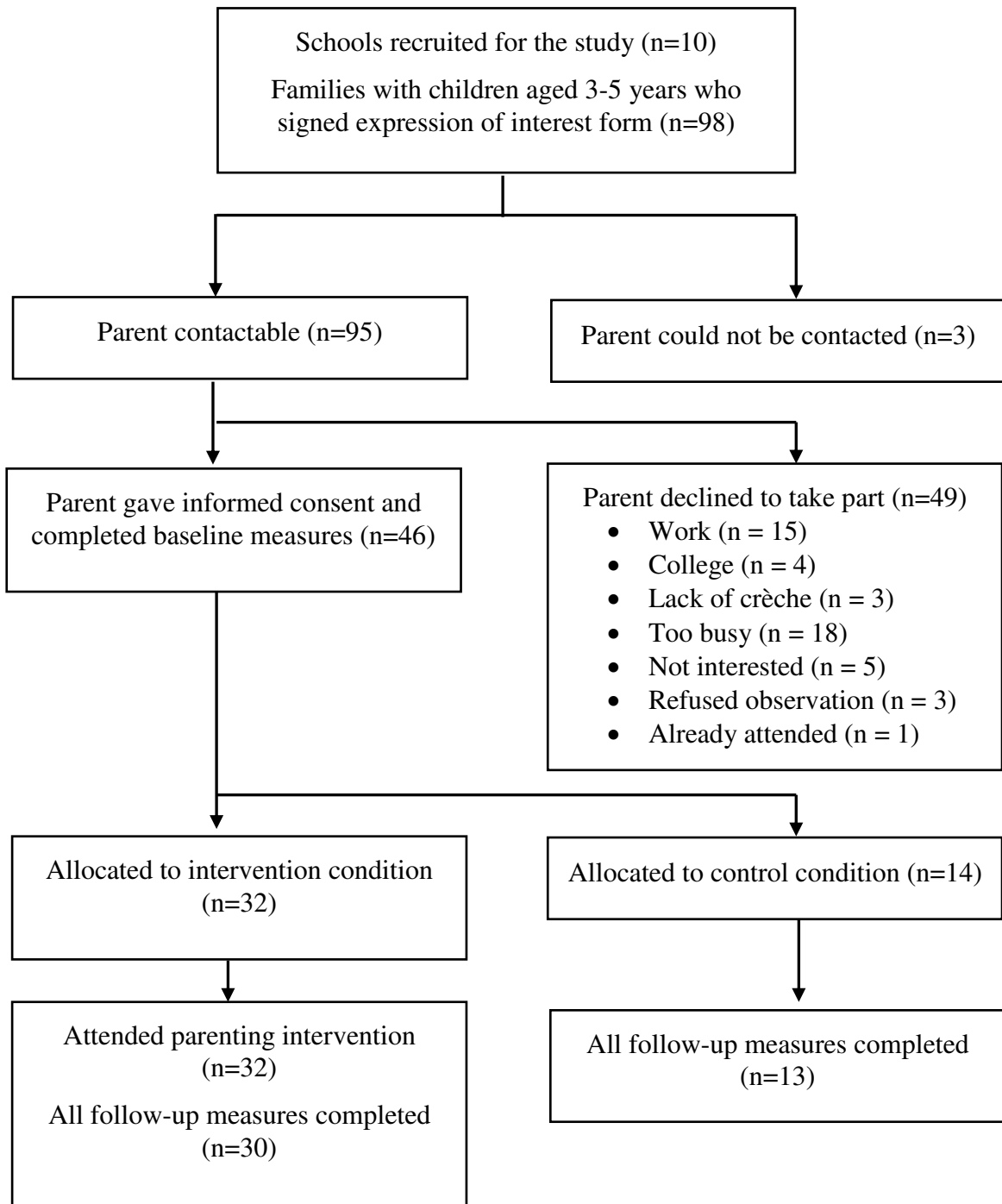


Figure 5.1. Consort diagram of the numbers of families involved in the study

language of the family (Welsh or English). During the observation, the parent and child were observed for a maximum time of 30 minutes. Each parent-child dyad was given a book in their preferred language (Welsh or English) and asked to look at the book together. After 15 minutes the parent was asked to play with their child and the family's toys for another 15 minutes. The families were given the book as a thank-you gift for their participation in the study. The first author (primary coder) live-coded all home visits (N=120), and another trained researcher (secondary coder), blind to the intervention, live-coded 24% of visits (n=29) for reliability purposes. The primary and secondary coders demonstrated good inter-rater reliability (ICC range .875 - .984; Pye, et al., in preparation).

The intervention

Parents attended the programme for four weeks at their child's school, with each session lasting two hours during school hours. An average of four parents attended the programme within one school (range: 2 to 6 parents). The programme was delivered by two facilitators in each of the schools in the intervention condition (n=8). Facilitators had undergone group leader training and all but one of the facilitators were school-based staff. Leaders included teachers, classroom assistants, head teachers, and a psychologist. All leaders (n =16) received two hours of supervision each week from a certified trainer.

Programme attendance

Within the intervention condition, all 32 parents (100%) attended at least one session, and of those, 17 (53.1%) attended all four sessions. The overall mean attendance was 3.16 sessions (SD = 1.02).

Analysis strategy

Main analysis

Initial analysis examined the equivalence of groups at baseline on primary measures of outcome using kolmogorov-smirnov tests of normality, analysis of variance (ANOVA) and chi-square. The analysis included all families, irrespective of uptake of intervention or completion of measures. A strict intention-to-treat (ITT) analysis was conducted, assuming no change from baseline measures for those lost to follow-up (Pocock, 1983). However, as participants were not randomly assigned in this study, a further analysis was also performed to only include families with complete data sets across both time points (a per-protocol analysis; n=43: 30 intervention, 13 control).

The differences between the intervention and control conditions at follow-up for all outcome measures were analysed using analysis of covariance (ANCOVA), with condition (intervention and control) as the fixed factor and baseline scores entered as the covariate. Effect sizes were calculated according to Cohen's guidelines (1988), with an effect size of 0.3 indicating a small effect, 0.5 a medium effect, and 0.8 or above indicating a large effect size.

Subgroup analysis

Further subgroup analyses were conducted for the 17 parents who attended all four sessions of the programme, in order to evaluate the effectiveness of attending the full four sessions. The analysis method mirrored that of the full sample of parents, including ITT ANCOVA (comparing 17 intervention condition parents with 14 control condition parents) and per-protocol ANCOVA (comparing 15 intervention condition parents with 13 control condition parents).

Results

Attrition

Attrition rates were generally low. Of the 46 families assessed at baseline, 43 (93%) completed post-intervention assessments. Those with incomplete post-intervention data included two in the intervention, and one in the control condition.

Preparation of observational data

Prior to the main analyses, the total times for reading and play were examined across all families. Some families were not observed for a total 30-minute period (15 minutes of reading and 15 minutes of play) as some parents or children wanted to end the observation early (see Table 5.1). At baseline, seventeen families (37%) completed 15 minutes of interactive reading (M time = 10.65, SD = 4.08), compared to 40 families (87%) who completed 15 minutes of shared play (M time = 14.02, SD = 2.79). At 6-month follow-up, twelve families (28%) completed 15 minutes of reading (M time = 9.73, SD = 4.14), compared to 37 families (86%) who completed 15 minutes of shared play (M time = 14.43, SD = 1.73).

Due to variation in observation times for reading and play at both time points, the summed frequencies were calculated pro-rata for five minutes each of reading and play. The

results were analysed by using the total frequency for each behaviour category across a total time of 10 minutes (five minutes of play and five minutes of reading).

Table 5.1

Observation time data for reading and play at baseline and follow-up

	Baseline	Follow-up
Reading (Mean (SD))	10.65 (4.08)	9.73 (4.14)
Play (Mean (SD))	14.02 (2.79)	14.43 (1.73)
No. parents completing 15-minutes of reading	17/46	12/43
No parents completing 15-minutes of play	40/46	37/43

Sample characteristics

Demographic characteristics of the families are presented in Table 5.2a and 5.2b. Forty-six caregivers were involved in the study including 45 mothers and 1 father. Caregivers were aged between 21 and 51 years ($M = 33.33$, $SD = 6.54$) at baseline. Twenty two of the 46 children were boys (47.8%) and children's age ranged from 33 to 56 months ($M = 45.85$, $SD = 5.23$) at baseline.

Table 5.2a

Family characteristics at baseline for control and intervention conditions; baseline equivalence assessed using one-way ANOVA

	Control (n = 14)	Intervention (n = 32)	F	Sig
Demographics				
Mean child age in months (SD)	47.21 (1.28)	45.25 (5.38)	1.38	.246
Mean parent age in years (SD)	30.50 (5.22)	34.56 (6.74)	4.02	.051

The majority (78.2%) of parents were educated beyond the age of 16 and almost half (45.7%) of the participating families spoke Welsh as their first language at home. Twenty-two of the families were living in poor quality, insecure, and overcrowded housing, whilst twenty four families included three or more children.

Table 5.2b

Family characteristics at baseline for control and intervention conditions; baseline equivalence assessed using chi-square

Demographics	λ	Sig
Child's gender	2.19	.139
Mother's education level	2.52	.112
Housing quality	0.20	.655
Family size	1.18	.277

Equivalence analyses

Initial analyses involved assessing equivalence of groups at baseline on demographic characteristics (age, gender, education, housing, and family size) and primary and secondary outcome measures. A series of one-way analysis of variance (ANOVA) and chi-square tests revealed no significant differences between intervention and control conditions at baseline for any of the demographic characteristics (see Table 5.2a; 5.2b). Results of a Kolmogorov Smirnov test indicated that all outcome measures were normally distributed at baseline. A series of one-way ANOVA's showed no significant differences between the two conditions at baseline for all outcome measures (see Table 5.3).

Main results

The intervention condition showed significant improvements at follow-up in three of the five objectively observed parent verbal behaviours compared to the control condition using the PAROT measure (see Table 5.4a). ANCOVA analysis was conducted on the five parent composite variables: academic coaching, socio-emotion coaching, problem solving coaching, encouragement/praise and reflection/expansion. Similar results were found for both the intention to treat and per protocol analyses. A significant difference was found between the intervention and control conditions for academic coaching with intervention condition parents showing an increase in academic coaching, compared with control condition parents who showed a decrease. The intention to treat analysis showed a mean difference of 8.41 (2.33 to 14.50, $p=.008$) between groups at follow-up for academic coaching with an effect size of 0.89 (see Table 5.4a). A significant difference was also found for socio-emotion

coaching. There was a mean difference of 2.61 (0.59 to 4.62, $p=.013$) between groups at follow-up for socio-emotional coaching with an effect size of 0.87 (see Table 5.4a).

Table 5.3

Equivalence of groups (intervention and control) at baseline using one-way analysis of variance

Measure	Control	Intervention	F	P
	(n = 14)	(n = 32)		
	Mean (SD)	Mean (SD)		
Academic coaching (PAROT)	20.24 (12.73)	19.69 (10.63)	0.02	.878
Socio-emotion coaching (PAROT)	2.24 (1.69)	3.69 (2.74)	3.33	.075
Problem-solving coaching (PAROT)	15.55 (8.16)	17.42 (9.84)	0.39	.537
Encouragement/praise (PAROT)	11.38 (7.62)	10.46 (5.93)	0.20	.660
Reflection/expansion (PAROT)	15.35 (9.34)	17.57 (9.68)	0.52	.474
Child positive response (PAROT)	36.91 (12.94)	34.15 (13.21)	0.43	.516
Child negative response (PAROT)	1.16 (2.98)	1.00 (1.24)	0.07	.792
Child spontaneous vocalisation (PAROT)	15.14 (9.61)	16.50 (9.06)	0.21	.648
SDQ total difficulties	8.93 (5.73)	10.25 (6.16)	0.47	.498
ECBI intensity	94.86 (20.05)	109.72 (25.52)	3.73	.060
PSoC total	77.64 (10.71)	75.19 (11.59)	0.46	.503

The analysis also revealed a significant difference between conditions for encouragement/praise at follow-up, with the intervention condition again showing an increase compared with the control condition, who showed a decrease. A mean difference of 4.78 (0.79 to 8.77, $p=.020$) was found between groups at follow-up for encouragement/praise with an effect size of 0.78 (see Table 5.4a). No significant differences were found for problem solving coaching, whereby both intervention and control parents showed an increase, or reflection expansion, in which both conditions showed a decrease.

Analysis of covariance was also conducted on the three child verbal behaviour categories: child positive response, child negative response, and child spontaneous vocalisation. The intervention condition showed no significant differences at follow-up in these categories, compared with the control condition. Both the intervention and control

children showed an increase in positive responses, a decrease in negative responses, and a decrease in spontaneous vocalisations (see Table 5.4b).

The secondary parent-report outcome measures did not support the observational findings. No significant differences were found between the intervention and control conditions for the SDQ, ECBI, or PSoC measures at follow-up (see Table 5.5).

Subgroup results

Similar results were found when comparing the subgroup of parents who completed the full four sessions of the programme (n=17) with the control condition parents (n=14). The intervention condition showed significant improvements at follow-up in two of the five objectively observed parent verbal behaviours compared to the control condition using the PAROT measure (see Table 5.6a). Similar results were found for both the intention to treat and per protocol analyses. A significant difference was found between the intervention and control conditions for academic coaching with intervention condition parents showing an increase in academic coaching, compared with control condition parents who showed a decrease. The intention to treat analysis showed a mean difference of 8.83 (2.72 to 14.94, $p=.006$) between groups at follow-up for academic coaching with an effect size of 1.07 (see Table 5.6a). A significant difference was also found for socio-emotion coaching. There was a mean difference of 2.56 (0.97 to 4.15, $p=.003$) between groups at follow-up for socio-emotional coaching with an effect size of 1.23 (see Table 5.6a). No significant differences were found for problem solving coaching, encouragement/praise or reflection expansion.

The intervention condition showed no significant differences at follow-up in the three child verbal behaviour categories (child positive response, child negative response, and child spontaneous vocalisation) compared with the control condition. Both the intervention and control children showed an increase in positive responses, a decrease in negative responses, and a decrease in spontaneous vocalisations (see Table 5.6b). No significant differences were found between the intervention and control conditions for the secondary parent-report outcomes measures (SDQ, ECBI, or PSoC) at follow-up (see Table 5.7).

Table 5.4a

Primary parent outcome measures: summary of 6-month results using analysis of covariance

Primary Measures	Intention-to-treat				Per-protocol sample			
	Mean (SD) raw scores				Estimated mean		Estimated mean	
	Control (n=14)		Intervention (n=32)		difference (95% CI)	Effect size (95% CI)	difference (95% CI)	Effect size (95% CI)
	Baseline	Follow-up	Baseline	Follow-up	<i>P</i> value		<i>P</i> value	
PAROT academic	20.24 (12.73)	13.81 (8.18)	19.69 (10.63)	22.02 (10.83)	8.41 (2.33 to 14.50) 0.008*	0.89 (0.25 to 1.54)	8.10 (1.63 to 14.57) 0.015*	0.84 (0.17 to 1.51)
PAROT socio-emotion	2.24 (1.69)	1.79 (1.17)	3.69 (2.74)	5.04 (3.70)	2.61 (0.59 to 4.62) 0.013*	0.87 (0.20 to 1.54)	2.76 (0.41 to 5.11) 0.023*	0.88 (0.13 to 1.63)
PAROT problem-solving	15.55 (8.16)	18.31 (6.65)	17.42 (9.84)	18.81 (8.83)	0.38 (-4.22 to 4.97) 0.870	0.05 (-0.60 to 0.70)	0.46 (-4.50 to 5.43) 0.851	0.06 (-0.60 to 0.74)
PAROT encouragement/praise	11.38 (7.62)	9.14 (6.71)	10.46 (5.93)	13.38 (7.37)	4.78 (0.79 to 8.77) 0.020*	0.78 (0.13 to 1.42)	4.44 (0.11 to 8.77) 0.045*	0.69 (0.08 to 1.37)
PAROT reflection/expansion	15.35 (9.34)	13.61 (8.20)	17.57 (9.68)	15.39 (9.63)	0.16 (-3.80 to 4.12) 0.937	0.03 (-0.62 to 0.68)	0.07 (-3.91 to 4.05) 0.972	0.01 (-0.66 to 0.69)

*Significant at the $p < .05$ level

Table 5.4b

Primary child outcome measures: summary of 6-month results using analysis of covariance

Primary Measures	Intention-to-treat				Per-protocol sample			
	Mean (SD) raw scores		Estimated mean		Estimated mean		Estimated mean	
	Control (n=14)		Intervention (n=32)		difference (95% CI)	Effect size (95% CI)	difference (95% CI)	Effect size (95% CI)
	Baseline	Follow-up	Baseline	Follow-up	<i>P</i> value		<i>P</i> value	
PAROT child positive response	36.91 (12.94)	43.60 (14.92)	34.15 (13.21)	43.95 (16.93)	2.64 (-5.36 to 10.64) 0.509	0.21 (-0.44 to 0.86)	2.03 (-6.50 to 10.57) 0.633	0.16 (-0.52 to 0.85)
PAROT child negative response	1.16 (2.98)	0.86 (0.81)	1.00 (1.24)	0.60 (1.62)	0.26 (-0.68 to 1.20) 0.578	0.18 (-0.47 to 0.83)	0.22 (-0.77 to 1.22) 0.653	0.15 (-0.52 to 0.82)
PAROT child spontaneous vocalisation	15.14 (9.61)	8.42 (5.71)	16.50 (9.06)	12.61 (9.92)	3.33 (-1.06 to 7.72) 0.133	0.49 (-0.16 to 1.14)	3.94 (-0.75 to 8.63) 0.097	0.57 (-0.11 to 1.24)

Table 5.5

Secondary outcome measures: summary of 6-month results using analysis of covariance

Secondary Measures	Intention-to-treat				Per-protocol sample			
	Mean (SD) raw scores				Estimated mean difference (95% CI)		Estimated mean difference (95% CI)	
	Control (n=14)		Intervention (n=32)		<i>P</i> value	Effect size (95% CI)	<i>P</i> value	Effect size (95% CI)
	Baseline	Follow-up	Baseline	Follow-up				
SDQ total difficulties	8.93 (5.73)	9.29 (3.77)	10.25 (6.16)	8.81 (4.84)	1.16 (-1.01 to 3.33) 0.286	0.35 (-0.30 to 1.00)	1.30 (-1.00 to 3.59) 0.260	0.39 (-0.30 to 1.07)
ECBI intensity	94.86 (20.05)	89.79 (22.53)	109.72 (25.52)	101.28 (27.82)	0.74 (-12.75 to 14.23) 0.913	0.04 (-0.64 to 0.71)	0.03 (-14.76 to 14.81) 0.997	0.00 (-0.71 to 0.71)
PSoC total	77.64 (10.71)	76.36 (10.17)	75.19 (11.59)	76.44 (10.60)	1.80 (-2.69 to 6.29) 0.423	0.26 (-0.39 to 0.91)	1.40 (-3.45 to 6.25) 0.562	0.20 (-0.48 to 0.88)

Table 5.6a

Subgroup results of primary parent outcome measures: summary of 6-month results using analysis of covariance

Primary Measures	Intention-to-treat				Per-protocol sample			
	Mean (SD) raw scores				Estimated mean		Estimated mean	
	Control (n=14)		Intervention (n=17)		difference (95% CI) <i>P</i> value	Effect size (95% CI)	difference (95% CI) <i>P</i> value	Effect size (95% CI)
	Baseline	Follow-up	Baseline	Follow-up				
PAROT academic	20.24 (12.73)	13.81 (8.18)	18.11 (7.59)	21.63 (10.26)	8.83 (2.72 to 14.94) 0.006*	1.07 (0.33 to 1.82)	8.26 (1.65 to 14.87) 0.016*	0.98 (0.20 to 1.77)
PAROT socio- emotion	2.24 (1.69)	1.79 (1.17)	3.46 (2.74)	4.95 (2.97)	2.56 (0.97 to 4.15) 0.003*	1.23 (0.47 to 2.00)	2.79 (1.07 to 4.51) 0.003*	1.30 (0.50 to 2.11)
PAROT problem- solving	15.55 (8.16)	18.31 (6.65)	15.75 (6.55)	17.06 (7.70)	1.37 (-2.97 to 5.71) 0.523	0.23 (-0.51 to 0.97)	1.46 (-3.35 to 6.27) 0.538	0.24 (-0.54 to 1.02)
PAROT encouragement/ praise	11.38 (7.62)	9.14 (6.71)	8.39 (4.93)	11.09 (6.69)	3.51 (-1.01 to 8.03) 0.123	0.59 (-0.17 to 1.35)	2.96 (-2.08 to 7.99) 0.238	0.48 (-0.33 to 1.28)
PAROT reflection/ expansion	15.35 (9.34)	13.61 (8.20)	16.15 (9.65)	14.63 (10.26)	0.43 (-4.32 to 5.18) 0.854	0.07 (-0.67 to 0.81)	0.42 (-4.23 to 5.08) 0.853	0.07 (-0.71 to 0.85)

*Significant at the $p < .05$ level

Table 5.6b

Subgroup results of primary child outcome measures: summary of 6-month results using analysis of covariance

Primary Measures	Intention-to-treat				Per-protocol sample			
	Mean (SD) raw scores				Estimated mean		Estimated mean	
	Control (n=14)		Intervention (n=32)		difference (95% CI)	Effect size (95% CI)	difference (95% CI)	Effect size (95% CI)
	Baseline	Follow-up	Baseline	Follow-up	<i>P</i> value		<i>P</i> value	
PAROT child positive response	36.91 (12.94)	43.60 (14.92)	35.45 (14.37)	41.90 (18.72)	0.41 (-8.60 to 9.41) 0.927	0.03 (-0.71 to 0.77)	1.59 (-7.96 to 11.15) 0.734	0.13 (-0.66 to 0.92)
PAROT child negative response	1.16 (2.98)	0.86 (0.81)	0.98 (1.22)	0.89 (2.18)	0.03 (-1.26 to 1.32) 0.962	0.02 (-0.72 to 0.76)	0.14 (-1.28 to 1.57) 0.837	0.08 (-0.70 to 0.86)
PAROT child spontaneous vocalisation	15.14 (9.60)	8.42 (5.71)	17.29 (9.79)	12.56 (10.22)	2.90 (-1.90 to 7.71) 0.226	0.45 (-0.29 to 1.19)	3.83 (-1.40 to 9.06) 0.144	0.58 (-0.21 to 1.37)

Table 5.7

Subgroup results of secondary outcome measures: summary of 6-month results using analysis of covariance

Secondary Measures	Intention-to-treat				Per-protocol sample			
	Mean (SD) raw scores				Estimated mean difference (95% CI) <i>P</i> value		Estimated mean difference (95% CI) <i>P</i> value	
	Control (n=14)		Intervention (n=32)		Effect size (95% CI)	Effect size (95% CI)	Effect size (95% CI)	
Baseline	Follow-up	Baseline	Follow-up					
SDQ total difficulties	8.93 (5.73)	9.29 (3.77)	10.65 (5.28)	10.24 (5.15)	0.06 (-2.68 to 2.79) 0.967	0.02 (-0.73 to 0.76)	0.17 (-2.83 to 3.18) 0.907	0.05 (-0.77 to 0.86)
ECBI intensity	94.86 (20.05)	89.79 (22.53)	114.47 (25.93)	112.18 (29.22)	8.27 (-8.37 to 24.91) 0.317	0.40 (-0.40 to 1.20)	7.89 (-11.60 to 27.39) 0.412	0.36 (-0.53 to 1.26)
PSoC total	77.64 (10.71)	76.36 (10.17)	73.06 (10.31)	74.18 (10.39)	1.17 (-4.11 to 6.46) 0.653	0.17 (-0.59 to 0.93)	0.64 (-5.44 to 6.72) 0.830	0.09 (-0.74 to 0.92)

Discussion

The results of this study provide preliminary evidence that the IY School Readiness parenting programme is effective in increasing key verbal parenting behaviours in the context of reading and play that are important for children's readiness for school. Based on the stated aims of the IY School Readiness programme, we predicted that parents attending this group-based intervention would interact more positively with their children in the contexts of reading and play. Thus the programme group leaders encouraged parents to coach their children's school readiness (academic, socio-emotion, and problem solving) skills and to respond with encouragement and praise to their children's efforts when playing and reading together. It seems likely that this was effective; the intervention and control conditions had similar mean scores on the observation measure at baseline, but significant differences were found between the two conditions at 6-month follow-up. As hypothesised, these results indicate that the programme had a positive effect on parent verbal behaviours in the intervention condition relative to the control condition.

Intervention condition parents demonstrated a significant increase in academic and socio-emotion coaching after attending the programme, whilst the control condition showed a decrease. Following the programme, parents in the intervention condition verbally coached their children academically using core aspects of the programme, including describing, commenting, and asking open-ended questions in relation to colours, numbers, and shapes. Parents in the intervention condition also demonstrated their ability to use more socio-emotion coaching following the programme, by coaching their child's friendly play, expression of feelings, and using emotion vocabulary. Parents who attended the programme responded with more encouragement and praise to their children's efforts in the contexts of reading and playing, although this finding was not significant for the subgroup of parents who attended all four sessions of the programme.

An increase in child positive behaviours and a reduction in child negative behaviours when interacting with parents was hypothesised for children whose parents had attended the programme. However, the results did not find any significant differences in child verbal behaviours when comparing intervention and control conditions. Both intervention and control condition children showed a similar trend, with an increase in positive verbal behaviours and a decrease in negative verbal behaviours. The non-significant findings could be because both intervention and control conditions were already demonstrating high

frequencies of positive verbal responses and very low frequencies of negative verbal responses at baseline, therefore leaving little room for change.

No significant differences were also found between the intervention and control conditions at follow-up for the secondary child behaviour outcome measures. Despite the non-significant findings in parent-report measures, the SDQ and ECBI means were all in the normal (non-clinical) range at baseline, therefore a significant change would be difficult to find considering the child behaviour measures were already low at baseline (Goodman, 2001; Robinson et al., 1980). However, no screening for high risk/need families was conducted in this study, as the programme is a universal programme, offered to all parents.

Limitations and future direction

The present results may underestimate the effectiveness of the IY School Readiness programme because most of the group leaders involved in the study were delivering the programme for the first time. Future evaluations with leaders that have more experience in the programme delivery would be beneficial. An RCT using a larger sample of families would be beneficial and would further increase our understanding of the value of parenting interventions delivered to families as children start school for the first time. However, the initial analysis in this study did demonstrate similarities between conditions at baseline but resource constraints did not enable recruitment of a larger sample. The subgroup analyses (comparing families who completed the full four sessions of the programme with the control families) confirmed all but one of the findings of the main analyses. This suggests the need to encourage parents to complete the full programme in a future larger RCT, in order to make appropriate comparisons.

Conclusion

This evaluation of the IY School Readiness programme provides preliminary evidence that providing support to parents through schools can change parent behaviours. The IY School Readiness parenting programme is effective in increasing key verbal parenting behaviours in the context of reading and play that are important for children's readiness for school. The results of this study are encouraging, suggesting the benefits of delivering a short, universal parenting intervention as children start school. However, more research is needed to determine whether this type of intervention is a good investment for the future.

Key messages:

- Providing support to parents through schools can change parent behaviours.
- There are benefits of delivering a short, universal parenting intervention as children start school.
- The IY School Readiness parenting programme is effective in increasing key verbal parenting behaviours in the context of reading and play that are important for children's readiness for school.
- More research is needed to determine whether this type of intervention is a good investment for the future.

CHAPTER 6

STUDY 4

Evaluating the Incredible Years School Readiness Parenting Programme: Longer-term outcomes (12-months)

Introduction

Parenting programmes have been identified as being an important means of intervening to support parents and to enhance parenting (Department for Education & Skills, 2004; Allen, 2011a; 2011b). Short-term evaluations are typical within parenting research, yet the longer-term effects often remain unknown. It is essential to establish whether positive short-term outcomes achieved by parenting programmes are maintained over time, in order to determine the longer-term benefits of parenting programmes for society. More frequent assessments over longer time-frames have been suggested as optimal for evaluating the time-sensitive nature of behaviour change (Clingempeel & Henggeler, 2002).

The statistically significant results in Chapter 6 demonstrated improvements in three objectively observed parent verbal behaviours for parents who attended the IY School Readiness programme. Parents showed a significant increase in academic and socio-emotion coaching after attending the programme, compared to the control condition. Parents also used significantly more praise and encouragement towards their children, following their attendance on the programme.

Second follow-ups at 12 months post-baseline were completed to determine the longer-term benefits of the IY School Readiness parenting programme. A number of studies of longer IY parenting programmes have reported positive long-term outcomes over 12, 18 months and three years (Bywater et al., 2009; Webster-Stratton, 1998). However, as this was a shorter, non-targeted, universal programme, no prediction was made as to whether any short term changes would be maintained. The results of this longer-term analysis will determine the longer-term effects of the IY School Readiness programme on parent-child interactions, child behaviour and parental self-competence.

Method

Participants and allocation to intervention

The study reports on the 32 intervention families and 14 control families from the previously reported short-term evaluation (see Chapter 6), which compared intervention and control families at baseline and follow-up one (6 months post-baseline). Ethical approval was granted by the School of Psychology, Bangor University (approval number: 1628; 2010; see Appendix A). Ten primary schools were recruited, across two recruitment phases, in partnership with Gwynedd and Conwy education authorities. Schools were allocated to intervention and wait list control conditions on a first come first serve basis.

Parents were invited by the school to attend the IY School Readiness programme and to participate in the evaluation. Families were eligible for inclusion in the research if they had a child aged 3-5 years in the nursery or reception class of a participating school and lived in the catchment area of that school. Eligible families included those in which the primary caregiver was able to attend the programme for four weeks at the school.

Intervention

The IY School Readiness parenting programme was run between baseline and first follow-up. The programme was delivered by two facilitators in each intervention condition school for two hours per week for four weeks. All but one of the facilitators were school-based staff and all facilitators received training and weekly supervision.

Measures and procedures

The evaluation measures included a direct observation of parent-child interactions, parent-report questionnaires of child behaviour and parent self-competence, and a semi-structured interview. Measures were administered during three home visits across 12 months: baseline, follow-up one (6 month post-baseline) and follow-up two (12 months post-baseline).

The Play and Reading Observation Tool (PAROT; Pye et al., in preparation) was used to measure parent-child interactions during a 30-minute observation during shared play and reading within the home environment. The PAROT measures the frequencies of five parent verbal behaviours: academic coaching, socio-emotion coaching, problem-solving coaching, encouragement/praise, and reflection/expansion and three child verbal behaviours: child positive response, child negative response, and child spontaneous vocalization. The first author (primary coder) live-coded all home visits (N=120), and another trained researcher (secondary coder), blind to the intervention, live-coded 24% of visits (n=29) for reliability purposes. The primary and secondary coders demonstrated good inter-rater reliability (ICC range .875 - .984; Pye, et al., in preparation).

The Strengths and Difficulties Questionnaire 3/4 version (SDQ3/4; Goodman, 2005) and the Eyberg Child Behaviour Inventory (ECBI; Eyberg & Ross, 1978; Robinson et al., 1980) were completed by parents to measure parent-report child behaviour. The Parent Sense of Competence (PSoC; Gibaud-Wallston & Wandersman, 1978; Mash & Johnston, 1983) questionnaire was also completed by parents to measure parenting self-competence and self-efficacy. Basic socio-demographic and general health data of the family was collected using

the Personal Data and Health Questionnaire (PDHQ, Hutchings, 1996), a semi-structured interview administered by the researcher and answered by the primary caregiver.

Analysis strategy

Initial analysis examined the equivalence of groups at baseline on primary measures of outcome using kolmogorov-smirnov tests of normality, analysis of variance (ANOVA) and chi-square (see Chapter 6). The differences between the intervention and control conditions at follow-up two for all outcome measures were analysed using analysis of covariance (ANCOVA), with condition (intervention and control) as the fixed factor and baseline scores entered as the covariate. As participants were not randomly assigned in this study, the analysis was performed to only include families with complete data sets across all time points, baseline and 6- and 12-months post-baseline (a per-protocol analysis; n=31 (25 intervention, 6 control)).

Due to the small sample size for the control condition, secondary analyses were conducted to report on the intervention families only. All families allocated to the intervention (n=32) were included in the analysis, irrespective of uptake of intervention or completion of measures (intention-to-treat analysis; ITT). The ITT analysis included those from the intervention condition lost by second follow-up (n=7), and assumed no change since the last available measurement (Pocock, 1983). A further per-protocol analysis was performed to only include intervention condition families with complete data sets across all time points (n=25). These secondary analyses employed a series of repeated measures analysis of variance (ANOVA) over time. A significant difference existed between baseline and follow-up one for three out of five observed parent verbal behaviour categories: academic coaching, socio-emotion coaching, and encouragement/praise (see Chapter 6). If positive outcomes have been maintained, no significant differences should be found between follow-up one and two. Effect sizes were calculated according to Cohen's guidelines (1988), with an effect size of 0.3 indicating a small effect, 0.5 a medium effect, and 0.8 or above indicating a large effect size.

Results

Of the 32 parents allocated to the intervention condition, 25 completed both post-intervention assessments (see Figure 6.1). Of the 14 parents in the control condition, six completed both post-intervention assessments. Of the 25 intervention condition parents who

completed all assessments, 23 had nursery-aged children and two had reception-aged children.

Preparation of observational data

Prior to the main analyses, the total times for reading and play were examined across all families at all three time points (baseline, 6-month follow-up and 12-month follow-up). Some families were not observed for a total 30-minute period (15 minutes of reading and 15 minutes of play) as some parents or children wanted to end the observation early (see Table 6.1). Due to variation in observation times for reading and play at both time points, the summed frequencies were calculated pro-rata for five minutes each of reading and play. The results were analysed by using the total frequency for each behaviour category across a total time of 10 minutes (five minutes of play and five minutes of reading).

Table 6.1

Observation time data for reading and play at baseline, 6-months and 12-months

	Baseline	6-months	12-months
Reading (Mean (SD))	10.65 (4.08)	9.73 (4.14)	9.03 (3.75)
Play (Mean (SD))	14.02 (2.79)	14.43 (1.73)	13.59 (2.37)
No. parents completing 15-minutes of reading	17/46	12/43	4/31
No parents completing 15-minutes of play	40/46	37/43	21/31

Short-term findings (6-months)

The programme had a positive effect on three out of five observed parent verbal behaviour categories: academic coaching, socio-emotion coaching, and encouragement/praise for the intervention condition at follow-up one (6 months post baseline; see Chapter 6). The programme had no significant effects on the three parent-report measures on child behaviour and parent self-competence: SDQ, ECBI, PSoC at follow-up one. A summary of short-term findings is presented in Table 6.2.

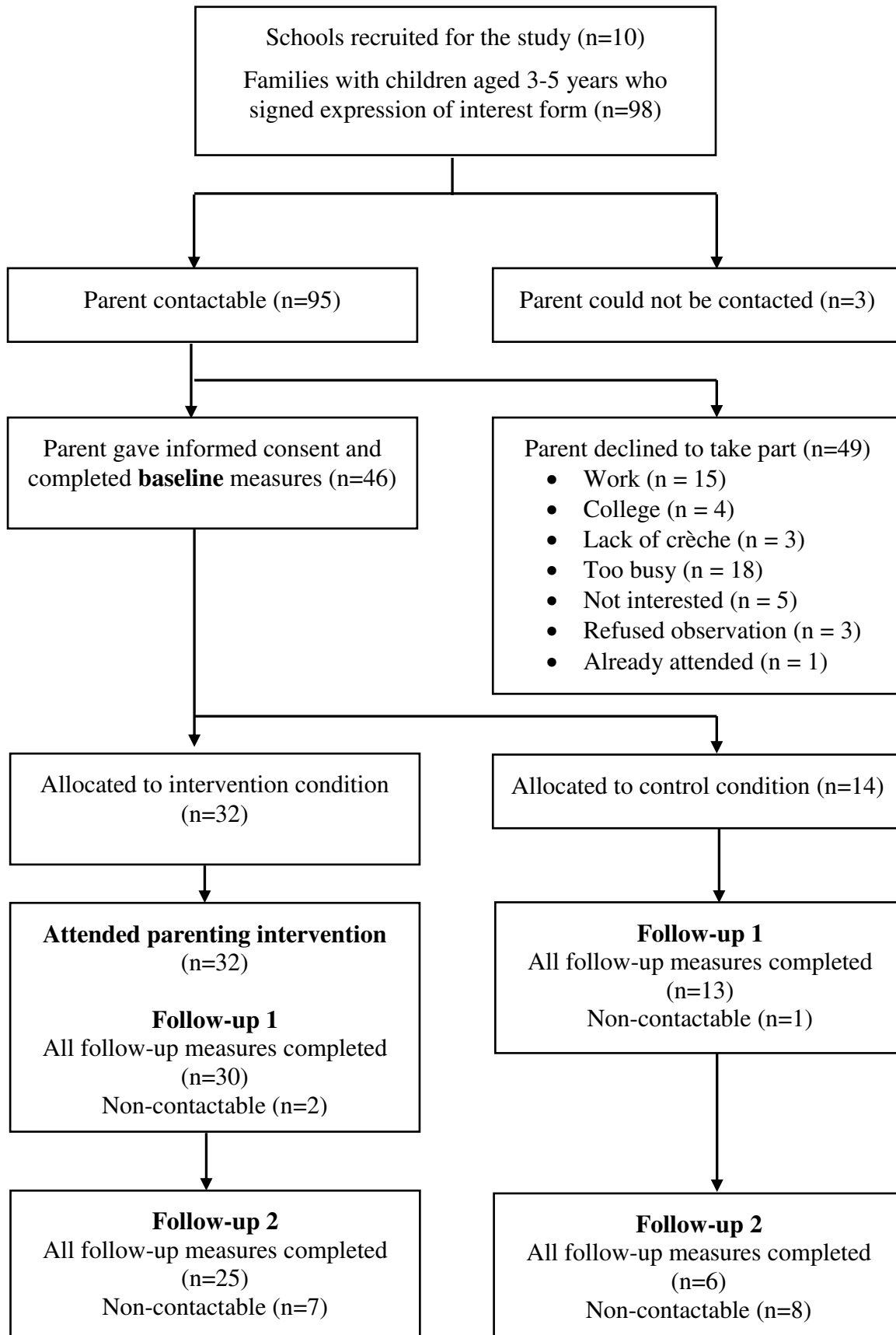


Figure 6.1. Consort diagram: flow of participants in the study

Long-term findings (12 months)

Intervention and control comparisons

Parent verbal behaviour

A per-protocol ANCOVA analysis was conducted on the five *parent* verbal behaviour categories: academic coaching, socio-emotion coaching, problem solving coaching, encouragement/praise and reflect/expansion. No significant differences were found between the intervention and control conditions for any of the parent verbal behaviour categories from baseline to second follow-up at 12 months post baseline (see Table 6.3). A summary of long-term findings is presented in Table 6.2.

Child verbal behaviour

Further per-protocol ANCOVA analysis was conducted on the three *child* verbal behaviour categories: child positive response, child negative response, and child spontaneous vocalization. No significant differences were found between the intervention and control conditions for any of the child verbal behaviour categories from baseline to follow-up two (see Table 6.3). Similarly, no significant differences were found between the intervention and control conditions for the SDQ, ECBI, or PSoC parent-report measures at follow-up (see Table 6.4).

Intervention condition only

ANOVA analyses were conducted on families allocated to the intervention only. Tables 6.5 and 6.7 shows no statistical differences between follow-up one and two on five out of eight observation categories in both the ITT and complete data per-protocol analyses. A significant positive change was demonstrated for observed child positive response, with a mean difference of 7.85 (0.68 to 15.03, $p=.028$) between follow-up one and two, with an effect size of 0.46 (see Table 6.5). Significant negative changes were found for parent academic coaching and child spontaneous vocalisation between follow-up one and two but no significant changes were found between baseline and follow-up one. The ITT analyses showed a reduction in mean scores for academic coaching from 22.02 to 16.39, and for child spontaneous vocalisation from 12.61 to 5.87 from first to second follow-up.

Table 6.2

A summary of short and long-term findings

Outcomes	ANCOVA Per-protocol n=43 (13 control, 30 intervention)	ANCOVA Per-protocol n=31 (6 control, 25 intervention)
	Baseline to follow-up 1	Baseline to follow-up 2
PAROT academic	Significant increase for intervention condition, compared with control*	No significant difference
PAROT socio-emotion	Significant increase for intervention compared with control*	No significant difference
PAROT problem-solving	No significant difference	No significant difference
PAROT encouragement/praise	Significant increase for intervention compared with control*	No significant difference
PAROT reflection/expansion	No significant difference	No significant difference
PAROT child positive response	No significant difference	No significant difference
PAROT child negative response	No significant difference	No significant difference
PAROT child spontaneous vocalisation	No significant difference	No significant difference
SDQ total difficulties	No significant difference	No significant difference
ECBI intensity	No significant difference	No significant difference
PSoC total	No significant difference	No significant difference

*Significant finding

ANOVA analyses were conducted to detect any changes between follow-up one and two for the parent report measures: SDQ, ECBI, and PSoC (see Tables 6.6 and 6.8). The ITT analyses showed a significant positive change in PSoC total scores from follow-up one to follow-up two. A mean difference of 2.44 (0.14 to 4.74, $p=.035$) was found for PSoC total scores between follow-up one and two, with an effect size of 0.22 (see Table 6.6).

Discussion

The longer-term (12-month) comparison of intervention and control conditions showed no significant differences for all eight observation measures and the three parent-report measures from baseline to follow-up two (see Table 6.2). These results suggest that the

short-term (6-month) improvements in parent verbal behaviours (academic coaching, socio-emotion coaching and encouragement/praise) were not maintained over time. Both intervention and control condition parents showed a decrease in academic coaching, socio-emotion coaching, problem-solving coaching, and reflection/expansion from baseline to follow-up two (12 months after baseline). These results suggest that intervention condition parents had not maintained their use of key parenting behaviours as learnt during the IY School Readiness programme. Intervention condition parents did, however, show a modest increase in encouragement/praise from baseline to follow-up two, compared with control condition, who showed a decrease, though this difference was non-significant. Intervention and control condition children demonstrated a similar positive trend in positive responses and a similar negative trend in spontaneous vocalisations at second follow-up, suggesting that parents' attendance on the programme had no subsequent effect on child verbal behaviour over time. However, intervention condition children were less verbally negative towards their parents at second follow-up, compared with control children who were more verbally negative. This difference was almost statistically significant, although the frequency of child negative responses for both control and intervention condition children were already low at baseline. In line with the short-term outcomes, no significant changes were seen in parent report measures of child behaviour and parent competence. This was to be expected as the SDQ and ECBI means were already in the normal (non-clinical) range at baseline, therefore a significant change would be difficult to detect (Goodman, 2001; Robinson et al., 1980).

The non-significant longer-term findings are not surprising considering the length of the IY School Readiness programme. The programme comprised of only four weekly sessions and the longer-term follow-up data was collected at 12 months after baseline. At this 12-months data collection point, approximately 11 months would have passed since parents had attended the programme. It is possible that there was a dose effect as a result of parents returning to the original environment, and the concepts learned during the programme may have been forgotten.

For the intervention condition only analyses, no significant differences should be found between follow-up one and two in order to conclude that positive outcomes from the short-term evaluation (academic coaching, socio-emotion coaching and encouragement and praise) had been maintained. The results of the secondary analyses (ANOVA's) were non-significant for two of the outcomes: socio-emotion coaching and encouragement/praise, suggesting improvements in socio-emotion coaching and encouragement and praise had been maintained at second follow-up. However, this was not the case for the third positive

outcome from the short-term evaluation; the significant reduction in academic coaching from first to second follow-up suggests parents had not maintained their use of this key parenting behaviour as taught during the IY School Readiness programme.

However, some significant increases were found at follow-up two that had not been previously found in the short-term comparison analyses. Intervention condition children responded significantly more positive at second follow-up. In addition, intervention condition parents self-reported significantly higher levels of self-competence at second follow-up.

Limitations and future studies

The results of this longer-term evaluation must be considered carefully. The comparison (intervention and control) results suggest that intervention condition parents had not maintained their use of key parenting behaviours as taught during the IY School Readiness programme at 12-months after baseline. However, the sample size was considerably smaller at follow-up two due to non-complete data, with only 6 parents in the control comparison condition, compared with 25 parents in the intervention condition. Despite the small sample size for the control condition, inclusion of control condition parents at 12 months for comparison is a strength of the study. The secondary analyses included no control comparison, in order to detect any changes in the intervention condition only. However, the lack of control data weakens these findings. Further evaluations with larger resources should seek to recruit a larger sample with additional long-term control data in order to corroborate the findings of this study. A second weakness of this study is that the primary observer was not masked to condition due to limited resources. However, a second reliable observer, blind to condition, assisted with data collection.

Implications and conclusion

The short-term evaluation of the IY School Readiness parenting programme provided preliminary evidence that providing support to parents through schools can change parent behaviours. However, the results of this study suggest limited longer-term benefits of the IY School Readiness parenting programme for parents and their children. The non-significant findings suggest that this four-week programme may not be long enough to produce longer-lasting improvements in parent verbal behaviours. However, there may be additional benefits of the programme to families and schools, in terms of strengthening home-school links.

Table 6.3.

Per-protocol (n=31) observation measures: summary of 12-month results for families with complete data using analysis of covariance

Primary Measures	Mean (SD) raw scores				Estimated mean difference (95% CI) <i>P</i> value	Effect size (95% CI)
	Control (n=6)		Intervention (n=25)			
	Baseline	Follow-up 2	Baseline	Follow-up 2		
PAROT academic	18.42 (8.83)	13.08 (6.53)	17.82 (6.01)	14.13 (7.81)	1.27 (-5.59 to 8.12) 0.708	0.17 (-0.76 to 1.10)
PAROT socio-emotion	2.44 (0.60)	0.99 (0.81)	3.86 (2.62)	3.20 (2.98)	2.02 (-0.63 to 4.66) 0.129	0.73 (-0.23 to 1.69)
PAROT problem-solving	16.01 (8.77)	10.59 (6.91)	16.04 (10.11)	14.32 (7.71)	3.73 (-3.12 to 10.58) 0.274	0.51 (-0.42 to 1.44)
PAROT encouragement/praise	10.29 (8.13)	8.62 (4.85)	10.43 (6.19)	11.56 (6.48)	2.91 (-2.78 to 8.59) 0.304	0.43 (-0.46 to 1.40)
PAROT reflection/expansion	14.20 (6.10)	10.88 (6.20)	16.36 (7.25)	12.57 (6.50)	0.58 (-4.50 to 5.66) 0.816	0.11 (-0.83 to 1.05)
PAROT child positive response	44.65 (16.38)	48.14 (11.94)	31.25 (10.64)	49.86 (17.83)	4.35 (-13.19 to 21.90) 0.615	0.25 (-0.77 to 1.28)
PAROT child negative response	0.24 (0.58)	1.33 (1.92)	1.12 (1.29)	0.46 (0.81)	0.97 (-0.10 to 2.03) 0.073	0.89 (-0.09 to 1.86)
PAROT child spontaneous vocalisation	8.37 (2.85)	3.46 (2.98)	18.15 (8.91)	5.06 (4.36)	0.25 (-3.96 to 4.47) 0.903	0.06 (-0.97 to 1.10)

*Significant at the $p < .05$ level

Table 6.4

Per-protocol (n=31) parent-report measures: summary of 12-month results for families with complete data using analysis of covariance

Secondary Measures	Mean (SD) raw scores				Estimated mean difference (95% CI) <i>P</i> value	Effect size (95% CI)
	Control (n=6)		Intervention (n=25)			
	Baseline	Follow-up 2	Baseline	Follow-up 2		
SDQ total difficulties	7.83 (5.49)	8.17 (7.14)	11.00 (6.10)	8.76 (4.89)	1.14 (-2.93 to 5.21) 0.570	0.27 (-0.69 to 1.22)
ECBI intensity	94.00 (13.34)	91.50 (31.17)	114.08 (21.74)	106.16 (20.56)	2.37 (-16.98 to 21.71) 0.804	0.12 (-0.88 to 1.13)
PSoC total	83.33 (9.67)	82.33 (9.87)	73.24 (11.61)	77.00 (11.93)	2.68 (-4.74 to 10.10) 0.465	0.36 (-0.63 to 1.35)

*Significant at the $p < .05$ level

Table 6.5

Intention-to-treat (n=32) observation measures: summary of 12-month results for all intervention families using analysis of variance

Primary Measures	Intervention n = 32, raw scores			Estimated mean differences using repeated measures ANOVA			
	Mean (SD)			Baseline to follow-up 1		Follow-up 1 to follow-up 2	
	Baseline	Follow-up 1	Follow-up 2	Mean difference (95% CI) P-value	Effect size (95% CI)	Mean difference (95% CI) P-value	Effect size (95% CI)
PAROT academic	19.69 (10.63)	22.02 (10.83)	16.39 (9.26)	2.34 (-3.49 to 8.16) 0.953	0.22 (-0.33 to 0.76)	5.63 (2.26 to 9.01) 0.001*	0.56 (0.22 to 0.90)
PAROT socio-emotion	3.69 (2.74)	5.04 (3.70)	3.94 (3.52)	1.36 (-0.34 to 3.05) 0.157	0.42 (-0.11 to 0.95)	1.10 (-0.73 to 2.93) 0.416	0.30 (-0.20 to 0.81)
PAROT problem-solving	17.42 (9.84)	18.81 (8.84)	16.41 (8.65)	1.39 (-2.56 to 5.34) 1.000	0.15 (-0.27 to 0.57)	2.40 (-1.14 to 5.93) 0.288	0.27 (-0.13 to 0.68)
PAROT encouragement/praise	10.46 (5.93)	13.38 (7.37)	12.28 (7.02)	2.92 (0.01 to 5.83) 0.049*	0.44 (0.00 to 0.88)	1.10 (-1.49 to 3.69) 0.870	0.15 (-0.21 to 0.51)
PAROT reflection/expansion	17.57 (9.68)	15.39 (9.63)	15.14 (10.15)	2.18 (0.81 to 5.17) 0.223	0.23 (-0.08 to 0.54)	0.25 (-2.21 to 2.71) 1.000	0.03 (-0.22 to 0.27)
PAROT child positive response	34.15 (13.21)	43.95 (16.93)	51.80 (17.39)	9.80 (4.27 to 15.33) <0.001*	0.65 (0.28 to 1.02)	7.85 (0.68 to 15.03) 0.028*	0.46 (0.04 to 0.88)
PAROT child negative response	1.00 (1.24)	0.60 (1.62)	0.38 (0.73)	0.40 (-0.43 to 1.22) 0.692	0.28 (-0.30 to 0.85)	0.22 (-0.60 to 1.03) 1.000	0.19 (-0.51 to 0.87)
PAROT child spontaneous vocalisation	16.50 (9.06)	12.61 (9.92)	5.87 (5.80)	3.90 (0.23 to 7.56) 0.034*	0.41 (0.02 to 0.80)	6.73 (2.35 to 11.12) 0.001*	0.86 (0.30 to 1.41)

*Significant at the p<.05 level

Table 6.6

Intention-to-treat (n=32) self-report measures: summary of 12-month results for all intervention families using analysis of variance

Secondary Measures	Intervention n = 32, raw scores			Estimated mean differences using repeated measures ANOVA			
	Mean (SD)			Baseline to follow-up 1		Follow-up 1 to follow-up 2	
	Baseline	Follow-up 1	Follow-up 2	Mean difference (95% CI) <i>P</i> -value	Effect size (95% CI)	Mean difference (95% CI) <i>P</i> -value	Effect size (95% CI)
SDQ total difficulties	10.25 (6.16)	8.81 (4.84)	8.13 (4.77)	1.44 (-0.54 to 3.41) 0.225	0.26 (-0.10 to 0.62)	0.69 (-1.15 to 2.53) 1.000	0.14 (-0.24 to 0.53)
ECBI intensity	109.72 (25.52)	101.28 (27.82)	101.59 (22.19)	8.44 (0.05 to 16.82) 0.048*	0.32 (0.00 to 0.63)	0.31 (-9.39 to 10.02) 1.000	0.01 (-0.38 to 0.40)
PSoC total	75.19 (11.59)	76.44 (10.60)	78.88 (11.37)	1.25 (-2.22 to 4.72) 1.000	0.11 (-0.20 to 0.43)	2.44 (0.14 to 4.74) 0.035*	0.22 (0.01 to 0.43)

*Significant at the $p < .05$ level

Table 6.7

Per-protocol (n=25) observation measures: summary of 12-month results for families with complete data using analysis of variance

Primary Measures	Intervention n = 25, raw scores			Estimated mean differences using repeated measures ANOVA			
	Mean (SD)			Baseline to follow-up 1		Follow-up 1 to follow-up 2	
	Baseline	Follow-up 1	Follow-up 2	Mean difference (95% CI) P-value	Effect size (95% CI)	Mean difference (95% CI) P-value	Effect size (95% CI)
PAROT academic	17.82 (6.01)	20.37 (10.74)	14.13 (7.81)	2.54 (-2.28 to 7.36) 0.561	0.30 (-0.27 to 0.88)	6.24 (2.16 to 10.32) 0.002*	0.43 (0.15 to 0.70)
PAROT socio-emotion	3.86 (2.62)	4.81 (3.71)	3.20 (2.98)	0.95 (-1.08 to 2.97) 0.723	0.30 (-0.34 to 0.94)	1.61 (-0.64 to 3.86) 0.232	0.48 (-0.19 to 1.16)
PAROT problem-solving	16.04 (10.11)	17.46 (8.65)	14.32 (7.71)	1.42 (-3.47 to 6.32) 1.000	0.15 (-0.37 to 0.67)	3.14 (-1.40 to 7.68) 0.264	0.38 (-0.17 to 0.94)
PAROT encouragement/praise	10.43 (6.19)	12.52 (7.21)	11.56 (6.48)	2.09 (-1.45 to 5.63) 0.424	0.31 (-0.22 to 0.84)	0.96 (-2.35 to 4.27) 1.000	0.14 (-0.34 to 0.62)
PAROT reflection/expansion	16.36 (7.25)	13.02 (6.23)	12.57 (6.50)	3.35 (0.02 to 6.67) 0.048*	0.50 (0.00 to 0.99)	0.44 (-2.76 to 3.64) 1.000	0.07 (-0.43 to 0.57)
PAROT child positive response	31.25 (10.64)	40.39 (15.03)	49.86 (17.83)	9.13 (2.26 to 16.00) 0.007*	0.71 (0.18 to 1.25)	9.48 (0.61 to 18.34) 0.033*	0.58 (0.04 to 1.12)
PAROT child negative response	1.12 (1.29)	0.74 (1.81)	0.46 (0.81)	0.38 (-0.67 to 1.43) 1.000	0.25 (-0.43 to 0.92)	0.28 (-0.79 to 1.34) 1.000	0.21 (-0.60 to 1.02)
PAROT child spontaneous vocalisation	18.15 (8.91)	13.70 (9.98)	5.06 (4.36)	4.45 (-0.01 to 8.92) 0.051	0.47 (0.00 to 0.94)	8.65 (3.33 to 13.96) 0.001*	1.21 (0.46 to 1.95)

*Significant at the p<.05 level

Table 6.8

Per-protocol (n=25) parent-report measures: summary of 12-month results for families with complete data using analysis of variance

Secondary Measures	Intervention n = 25, raw scores			Estimated mean differences using repeated measures ANOVA			
	Mean (SD)			Baseline to follow-up 1		Follow-up 1 to follow-up 2	
	Baseline	Follow-up 1	Follow-up 2	Mean difference (95% CI) <i>P</i> -value	Effect size (95% CI)	Mean difference (95% CI) <i>P</i> -value	Effect size (95% CI)
SDQ total difficulties	11.00 (6.10)	9.48 (4.67)	8.76 (4.87)	1.52 (-0.98 to 4.02) 0.390	0.28 (-0.18 to 0.75)	0.72 (-1.65 to 3.09) 1.000	0.15 (-0.35 to 0.65)
ECBI intensity	114.08 (21.74)	105.32 (28.32)	106.16 (20.56)	8.76 (-0.95 to 18.47) 0.087	0.35 (-0.04 to 0.74)	0.84 (-11.81 to 13.49) 1.000	0.03 (-0.48 to 0.55)
PSoC total	73.24 (11.61)	74.36 (10.78)	77.00 (11.93)	1.12 (-3.17 to 5.41) 1.000	0.10 (-0.28 to 0.48)	2.64 (-0.26 to 5.54) 0.083	0.23 (-0.02 to 0.49)

*Significant at the $p < .05$ level

CHAPTER 7

STUDY 5

Parent and school feedback on the Incredible Years School Readiness Parenting Programme: A process evaluation

Introduction

The evaluation of the IY School Readiness parenting programme provided preliminary evidence that providing support to parents through schools can change the verbal behaviour of parents in the short-term (see Chapter 6) but these changes may not be maintained in the longer-term (see Chapter 7). The programme may, however, have other benefits to families and schools, in terms of strengthening home-school links.

Parental involvement with the school is a strong predictor of school readiness (Hindman, 2009; Kingston et al., 2012). Increased parent involvement in education is related to lower rates of behaviour problems among children of single parents and among children from neighbourhoods with higher levels of childcare burden (Kingston et al., 2012). Trust between parents and teachers is a particularly important element in building and maintaining the family-school relationship and it has been positively correlated with three indicators of school performance (Adams & Christenson, 2000). This suggests the need for schools and parents to make efforts in building a trusting relationship during the child's academic years (Adams & Christenson, 2000). A report on the impact of parental involvement, parental support and family education on pupil achievements and adjustment highlights the need to enhance home school links and to develop and research initiatives that enhance home-school links (Desforges, Abouchaar & Britain, 2003).

The IY School Readiness parenting programme is a four-session programme (two hours per week) for parents of children aged 3-5 years, delivered by school staff e.g. teachers, in schools. The programme aims to promote children's school readiness by enhancing their language, reading, and social skills and promote the home-school link.

Purpose and scope

The purpose of this chapter is to report on the experiences of group leaders and parents involved in the delivery of, or in participation in the IY school readiness parenting programme in North Wales, including their perceptions of the home-school relationship. This chapter also provides an overview of the time and cost commitments involved for leaders that have been trained to deliver the IY School Readiness programme with fidelity. The findings of this chapter intend to inform the ability of the IY School Readiness programme to strengthen home-school links and to inform future developments and implementation of the programme.

Methods

This chapter reports on the intervention condition parents ($n=27$) that provided feedback following attendance on the IY School Readiness programme, and the group leaders ($n=14$) who provided feedback following delivery of the programme within eight schools in North Wales during 2010 and 2011 (see Figure 7.1).

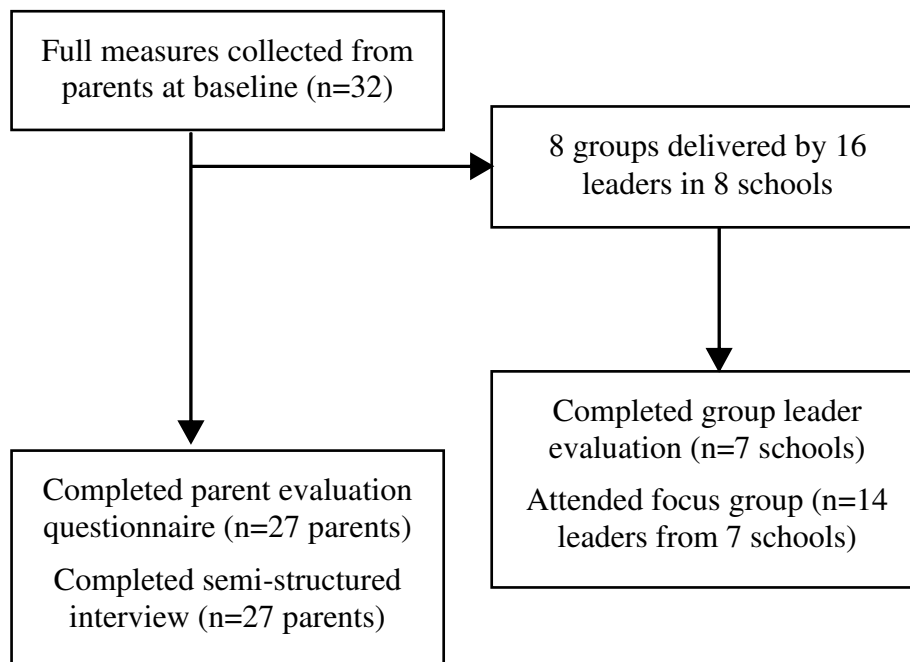


Figure 7.1. Consort diagram: flow of parents and group leaders

Measures

The parent feedback was obtained using the parent evaluation questionnaire (see Appendix W) and a semi-structured interview (see Appendix X), both specifically developed for the purpose of this study. Parent measures were administered during the first follow-up visit, six months post-baseline. The parent evaluation questionnaire was developed to obtain quantitative data on aspects of the home-school relationship following attendance on the IY School Readiness programme. Parents rated 7 items including, how comfortable they feel talking to, and how well they are heard by, the teachers and school, whether they feel the relationship with teacher and the school has improved, and their likelihood to approach the school since attending the programme. Parents rated these on a five-point scale from *strongly agree* to *strongly disagree*. Parents also rated the problems they faced when attending the programme on a five-point scale from *not at all* to *very much*, and were asked an open

question regarding what skills they think are important for their child to be ready for school. The parent semi-structured interview comprised of eight questions about the parents' opinions and perceptions of the programme. Parents were asked how supportive and useful they had found the programme and whether the programme had led to any changes in their own behaviour, their child's behaviour, or their relationship with their child. Parents were also asked how they felt about their child's transition to full-time school since attending the programme and whether they felt the programme had any benefits to the school. Finally, parents were asked about the effect of the programme on their relationship with the school and whether they had any suggestions to change or improve the programme for future parents.

Group leader feedback was obtained using the group leader evaluation questionnaire, again designed specifically for the purpose of this study (see Appendix AA). One questionnaire was administered to each set of group leaders at every school during the final supervision session. The questionnaire asked group leaders to rate four items in relation to the home-school relationship, including how comfortable they feel talking to parents, how well they are heard by parents, whether the relationship between the parents and the school has improved, and whether parents are more likely to approach the school since they attended the programme. Items were rated on a five-point scale ranging from *strongly agree* to *strongly disagree*. The group leaders also rated ten further items in relation to specific aspects of the programme, including weekly supervisions, materials, videotape examples, role play, group discussion and interaction, ease of implementing and effectiveness, overall feeling about the programme, likelihood to run the programme again, and any barriers they faced in delivering the programme. Group leaders were also asked what they liked most and least about the programme and how we could improve the programme for delivery in other schools.

Group leaders who attended the last weekly supervision session also discussed their experience of delivering the programme during two focus groups led by the first author. Leaders were asked a series of questions and the discussions were recorded in written note-form and also on a video recorder by the first author (see Appendix BB). The questions in the focus group related to the group leaders' overall opinion of the programme, the perceived benefits to themselves, the school, the parents and the children, the parent-school relationship, barriers or difficulties in implementing the programme and recommendations for future implementation. Finally, leaders were asked to complete a brief time and cost diary during the final weekly supervision (see Appendix CC).

Group delivery and supervision

Parents attended the programme for four weeks at their child's school, with an average of four parents attending the programme per school (range: 2 to 6 parents). Two group leaders in each of the eight schools delivered the programme during school hours, with each of the four sessions lasting two hours. Leaders had undergone a one-day group leader training delivered by an accredited trainer and all but one of the facilitators were school-based staff. Leaders included teachers, classroom assistants, head teachers, and a psychologist. All leaders ($n=16$) received two hours of group supervision each week from a certified trainer. This ensured the leaders had sufficient support to deliver the programme with a high level of fidelity. Recordings of previous group sessions were viewed and discussed and leaders planned the next group sessions.

Results

Parent attendance

All 32 parents (100%) attended at least one session, and of those, 17 (53.1%) attended all four sessions. The overall mean attendance was 3.16 sessions ($SD = 1.02$). Table 1 presents descriptive data on the number of sessions attended by parents.

Table 7.1
Descriptive data on the number of sessions attended by parents ($n=32$)

No. of sessions attended	No. of parents	% of parents
1	2	6
2	8	25
3	5	16
4	17	53

Parents reported a range of reasons for not attending any of the four programme sessions, including: work ($n=4$), education ($n=1$), child illness ($n=3$), and parent illness ($n=2$).

Parent evaluation questionnaire

Of the 32 parents who attended the IY School Readiness programme, 27 completed and returned the IY school readiness parent evaluation questionnaire. The majority (92.6%) of parents agreed ($n=14$) or strongly agreed ($n=11$) that if they had a problem with their child,

they would feel more comfortable talking about it to the teachers who ran the programme since attending the programme. Eight-nine percent of parents agreed (n=17) or strongly agreed (n=7) that they would feel more comfortable talking to the school about any problems with their child since attending the programme. Since attending the programme, 96.3% of parents agreed (n=19) or strongly agreed (n=7) that they felt they could talk to and be better heard by the teachers who ran the programme, whilst 85.2% of parents felt they could talk to and be better heard by the school in general. Eighty-nine percent of parents agreed (n=15) or strongly agreed (n=9) that the relationship between themselves and the teachers who ran the programme had improved after attending the programme. Seventy-four percent of parents said the relationship between themselves and the school had improved and 77.8% said they would be more likely to approach the school since attending the programme.

When asked what problems they had faced when attending the programme, 25.9% of parents rated a lack of crèche for other children as a potential problem. Not enough time was a problem for 37% of parents, whilst only 18.5% of parents said the programme was at the wrong time of day. Twenty-six percent of parents rated other personal circumstances as a potential problem they faced when attending the programme. Parents reported a range of skills when asked what they think is important for their child to be ready for school and most parents responded with several answers; these are summarised in Table 7.2. The two most frequently reported skills included social skills, such as sharing and being friendly, and academic skills, such as reading, writing, and knowledge of numbers and letters.

Table 7.2
A summary of parent responses in relation to schools readiness skills (n=27)

What skills do you think are important for your child to be ready for school?	n
Emotion skills/Able to express themselves/happy	3
Social skills (Sharing, friendly)	21
Academic skills (Reading, writing, counting, knowledge of letters)	13
Speaking/communication/language	8
Play skills	2
Confidence	7
Concentration/Listening	3
Basic grasp of principles	1
Manners/polite	3
Wanting to go	1
Willing/ready to learn	2

Independent	2
Respect for others	1
Knowing boundaries	1
Understanding tasks	1
Feeling safe	1
Routine/structure	1
Asking for help	1
Able to go to toilet/out of nappies	2
Able to eat food at lunch	1
Able to take coat off	1

Parent semi-structured interviews

The open-ended question and interview data were analysed using thematic analysis, in order to identify and explore themes within the data. Data was reviewed and organised by question to review the data across respondents.

All parents (n=27) said they found the programme supportive and useful (see Appendix DD). Parents said it had reinforced things they already knew and it was nice to have some support. Parents said the programme was great fun, they had really enjoyed it, and they would recommend it to others. The majority of parents (n=22) said they felt the programme had led to changes in their behaviour as a parent. Parents reported they were spending more time with their children and had learned new skills. Parents said that they had learned to have more patience, label emotions, use more praise, ask less questions, and describe and comment. Parents had also learned new ways of playing and reading with their child, including less reading at them, and letting the child take the lead. One parent commented that they had learned to think before they shout and another parent said they were now more positive and less critical. Eighteen parents felt the programme had led to changes in their child's behaviour. Parents said their children were better behaved, had learned to wait their turn, paid more attention, had less tantrums, and were more willing to listen. One parent commented that the programme had been "*helpful to the whole family*", while another parent said their child was already well-behaved, and another parent said their child's behaviour had worsened, but not due to the programme. One mother commented on the effect of the programme on her son's emotions:

"Emotions come more naturally to him now, he tells me how he feels."

Nineteen parents reported a better relationship between themselves and their child after attending the programme. Parents said they spent more time together, talked more, reacted better to each other, played more, and that the programme had brought them closer together:

“We are better friends now, less arguing, less cheeky”

One parent said they had always been close anyway and another parents said the relationship had stayed the same but it was nice to be reinforced.

Seventeen parents said the programme had helped how they felt about their child’s transition to full-time school. Parents commented that it was nice to get to know the teachers, the school, and gain a better understanding of what their child will be doing in school. Nine parents did not feel any different after attending the programme because it wasn’t their first child and two parents said it was not applicable. All parents (n=27) said they thought the programme had some benefits to the school. Parent said the programme gave schools the opportunity to get to know the parents and it was good for the teachers to get to know the background and family of the child. One parent commented that it linked in with learning through play. Twenty-three parents reported a positive effect of the programme on the relationship between them and the school. Parents felt more comfortable and relaxed approaching the school and felt they could talk to the teachers:

“Feel I can discuss more with them, feel like we are all on the same level”

One parent commented that it was good to get over the barrier of the school and another parent said they were *“not scared to ask anymore”*.

When asked how we could change/improve the programme for future parents, seven parents said no changes were needed, one parent did not answer, and two were not sure. Suggestions for changes or improvements included making the programme less American, include more information on what goes on in the school and in the classroom, and start the course at a later time. Parents commented on the length of the programme, with one parent saying it should be shorter and two parents saying it was too short and suggested adding an extra session or two at the end or a revision/follow-up after a couple of weeks. One parent commented that the videos were too short and they needed some time to make notes, and another parent said they could not understand some of the videos and they should be made

more relevant. Four parents referred to making the programme obligatory or compulsory for a parent to attend as their child starts school:

“Make it an obligatory thing to attend, all parents should attend before their children start school. Make it part of the children starting school.”

Group leader questionnaire feedback

Of the eight schools that delivered the programme, seven completed and returned the IY school readiness group leader evaluation questionnaire. All seven schools agreed (n=3) or strongly agreed (n=4) that if they thought a child needed some additional support, they would feel more comfortable talking to their parents about it since they had attended the programme. In addition, all seven schools agreed (n=3) or strongly agreed (n=4) that they felt they could talk to and be better heard by the parents since they had attended the programme. Three schools agreed and four schools strongly agreed that the relationship between the parents and the school had improved since the programme and that parents were more likely to approach the school since attending the programme.

In relation to the delivery of the programme, all seven schools rated the weekly supervision sessions as helpful (n=3) or very helpful (n=4). The materials for the sessions were rated as helpful (n=2) or very helpful (n=5) and all seven schools rated the use of videotape examples as helpful. Two schools found the use of role-play very helpful, whilst five schools found it helpful. The group discussion and interaction was rated as average (n=2) and above average (n=5). The ease of implementing the programme was rated as very easy (n=1), easy (n=2), neutral (n=3), or difficult (n=1), whilst the effectiveness of the programme was rated as effective (n=2) or very effective (n=5). Group leaders' overall feeling about the programme was rated as very positive by all seven schools and all but one of the schools were likely (n=1) or very likely (n=5) to run the programme again in the future.

When asked what barriers they had faced in delivering the programme, schools rated lack of adequate funding, no space for day-care for children and difficulty funding day care providers as the three main barriers. Lack of interest from families, not having enough time in their work load, and difficulties getting group together were also rated highly as potential barriers. Some schools (n=4) said they had faced personal frustration with the programme or felt they had a lack of knowledge or were incompetent to deliver (n=5). However, none of the schools felt that the training for delivering the programme was inadequate or that they had a lack of interest from the teachers and the school in general.

When asked what they liked most about the programme, five schools said they enjoyed building positive relationships and getting to know the parents. One school said they liked how effective the programme is considering it is only four sessions. One school said that four weeks was not too much to ask from the parents or the school and another school particularly liked the reading sessions. When asked what they liked least about the programme, two schools felt there was too much content to present and that the programme lacked an introductory week. One school did not like the vignettes and two further schools found some of the vignettes difficult to understand. Two schools did not like being video recorded, whilst another school found the programme time consuming and felt there was a lack of funding. Two schools did not like the title of the course, with one school referring to this in relation to recruitment. When asked how programme delivery could be improved, two schools referred to the vignettes and suggested changing the title of the programme. One school suggested additional financial and practical support, whilst three schools suggested an introductory session of about half an hour at the beginning of the programme. One of the schools also suggested running the programme later on in the term and including a session on praise.

Group leader focus groups

The responses to the focus group questions were fully transcribed and the author read and re-read the text. The data was organised by question to look across all respondents and analysed using thematic analysis, in order to identify and explore themes.

Group leaders had positive overall opinions of the programme; they said the programme was very good, that they had enjoyed delivering it, and that it was effective and good things came of it. Positive feedback was also received about the length of the programme:

“The programme has been effective, it’s a short programme - quite easy to put the time in to do it and not too much of a commitment for parents as it is only four weeks”.

Two group leaders referred to the programme improving the relationship between the parents and the school, whilst two other schools said that it had raised awareness amongst parents of the school’s ideas of school readiness.

The group leaders perceived strengthening the relationship with parents as being the main benefit of the programme to themselves and the school:

“The relationship with parents has improved.”

“Chance for us to come out of the office and to get to know the parents and build relationships. “

“Yes building a relationship with the parents, it’s been nice”

One group leader said she felt she had gained personally and got some ideas to use at home, whilst another group leader said the programme had reminded her to praise in the classroom. The perceived benefits of the programme to the parents and their children included strengthening the parent-child relationship and increasing parent self-confidence. One group leader said the programme had increased parents’ confidence to strengthen their relationship with their children. Group leaders reported that the programme had effects on the whole family, and skills were transferable to older children in the family. Two group leaders referred to the programme as being beneficial for parents who are new to the school or area.

Group leaders reported the cost as being the biggest barrier or difficulty in implementing the programme. The majority of the schools (n=5) had to find supply cover in order for teachers to leave the classroom and deliver the programme to parents. In addition, group leaders referred to the future cost involved, as they would need to purchase the DVDs in order to deliver the programme in the future:

“Cost is the biggest problem – even though we have all the paper work and resources, we would have to buy the DVDs to deliver in the future. If the authority could hold a couple of copies then we could loan them out for four weeks at a time.”

With regard to set-up of the programme, finding a suitable date and time to deliver the programme and recruiting parents at the start of term were reported as difficulties in implementing the programme. With regard to the content of the programme, group leaders reported that it was difficult to get some parents to complete the homework and some of the parents did not understand the videos.

Group leaders made many recommendations for future implementation of the programme, in relation to time of year for delivery, size of the group, title of the programme, and additional sessions. One group leader suggested delivering half of the programme (two sessions) before the summer term, and another half of the programme in the autumn term. Another group leader said they intended to run the whole programme before the summer term, whilst a further group leader suggested after the autumn half-term would be better in order to have time to get to know the parents. One group leader suggested a smaller group of four parents would be better, as parents would be more likely to talk and feel relaxed. Three group leaders advised changing the title, as it did not reflect what parents might perceive as 'school readiness'. Finally, group leaders recommended adding an extra introductory session at the beginning and an extra session on praise.

Time and cost diary

Seven group leaders completed a time and cost diary, providing an account of the time and costs relating to delivery of the programme (see Appendix CC). The mean room preparation and session preparation times were 2.14 hours (range 1 to 4 hours) and 3.79 hours (range 2 to 6 hours) respectively across the four sessions. The programme delivery time ranged from 8 to 9 hours, with a mean time of 8.29 hours across the four sessions. The mean time for catch-up/home visits sessions was 0.86 hours (range 0 to 6 hours), whilst group leaders spent between 0 and 2 hours on telephone parent/buddy calls ($M=0.48$ hours) over the four sessions. Supervision sessions took an average of 8.57 hours (range 8 to 10 hours) and travel to supervision took an average of 3.43 hours (range 0.67 to 8 hours) for the four sessions. The overall mean time including time spent on room and session preparation, delivering the programme, catch-up/home visits sessions, telephone calls, supervision sessions and travel to supervision sessions, was 27.55 hours (range 23.33 to 34.00 hours) over the four weeks. Schools reported a mean cost of £491.43 (range £0 to £1200) for teacher supply cover and a mean cost of £3.43 (range £0 to £16.00) for refreshments and snacks for parents.

Discussion

Overall, the mean attendance was high and group leaders and parents provided positive feedback on the IY School Readiness programme. With regards to the parent-school relationship, the majority of parents felt more comfortable talking to the teachers and schools

about their children after attending the programme and group leaders also said they felt more comfortable talking to the parents about the children. The group leaders and parents reported an improved home-school relationship, suggesting the potential of the programme in bringing parents and schools closer together.

Most parents found the programme had changed their behaviour and their child's behaviour for the better, leading to a stronger parent-child relationship. Six of the seven schools said they would be likely to redeliver the programme, suggesting the programme had been positively received and implemented successfully within those schools.

The cost and lack of funding were the biggest barriers for schools. The programme resources had all been supplied to the schools, apart from the DVDs, which had been provided to the schools on loan. Most of the schools had to provide supply cover whilst the classroom teacher was delivering the programme and this proved to be expensive. Some constructive feedback was received with regard to length of the programme, with some parents and group leaders suggesting an extra introductory session due to the large volume of materials to present. However, conflicting feedback suggested that four weeks was optimal and ensured parents did not have to commit too much of their time and the same with regard to the group leaders. Some parents and leaders perceived the video clips negatively, with reference to the American accent and a lack of understanding of the video clips. The development of new, validated video clips in North Wales might ease implementation of the programme and parent engagement in the future.

Strengths and limitations

This chapter provides valuable feedback on the delivery of, and participation in, the IY School Readiness programme. The feedback will inform future implementation and developments of the programme; however, the feedback must be interpreted with caution due to a number of factors. There may have been some participant response bias as parents and group leaders provided feedback in the presence of the main researcher. Another limitation is the small sample size; the groups were delivered during school hours and this may have limited the ability of parents in employment to attend the programme. In addition, all but one group leader were delivering the programme for the first time. However, this is the first evaluation of the IY School Readiness programme and the feedback from this trial can inform future larger trials. Larger studies with more experienced leaders would be needed for future evaluations.

Conclusion

Leaders may need to secure funding in order to ensure sufficient cover for teachers to leave the classroom to deliver the programme. Leaders may also want to source funding in order to purchase the video materials or look at ways to liaise with other schools and share video materials on a rotation basis. The programme was well received by parents and group leaders alike. Its short duration ensures schools have the time to implement the programme and parents have the time to attend. The programme enabled group leaders to build relationships with and talk to parents in a more relaxed, open, trusting environment.

CHAPTER 8
GENERAL DISCUSSION

The discussion begins with an overview of the main objectives of the thesis. The findings are then discussed in relation to the current literature and policy implications followed by a discussion of study strengths and limitations and future possible research directions.

Objectives and outline of the thesis

The main objective of this thesis was to evaluate the effectiveness of the IY School Readiness parenting programme through a small, non-randomised, controlled comparison trial and develop a tool to use in the evaluation. School staff delivered the intervention to parents of children aged three to five years in areas of North Wales. The first study reviewed the existing literature on the concept of school readiness, including the dimensions of school readiness and the factors that predict children's readiness for school. The second study reported on the development and testing of a new observational tool designed to evaluate the impact of the IY School Readiness parenting programme on positive parent and child verbal behaviours. The third and fourth studies reported on the short-term and longer-term outcomes from a trial of the IY School Readiness programme, comparing data collected from parents who received the programme with that of comparison control families. The final study reported on the costs of the programme and on feedback on the IY School Readiness programme from group leaders and intervention condition parents. The following section provides a summary of the main findings from each of these five studies and the implications of these findings.

Study 1: School readiness: A review of the dimensions and predictors of a complex construct

Not all children are successful in making the transition to formal schooling and large proportions of children have difficulties adjusting to school life (Rimm-Kaufman et al., 2000). The importance of children's readiness for school is apparent (Aiona, 2005) and this literature review sought to provide a clearer definition of school readiness, including the potential predictors of children's readiness for school, by conducting a review of school readiness literature. The review found an abundance of literature in the area of school readiness and the literature confirmed the notion of school readiness as a multi-dimensional concept. The five main dimensions of school readiness include physical well-being and motor development, social and emotional development, approaches toward learning, language development, and cognition and general knowledge (Kagan et al., 1995; NEGP, 1991).

Recent research emphasised the important role of social-emotional development for subsequent school success. The review also identified many home- and school-related risk and protective factors that may be predictive of school readiness and success, suggesting the importance of the home and school environments.

Study 2: The Play And Reading Observation Tool (PAROT): Validation of a measure of parent-child interactions that promote school readiness

Several observation tools have been developed to assess parent-child interactions during *either* play or reading. However, no existing tool was found to assess the mutual parenting behaviours that promote school readiness during both shared play and reading activities, as outlined in the IY School Readiness parenting programme. The PAROT was developed for this purpose. This study reported on the development and validation of the PAROT, to assess two key components of school readiness (cognitive/academic skills and socio-emotional competence) during play and reading parent-child interactions within the home learning environment. Structured home observations were conducted with 46 pre-school children and their parents, who had signed up to attend the IY School Readiness parenting programme. The observations included up to 15 minutes each of joint play and reading and frequencies of parent and child verbal behaviours were coded using the PAROT. This study demonstrated high internal reliability of the PAROT, with the formation of eight composite categories. The study also demonstrated good code-recode and inter-rater reliability, with both coders maintaining a minimum of 70% overall agreement for both inter-rater and code-recode reliability. Observer reliability was further confirmed by high intra-class correlations on each category. The PAROT demonstrated limited evidence of concurrent validity with one child and two parent categories with the SDQ, ECBI, and PSoC, in line with previous research (Hutchings et al., 2007; Webster-Stratton & Eyberg, 1982). This study demonstrated that the PAROT was an accurate and reliable observational tool developed specifically to evaluate the parenting behaviours encouraged in the IY School Readiness programme for parents. Future studies should involve additional trained coders to enable more data to be second coded to further demonstrate the reliability of the PAROT and further research is needed to confirm the validity of the tool.

Study 3: Evaluating the Incredible Years School Readiness Parenting Programme:

Short-term outcomes (6-months)

The third study reported on the short-term effectiveness of the IY School Readiness parenting programme in terms of improving observed parent-child interactions at home and parent-reports of child behaviour and parental self-competence at 6-months follow-up. The IY School Readiness parenting programme was effective in increasing key verbal parenting behaviours in the context of reading and play that are important for children's readiness for school. This was the first known evaluation of the IY School Readiness programme and appropriate measures for evaluating the programme were selected. Parent verbal behaviours (academic, socio-emotion, and problem solving coaching, encouragement/praise and reflection/expansion) and child verbal behaviours (positive response, negative response and spontaneous vocalisation) were the primary outcome measures, as observed using the PAROT during child-directed play and interactive reading within the home. Secondary measures included two parent-report measures of child behaviour and parental self-competence. The study demonstrated significant improvements for intervention condition parents at 6-month follow-up on three of the five objectively observed parent verbal behaviours compared to the control condition. Intervention condition parents showed a significant increase in academic and socio emotion coaching after attending the programme, whilst the control condition showed a decrease. Parents who attended the programme also responded to their children with significantly more encouragement and praise after attending the programme. The programme demonstrated no significant changes in child verbal behaviours and no significant differences were found between intervention and control conditions at 6-month follow-up for the secondary parent-report measures. This short-evaluation provides preliminary evidence that providing support to parents through schools can change parent verbal behaviours.

Study 4: Evaluating the Incredible Years School Readiness Parenting Programme:

Longer-term outcomes (12-months)

The fourth study reported on the longer-term effectiveness of the IY School Readiness parenting programme to establish whether the short-term outcomes found in the 6-month evaluation were maintained. The comparison of intervention and control conditions at 12-months post-baseline showed no significant differences for any of the parent and child verbal behaviours or the three parent-report measures from baseline to follow-up two. These results suggest that the short-term (6-month) improvements in parent verbal behaviours (academic

coaching, socio-emotion coaching and encouragement/praise) were not maintained over time. Both intervention and control condition parents showed a decrease in academic coaching, socio-emotion coaching, problem-solving coaching, and reflection/expansion from baseline to follow-up two (12 months after baseline). The non-significant findings suggest that this four-week programme may not be long enough to produce longer-lasting improvements in parent verbal behaviours. Further evaluations with larger resources are needed in order to confirm these findings.

Study 5: Parent and school feedback on the Incredible Years School Readiness

Parenting Programme: A process evaluation

The fifth study reported on the experiences of parents and schools involved in the IY School Readiness parenting programme, including their perceptions of the home-school relationship. This study also provided an overview of the time and cost commitments involved for the leaders who were trained to deliver the IY School Readiness programme with fidelity. Parent feedback was obtained using a questionnaire and a semi-structured interview at the first follow-up visit (6-months after baseline). School feedback was obtained using a group leader questionnaire, a time and cost diary, and through focus group discussions. Overall, the mean attendance on the programme was high and parents and group leaders provided positive feedback on the programme. Parents and group leaders reported an improved home-school relationship and suggested valuable improvements for the future implementation of the programme.

Relevance of research findings and implications

The main aim of this thesis was to evaluate the effectiveness of the IY group-based School Readiness parenting programme for parents of preschool children aged 3-5 years living in North Wales. The first study introduced the concept of school readiness, providing a discussion of the dimensions of school readiness and the factors that may contribute to children's school readiness. The review of existing literature confirmed a three-fold definition of school readiness including the readiness of the child, that is, the set of skills the child requires in order to be ready for school. The review found that all school readiness research refers to at least one of five dimensions of children's school readiness, including physical well-being and motor development, social and emotional development, approaches toward learning, language development, and cognition and general knowledge. However, more current research emphasised social and emotional development as an important dimension of

children's school readiness (Blair, 2002; Brigman & Webb, 2003; Denham et al., 2013; Denham et al., 2014; Fantuzzo et al., 2005; Ziv, 2013). The three-fold definition of school readiness also included the readiness of the home and the readiness of the school, including important factors relating to the home and school environments that are important for children's successful transition to school. The review identified many factors that may be predictive of school success, including the quality of preschool education (Cote et al., 2013; Dickinson & Porche, 2011; Dobbs-Oates et al., 2011; Magnuson & Shager, 2010); positive peer play interactions (Fantuzzo & McWayne, 2002); the quality of the home environment (Forget-Dubois et al., 2009; Jeon et al., 2014); parent involvement, availability, and supportiveness (Booth, 1999; Davis & Logsdon, 2011; Hindman, 2009; Martin et al., 2010; Sheridan et al., 2011), family socioeconomic status (Dotterer et al., 2012; Hair et al., 2006), and parent involvement with the school (Hindman, 2009).

It is clear from the review of literature that parents play an important role in the development of children's school readiness (Fan & Chen, 2001; High, 2008; Lau et al., 2011; Meisels, 1999; Walsh, 2005). Positive relationships between parents and their children result in the formation of positive relationships with peers and teachers in schools (Howes et al., 2008), thereby ensuring children settle into school, have few conduct problems, and good academic attainment (Fantuzzo & McWayne, 2002). Parenting programmes are an important method of supporting parents in the development of children's school readiness and the UK Government have put forward a strong case for early intervention and supporting parents to improve the lives of children (Department for Education & Skills, 2004; Allen, 2011a; Allen 2011b).

In light of Government recommendations, many parenting programmes and initiatives have been developed and evaluated, however, the IY School Readiness programme is one of relatively few programmes that have been designed specifically to support parents as their children start school. The findings of the review provide support for the development of the IY School Readiness parenting programme as a programme for promoting school readiness. The content of the IY School Readiness programme has clearly been developed in line with the multiple concepts of school readiness. The IY School Readiness programme aims to promote preschool children's school readiness, in terms of supporting parents in encouraging three key child school readiness components, including social and emotional skills, cognitive and general knowledge skills, and language skills (Webster-Stratton, 2011). These skills are clearly in line with three of the five school readiness dimensions as identified by the NEGP (Kagan et al., 1995). The programme also encourages the relationship between the home and

the school, a key predictor of school readiness (Carlton & Winsler, 1999; Hindman, 2009). The IY School Readiness programme promotes child school readiness skills, provides support for parents to ensure a ready home learning environment, and enables schools to engage and build relationships with parents. The content of the programme is therefore in line with the notion that school readiness is a three-fold concept, incorporating a ready child, home and school (NEGP, 1991).

In light of considerable support from the Government for early intervention, this evaluation is timely and relevant. The findings of this evaluation are encouraging, suggesting the benefits of investing in the delivery of a short, universal intervention for parents as children start school. This thesis provides support for the delivery of the programme in Wales with emphasis on improving parent-child interactions in the form of enhanced parent positive verbal behaviours likely to promote children's school readiness. The short-term findings of this evaluation demonstrated improvements in observed parental academic and socio-emotion coaching and encouragement and praise in the contexts of shared reading and joint play, two important learning environments for promoting school readiness skills (Bredekamp & Cople, 1997; Farrant & Zubrick, 2013; Ginsburg, 2007; Savina, 2014; Wasik & Bond, 2001). Academic knowledge and socio-emotional competence are two key skills that are thought to facilitate a child's transition to school (Duncan et al., 2007; Fantuzzo et al., 2005; High, 2008; Raver, 2002; Sasser & Bierman, 2011; Stacks & Oschio, 2009). Responding with encouragement and praise are important parent behaviours thought to enhance parent-child interactions (Huebner & Meltzoff, 2005; Lonigan & Whitehurst, 1998; Querido et al., 2002; Webster-Stratton, 2011).

The results of this evaluation are in line with previous research on the IY parenting programmes in Wales, demonstrating positive outcomes for parents. The Welsh Government has heavily invested in the IY programmes across Wales and several evaluations have been undertaken. The evaluation of the IY BASIC parenting programme within Sure Start areas with parents of three and four year old children showed significant improvements in child behaviour, parental mental health, and positive parenting (Hutchings et al., 2007) with maintained long-term benefits at the 18-month follow-up (Bywater et al., 2009). Further evaluations of the IY toddler and baby programmes also demonstrated positive improvements in parent behaviours, including reduced negative parenting (Griffith, 2011) and improved sensitive parental responding (Jones, 2013). Using a newly developed, reliable tool (the PAROT), this study also found significant positive improvements in parenting in the short-

term (6-months after baseline) but these benefits were not maintained at the 12-month follow-up.

Study strengths

This evaluation of the IY School Readiness programme has several strengths. Despite a limited budget, the evaluation involved three data collection time-points. The evaluation demonstrated positive outcomes for parents in the short-term (from baseline to six months) and although these benefits were not maintained at the 12-month follow-up, the results show promise in line with previous IY research in Wales. The IY School Readiness parenting programme is much shorter in duration than the other IY parent programmes and is a universal programme offered to all parents with preschool children, and short-term positive outcomes were yielded despite the programme being only four weeks in duration. This suggests that delivering a short, universal programme can have positive benefits to parents and society. A short programme of this kind provides the opportunity for schools to deliver a programme with less financial and time burden than longer programmes.

A range of appropriately selected measures was used to evaluate the programme, including multiple modes of data collection, such as parent report, semi-structured interview, and direct observation. The development of an appropriate, reliable observation tool enabled the assessment of key parent and child behaviours in the contexts of reading and play, reflecting the content of the IY School Readiness programme. This project demonstrated inter-rater reliability between the primary (first author) and secondary coders on the observation tool.

The successful delivery of this evaluation is due to excellent working partnerships between the research team, the local authorities, the schools, and the parents and their families. Although programme fidelity was not directly assessed, group leaders attended weekly group supervision sessions with an IY mentor. The high attendance rates among parents suggest that group leaders were successful in engaging parents. The feedback from both the group leaders and parents was very positive and provided invaluable suggestions regarding future implementation of the programme.

Study limitations and future directions

Funding was a limitation, as the budget enabled a single Ph.D. student to set-up, recruit, and collect data for the evaluation. Time was also a constraint, as the recruitment and intervention took several months to set-up and schools were recruited across two phases,

therefore prolonging the duration of the data collection period. An RCT would have enabled a more rigorous evaluation of the programme, however, funding and time constraints did not allow this. Further limitations are in relation to the sample of parents. All but one of the parents involved in the study were mothers, therefore limiting the generalisability of the findings to fathers. As this was a Ph.D. study, the intended sample size (N=72) was not based on power calculations. The sample size was based on what was realistic for a single Ph.D. student to collect and this effectively was a small non-randomised trial from which further funding could be sought in order to undertake a larger RCT. Lower numbers of parents were recruited (N=46) than initially intended (N=72) and one possible explanation is that the groups were delivered during school hours and this may have limited the ability of parents in employment to attend the programme. However, attempts were made by the researcher to improve recruitment. The researcher visited schools to engage parents by giving an informal presentation regarding the programme and the research and delivering a question and answer session. The schools also received regular telephone and face-to-face contact from the researcher, to discuss any problems with recruitment and to suggest ideas for engaging parents.

The design of a larger, future RCT may require further thought based on insight gained from the completion of this evaluation. As the programme is only four weeks in duration, it would be expected that parents would attend the majority of sessions. However, just over half of the parents (n=17) attended all four sessions of the programme in this study. Parents reported a range of reasons for not attending any of the four programme sessions, including: work, education, child illness, and parent illness. Child and parent illness are factors that may be beyond the control of the study, however, as some parents were unable to attend due to having to go to work or attend college, the timing of the delivery of the programme requires further consideration. However, this evaluation did involve subgroup analysis for this small sample of 17 intervention condition parents compared with the control condition parents, and similar results were obtained as were found for the full sample including 32 intervention condition parents.

Despite the use of a range of appropriate measures for the evaluation, a further limitation of the evaluation is the limited evidence for the validity of the newly developed observation tool (PAROT). In addition, funding constraints meant that the primary coder for the direct observation was not blind to conditions when collecting data, however, a proportion of the data was double coded by a blind secondary coder in order to discount bias. A further limitation in relation to the observation was the inability to collect observational

data for a full 30-minute period. The intention was to observe parents and their children interacting for 15-minutes of play and 15-minutes of reading. The majority of families did manage to complete the 15-minutes of play at all three time points: baseline (87%), 6-month follow-up (86%), and 12-months (68%). However, the numbers of families completing the 15-minutes of reading was much lower for all three time points, with families reading together for an average time ranging from 9-11 minutes. The data was therefore calculated pro-rata to accommodate for these shorter reading times when conducting the analyses. This should be taken into consideration when designing a future study, and future studies could either involve an observation of a shorter duration or the introduction of additional books during the 15-minute period.

There were some further limitations or thoughts for consideration in relation to the design and recruitment of the study. The present results may underestimate the effectiveness of the IY School Readiness programme because most of the group leaders involved in the study were delivering the programme for the first time. There may also have been some participant response bias as parents and group leaders provided feedback in the presence of the main researcher. A further potential limitation was the recruitment of children from both nursery and reception classes, as these are two distinct stages of education. This study involved only two reception class children, compared with 44 nursery class children, and therefore robust comparisons were not advisable due to the very uneven group sizes. In addition, no data was collected in relation to older siblings who were already attending the same school, and in hindsight, this data would have provided further insight into the benefits of the programme for children who had no prior familiarity with the school.

CHAPTER 9
CONCLUSION

This was the first evaluation of the IY School Readiness parenting programme with parents of preschool children aged three to five years. This thesis evaluated the delivery of a programme designed to support parents as their children start school. Short-term findings indicated improvements in parent positive verbal behaviours likely to promote children's school readiness and longer-term findings suggest minimal longer-term benefits of the programme to parents. The findings of the process evaluation also suggest the ability of the programme to enhance home-school relationships. The findings of this evaluation support the previous IY work in Wales, demonstrating positive improvements in parent behaviours following attendance on the IY programmes and it is hoped that this study of the IY School Readiness parenting programme will inform future evaluations.

Further research is required, addressing the limitations discussed above, in order to corroborate the findings of this evaluation. Additional funding would enable a large-scale rigorous evaluation using an RCT design, with the recruitment of a larger sample of parents and more experienced group leaders. There is also potential to evaluate the effectiveness of offering the IY School Readiness programme followed by an additional twelve-week IY BASIC parenting programme. Further evaluations could also seek to recruit additional fathers, in order to make comparisons between mothers and fathers with regard to programme outcomes. Additional research is needed to further validate the PAROT as an observation tool for coding key parent and child school readiness related behaviours in the contexts of reading and play. The PAROT could be compared with other established observation tools and further research with a larger sample is required to substantiate the findings.

This PhD has been a major undertaking, involving a review of literature, the development of a study protocol, submission to ethics, designing of an observation tool, set up and recruitment of the study, analyses of data, and the mammoth task of writing this thesis. The process has been a significant journey involving many positives, challenges and lessons learned along the way. Firstly, there was the challenge of finding a definition of school readiness, based on vast amounts of literature in the field. Secondly, there was the challenge of designing a study to evaluate a programme of such short duration. Despite many past IY evaluations in which to refer to, the programme is only four weeks in duration and much time was spent deliberating how to evaluate change over such a short period of time. Thirdly, there was the development of a study-specific observation tool, which could have been a PhD study in itself. Despite the existence of validated observation tools to assess the components of the parent-child relationship during either reading or play, no existing tool enabled the assessment of such components during both reading and play. There was also no

tool that assessed key school readiness dimensions, which led to the development of an observation tool for this purpose. Finally, there was the challenge of recruitment, a recognised challenge in many evaluations of this kind. A lesson learned was that any amount of data collected is of value and can provide insight for the designing of future studies.

Despite a range of challenges, this PhD journey has been a success. This PhD has enabled the development of an observation tool that may be used for further evaluations of this kind, and the completion of the first evaluation of the IY School Readiness programme, providing preliminary short-term outcomes and insight for future delivery of the programme. The IY School Readiness parenting programme was effective in increasing key verbal parenting behaviours in the context of reading and play that are important for children's readiness for school and this evaluation provides preliminary evidence that providing support to parents through schools can change parent verbal behaviours.

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APPENDICES

APPENDIX A

Copy of the ethics approval email

From: Everil McQuarrie <e.mcquarrie@bangor.ac.uk>
Subject: **Ethics proposal 1628**
Date: 23 July 2010 10:35:40 BST
To: "Bywater,Tracey-Jane" <t.bywater@bangor.ac.uk>, Dr David Michael Daley
<pse0e@bangor.ac.uk>, "Cooper,Kirstie" <psp880@bangor.ac.uk>

Dear Colleagues,

Evaluating the Incredible Years School Readiness parenting programme. Ethics 1628

Your research proposal number 1628 has been reviewed by the School of Psychology Ethics and Research Committee and the committee are now able to confirm ethical and governance approval for the above research on the basis described in the application form, protocol and supporting documentation. This approval lasts for a maximum of five years from this date.

Ethical approval is granted for the study as it was explicitly described in the application

If you wish to make any non-trivial modifications to the research project, please submit an amendment form to the committee, and copies of any of the original documents reviewed which have been altered as a result of the amendment. Please also inform the committee immediately if participants experience any unanticipated harm as a result of taking part in your research, or if any adverse reactions are reported in subsequent literature using the same technique elsewhere.

Governance approval is granted for the study as it was explicitly described in the application and we are happy to confirm that this study is now covered by the University's indemnity policy.

If any new researchers join the study, or any changes are made to the way the study is funded, or changes that alter the risks associated with the study, then please submit an amendment form to the committee.

Yours sincerely

Everil

--

*Everil McQuarrie,
Research and PhD Administrator,
Room 113,
School of Psychology*

APPENDIX B

Study introductory letter to schools: Phase 1

Blynyddoedd Rhyfeddol Cymru
Ysgol Seicoleg
Llawr Isaf
Adeilad Nantlle
Safle'r Normal
Prifysgol Bangor
Bangor
Gwynedd.
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April 15th, 2010

Dear School,

Researching and evaluating the Incredible Years School Readiness programme

My name is Kirstie Cooper and I am a psychology Ph.D student at Bangor University, based at the Incredible Years (IY) Wales Centre. The centre focuses on disseminating and researching the evidence based Webster-Stratton IY parent, child and teacher programmes. The classroom programmes have already been implemented in all primary schools in Gwynedd and the parenting programmes have regularly been run in the Flying Start/Sure Start areas and are increasingly being delivered in local schools.

As part of my Ph.D, I am conducting the first ever evaluation of the new IY School Readiness programme for parents. The programme was developed to help parents to prepare their children for school by encouraging child-directed play and interactive reading and strengthening home school links. It is delivered to parents through schools and comprises four weekly 2-hour sessions.

Following discussions with Sioned Owen (Early Years Manager for Gwynedd), your school has been recommended to take part in this research project. One or two members of your school staff will be trained by Prof. Judy Hutchings (Director of Incredible Years Wales) to deliver the programme to parents of nursery or reception class children. She will also provide weekly supervision for the people delivering the programme during the four weeks. We are hoping to run the programme in four schools and we may well have community based staff that will be willing to partner with a member of school staff to deliver the programme. Each school will need to recruit approximately 6 families of children aged 3 - 5 years as their children start nursery or reception class in September 2010. We are asking schools to run the programme during September and October 2010 to the group of parents. The research team will arrange three visits to the families over a period of 12 months, where families will be asked to complete a battery of questionnaires and to undertake an observation in their own home.

We hope you feel as enthusiastic as we do about this opportunity to take part in the first evaluation of the School Readiness programme. To learn more about this project, please do not hesitate to contact me and I will arrange to visit you and answer any queries. I have enclosed information regarding an Incredible Years School Readiness programme training day to be held on 19th May 2010 in Bangor. The Welsh Assembly Government and Incredible Years Wales will fund training places for staff.

I look forward to hearing from you soon.
Yours faithfully

Kirstie Cooper

Kirstie Cooper
E-mail psp880@bangor.ac.uk
Phone 01248 383758

APPENDIX C

Study introductory letter to schools: Phase 2

Blynyddoedd Rhyfeddol Cymru
Ysgol Seicoleg
Llawr Isaf
Adeilad Nantlle
Safle'r Normal
Prifysgol Bangor
Bangor
Gwynedd.
LL57 2PZ.
Ffôn: 01248 383 758
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E-bôst: j.hutchings@bangor.ac.uk
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Incredible Years Wales
School of Psychology
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Bangor
Gwynedd
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Tel: 01248 383 758
Fax: 01248 382 652
E-mail: j.hutchings@bangor.ac.uk
psp880@bangor.ac.uk
December 2010

Dear School,

Researching and evaluating the Incredible Years School Readiness programme

My name is Kirstie Cooper and I am a psychology Ph.D student at Bangor University, based at the Incredible Years (IY) Wales Centre. The centre focuses on disseminating and researching the evidence based Webster-Stratton IY parent, child and teacher programmes. The classroom programmes have already been implemented in all primary schools in Gwynedd and the parenting programmes have regularly been run in the Flying Start/Sure Start areas and are increasingly being delivered in local schools across North Wales.

As part of my Ph.D, I am conducting the first ever evaluation of the new IY School Readiness programme for parents. The programme was developed to help parents to prepare their children for school by encouraging child-directed play and interactive reading and strengthening home school links. It is delivered to parents through schools and comprises four weekly 2-hour sessions. Four schools in Gwynedd have successfully run the programme in September 2010 and we are looking for a further four schools to run it during March 2011.

Your school has been recommended to take part in this research project. We are looking for schools that are enthusiastic about the Incredible Years programmes and the first four schools to get in contact will be included in the study. Two members of your school staff will require free 1-day training by Prof. Judy Hutchings (Director of Incredible Years Wales) to deliver the programme to parents of nursery or reception class children. The training will take place in Bangor on February 9th 2011. Prof. Hutchings will also provide weekly supervision for the people delivering the programme during the four weeks. Each school will need to recruit approximately 6 parents of children aged 3 - 5 years who started nursery or reception class in September 2010. We are asking schools to run the programme for 2 hours per week for four weeks during March 2011. The research team will arrange three home visits to the families over a period of 12 months, where families will be asked to complete a battery of questionnaires and to undertake an observation in their own home.

We hope you feel as enthusiastic as we do about this opportunity to take part in the first evaluation of the School Readiness programme. To learn more about this project, please contact me and I will arrange to visit you and answer any queries. I have enclosed an information and consent form, which schools are asked to read and complete after agreeing to participate.

I look forward to hearing from you soon.

Yours faithfully

Kirstie Cooper

Kirstie Cooper

E-mail psp880@bangor.ac.uk

Phone 01248 383758

APPENDIX D
School consent form

SCHOOL AND TEACHER CONSENT FORM

Name of school:

Address:

.....

Postcode: E-mail:

Telephone: Fax:

Name of: Head teacher:

Class teacher:.....

Total number of pupils in school: Average class intake:

Any other information about the school that you think might be of interest to us:

.....

.....

.....

I confirm that I am willing to participate in the School Readiness research programme. I understand that this will involve recruiting parents and running the groups.

Signature of head Teacher _____

Signature of class Teachers 1. _____

2. _____

3. _____

4. _____

**We look forward to working with you.
- Thank you for your time -**

APPENDIX E

Table of resources provided to schools

	Nos	Resource	Box
✓	Set of 5	Leader's files	/
✓	1 Set	Programme DVDs	/
✓	Set of 4	Agendas (A3 laminated)	1
✓	Set of 4	Wally Detective Problem Books	1
✓	2	Photocopied Wally Problems for homework	1
✓	1	Pull Along Phone	2
✓	12	Poster – Children Learn What They Live	1
✓	12	Video Consent Forms	1
✓	2	Packs Stickers	1
✓	12	Chapter 1 & 2	1
✓	12	Problem 15	1
✓	12	Pennod 1 & 2	1
✓	12	Problem 15 (Cymraeg)	1
✓	Set of 4	Freepost Envelope	1
✓	Set of 4	Leader List (to be completed each week)	1
✓	Set of 4	Outlines	1
✓	12 (48)	Parent Weekly Evaluations (per week)	1
✓	12	Parent Participation Summary Sheet	1
✓	12	Parent Contact List	1
✓	12	Parent Attendance List	1
✓	12	Rhestr Gwiri Hunan-Arolygu/Self- Monitoring Checklist	1
✓	12	Square Cut File for above	1
✓	12	Ringbinders Containing Session 1 Parent Handouts	1
✓	12	Session 2, 3 & 4 Parent Handouts (including Parent Questionnaire, Holiadur Boddhad Rhiant, Certificates (Bilingual)).	1
✓	1	Hole Puncher	1
✓	1	Flip Chart Paper	/
✓	Set of 4	Flip Chart Pens	1
✓	1	Camera and Tripod	/
✓	1	Raffle Book	1
✓	4	Mr Men Books (one per raffle prize per week)	1
✓	12	End of course gift for Parent	3
✓		Book for homework role-play (Farm Yard Tales/Cae Berllan)	1
✓		Puppets for role-play	1
✓	12	Fridge Magnets	2

✓	4 sheets	Name Labels	1
✓	1	Box Chocolates	2

APPENDIX F

Information for schools to explain the study to parents: Phase 1

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E-mail: j.hutchings@bangor.ac.uk
psp880@bangor.ac.uk

Evaluating the Incredible Years School Readiness Parenting Programme - PROJECT OVERVIEW -

Background

There are increasing numbers of children arriving in school without the necessary social and self-regulatory skills. A lack of these skills can predict low academic achievement and poor relationships, leading to conduct problems. Although many Incredible Years (IY) Parenting Programmes have been found to reduce the occurrence of conduct problems, no programme addresses specifically the dimensions of school readiness. The IY School Readiness programme was designed for this purpose but its effectiveness has never been researched.

The Programme

The Incredible Years School Readiness programme is a universal parenting programme that can be offered to all parents as their children start school. This two-part programme can be used as a stand-alone programme or supplemental to the BASIC Parent Programme and consists of four 2-hour weekly sessions delivered to parents through schools. The ultimate aims of the programme are to:

1. Improve children's school readiness
2. Prevent children from developing later conduct problems and academic underachievement
3. Enhance home-school relationships.

The Evaluation

Sample

4 schools will run the group with parents of 3 - 5 year old children during September 2010.

Recruitment

Two members of staff from each school will be trained by Prof. Judy Hutchings to deliver the programme to parents of nursery or reception class children. Prof. Hutchings will also provide weekly supervision during the four-week programme for the intervention group and supervision can also be accessed for the control group. During July 2010, participating schools will give information to all families of 3-5 year old children starting nursery or

reception class in September 2010. Each school will need to recruit approximately 6 parents to attend the course and participate in the evaluation.

A researcher will conduct an initial home visit to distribute information sheets and discuss the evaluation. Groups will run between September and October 2010 for four weeks.

Data Collection

The research team will arrange three 1-hour visits to the families over a period of 12 months (September 2010, March 2011, and September 2011). Data will be collected through home visits, where families will be asked to complete a battery of questionnaires and to undertake interactive play and reading with their child whilst being observed. Children will receive a bilingual book in their chosen language during each visit as a thank you to the family for their participation.

*****Please note:**

Incredible Years Wales will:

- Loan each school a programme (i.e. DVDs etc)
- Provide all training materials
- Not be able to pay for teachers cover
- Obtain school ethics to conduct the study

Schools will:

- Require 1-day training for their staff – they can sign up to a training day on May 19th (free WAG day) or another free training day will run on September 30th
- Receive information sheets about the study and a debrief report at the end of the study

Gwynedd Education will:

- Receive a report at the end to give the results of the study

Parents will

- Receive information sheets and consent forms to complete
- Receive a debrief at the end with overall results

APPENDIX G

Information for schools to explain the study to parents: Phase 2

Blynyddoedd Rhyfeddol Cymru
Ysgol Seicoleg
Llawr Isaf
Adeilad Nantlle
Safle'r Normal
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psp880@bangor.ac.uk

Evaluating the Incredible Years School Readiness Parenting Programme - PROJECT OVERVIEW -

Background

There are increasing numbers of children arriving in school without the necessary social and self-regulatory skills. A lack of these skills can predict low academic achievement and poor relationships, leading to conduct problems. Although many Incredible Years (IY) Parenting Programmes have been found to reduce the occurrence of conduct problems, no programme addresses specifically the dimensions of school readiness. The IY School Readiness programme was designed for this purpose but its effectiveness has never been researched.

The Programme

The Incredible Years School Readiness programme is a universal parenting programme that can be offered to all parents as their children start school. This two-part programme can be used as a stand-alone programme or supplemental to the BASIC Parent Programme and consists of four 2-hour weekly sessions delivered to parents through schools. The ultimate aims of the programme are to:

4. Improve children's school readiness
5. Prevent children from developing later conduct problems and academic underachievement
6. Enhance home-school relationships.

The Evaluation

Sample

4 schools will run the group with parents of 3 - 5 year old children during March 2011.

Recruitment

Two members of staff from each school will be trained by Prof. Judy Hutchings to deliver the programme. Prof. Hutchings will also provide weekly supervision in Bangor during the four-week programme. During January 2011, participating schools will give information to all families of 3 - 5 year old children who started nursery or reception class in September 2010. Each school will need to recruit approximately 6 parents to attend the course and participate in the evaluation.

A researcher will conduct an initial home visit to distribute information sheets and discuss the evaluation. Groups will run within the schools during March 2011 for 4 weeks.

Data Collection

The research team will arrange three 1-hour visits to the families over a period of 12 months (February 2011, August 2011, and February 2012). Data will be collected through home visits, where families will be asked to complete a battery of questionnaires and to undertake interactive play and reading with their child whilst being observed. Children will receive a bilingual book in their chosen language during each visit as a thank you to the family for their participation.

*****Please note:**

Incredible Years Wales will:

- Loan each school a programme (i.e. DVDs etc)
- Provide all training materials
- Not be able to pay for teachers cover
- Obtain school ethics to conduct the study

Schools will:

- Require 1-day training for their staff – they can sign up to a training day on February 9th (free WAG day)
- Receive information sheets about the study and a debrief report at the end of the study

Gwynedd/Conwy Education will:

- Receive a report at the end to give the results of the study

Parents will

- Receive information sheets and consent forms to complete
- Receive a debrief at the end with overall results

APPENDIX H

Parent expression of interest form

APPENDIX I

Parent information sheet (intervention condition): Phase 1

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Ysgol Seicoleg
Llawr Isaf
Adeilad Nantlle
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E-mail: j.hutchings@bangor.ac.uk
psp880@bangor.ac.uk

Evaluating the Incredible Years School Readiness Parenting Programme

- PARENT INFORMATION SHEET -

Principal Researcher: Kirstie Cooper (PhD Student)
Supervisors: Dr. Tracey Bywater
Dr. David Daley

Invitation

The new Incredible Years (IY) School Readiness parenting programme will be running in eight selected primary schools in North Wales during 2010/2011. Your child will be starting nursery or reception class in one of the selected schools in September 2010, and staff in your child's school will be running the programme to groups of parents. You are invited to come along to the parent group at your child's school and to take part in our research study. Please take your time to read this information sheet. This sheet will tell you what the research is about, and what you will be asked to do if you decide to take part.

What is the aim of this study?

The study will find out how supportive parents find the IY School Readiness Parenting Programme. The programme runs for four weeks (2 hours per week) for parents of children aged 3-5 years. The programme helps parents to support their child's academic, social, and emotional readiness as they first start school. Parents will get support to prepare their child for school by encouraging child-directed play, interactive reading, and strengthening home-school links.

Why have I been asked to take part?

You have been asked to take part because you are the parent of a child aged 3-5 years, and your child is due to start nursery or reception class in September 2010 at one of the chosen schools. With your agreement, your child's teacher has forwarded your name to us, as you showed an interest in the programme and helping us with our study.

Do I have to take part?

It is entirely voluntary whether or not you decide to be part of this research project and attend the programme. If you do decide to take part, please keep this information sheet to refer to, and please sign the consent form and return to your child's teacher in the envelope provided. If you give consent, a member of the research team will call or write to you to arrange to visit you to go through the research and answer any questions. You are free to withdraw from the research at any time and you do not need to give a reason. Your withdrawal from the study will not affect the support that your child will receive from the school.

What will I be asked to do?

If you take part you will be asked to attend a 4-session parenting group. Each session will last two hours, and will be run in your child's school on a weekly basis. A member of a small research team will visit you three times in your home. You will have a first visit from the research team sometime in September 2010. You will then attend the 4-session parenting group in September/October. Your second visit will take place sometime in March 2011, and your final visit in September 2011. The visits will take about one hour.

During the home visits we will ask you to fill out four short questionnaires about you and your child. These should take you 30 minutes to complete. For the next 30 minutes, we are asking permission to observe you and your child playing together, and for this to be video taped. The videotapes will only be watched by members of the research team for research purposes. For the first half of the observation, you will be observed playing with your child. For the final half of the observation, you will be given a children's book from the research team and be observed while you and your child read the book together. You will be given a different book to read during each of the three visits. Your child will be able to keep the three books, as a thank you for taking part in the study.

What are the benefits of taking part in this study?

If you decide to take part, you will have the chance to attend the 4-week Incredible Years School Readiness parenting course. The course will give you the chance to share your experiences of parenting, learn new skills, and provide support you, your child, and other families.

What are the possible disadvantages or risks of taking part?

There are no disadvantages or risks. We have done everything we can to make sure that no harm will come to you or your child during the course of this study. All members of the research team have had thorough criminal checks. Researchers are experienced in using all measures, and are trained observers.

Will our details be kept confidential?

Yes. To ensure confidentiality and data protection, the contact details and identity of participants will not be disclosed to anyone other than the main research team. When we write up the findings we will only report the information for the group as a whole. All information relating to you and your family i.e. consent forms and contact details will be kept in a locked filing cabinet in Bangor University. Your data will be entered into a computer database using an identification number not your name.

What about the results of the study?

The anonymous results may be published in a scientific journal in the future, as well as presented to your Local Education Authority. Both your child's and your own identification will remain confidential. We will send you a general summary of the research findings at the end of the project.

Who can I contact if I have more questions?

If you need to know any more about the study, you can either: call Kirstie on 01248 382673, email her at psp880@bangor.ac.uk, or write to her at Incredible Years Wales, Nantlle Building, Normal Site, Bangor, Gwynedd, LL57 2PZ.

In the case of any complaints about the conduct of this study, please contact Professor Oliver Turnbull, Head of School, School of Psychology, Bangor University, Gwynedd, LL57 2DG.

**Thank you for taking the time to read this information sheet
- We look forward to working with you -**

APPENDIX J

Parent information sheet (intervention condition): Phase 2

Blynyddoedd Rhyfeddol Cymru
Ysgol Seicoleg
Llawr Isaf
Adeilad Nantlle
Safle'r Normal
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Bangor
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psp880@bangor.ac.uk

Evaluating the Incredible Years School Readiness Parenting Programme

- PARENT INFORMATION SHEET -

Principal Researcher: Kirstie Cooper (PhD Student)
Supervisors: Dr. Tracey Bywater
Dr. David Daley

Invitation

The new Incredible Years (IY) School Readiness parenting programme will be running in selected primary schools in North Wales during 2010/2011. Your child started nursery or reception class in one of the selected schools in September 2010, and staff in your child's school will be running this new programme to groups of parents. You are invited to come along to the parent group at your child's school and to take part in our research study. Please take your time to read this information sheet. This sheet will tell you what the research is about, and what you will be asked to do if you decide to take part.

What is the aim of this study?

The study will find out how supportive parents find the IY School Readiness Parenting Programme. The programme runs for four weeks (2 hours per week) for parents of children aged 3-5 years. The programme helps parents to support their child's academic, social, and emotional readiness as they first start school. Parents will get support to prepare their child for school by encouraging child-directed play, interactive reading, and strengthening home-school links.

Why have I been asked to take part?

You have been asked to take part because you are the parent of a child aged 3-5 years, and your child started nursery or reception class in September 2010 at one of the chosen schools. With your agreement, your child's school has forwarded your name to us, as you showed an interest in the programme and helping us with our study.

Do I have to take part?

It is entirely voluntary whether or not you decide to be part of this research project and attend the programme. If you do decide to take part, please keep this information sheet to refer to, and please sign the consent form and return to your child's teacher in the envelope provided. If you give consent, a member of the research team will call or write to you to arrange to visit you to go through the research and answer any questions. You are free to withdraw from the research at any time and you do not need to give a reason. Your withdrawal from the study will not affect the support that your child will receive from the school.

What will I be asked to do?

If you take part you will be asked to attend a 4-session parenting group. Each session will last two hours, and will be run in your child's school on a weekly basis. A member of a small research team will visit you three times in your home. You will have a first visit from the research team sometime in February 2011 and you will then attend the 4-session parenting group in March 2011. Your second home visit will take place sometime in August 2011 and you will have a final visit in February 2012. Each visit will take about one hour.

During the home visits we will ask you to fill out four short questionnaires about you and your child. These should take you 30 minutes to complete. For the next 30 minutes, we are asking permission to observe you and your child playing together, and for this to be video taped. The videotapes will only be watched by members of the research team for research purposes. For the first half of the observation, you will be observed playing with your child. For the final half of the observation, you will be given a children's book from the research team and be observed while you and your child read the book together. You will be given a different book to read during each of the three visits. Your child will be able to keep the three books, as a thank you for taking part in the study.

What are the benefits of taking part in this study?

If you decide to take part, you will have the chance to attend the 4-week Incredible Years School Readiness parenting course. The course will give you the chance to share your experiences of parenting, learn new skills, and provide support you, your child, and other families.

What are the possible disadvantages or risks of taking part?

There are no disadvantages or risks. We have done everything we can to make sure that no harm will come to you or your child during the course of this study. All members of the research team have had thorough criminal checks. Researchers are experienced in using all measures, and are trained observers.

Will our details be kept confidential?

Yes. To ensure confidentiality and data protection, the contact details and identity of participants will not be disclosed to anyone other than the main research team. When we write up the findings we will only report the information for the group as a whole. All information relating to you and your family i.e. consent forms and contact details will be kept in a locked filing cabinet in Bangor University. Your data will be entered into a computer database using an identification number not your name.

What about the results of the study?

The anonymous results may be published in a scientific journal in the future, as well as presented to your Local Education Authority. Both your child's and your own identification will remain confidential. We will send you a general summary of the research findings at the end of the project.

Who can I contact if I have more questions?

If you need to know any more about the study, you can either: call Kirstie on 01248 382673, email her at psp880@bangor.ac.uk, or write to her at Incredible Years Wales, Nantlle Building, Normal Site, Bangor, Gwynedd, LL57 2PZ.

In the case of any complaints about the conduct of this study, please contact Professor Oliver Turnbull, Head of School, School of Psychology, Bangor University, Gwynedd, LL57 2DG.

**Thank you for taking the time to read this information sheet
- We look forward to working with you -**

APPENDIX K

Parent information sheet (control condition): Phase 1

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Ysgol Seicoleg
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Gwynedd.
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psp880@bangor.ac.uk

Evaluating the Incredible Years School Readiness Parenting Programme

- PARENT INFORMATION SHEET -

Principal Researcher: Kirstie Cooper (PhD Student)
Supervisors: Dr. Tracey Bywater
Dr. David Daley

Invitation

We would like to invite you to take part in this research study. Please take your time to read this information sheet. This sheet will tell you what the research is about, and what you will be asked to do if you decide to take part.

What is the aim of this study?

The study is looking at children readiness for school. We aim to find out how supportive parents find the Incredible Years School Readiness Parenting Programme, and how successful it is in helping parents prepare their children for full-time school. The programme will be running in eight primary schools in North Wales during 2010/2011.

Why have I been asked to take part?

We are looking for families who have **not** attended the School Readiness programme. You have been asked to take part because you are the parent of a child aged 3-5 years, and your child started nursery or reception class in September 2010.

Do I have to take part?

It is entirely voluntary whether or not you decide to be part of this research project. If you do decide to take part, please keep this information sheet to refer to, and please sign the consent forms and keep a copy for yourself. You are free to withdraw from the research at any time and you do not need to give a reason.

What will I be asked to do?

If you decide to take part, a member of a small research team will visit you three times in your home. You will have a first visit from the research team in September 2010. Your second visit will take place sometime in March 2011, and your final visit in September 2011. The visits will take about one hour.

During the home visits we will ask you to fill out four short questionnaires about you and your child. These should take you 30 minutes to complete. For the next 30 minutes, we are asking permission to observe you and your child playing together, and for this to be videotaped. The videotapes will only be watched by members of the research team for research purposes.

For the first half of the observation, you will be observed playing with your child. For the final half of the observation, you will be given a children's book from the research team and be observed while you and your child read the book together. You will be given a different book to read during each of the three visits. Your child will be able to keep the three books, as a thank you for taking part in the study.

What are the benefits of taking part in this study?

If you decide to take part, you will have the chance to contribute to a new, exciting research study looking at children's readiness for school. Your child will also receive three colourful reading books in either Welsh or English.

What are the possible disadvantages or risks of taking part?

There are no disadvantages or risks. We have done everything we can to make sure that no harm will come to you or your child during the course of this study. All members of the research team have had thorough criminal checks. Researchers are experienced in using all measures, and are trained observers.

Will our details be kept confidential?

Yes. To ensure confidentiality and data protection, the contact details and identity of participants will not be disclosed to anyone other than the main research team. When we write up the findings we will only report the information for the group as a whole. All information relating to you and your family i.e. consent forms and contact details will be kept in a locked filing cabinet in Bangor University. Your data will be entered into a computer database using an identification number not your name.

What about the results of the study?

The anonymous results may be published in a scientific journal in the future, as well as presented to your Local Education Authority. Both your child's and your own identification will remain confidential. We will send you a general summary of the research findings at the end of the project.

Who can I contact if I have more questions?

If you need to know any more about the study, you can either: call Kirstie on 01248 382673, email her at psp880@bangor.ac.uk, or write to her at Incredible Years Wales, Nantlle Building, Normal Site, Bangor, Gwynedd, LL57 2PZ.

In the case of any complaints about the conduct of this study, please contact Professor Oliver Turnbull, Head of School, School of Psychology, Bangor University, Gwynedd, LL57 2DG.

Thank you for taking the time to read this information sheet

- We look forward to working with you -

APPENDIX L

Parent information sheet (control condition): Phase 2

Blynyddoedd Rhyfeddol Cymru
Ysgol Seicoleg
Llawr Isaf
Adeilad Nantlle
Safle'r Normal
Prifysgol Bangor
Bangor
Gwynedd.
LL57 2PZ.
Ffôn: 01248 383 758
Ffacs: 01248 382 652
E-bôst: j.hutchings@bangor.ac.uk
psp880@bangor.ac.uk



Incredible Years Wales
School of Psychology
Ground Floor
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Normal Site
Bangor University
Bangor
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Tel: 01248 383 758
Fax: 01248 382 652
E-mail: j.hutchings@bangor.ac.uk
psp880@bangor.ac.uk

Evaluating the Incredible Years School Readiness Parenting Programme

- PARENT INFORMATION SHEET-

Principal Researcher: Kirstie Cooper (PhD Student)
Supervisors: Dr. Tracey Bywater
Dr. David Daley

Invitation

We would like to invite you to take part in this research study. Please take your time to read this information sheet. This sheet will tell you what the research is about, and what you will be asked to do if you decide to take part.

What is the aim of this study?

The study is looking at children readiness for school. We aim to find out how supportive parents find the Incredible Years School Readiness Parenting Programme, and how successful it is in helping parents prepare their children for full-time school. The programme will be running in eight primary schools in North Wales during 2010/2011.

Why have I been asked to take part?

We are looking for families who have **not** attended the School Readiness programme. You have been asked to take part because you are the parent of a child aged 3-5 years, and your child started nursery or reception class in September 2010.

Do I have to take part?

It is entirely voluntary whether or not you decide to be part of this research project. If you do decide to take part, please keep this information sheet to refer to, and please sign the consent forms and keep a copy for yourself. You are free to withdraw from the research at any time and you do not need to give a reason.

What will I be asked to do?

If you decide to take part, a member of a small research team will visit you three times in your home. You will have a first visit from the research team in February 2011. Your second visit will take place sometime in August 2011, and your final visit in February 2012. The visits will take about one hour.

During the home visits we will ask you to fill out four short questionnaires about you and your child. These should take you 30 minutes to complete. For the next 30 minutes, we are asking permission to observe you and your child playing together, and for this to be

videotaped. The videotapes will only be watched by members of the research team for research purposes.

For the first half of the observation, you will be observed playing with your child. For the final half of the observation, you will be given a children's book from the research team and be observed while you and your child read the book together. You will be given a different book to read during each of the three visits. Your child will be able to keep the three books, as a thank you for taking part in the study.

What are the benefits of taking part in this study?

If you decide to take part, you will have the chance to contribute to a new, exciting research study looking at children's readiness for school. Your child will also receive three colourful reading books in either Welsh or English.

What are the possible disadvantages or risks of taking part?

There are no disadvantages or risks. We have done everything we can to make sure that no harm will come to you or your child during the course of this study. All members of the research team have had thorough criminal checks. Researchers are experienced in using all measures, and are trained observers.

Will our details be kept confidential?

Yes. To ensure confidentiality and data protection, the contact details and identity of participants will not be disclosed to anyone other than the main research team. When we write up the findings we will only report the information for the group as a whole. All information relating to you and your family i.e. consent forms and contact details will be kept in a locked filing cabinet in Bangor University. Your data will be entered into a computer database using an identification number not your name.

What about the results of the study?

The anonymous results may be published in a scientific journal in the future, as well as presented to your Local Education Authority. Both your child's and your own identification will remain confidential. We will send you a general summary of the research findings at the end of the project.

Who can I contact if I have more questions?

If you need to know any more about the study, you can either: call Kirstie on 01248 382673, email her at psp880@bangor.ac.uk, or write to her at Incredible Years Wales, Nantlle Building, Normal Site, Bangor, Gwynedd, LL57 2PZ.

In the case of any complaints about the conduct of this study, please contact Professor Oliver Turnbull, Head of School, School of Psychology, Bangor University, Gwynedd, LL57 2DG.

**Thank you for taking the time to read this information sheet
- We look forward to working with you -**

APPENDIX M
Parent consent form

Blynyddoedd Rhyfeddol Cymru
Ysgol Seicoleg
Llawr Isaf
Adeilad Nantlle
Safle'r Normal
Prifysgol Bangor
Bangor
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E-mail: j.hutchings@bangor.ac.uk
psp880@bangor.ac.uk

**Evaluating the Incredible Years School Readiness Parenting Programme
- PARENT CONSENT FORM-**

ID Number: _____

Principal Researcher: Kirstie Cooper (PhD Student)
Supervisors: Dr. Tracey Bywater
Dr. David Daley

I agree to take part in the School Readiness programme and as part of this project I will be involved in a research study by staff from Bangor University. I have read and understood the information sheet and I agree for my child and I to take part. I understand that taking part is voluntary and I am free to withdraw my family at any time without giving a reason. I understand that I am under no pressure to take part in this research and that my families identity will remain confidential. I also understand that I will receive an anonymous summary report at the end of the study, outlining the overall results of the study.

Please tick and initial as appropriate:

- I am willing to take part in the School Readiness programme at school
- I am willing for my child and I to take part in home visit observations
- I am willing for my child and I to be recorded whilst being observed
- I am willing to complete questionnaires about my child

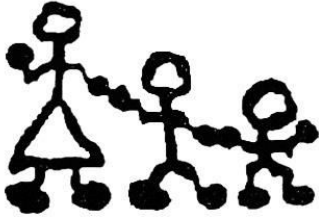
Your signature: _____
Your name in print _____
Your child's name: _____
Date: _____

In the case of any complaints about the conduct of this study, please contact Prof. Oliver Turnbull, Head of School, School of Psychology, Bangor University, Bangor, Gwynedd, LL57 2DG.

- Thank you for your time -

APPENDIX N

Group video recording consent form



**INCREDIBLE YEARS
SCHOOL READINESS PROGRAMME**

FORM OF CONSENT FOR VIDEO RECORDING OF PARENTING GROUP

I understand that the Parenting Group leader, will be recording all sessions of the Parenting Group for which I have enrolled.

I agree to the recording, which will be available to me to view should I so wish.

I agree that the recording may be used by the group leaders to review how the programme is working and to plan for future sessions, in their own research and for their own supervision from the programme designer.

SIGNED: Date:

I agree / do not agree that it may also be shown to other professionals and other groups as a teaching aid by the Bangor Incredible Years Wales centre.

SIGNED: Date:

VIDEO RECORDING COMMENCED ON:

NAME AND OCCUPATION OF GROUP LEADERS: 1.

2.

APPENDIX O
Personal Data and Health Questionnaire (PDHQ)

Participant ID: () () ()

Date: () () () () () ()

Personal Data and Health Questionnaire

1. BACKGROUND DETAILS

1a. Child's DOB Child's Age Sex: M F

1b. Carer's DOB Carer's Age Sex: M F

1c. Relationship to child:

Biological parent *Step-parent*
Parent's partner (living together) *Adoptive parent*
Foster parent *Other adult relative (state)*

1d. How old were you when your first child was born?.....

1e. What is your preferred language for speaking?.....reading?.....

1f. What is your child's preferred language for speaking?.....reading?.....

2. CHILD'S HEALTH AND DEVELOPMENT

2a. Has your child suffered any health problems so far (apart from normal childhood illnesses) or sustained serious injuries? Please give details.

.....

2b. Has your child ever been in hospital? (If yes, please state reason, and how many times)?

.....

2c. Has your child ever had any special help or been treated differently at nursery on account of their behaviour?

Yes No N/A Not known

2d. Please describe any special needs provision or what nursery staff/helpers have done.

.....

2e. Have you ever attended any parenting courses?

Yes No If Yes please name and date

If 'yes', which programme?

2f. Have you had access to any of the following Flying Start facilities?

Ti a fi/playgroup
Language and Play
Baby massage
Health Visitor

3. OTHER HOUSEHOLD / FAMILY MEMBERS

3a. What is your marital status?

- | | | | |
|---|--------------------------|------------------------|--------------------------|
| <i>Single, never married</i> | <input type="checkbox"/> | <i>Married</i> | <input type="checkbox"/> |
| <i>Separated</i> | <input type="checkbox"/> | <i>Widowed</i> | <input type="checkbox"/> |
| <i>Divorced</i> | <input type="checkbox"/> | <i>Living together</i> | <input type="checkbox"/> |
| <i>In relationship but living apart</i> | <input type="checkbox"/> | | |

3b. If in relationship, how would you rate the quality of your relationship with your partner?

- Bad* *Poor* *Mixed* *Good* *Excellent*

3c. Spouse / partner's relationship to child:

- | | | | |
|---|--------------------------|-----------------------------|--------------------------|
| <i>Biological parent</i> | <input type="checkbox"/> | <i>Step-parent</i> | <input type="checkbox"/> |
| <i>Parent's partner (living together)</i> | <input type="checkbox"/> | <i>Adoptive parent</i> | <input type="checkbox"/> |
| <i>Foster parent</i> | <input type="checkbox"/> | <i>Other adult relative</i> | <input type="checkbox"/> |

3d. How involved is your current partner with the upbringing of your child (index)?

- | | |
|--|--------------------------|
| <i>Not at all</i> | <input type="checkbox"/> |
| <i>Low (e.g. lives apart sees once/wk or less)</i> | <input type="checkbox"/> |
| <i>Mid (e.g. sees everyday but not much involvement)</i> | <input type="checkbox"/> |
| <i>High (e.g. sees everyday and carries out activities with child)</i> | <input type="checkbox"/> |

3e. Would your partner be available to join the parenting group?

- Yes* *No*

3f. Who else shares your household? What is their relationship to your child?

- Child 1: *Name*..... *Relationship*:..... *D.o.b*:
- Child 2: *Name*..... *Relationship*:..... *D.o.b*:
- Child 3: *Name*..... *Relationship*:..... *D.o.b*:
- Child 4: *Name*..... *Relationship*:..... *D.o.b*:
- Child 5: *Name*..... *Relationship*:..... *D.o.b*:
- Child 6: *Name*..... *Relationship*:..... *D.o.b*:
-
- Adult 1: *Relationship*: *Age (yrs)*:
- Adult 2: *Relationship*: *Age (yrs)*:
- Adult 3: *Relationship*: *Age (yrs)*:

4. FAMILY HEALTH

4a. Have you suffered any significant health problems since the birth of your child?

.....

4b. Have any other family members had serious health problems?

.....

4c. Have you or any member of your family ever had problems with drug and/or alcohol?

- Yes* *No* *Don't know*

If 'yes', which member of the family has/had the problem?

4d. Have ANY of your children (or any other member of your family) – to your knowledge - been in trouble with the police (or been involved in any form of criminal activity)?

Yes No Don't know

5. HOUSING

5a. Is your home:

Owned Privately rented unfurnished
 Council / housing association rented Other
 Privately rented furnished

If 'other' please give details.....

5b. Condition of the building (RATED BY RESEARCHER)

Good Acceptable Substandard

5c. How many bedrooms do you have use of?

6. PRIMARY CARER'S EDUCATION

6a. How old were you when you left school?

6b. Did you gain any qualifications at school?

6c. Did you receive further or higher education after leaving school (e.g. College, NVQs, YTS etc.)?

7. INCOME

7a. Total Family Income: Which category would best describe your total weekly income? That is what you actually get in each week to spend on living costs. (INCLUDE employment, social security payments EXCLUDE housing cost, working tax and family credits, child maintenance, pensions or investments)

<u>1 adult household</u>		<u>2 adult household</u>	
£160 or below	<input type="checkbox"/>	£245 or below	<input type="checkbox"/>
£161 - £239	<input type="checkbox"/>	£246 - £325	<input type="checkbox"/>
£240 - £319	<input type="checkbox"/>	£326 - £400	<input type="checkbox"/>
£320 - £395	<input type="checkbox"/>	£401 - £480	<input type="checkbox"/>
£396 - £474	<input type="checkbox"/>	£481- £555	<input type="checkbox"/>
£475 - £550	<input type="checkbox"/>	£556 - £634	<input type="checkbox"/>
£551 - £650	<input type="checkbox"/>	£635 - £749	<input type="checkbox"/>
£651 or above	<input type="checkbox"/>	£750 or above	<input type="checkbox"/>

7b. Is this income made up mostly of:

State benefits (such as Job seeker's allowance / income support)
 Other benefits that subsidise wages (e.g. WFTC)
 Maintenance payments for child(ren)
 Wages
 Other: please state.....

APPENDIX P

Information for parents about the home observation

GUIDELINES FOR HOME OBSERVATION

During the observation, the researcher will set up a video camera to record you and your child for half an hour. During this time, she will be observing you and recording your child's interaction with you. It will not be possible, therefore, for the researcher to talk to you or your child at all during this time.

For the first half of the observation, we ask that you spend up to 15 minutes with your child reading the book that the researcher gives you. For the second half of the observation, we ask that you play with your child using any toys of your child's choice. This will also last up to 15 minutes.

We understand that you might feel a bit uncomfortable to be observed, but it is best to try and interact with your child as normally as possible, as if the observer wasn't there.

Here are some general guidelines to the observation visit, but please feel free to ask the researcher any questions you may have before the observation starts.

- **You and your child do not have to read the words in the book, we just want to observe you having fun together with a book**
- **Family members should stay in one room**
- **No TV on during the observation**
- **No books during the play session**
- **No visitors**
- **Answer incoming calls briefly, no outgoing calls**
- **No talking to the researcher during the observation**

THANK YOU VERY MUCH

APPENDIX Q
PAROT coding sheet

Time: BL FU1 FU2

Family ID: _____

Coder ID: _____ Prim / Sec

Play / Reading

PAROT
Play And Reading Observation Tool

A	D	Parent Categories	
		Descriptive Comment	
		Academic	
		Emotion	
		Social	
		Problem solving	
		Neutral	
		Open-ended question	
		Academic	
		Emotion	
		Social	
		Problem-solving	
		Neutral	
		Closed Question	
		Academic	
		Emotion	
		Social	
		Problem-solving	
		Neutral	
		Encouragement	
		Academic	
		Emotion	
		Social	
		Problem-solving	
		Neutral	
		Labelled Praise	
		Unlabelled Praise	
		Critical Statement	
		Reflection/Expansion	

A	D	Child Categories	
		Positive Response	
		Negative Response	
		Neutral Response	
		Spontaneous Vocalisation	

Ratio Open/Close Questions	
-----------------------------------	--

<u>Reliability Calculation</u>	A =
	D =
	Total =
	Reliability (%) = A / T x100
	=

<u>Notes</u>

APPENDIX R
PAROT training manual

PAROT

Play And Readng Observation Tool

TRAINING MANUAL

August 2010

RULES FOR HOME VISIT

1. All family members to be present
2. Family members should stay in one room
3. No television on during the observation
4. No books during the play session
5. No visitors
6. No outgoing calls - answer incoming calls briefly
7. No talking to the researcher during the observation

OBSERVATION PROCEDURE

Instructions to observers

- Develop a friendly relationship / build rapport with family members so they feel as comfortable as possible.
- Do not give advice on dealing with child problems (researcher should direct questions to clinician in charge of project).
- When approached by family member during observation, do not respond.
- Reiterate to parent and child that coder will not be able to talk / answer any questions while observation is taking place.
- Orient the family to the process of observation BEFORE the observation commences. The goal of the researcher should be to answer all questions as fully as possible beforehand, so that family are clear about what is going to happen during the visit.
- No prompting when parent is not interacting
- Child Protection Issues:
 - i. Coders are unlikely to come across serious physical abuse as these families have agreed to participate in the study.
 - ii. One might come across emotional abuse, but there is a problem in defining what constitutes abuse in an emotional sense.
 - iii. Observers are NOT clinically trained, and therefore not qualified to identify such behaviours.

- iv. If observers, however, do feel uncomfortable following an observation visit, then the researchers should bring the issue up with a) the clinician in charge of the project, and / or b) the school that is involved with the project.
- v. Police checks for all coders will be made before they go out to visit families.

Preparing materials for the home visit

The cover sheet will have all the details on there for you (address / names etc).

You will need to complete the following:

- Time (circle BL, FU1, FU2).
- Family ID (number will be on cover sheet).
- Coder initial.
- RV / SO (circle whether single observation / reliability visit. Note whether you are the primary or secondary coder).

Additional materials to bring to the home visit:

- A copy of **RULES FOR HOME OBSERVATIONS FOR PARENTS** to hand to parents if necessary (this should be in the visit folder) .

Arriving and coding the observation

- The primary home observer is responsible for putting the family at ease. Spend a *few* minutes making sure all family members understand the rules. Explain that you will try to be as unobtrusive and “invisible” as possible.
- Children need to be told that you will be working quietly and will not be able to talk with them until you are through with your work. Let them know you will not forget to tell them when you are finished and able to talk.
- Each 15-minute observation is coded in 5-minute segments, one coding sheet per 5 minutes (6 sheets in total).
- If any family member leaves the room for a long time (over one minute), stop the clock, and add the time to the five-minute segment.

Reliability Observations

- If a secondary home observer is present, s/he will need the same paperwork as the primary coder.
- The primary and secondary coder must sit or stand together. Decide who will be the timekeeper (usually the primary coder).
- At the end of a five-minute segment the timekeeper will nod to the other home observer that it is time to stop that segment.
- It is important that the primary and secondary observers keep their communication to a minimum (nonverbal communication is preferable.) In this way the observers are less distracting to the family.
- At times the primary observer will need to decide to stop the clock (while the child goes to the bathroom or during a Time Out, for example). Other decisions may be to move to another seat or location in the room, unobtrusively remind the family of a rule, or tack on extra time due to an absent family member. It is important for the secondary observer to be in sync during these times.

Coding tips and considerations

- Keep your pencil moving as much as possible so the family is not aware of what you are doing. If the parent sees you moving the pencil only when s/he talks, s/he may stop talking!
- Try to look at children, including siblings, without giving them eye contact. Otherwise, they may begin performing for the observer.
- Often target children will test the rule about getting work done. If they talk to you, bang your knee, laugh in your face, or stamp on your watch, IGNORE THEM. Do not look at them, smile at them, gasp, laugh, or in any way let them know you are responding to them. This is difficult, but essential.

Completing the home visit

Thank the family for their time. Talk to the children and thank them for letting you do your work. Give the child a sticker (and siblings if present).

PAROT BEHAVIOUR CATEGORIES

<u>Parent categories</u>	<u>Child Categories</u>
1) Descriptive comment	1) Positive Response
2) Open-ended Question	2) Negative Response
3) Closed Question	3) Neutral Response
4) Encouragement	4) Spontaneous Vocalisation
5) Labelled Praise	
6) Unlabelled Praise	
7) Critical Statement	
8) Reflection/Expansion	

Calculating inter-coder reliability

Inter-coder reliability is calculated by dividing the number of codes two coders are in agreement with by the total number of codes. (A / T) The first step is to total each type of code, that is, total the hash marks in each coding category. The coding sheets provide columns for marking the number of codes that a secondary coder is in agreement or disagreement with. These columns are at the far left and right of each coding page. For instance, if the primary coder tallied 12 unlabelled praise and the secondary coder tallied 10, place 10 in the A column (agree) and 2 in the D column (disagree). Continue similarly for each code. Total the number of A (agree) and D (disagree) and T (agree plus disagree). Divide A by T to determine percentage of reliability between the two coders. The standard we use for reliability is 70% or greater. Reliability for each videotape segment is calculated separately. The reliability of each 30-minute home observation segment (each parent) is calculated from the total for the 30 minutes, rather than each 5-minute segment.

PARENT CATEGORIES

The Incredible Years (IY) School Readiness programme teaches parents to describe and comment, encourage, and ask questions in relation to 4 key dimensions of school readiness:

- 1. Academic**
- 2. Emotion**
- 3. Social**
- 4. Problem-solving**

These are the main areas of focus during the observation of the parent-child interaction, and we will now look at each of them in more detail.

1. Academic skills

Academic skills are probably the most obvious dimension of school readiness. The following is a list of academic concepts and behaviours that may be commented upon when playing a parent is playing with their child:

Colours

“You have the red car and the yellow truck”

Number counting

“There are one, two, three dinosaurs in a row”

Shapes

“Now the square Lego is stuck to the round Lego”

Sizes (long, short, tall, smaller than, bigger than)

“The train is longer than the track”

“You are putting the tiny bolt in the right circle”

Positions (up, down, beside, next to, on top, behind)

“The blue block is next to the yellow square, and the purple triangle is on top of the long, red rectangle”

Working hard

“You are working so hard on that puzzle”

Concentrating, focusing

“You are concentrating hard on that puzzle”

Reading, Drawing, Colouring

“You are reading that very clearly”

Listening

“You really listened to what I said”

2. Emotion skills

Describing children’s feelings is thought to be a powerful way to strengthen a child’s emotional literacy. Once children have emotion language, they will be able to better regulate their own emotions because they can tell their parent how they feel. The following is a list of emotions that can be commented upon when playing with your child:

- | | |
|-------------------|--------------------|
| Happy | Patient |
| Frustrated | Having fun |
| Jealous | Forgiving |
| Caring | Curious |
| Angry | Mad |
| Interested | Embarrassed |
| Calm | Proud |
| Excited | Pleased |
| Sad | Helpful |
| Worried | Confident |

Examples:

“You look proud of that drawing”

“You seem confident when reading that

“That is frustrating, and you are staying calm and trying to do it again”

“You look really angry, are you mad with me?”

“I’m having so much fun with you”

3. Social skills

Describing and prompting children’s friendly behaviours is a powerful way to strengthen children’s social skills. Social skills are the first steps to making lasting friendships. The following is a list of social skills that parents may comment on when playing with their child alone or when their child is playing with a friend:

Helping

“You are helping your friend build his tower”

Sharing

“That’s so friendly. You are sharing your blocks with your friend and waiting your turn”

Team work

“You are both working together and helping each other like a team”

Using a friendly voice (quiet, polite)

“That’s a very friendly voice”

Listening to what a friend says

“You listened to your friend’s request”

“Your friend listened to you and shared”

Taking turns

“You are taking turns. That’s what good friends do for each other”

Asking

“That’s nice that you asked before taking”

Trading

“Why don’t you swap toys with your friend?”

Waiting

“You waited and asked first if you could use that”

Making a suggestion

“You made a friendly suggestion and your friend is doing what you suggested”

Giving a compliment

“That was very friendly of you to tell him that he did a good job”

Including others

“You asked all the boys and girls if they wanted to play. That’s friendly”

Apologising

“That’s nice of you to tell her you’re sorry”

4. Problem solving skills

Getting children to think for themselves and come up with solutions are effective ways for parents to help their children to develop problem-solving skills. This could include asking a child to **think, plan, organise, generate ideas, solutions or consequences.**

Examples

“Can you think of a way that you both can play with the ball?”

“If someone started teasing you again, what would you do?”

“I have a problem and I wonder if you can help me with it?”

Now that you have a better idea of the 4 main elements of the School Readiness programme, this should help when learning and understanding the main parent categories for coding.

DESCRIPTIVE COMMENT

Definition

A descriptive comment is a statement or phrase that describes or refers to what **the child is doing** or **an object** or **a toy**. These comments express an interest in what the child, parent or object is doing in the here and now.

Guidelines

1. A descriptive comment gives an account of the child's ongoing activity.

You're putting the cow in the barn. (DC neutral)

You've chosen a purple crayon. (DC academic)

Now you're finishing the roof. (DC neutral)

The red block is going on top of the green block (DC academic)

2. A descriptive comment may describe the child's body language or physical activity.

You're flopping your arms like a rag doll (DC neutral)

You're jumping off the third stair. (DC academic)

3. Descriptive comments are evaluatively neutral and contain no praise or criticism of the child's product, activity or feelings.

Compare the following examples:

You've lined up all the cars for the car wash. (DC neutral)

That's brilliant the way you lined up all the cars. (LP)

Your car line up **isn't very straight**. (CS)

You're pouring water on my face! (DC neutral)

You're pouring water on my face **so nicely**. (LP)

4. Descriptive comments are statements that focus on the child as well as the parent or the child's toys.

You've put the horse next to the cow. (DC academic)

It looks as though **the horse** and cow are friends. (DC social)

My cow is coming to meet your cow. (DC social)

You're moving your cow closer to mine (DC neutral)

Decision Rules

1. **When uncertain as to whether a verbalisation is a question, reflection/expansion, labelled praise, unlabelled praise, encouragement or descriptive comment, code descriptive comment.**

Descriptive comments may then be coded according to the following subcategories:

DC academic

Any descriptive comment in relation to the child, parent or an object or toy that relates to academic learning.

Examples:

"You have the blue car and the black van" – colours

"There are five teddy's in your toy box" – numbers

"That's a horse" – labelling

"That's a long train you've made" – size

"I'm putting the car under the bridge" – prepositions

“You’re working hard and concentrating on that” – working hard, concentrating

DC emotion

Any descriptive comment in relation to the child, parent or an object or toy that relates to emotion learning.

Examples:

“That is making you angry and frustrated”

“I’m having so much fun with you”

“That cat doesn’t look very happy”

“I was nervous it would fall down, but you were very careful”

DC social

Any descriptive comment in relation to the child, parent or an object or toy that relates to social learning.

Examples:

“You’re sharing with mummy”

“The cat and the dog are helping each other”

“Lets take turns”

“The bear asked if he could go next”

DC problem solving

Any descriptive comment in relation to the child, parent or an object or toy that relates to problem solving.

Examples:

“We both solved the problem of how to put the blocks together”

“The man came up with a solution”

“They’re trying to come up with some ideas”

DC neutral

Any descriptive comment in relation to the child, parent or an object or toy that does not relate to academic, emotion, social or problem solving skills.

Examples:

“You’re getting another toy out”

“The man is speaking to the woman”

“We are going to play for bit longer”

“You’re turning the pages”

OPEN-ENDED QUESTION

Definition

This is a comment expressed in question form that clearly asks for **further information (i.e. more than a one-word answer)**.

Examples:

“Tell me more...?”

“What do you think might happen next?”

“Can you tell me what the story is about?”

“Why don’t you tell me what is wrong with your dolly?”

“What is wrong with you darling?”

“Tell me about the book..?”

“What are we going to do tomorrow?”

Open-ended questions may then be coded according to the following subcategories:

OQ academic

Any open-ended question that relates to academic learning.

Examples:

“Can you describe the colours in the picture?” – colours

“Can you tell me what all these different animals are and how big they are?” – numbers, sizes

OQ emotion

Any open-ended question that relates to emotion learning.

Examples:

“How do you think she feels?”

“Tell me how you’re feeling today?”

“Why don’t you tell me which animals look happy and which look sad?”

OQ social

Any open-ended question that relates to social learning.

Examples:

“Can you tell me why you think they’re sharing the toys?”

“Why are the boy and girl helping each other?”

“Why do you think it’s nice to take turns when playing games?”

OQ problem solving

Any open-ended question that relates to problem solving.

Examples:

“Tell me how you would come up with a solution?”

“What kind of ideas could you come up with?”

“What do you think will happen next?”

OQ neutral

Any open-ended question that does not relate to academic, emotion, social or problem solving skills.

Examples:

“What should we do tomorrow?”

“Tell me more...?”

CLOSED QUESTION

Definition

Any question that requires only **one word** as an answer. An expected answer for a closed question may be “yes/no”, a nod of the head, or can be answered with a name or label.

Examples:

“What animal is that?”

“Are you okay?”

“How many ducks are there?”

“What shape is that?”

Closed questions may then be coded according to the following subcategories:

CQ academic

Any closed question that relates to academic learning.

Examples:

“How many trains are there?” → answer = “two”

“Is that a big car or little car?” → answer = “big”

“What colour is it?” → answer = “yellow”

CQ emotion

Any closed question that relates to emotion learning.

Examples:

“Are you okay?” → answer = nod of the head

“Is the cat happy or sad?” → answer = “happy”

CQ social

Any closed question that relates to social learning.

Examples:

“Are they taking turns?” → answer = “yes”

“Why don’t we share?” → answer = “okay”

CQ problem solving

Any closed question that relates to problem solving.

Examples:

“Any ideas?” → answer = “nope”

“Is this a good solution?” → answer = “yes”

CQ neutral

Any closed question that does not relate to academic, emotion, social or problem solving skills.

Examples:

“How about tomorrow?” → answer = “ok” or “Why?” → answer = shrugs
shoulders

Decision Rules

1. When uncertain as to whether a question is a closed or open-ended question, code closed.

ENCOURAGEMENT

Definition

Encouragement stands alone from descriptive comments, and you need to be aware of this. In one sense it is more related to 'praise', but the words are not quite positive enough to qualify as praise.

Encouragement is a statement or phrase that expresses approval, appreciation, or positive acknowledgment of the child's efforts, attributes or product.

Guidelines

1. Unlike praise, encouragement does not include an evaluative word in its verbalization.

There you go! (E neutral)

You've remembered all your letters! (E academic)

You've picked up all the toys! (E neutral)

You're doing a **great job** of picking up everything! (LP)

That's energetic of you! (E neutral)

Your energy is **terrific**! (LP)

2. Similar to praise, encouragement often expresses enthusiasm, warmth or a pleasant tone of voice.

You're keeping your hands to yourself! (E neutral)

You're setting the table! (E neutral)

Sweetheart, you put a spoon in every bowl. (E neutral)

You've finished everything on your plate! (E neutral)

Look at that! (E neutral)

3. Encouragement is often a borderline compliment.

You walked so quietly; I couldn't hear your feet! (E neutral)

You're becoming a reader! (E academic)

You're a **really good** reader! (LP)

You're thinking hard! (E academic)

You're quick. (E neutral)

You're **good** (UP)

That was an interesting story! (E neutral)

That's very straight! (E neutral)

You are so alert today! (E academic)

4. A comment which expresses pleasure in the child's positive feelings will be coded encouragement.

That looks like fun. (E emotion)

Such a lot of happiness! (E emotion)

You're pretty cheerful! (E emotion)

You are so enthusiastic! (E emotion)

Decision Rules

1. **When uncertain as to whether a verbalisation is unlabelled praise, labelled praise or encouragement, code encouragement.**

Encouragements may then be coded according to the following subcategories:

E academic

Any encouragement that relates to the child's academic learning.

Examples:

"You got all 3 puzzles right!" – numbers

"Yes! That is a horse" – labelling

"Wow, what a long train you've made!" – size

E emotion

Any encouragement that relates to the child's emotional learning.

Examples:

"You make me really happy when you get them all right!"

"You're so much fun today!"

"You're in such a good mood"

E social

Any encouragement that relates to the child's social learning.

Examples:

"Wow, you're sharing with mummy"

"Yeah! You're sharing like mummy asked"

E problem solving

Any encouragement that relates to the child's problem solving.

Examples:

“Wow you came up with a solution”

“You did it all by yourself!”

“That’s an idea!”

E neutral

Any encouragement that does not relate to the child’s academic, emotion, social or problem solving skills.

Examples:

“You’re tidying up like I showed you”

“Wow, you won!”

“You’re a big boy”

LABELLED PRAISE

Definition

Labelled praise is any specific verbalisation that expresses a favourable judgment upon an activity, product, or attribute of the child.

Guidelines

1. A labelled praise must be specific enough to let the child know exactly what can be done or displayed again to receive a similar praise

a. A labelled praise may provide an evaluation of the child's specific action.

Your **colouring** is beautiful. (LP)

That is beautiful. (UP)

I like the way you **sit** so quietly. (LP)

I like the way you're acting. (UP)

- b.** Verbs, such as “playing”, “helping”, “working”, and “acting” are non-specific and are not sufficient to make a praise labelled.

You are **playing** nicely. (UP)

You are building that tower nicely. (LP)

I like the way you're **helping**. (UP)

I like the way you're helping me pick up the toys. (LP)

- c.** A labelled praise may provide an evaluation of the child's specific product.

Your story was very well-organised. (LP)

That was very well-organised. (UP)

The dog you drew is very pretty. (LP)

That is very pretty. (UP)

- d.** Praise of objects which are not a product of the child are coded as descriptive comments.

That's a neat truck you're pushing. (DC neutral)

That's a neat truck you drew. (LP)

I like these farm animals. (DC neutral)

I like the farm animals that you picked to play with. (LP)

- e.** A labelled praise may provide an evaluation of a specific physical or psychological attribute of the child.

Your hair is beautiful. (LP)

You are beautiful. (UP)

Your ideas are very intelligent. (LP)

You are very intelligent. (UP)

2. A labelled praise must contain an evaluative component which is clearly positive.

It's great that you are trying so hard with that puzzle. (LP)

You're trying so hard with that puzzle. (E academic)

I like the way you drew that picture so quickly. (LP)

You drew that picture quickly. (E academic)

That's a wonderfully exciting story you made up. (LP)

That's an exciting story you made up. (E academic)

3. Specific statements of positive evaluation are labelled praises even if they are stated in question form.

You drew a lovely bouquet, didn't you? (LP)

Your design turned out beautifully, didn't it? (LP)

Isn't that a super airplane you made? (LP)

4. Labelled praises which reflect the child's statements or answer his questions are coded as labelled praise rather than reflection.

Child: Look at the pretty house I made! (SV)

Parent: I see you made a pretty house. (LP)

Child: I built a wonderful fort! (SV)

Parent: You did build a wonderful fort. (LP)

Child: Do you like my picture? (SV)

Parent: Yes, I do like your picture. (LP)

5. A verbalisation which interprets the child's feelings is a descriptive comment/encouragement rather than a labelled praise.

You seem happy about the piece you fixed. (DC emotion)

You're so proud of the new numbers you learned. (DC emotion)

I think you're pretty enthusiastic about your new haircut. (DC emotion)

6. The positive evaluation component of a labelled praise may be a metaphor.

You're a little darling for sitting still. (LP)

You're Daddy's little helper for bringing me the box. (LP)

7. When praise is given in the child's presence but not directed to the child, code as unlabelled or labelled praise.

Mother to father: Liam drew me a beautiful picture today! (LP)

Father to sibling of child: Conner won a special award today at his school. (LP)

8. If the child asks for praise and the parent obliges, code as unlabelled or labelled praise and not as reflection.

Child: Did I make a neat tower? (SV)

Parent: You did make a neat tower! (LP)

Child: Aren't I good at cleaning off my placemat? (SV)

Parent: You are good at cleaning off your placemat! (LP)

9. Even when a parent follows an unlabelled praise with a descriptive comment or encouragement that specifically points out what is positive, the praise is still unlabelled.

That was great. You wrote all of the numbers. (UP + E academic)

Good! You put everything back where it goes. (UP + DC neutral)

Decision Rules

- 1. When uncertain as to whether a verbalisation is a labelled or unlabelled praise, code it unlabelled praise.**
- 2. When uncertain as to whether a statement is a labelled praise or falls within another category such as reflection, descriptive comment, encouragement, or question, do not code labelled praise.**

Labelled Praise:

That's a terrific house you made.
You did a great job of building the tower.
I like the way you drew that circle.
Your picture is very pretty.
You have a beautiful smile.
You have a wonderful imagination.
That's an excellent way to figure out the solution.
You're considerate to share your cookie with me.
Isn't that a lovely design you made!
Did you make that wonderful tower?
What pretty hair you have!
You're my little helper for making the bed.
Thanks for putting that back on the shelf.
I sure appreciate it when you help pick up.

More examples:

“Thank you for picking up the toys.” (or any specific behaviour)
“That's a good idea.”
“That's a terrific place to put the bed.”
“Look at how well you built the house!”
“Thank you for not whining.”
“Thank you for not getting mud on your shoes.”
“Good matching!”
Good anything specific.
“Thank-you for using your big girl voice.”

UNLABELLED PRAISE

Definition

An unlabelled praise is a non-specific verbalisation that expresses a favourable judgment on an activity, product, or attribute of the child.

Guidelines

1. A non-specific verbalisation that contains one or more positive evaluative words or phrases is an unlabelled praise.

That's **nice**.

I **like** that.

Good work.

Nice work. **Wonderful**. (UP x 2)

Terrific, honey!

Great job.

2. Unlabelled praise is non-specific and does not include a specific action, object, or adjective. Specific praise is labelled praise.

Terrific! (UP)

Terrific **drawing**! (LP)

Good. (UP)

Good **singing**. (LP)

3. A brief positive evaluative word or phrase that occurs before or after an encouragement is an unlabelled praise. You should still code the encouragement as well as the praise.

Great! You're so fast! (UP + E neutral)

You did it! **Nice!** (E neutral + UP)

Good girl! You won! (UP + E neutral)

4. Unlabelled praise must refer to a product, activity, or attribute of the child. A verbalisation in which the parent includes herself/himself in the praise is still coded praise

Good! (referring to a child's tower) (UP)

Good! (parent admires own tower) (not coded)

Good for us! (UP)

That's pretty. (referring to child's drawing) (UP)

That's pretty. (referring to doll in playroom) (not coded)

You're being perfect. (UP)

Your dolly is being perfect. (DC neutral)

We're being perfect today. (UP)

5. An adjective or adverb that is clearly meant as a compliment makes a non-specific phrase an unlabelled praise, especially if "very" is used.

a) The following are unlabelled praise:

You're thoughtful.

That's beautiful.

That's perfect.

You're considerate.

You're bright.

It's wonderful.

You're intelligent.

You're so polite.

You're so patient.

That's special

That's very funny.

You're so careful.

You're the best.

That's accurate.

You're creative.

You're inventive.

You're smart.

You're courageous.

Superior!

That's brilliant!

You're responsible.

b) The following are borderline compliments and are coded encouragement:

You are so alert today! (E academic)

That's very energetic of you! (E neutral)

You're quick! (E neutral)
You're helping! (E social)
You're being quiet, aren't you? (E neutral)
That's very straight. (E neutral)

6. Unlabelled praise must include a clear verbal picture of positive evaluation. Implied approval through parental enthusiasm alone is not defined as unlabelled praise.

Wonderful! (UP)
Wow! (E neutral)
Not bad! (not coded)
That's mummy's little helper. (UP)
Thanks! (UP)

7. Non-specific statements of positive evaluation which positively evaluate the child's activity are unlabelled praise even if they are stated in question form.

That's terrific, isn't it? (UP)
I think that's beautiful, don't you? (UP)
You did that just right, didn't you? (UP)

8. A positive verbalisation that interprets the child's positive feeling state is an encouragement, not an unlabelled praise.

You **seem** very happy! (E emotion)
You're **pretty cheerful** today. (E emotion)

9. A positive metaphor or endearment that refers to the child is an unlabelled praise.

You're my little helper. (UP)
Here comes Daddy's little princess. (UP)

What a sweetheart! (UP)

10. When praise is given in the child's presence but not directed to the child, code as unlabelled or labelled praise.

Mother to father: Carmen was just perfect today! (UP)

11. If the child asks for praise and the parent obliges, code as unlabelled or labelled praise and not as reflection.

Child: Did I do a good job?

Parent: You did do a good job! (UP not R)

Decision Rules

1. **When uncertain as to whether a verbalisation is a labelled or unlabelled praise, code unlabelled praise.**
2. **When uncertain as to whether a verbalisation is an unlabelled praise or falls within another code category such as reflection or encouragement, do not code unlabelled praise.**

Unlabelled Praise: examples

Great!	Excellent.	You're right on top of things.
Nice!	First-rate.	That's intelligent.
Terrific!	Top-notch.	Fabulous!
Right.	That's right.	You're right.
Marvellous!	Wonderful.	Thank you very much.
Perfect.	Correct.	You're co-operative.
Thank you!	Good job!	Congratulations!
So far, so good!	That's better!	Cool

CRITICAL STATEMENT

Definition

A critical statement is a verbalisation that finds fault with the *activities, products, or attributes* of the child. Blame statements and “guilt-tripping” statements are coded critical statement.

Guidelines

1. A negatively evaluative adjective or adverb that refers to an action, product, or attribute of the child makes a comment a critical statement. Can be in declarative or question form.

You're a bad girl aren't you?	That's <u>naughty</u> .
That's a <u>horrible</u> thing to do.	You're <u>sloppy</u> .
What a <u>lousy</u> drawing.	You're <u>careless</u> .
You are <u>foul</u> today.	That's <u>not nice</u> .

2. A comment that corrects the child, by pointing out what is wrong, is a critical statement, even if the parent uses warm tone of voice.

That's not the way to put that together. (CS)
No, honey. That's not where it goes. (2 CS)
You're using the wrong colours for the American flag. (CS)
That's the wrong way. (CS)
Yes, it is. (contradicting child) (CS)

Contrast the following statements:

Child: This is a big red circle
Parent: That's a big green circle (DC academic)

Parent: No honey. That's not a red circle. It's green. (CS x 2 plus DC academic)

Child: Daddy said I could stay up until 9 o'clock

Parent: No, he said 8 o'clock (CS)

3. A statement of disapproval is a critical statement.

That's not very funny. (CS)

I hate it when you talk back. (CS)

I don't like you to throw things. (CS)

I don't like your cat picture. (CS)

4. Obvious parental sarcasm that refers to an activity, product, or attribute of the child is coded critical statement.

Well, that's just great! (CS)

You've gotta be kidding! (CS)

You call that a house! (CS)

Thanks a lot! (sarcastically) (CS)

Excuse me. (sarcastically) (CS)

Note: listen to tone of voice here for sarcasm. Only code critical statement if the sarcasm was clear and obvious.

5. Parental threats or predictions that describe the potential negative consequences of the child's behaviour are coded as critical statements.

If you don't put your blocks away another child may step on them.

I'm going to count to 3.

If you leave your bike outside someone might steal it.

If you don't put your coat on, you'll catch a cold.

Do you want a spanking?

You'd better get started right now or else.

6. Code any critical statement about the target child made by the parent being observed, even if the statement is directed to someone other than the child. For example, if the parent makes a critical remark about the child to you, the other parent, or a sibling, code critical statement.

Parent: (to coder) You're seeing him at his worst today. (CS)

Parent: (to coder) He usually behaves way worse than this. (CS)

REFLECTION/ EXPANSION

Definition

A reflection or expansion is a statement or a question that repeats all or part of the child's preceding verbalization or expands on what the child has just said. The reflection may be exactly the same words the child said, may contain synonymous words, or may add additional detail but the basic content must be the same as the child's message.

Guidelines

1. A reflection/expansion may be in declarative or question form.

Child: My doll's name is Peter. (SV)

Parent: His name is Peter. (R/E)

Parent: His name is Peter? (R/E)

Child: I smeared the paint. (SV)

Parent: It looks like you smeared a little paint. (R/E)

Parent: You smeared the paint? (R/E)

Child: The toy box is full (SV).

Parent: The toy box is very full. (R/E)

Parent: Is the toy box full? (R/E)

2. A reflection must retain the verbal content of the child's statement by including at least some of the child's words or exact synonyms of the child's words.

Child: My teacher is taking us to the zoo. (SV)

Parent: Oh, you're going to the zoo. (R/E)

Parent: Your teacher is taking you to see the animals. (R/E)

Parent: You're going to the place where they have a lot of different kinds of animals to watch. (R/E)

Parent: You're going to see some animals. (R/E)

3. A reflection must retain the basic meaning of the child's statement. Rephrased statements containing non-synonymous words that change the child's intent are coded as statements.

Child: Build a wall. (SV)

Parent: You want me to build a wall. (R/E)

Child: This is a big red block on top. (SV)

Parent: That's a **green** block on top. (DC academic)

Parent: **No. That's not** a red block. (2 CS)

4. The reflection may contain a descriptive elaboration or a grammatical correction of the child's message as long as the original content is retained.

Child: The girl is in the green car. (SV)

Parent: The green car has the girl and the boy in it. (R/E)

Child: I made a big square. (SV)

Parent: You made a **big square** in the circle. (R/E)

Parent: You made a **big circle**. (DC academic)

Parent: **No, you didn't** make a big square. (CS x 2)

5. A reflection may reflect stated feeling content but does not interpret unstated feeling.

Child: I like playing with these Legos. (SV)

Parent: You like this game. (R/E)

Parent: You enjoy playing with these Legos. (R/E)

Child: I can't put the puzzle together. (SV)

Parent: You're having a hard time with that puzzle. (Same meaning) (R/E)

Parent: You're feeling frustrated with that puzzle. (DC emotion)

Parent: You're trying hard to put that puzzle together. (DC problem solving)

Parent: You can't get the pieces to fit together. (R/E)

6. A reflection/expansion may expand on what the child says by relating it to everyday things e.g.

Child: There are 3 yellow ducks! (SV)

Parent: You saw some ducks at the pond last week. (R/E)

Child: Yay! I like playing with the trains (SV)

Parent: You played with the trains all day yesterday too! (R/E)

Decision Rules

1. **When uncertain as to whether a verbalisation is a reflection/expansion or a labelled praise, unlabelled praise, or critical statement, code reflection/expansion**
2. **When a verbalisation is both a reflection/expansion and a descriptive comment or encouragement, code reflection/expansion.**
3. **When strings of reflection/expansions are given, code only the first one as reflection/expansion.**

CHILD CATEGORIES

In response to the main parent categories, the following child categories have been devised:

1. **Positive Response**
2. **Negative Response**
3. **Neutral Response**
4. **Spontaneous Vocalisation**

POSITIVE RESPONSE

This refers to any positive response by the child in relation to what the parent has just said/asked. A positive response **must** be in response to what the parent has said/asked and if not, must be coded as a spontaneous vocalisation.

Examples

Parent: "Why don't you both share the toys?" (CQ)

Child: "Ok. I like sharing mum" (PR)

Parent: "Tell me how you're feeling today?" (OQ emotion)

Child: "I'm really excited about going to Grandma's later" (PR)

Parent: "There are lots of animals in that picture" (DC academic)

Child: "My favourite animal is a tiger!" (PR)

Parent: "How many trains can you see?" (OQ academic)

Child: "Ummm one, two, three...there are three trains!" (PR)

Parent: "Well done that's right" (UP)

Parent: "You're coming up with lots of good ideas!" (E problem solving)

Child: "I have another idea!" (PR)

NEGATIVE RESPONSE

This refers to any negative response by the child in relation to what the parent has just said/asked. A negative response **must** be in response to what the parent has said/asked and if not, must be coded as a spontaneous vocalisation.

Examples

Parent: "Why don't you both share the toys?" (CQ)

Child: "I hate sharing!" (NR)

Parent: "Tell me how you're feeling today?" (OQ emotion)

Child: "No I 'm not telling you!" (NR)

Parent: "There are lots of animals in that picture" (DC academic)

Child: "I'm not looking!" (NR)

Parent: "How many trains can you see?" (OQ academic)

Child: "I don't know!" (NR)

Parent: "You're coming up with lots of good ideas!" (E problem solving)

Child: "No I'm not!" (PR)

NEUTRAL RESPONSE

This refers to any response by the child that is not directly in response to what the parent has said. The child would always make a neutral response **after** the parent has spoken. If the child speaks without the parent speaking, this is coded a spontaneous vocalisation.

Examples

Parent: "Why don't you both share the toys?" (CQ)

Child: "I'm going to play with the trains" (Neu R)

Parent: "Tell me how you're feeling today?" (OQ emotion)

Child: "Mum, can we play with this instead?" (Neu R)

Parent: "There are lots of animals in that picture" (DC academic)

Child: "I'm going to read this book!" (Neu R)

Parent: "How many trains can you see?" (OQ academic)

Child: "I can't wait for tea!" (Neu R)

Parent: "You're coming up with lots of good ideas!" (E problem solving)

Child: "Lets play with the lego!" (Neu R)

SPONTANEOUS VOCALISATION

This refers to any vocalisation made by the child that is not in response to the parent speaking. Spontaneous vocalisations are coded when the child speaks without prompt to speak.

Examples

Child: "I like sharing mum" (SV)

Parent: "That's very good sharing" (LP)

Child: "I'm really excited about going to Grandma's later" (SV)

Parent: "You're really excited aren't you?" (R/E)

Child: "My favourite animal is a tiger!" (SV)

Parent: "Wow, a big tiger!" (E academic)

Child: "There are three trains!" (SV)

Parent: "Well done that's right" (UP)

Decision Rules

- 1. When uncertain as to whether to code a positive, negative or neutral response, code neutral response.**
- 2. When uncertain as to whether to code a positive, negative, neutral, or spontaneous vocalisation, code spontaneous vocalisation.**

APPENDIX S

Strengths and Difficulties Questionnaire 3/4

Strengths and Difficulties Questionnaire

P 3/4

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain or the item seems daft! Please give your answers on the basis of the child's behaviour over the last six months.

Child's Name

Male/Female

Date of Birth.....

	Not True	Somewhat True	Certainly True
Considerate of other people's feelings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restless, overactive, cannot stay still for long	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often complains of headaches, stomach-aches or sickness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shares readily with other children (treats, toys, pencils etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often has temper tantrums or hot tempers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rather solitary, tends to play alone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Generally obedient, usually does what adults request	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Many worries, often seems worried	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Helpful if someone is hurt, upset or feeling ill	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Constantly fidgeting or squirming	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has at least one good friend	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often fights with other children or bullies them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often unhappy, down-hearted or tearful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Generally liked by other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Easily distracted, concentration wanders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nervous or clingy in new situations, easily loses confidence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kind to younger children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often argumentative with adults	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Picked on or bullied by other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often volunteers to help others (parents, teachers, other children)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Can stop and think things out before acting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Can be spiteful to others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gets on better with adults than with other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Many fears, easily scared	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sees tasks through to the end, good attention span	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Do you have any other comments or concerns?

Please turn over - there are a few more questions on the other side

Overall, do you think that your child has difficulties in one or more of the following areas: emotions, concentration, behaviour or being able to get on with other people?

No	Yes- minor difficulties	Yes- definite difficulties	Yes- severe difficulties
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If you have answered "Yes", please answer the following questions about these difficulties:

- How long have these difficulties been present?

Less than a month	1-5 months	6-12 months	Over a year
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- Do the difficulties upset or distress your child?

Not at all	Only a little	Quite a lot	A great deal
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- Do the difficulties interfere with your child's everyday life in the following areas?

	Not at all	Only a little	Quite a lot	A great deal
HOME LIFE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FRIENDSHIPS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LEARNING	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LEISURE ACTIVITIES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- Do the difficulties put a burden on you or the family as a whole?

Not at all	Only a little	Quite a lot	A great deal
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Signature

Date

Mother/Father/Other (please specify:)

Thank you very much for your help

APPENDIX T
Eyberg Child Behaviour Inventory

ECBI™ Eyberg Child Behavior Inventory™

Parent Rating Form by Sheila Eyberg, PhD

Your Name _____ Relationship to Child _____ Today's Date ____/____/____

Child's Name _____ Child's Gender _____ Child's Date of Birth ____/____/____

Directions: Below are a series of phrases that describe children's behavior. Please (1) circle the number describing **how often** the behavior **currently** occurs with your child, and (2) circle either "yes" or "no" to indicate whether the behavior is **currently a problem for you**.

For example, if seldom, you would circle the 2 in response to the following statement:

	Never	Seldom	Sometimes	Often	Always	Is this a problem for you?
1. Refuses to eat vegetables	1	2	3	4	5	6 7 YES NO

Circle only one response for each statement, and respond to all statements. **DO NOT ERASE!** If you need to change an answer, make an "X" through the incorrect answer and circle the correct response. For example:

1. Refuses to eat vegetables	1	2	X 3	4	5	6 7 YES NO
------------------------------	---	---	-----	---	---	------------

	How often does this occur with your child?							Is this a problem for you?	
	Never	Seldom	Sometimes	Often	Always	YES	NO		
1. Dawdles in getting dressed	1	2	3	4	5	6	7	YES	NO
2. Dawdles or lingers at mealtime	1	2	3	4	5	6	7	YES	NO
3. Has poor table manners	1	2	3	4	5	6	7	YES	NO
4. Refuses to eat food presented	1	2	3	4	5	6	7	YES	NO
5. Refuses to do chores when asked	1	2	3	4	5	6	7	YES	NO
6. Slow in getting ready for bed	1	2	3	4	5	6	7	YES	NO
7. Refuses to go to bed on time	1	2	3	4	5	6	7	YES	NO
8. Does not obey house rules on own	1	2	3	4	5	6	7	YES	NO
9. Refuses to obey until threatened with punishment	1	2	3	4	5	6	7	YES	NO
10. Acts defiant when told to do something	1	2	3	4	5	6	7	YES	NO
11. Argues with parents about rules	1	2	3	4	5	6	7	YES	NO
12. Gets angry when doesn't get own way	1	2	3	4	5	6	7	YES	NO
13. Has temper tantrums	1	2	3	4	5	6	7	YES	NO
14. Sasses adults	1	2	3	4	5	6	7	YES	NO
15. Whines	1	2	3	4	5	6	7	YES	NO

Page 1
subtotals

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OVER →

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	How often does this occur with your child?							Is this a problem for you?	
	Never	Seldom	Sometimes	Often	Always			YES	NO
16. Cries easily	1	2	3	4	5	6	7	YES	NO
17. Yells or screams	1	2	3	4	5	6	7	YES	NO
18. Hits parents	1	2	3	4	5	6	7	YES	NO
19. Destroys toys and other objects	1	2	3	4	5	6	7	YES	NO
20. Is careless with toys and other objects	1	2	3	4	5	6	7	YES	NO
21. Steals	1	2	3	4	5	6	7	YES	NO
22. Lies	1	2	3	4	5	6	7	YES	NO
23. Teases or provokes other children	1	2	3	4	5	6	7	YES	NO
24. Verbally fights with friends own age	1	2	3	4	5	6	7	YES	NO
25. Verbally fights with sisters and brothers	1	2	3	4	5	6	7	YES	NO
26. Physically fights with friends own age	1	2	3	4	5	6	7	YES	NO
27. Physically fights with sisters and brothers	1	2	3	4	5	6	7	YES	NO
28. Constantly seeks attention	1	2	3	4	5	6	7	YES	NO
29. Interrupts	1	2	3	4	5	6	7	YES	NO
30. Is easily distracted	1	2	3	4	5	6	7	YES	NO
31. Has short attention span	1	2	3	4	5	6	7	YES	NO
32. Fails to finish tasks or projects	1	2	3	4	5	6	7	YES	NO
33. Has difficulty entertaining self alone	1	2	3	4	5	6	7	YES	NO
34. Has difficulty concentrating on one thing	1	2	3	4	5	6	7	YES	NO
35. Is overactive or restless	1	2	3	4	5	6	7	YES	NO
36. Wets the bed	1	2	3	4	5	6	7	YES	NO

Page 2
subtotals

Subtotals
from page 1

Scores	Raw score	T score	Exceeds Cutoff (✓)
Intensity			
Problem			

Comments:

APPENDIX U
Parent Sense of Competence

Participant ID: _____

Date: _____

Parenting Sense of Competence

This is a questionnaire about your attitudes and feelings that relate to parenting. Please circle the answer that most closely resembles how you feel. *There are no right or wrong answers.*

	Strongly Disagree	Disagree	Mildly Disagree	Mildly Agree	Agree	Strongly Agree
1. The problems of taking care of a child are easy to solve once you know how your actions affect your child – an understanding I have acquired.	6	5	4	3	2	1
2. Even though being a parent can be rewarding, I am frustrated now while my child is at his/her present age.	6	5	4	3	2	1
3. I go to bed the same way that I wake up in the mornings: feeling like I have not achieved very much.	6	5	4	3	2	1
4. I do not know why it is, but sometimes when I'm supposed to be in control, I feel more like the one being manipulated.	6	5	4	3	2	1
5. My mother/father was better prepared to be a good mother/father than I am.	6	5	4	3	2	1
6. I would make a fine model for a new mother/father to follow in order to learn what she/he would need to know in order to be a good parent.	6	5	4	3	2	1
7. Being a parent is manageable, and any problems are easily solved.	6	5	4	3	2	1
8. A difficult problem in being a parent is not knowing whether you're doing a good job or a bad one.	6	5	4	3	2	1
9. Sometimes I feel like I'm not getting anything done.	6	5	4	3	2	1
10. I meet my own personal expectations for expertise in caring for my child.	6	5	4	3	2	1
11. If anyone can find the answer to what is troubling my child, I am the one.	6	5	4	3	2	1
12. My talents and interests are in other areas – not being a parent	6	5	4	3	2	1
13. Considering how long I've been a mother/father, I feel thoroughly familiar with this role.	6	5	4	3	2	1
14. If being a mother/father of a child were only more interesting, I would be better motivated to do a better job as a parent.	6	5	4	3	2	1

15. I honestly believe I have all the skills necessary to be a good mother/father to my child.	6	5	4	3	2	1
16. Being a parent makes me tense and anxious.	6	5	4	3	2	1
17. Being a good mother/father is a reward in itself.	6	5	4	3	2	1



APPENDIX V
Parent thank you letter

Blynyddoedd Rhyfeddol Cymru
Ysgol Seicoleg
Llawr Isaf
Adeilad Nantlle
Safle'r Normal
Prifysgol Bangor
Bangor
Gwynedd.
LL57 2PZ.
Ffôn: 01248 383 758
Ffacs: 01248 382 652
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Evaluating the Incredible Years School Readiness Parenting Programme

Dear Parent

Please accept this Usbourne Farmyard Tales book as a thank you from us for your family's time and effort in completing the questionnaires and observational measures for our research.

Your help with the research is invaluable, as without your kind cooperation, the study would not be possible. By conducting this research we hope that – in future – more parents will be able to access the Incredible Years School Readiness programme.

Should you have any queries in the meantime, please do not hesitate to contact us.

Yours sincerely

Kirstie Cooper

The Incredible Years 'School Readiness' Research Team
School of Psychology
Bangor University

APPENDIX W

Parent evaluation questionnaire

Incredible Years School Readiness
Parent Evaluation
Questionnaire

Thank you for attending the School Readiness programme, we hope you enjoyed the sessions. Please answer the following questions as honest as possible:

A) Now that I have attended the programme.....

1. If I had a problem with my child, I would feel more comfortable talking about it to the teacher(s) who ran the programme:

Strongly Agree Agree Neutral Disagree Strongly Disagree

2. If I had a problem with my child, I would feel more comfortable talking to the school about it:

Strongly Agree Agree Neutral Disagree Strongly Disagree

3. I feel I can talk to and be better heard by the teacher(s) who ran the programme:

Strongly Agree Agree Neutral Disagree Strongly Disagree

4. I feel I can talk to and be better heard by the school in general:

Strongly Agree Agree Neutral Disagree Strongly Disagree

5. The relationship between myself and the teacher(s) who ran the programme has improved:

Strongly Agree Agree Neutral Disagree Strongly Disagree

6. The relationship between myself and the school has improved:

Strongly Agree Agree Neutral Disagree Strongly Disagree

7. I would be more likely to approach the school:

Strongly Agree Agree Neutral Disagree Strongly Disagree

Please turn over.....

B) What problems have you faced when attending the programme?

	Not at all	A little	Some	Quite a lot	Very much
a. Lack of crèche for other children	1	2	3	4	5
b. Not enough time	1	2	3	4	5
c. Wrong time of day	1	2	3	4	5
d. Other personal circumstances	1	2	3	4	5

C) What was your main reason for not attending (if applicable)

.....

D) What skills do you think are important for your child to be ready for school?

.....
.....
.....

APPENDIX X

Parent semi-structured interview questions

Incredible Years School Readiness
Parent Evaluation
Semi-structured Interview

1. How supportive and useful did you find the School Readiness programme?

.....
.....
.....
.....
.....

2. Do you feel that the programme has led to changes in your behaviour as a parent?

.....
.....
.....
.....
.....

3. Do you feel that the programme has led to changes in your child's behaviour?

.....
.....
.....
.....
.....

4. Has the programme had any effect on the relationship between you and your child?

.....
.....
.....
.....
.....

5. How do you feel about your child's transition to full-time school in September now that you have attended the programme?

.....
.....
.....
.....
.....

6. Do you think the programme had any benefits to the school?

.....
.....
.....
.....
.....

7. Has the programme had any effect on the relationship between you as a parent and the school?

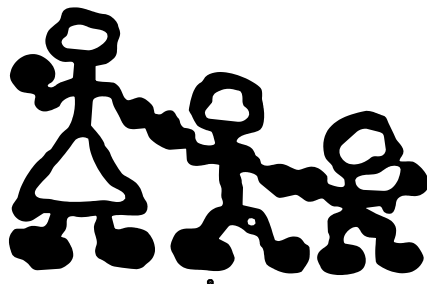
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8. How could we change/improve the programme for future parents?

.....
.....
.....
.....
.....

APPENDIX Y

End of programme parent certificate



Certificate

For participation, attendance and successful completion of

The Incredible Years School Readiness parenting programme
Developed by Dr. Carolyn Webster-Stratton

.....

Name of group leader: Signature:

Name of group leader: Signature:

Attendance date:

APPENDIX Z

Parent final thank you letter and debrief

Blynyddoedd Rhyfeddol Cymru
Ysgol Seicoleg
Llawr Isaf
Adeilad Nantlle
Safle'r Normal
Prifysgol Bangor
Bangor
Gwynedd.
LL57 2PZ.
Ffôn: 01248 383 758
Ffacs: 01248 382 652
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Evaluating the Incredible Years School Readiness Parenting Programme

Dear Parent

Please accept this Usbourne Farmyard Tales book as a thank you from us for your family's time and effort in completing the questionnaires and observational measures for our research.

As this has been your final visit from the research team we would like to take this opportunity to thank you for taking part in the research study. Your part in this project has been invaluable, as without your kind cooperation, the study would not be possible. By conducting this research we hope that – in future – more parents will be able to access the Incredible Years School Readiness programme.

Thank you again, and we will be in touch with you when we have finished analysing the data, to give you a brief summary of what we found. Should you have any queries in the meantime, please do not hesitate to contact us.

Yours sincerely

Kirstie Cooper

The Incredible Years 'School Readiness' Research Team
School of Psychology
Bangor University

APPENDIX AA
Group leader evaluation questionnaire

Incredible Years School Readiness
Group Leader Evaluation

Name of School

Thank you for your time and efforts in delivering the School Readiness programme to parents of children in your school. Please answer the following questions as honest as possible:

A) In relation to the parents who attended the programme:

1. If I had a problem with a child, I would feel more comfortable talking to his/her parent about it now that they have attended the programme.

Strongly Agree Agree Neutral Disagree Strongly Disagree

2. I feel I can talk to and be better heard by these parents now that they have attended the programme.

Strongly Agree Agree Neutral Disagree Strongly Disagree

3. The relationship between the parents and the school has improved since they have attended the programme.

Strongly Agree Agree Neutral Disagree Strongly Disagree

4. Parents are more likely to approach the school now that they have attended the programme.

Strongly Agree Agree Neutral Disagree Strongly Disagree

B) In relation to the delivery of the programme:

1. The weekly supervision sessions were:

Very helpful Helpful Neutral Somewhat helpful Unhelpful

2. The materials for the sessions were:

Very helpful Helpful Neutral Somewhat helpful Unhelpful

3. The use of videotape examples was:

Very helpful Helpful Neutral Somewhat helpful Unhelpful

4. The use of role plays was:

Very helpful Helpful Neutral Somewhat helpful Unhelpful

5. The group discussion and interaction was:

Above average Average Neutral Below average Very poor

6. How would you rate the ease of implementing this programme?

Very easy Easy Neutral Difficult Very difficult

7. How would you rate the effectiveness of the programme?

Very effective Effective Neutral Ineffective Very ineffective

8. My overall feeling about the programme is:

Very positive Positive Neutral Negative Very negative

9. How likely are you to run the programme again at your school in the future?

Very likely Likely Unsure Unlikely Very Unlikely

10. What barriers have you faced in delivering the programme? (mark one for each item)

	Not at all	A little	Some	Quite a lot	Very much
e. Lack of administrative support	1	2	3	4	5
f. Lack of adequate funding	1	2	3	4	5
g. Lack of interest from families	1	2	3	4	5
h. Lack of interest from teachers and school	1	2	3	4	5
i. Personal frustration with programme	1	2	3	4	5
j. Lack of knowledge and feeling of incompetence to deliver	1	2	3	4	5
k. Training for delivering the programme was inadequate	1	2	3	4	5
l. Inadequate support after groups start	1	2	3	4	5
m. Programme too complex to deliver	1	2	3	4	5
n. Not enough time in my work load to fit into schedule	1	2	3	4	5
o. Difficulties getting group together	1	2	3	4	5
p. No space for group to meet	1	2	3	4	5
q. No space for daycare for children	1	2	3	4	5
r. Difficulty funding day care providers	1	2	3	4	5
s. Other (please state)	1	2	3	4	5

.....

What did you like most about the programme?

.....

What did you like least about the programme?

.....

How could we improve the programme for delivery in other schools?

.....

APPENDIX BB

Group leader focus group questions and notes

FOCUS GROUP DISCUSSION

1. What is your overall opinion of the School Readiness programme?

A1: The programme has been effective, it's a short programme - quite easy to put the time in to do it and not too much of a commitment for parents as it is only four weeks

A2: Hardest thing – starting it, become natural after a week. We enjoyed it, especially being able to discuss with parents in a different way and hear their ideas.

A1: I liked the fact that we got to have a different type of connection with the parents.

B: raised awareness for parents of what we as a school thought about school readiness and that we didn't expect parents to be able to read and write. Parents got to see how much emphasis and importance we put on emotion development.

C: Parents had a shock how much emphasis there was on feelings and how much emphasis we put on consistency between the school and home.

A2: Some parents find it hard to show feelings and emotions. So if they find it difficult it isn't going to happen in the home.

A1: It was also an opportunity for parents to marvel at their children. Parent surprised at the language used by their children.

A1: It increased parents' confidence of what they can do with their children and that simple activities can make such a difference.

C: one parent liked the fact that it reinforced what they were doing was right.

B: we had chance to get to know the parents too.

B: It was nice for me because I was new in the school in September, so I didn't know any parents.

D1: It was a very good programme and good things came of it, but I did feel at times that there was an awful lot to present. Probably because it was the first time for them as parents and the first time for us delivering the programme.

D1/2: next time it would be easier, but because it was the first time it was a lot of pressure.

E1: There was a lot of stuff to present.

G2: and a lot of stuff for them to take in, in a short time.

E2: Because I have already ran other IY programmes, I had to remind myself sometimes to ignore some of the other concepts from the basic or the toddler programme. I had to remind myself that this was about school skills and social skills, and looking at books.

G2: It is also quite hard for us and parents to go straight into coaching right from the start without parents knowing what coaching is.

D1: The role-play was a bit intimidating at times and because it was being filmed also. A lot of the parents looked at the video recorder.

D2: I was quite nervous with the video on and maybe that brushed off on the parents at times.

D1: Although we tried to be positive about it.

G1: One of the parents picked up her baby a lot when she got nervous up, but she did come to every session, and also the baby was only 9 weeks old.

G1: She said that she hadn't had time the first week to do her homework but had managed to do it by the later sessions.

F2: Our parents were quite confident playing a role.

F1: they didn't really think about the camera did they?

F2: we were modelling, and they were happy that we were doing it first, then they were confident to follow. They were quite noisy and confident.

F1: yes we got a good crew to tell the truth.

D1: we had some parents who were a bit quiet

F2: we had some who were talking across us sometimes, but they were enthusiastic and that's important.

2. What are your perceptions of any benefits of the programme to yourself and your school?

C: The relationship with parents has improved.

A1: An opportunity to talk to parents as head teachers.

A2: The chance to talk informally with parents.

A1: chance for us to come out of the office and to get to know the parents and build relationships.

F1: I've liked getting to know the parents.

F2: yes building a relationship with the parents, it's been nice.

F1: especially for me because I teach the children. I've had two this week saying they are more confident coming up to me to chat. That's what I've liked out of the programme.

G1: some of the parents have shown an interest in the longer programme, and have taken an interest in Wally and molly. I think they would be more prepared to come to other things now

and they have an interest in Webster-Stratton. It's a good way to build the relationship with parents.

F2: our parents were telling us they had been praising a lot more.

F1: one of the parents said they were more aware now of when they say "don't do that" or when they ask lots of questions when looking at a book.

G1: I thought the reading part was very good.

D2: I feel that I've gained personally, and got some ideas to use at home. And also get to know the parents.

E1: I noticed that I've started to praise more in the classroom and reminded me how to praise in the classroom. One parent asked me how I manage to read like that to groups of children, and then I started to question myself and wonder whether I could take children in smaller groups to look at books.

3. What are your perceptions of any benefits of the programme to the parents and their children?

A2: I think it has helped the relationship between the parents and their children.

A1: It has increased parents' confidence to strengthen their relationship with their children.

A1: Lots of the parents said they were using the skills that they'd learned with the older children too.

C: Lots of parents said the programme had a positive effect on them as a family. Parents could take elements of what they were learning and use them with their other children too.

A2: One of the parents showed their partner how to sit and read, so both parents were doing it the same way at home.

F1: the reading

F2: the way they speak to their children, praising, they were telling us they were using the academic coaching

F1: they also were watching when they were using the closed questions and trying to use the open-ended questions

G1: Parents spending more time with their children, become more interactive with their child

E2: change parents' self-confidence, parents becoming more positive about themselves.

D1: One parent said the house is a much happier place

G1: They all enjoyed it more than anything

D1: Her child had more respect towards the mother – mother reported this, much more respectful, the relationship was closer

G2: there is relationship building even without a specific section within the programme on this

D1: They got to share ideas

G1: Everyone likes praise and that has been a boost for parents receiving stickers, it broke the ice for them receiving stickers

4. What effect do you feel this programme has had on the relationship between the parents and your school?

A1: I think the parents see the school and us in a different light now. It's good that they felt they could relax in our company and have a nice open discussion.

A2: trust and that we are not judging them

C: I think parents have appreciated that we thought their contribution was just as important, that we can't do what we do without what they do at home.

A2: a chance to have a cup of tea with them.

B: yes and chance to have a chat.

C: a good opportunity for newer parents. Everyone contributed, the fact that the parents and the school had the same thing in common: the child, and the welfare of the child.

D1: Very good.

F2: Some offered to come in and help out with reading

D2: easier for us to go to them and them to us and talk

G1: got to know and understand the parents better

E2: helped one of the parents to settle into the area, because she didn't know many people in the area

5. Did you feel there were any barriers or difficulties in implementing the programme?

D: recruiting was the biggest problem

F: Especially at the start of term when we don't know them and they don't know us

D: Leaving the classroom

D: Finding a suitable date and time

E: Supply cover

6. What are the barriers or difficulties in implementing the programme in the future?

A2: some of the parents weren't keen on some of the videos, and maybe didn't understand the accent on the videos. Some of them felt the girl in the video looked older than their child.

A1: yes the mum with the girl in the last clips doing the problem solving.

C: the translator was a barrier too.

A1: maybe we were inexperienced though. We found it hard to understand things, but maybe in the future, we could make time to pick and choose the videos.

A2: if we want them to relate to the videos, we need something from this country.

C: well that's only technology, it's easy to do.

A2: the other thing we found hard was getting the parents to do the homework. Some were happy to do it, but we saw no homework for a couple of the parents. I don't know if it was a lack of confidence or if they just didn't want to share it. Others loved doing it.

A1: giving the time has been a commitment. Maybe if teachers were running it instead of us, but we wanted the experience of running it so that we can develop the work within the school in the future

A2: but we had a problem because one of the nursery teachers was off on sickness.

All agreed: Cost is the biggest problem – even though we have all the paper work and resources, we would have to buy the DVDs to deliver in the future. If the authority could hold a couple of copies then we could loan them out for four weeks at a time.

7. Recommendations for future implementation of the programme

A1: the plan is to run it in the future. And we would like to have another session to target other parents from the same class, maybe deliver two sessions before the summer term and two in September.

A2: a smaller group was more likely to talk and parents felt more relaxed. Maybe two groups of 4 rather than a group of 8 parents. We have enough time for them all then.

C: we intend to run in it before the summer. Thinking back, maybe the title was the problem, with parents thinking it was school readiness, but really it is a readiness for life course.

Parents may have thought we were going to give a course on writing and reading

A2: Yes maybe change the title

B: yes the title was a problem and parents didn't know what to expect

F1: Have a session on praise

G2: or half a session

D1: One session to get to know each other before going straight on to coaching

D2: An introduction session so parents know the content before attending the main programme

E2: introductory session to explain what the course is about, and to explain how much they will get out of it

D2: half an hour or an hour about what the four weeks will be, everyone to get to know each other

D1: it will be easier second time round as we will be more experienced

D2: after half-term might be better so the children have had chance to settle and to get to know the parents a bit

APPENDIX CC
Group leader cost and time diary

IY School Readiness Session Cost Form

Start date and Location of 4-week group:

Group leader name:

If you have any queries when completing this form please contact Kirstie Cooper Tel: 01248 382673.

E-mail: psp880@bangor.ac.uk Incredible Years Wales, Nantlle Building, Normal site, Bangor University, Bangor, Gwynedd. LL57 2PZ.

Pre-group set up costs	
Initial home visit to families: Include number of families and time spent (hours)	
Travel to initial visits: Include time/mileage	
Initial telephone call time: Hours/mins	
Admin time: Sending out initial letters etc.	
Pre-group supervision time (including set up day)	
Travel to pre-group supervision: Time/mileage	

WEEK:	1	2	3	4
Room preparation time				
Session preparation time (include personal time & planning with co-leaders)				
Group time (e.g. 2 hours)				
Catch up/home visits sessions (include number of visits & time taken)				
Weekly telephone time (parent/buddy calls etc.)				
Weekly supervision time				
Travel to weekly supervision (time/mileage)				
Other extra time commitments (details please)				
Other costs incurred: Cover for staff, tea, coffee, biscuits, chocolates Admin costs directly related to the project (please specify in each case)				
Other costs or comments:				

Thank you very much for your time

APPENDIX DD
Parent responses to semi-structured interview

1. How supportive and useful did you find the School Readiness programme?

Supportive and useful (9)

Very supportive and useful (13)

Quite supportive and useful (5)

Nice to refresh on a few techniques – play, read, praise

Nice to meet other mothers and to see everyone else going through the same things and learn from other mums

Nice to get to know the teachers and the school

Communications with my daughter were better

Presented nicely, informal, nice small group, good teaching style

Looked forward to going, enjoyable

Some of it a bit false

Some repetition

Maybe too long

It has reinforced things I already knew

Gives you some back up on what you're doing

Great fun, really enjoyed it, brilliant, I enjoyed it very much, I would recommend to others

Excellent leaders

Nice to have some support

2. Do you feel that the programme has led to changes in your behaviour as a parent?

Yes (22)

No (5)

A little bit more patient now

Reminder to stop and slow down with the children

Better time balance – give them more time, spend more time with them

Learned to ignore and won't give in

Praise more

Asking less questions

Describe and comment more

Made me more aware

How to come down to their level

New ideas on how to deal with things: reading – less reading at them, same with playing,

Let the children's imagination lead

How to label emotions

How to teach academic skills to them through books

Reinforced what I already knew

Let them direct the play

Changed how I play with and speak to him

Talk more, play more, read more –let him take the lead, talk and describe the pictures rather than just ready the book

Have fun

I react better to her

More time for children

More self-awareness

Think before I shout

Being positive rather than critical

More guilt as a parent for not spending enough time with my child

Still shouting

3. Do you feel that the programme has led to changes in your child's behaviour?

Yes (18)

No (8)

No answer (1)

She has learned to wait her turn

His behaviour has improved, he has matured but not sure if this is due to the programme

Behaviour getting worse but not due to the programme.

Helpful to whole family

Emotions come more naturally to him now, he tells me how he feels

He behaves much better and pays more attention

When it started he got quite excited about the extra time together

Less tantrums, less wanting his own way
Reading and playing better, counting more
Meal times improved due to focus on good behaviour
Better behaved and happier
Not much, but a bit better than before
He reacts better to the way I praise him
He liked the fact that mum had homework!
More patient
He likes being praised more
He can now describe how I feel when he misbehaves
She's a good girl anyway
More willing to listen

4. Has the programme had any effect on the relationship between you and your child?

Yes (19)

No (8)

It's only going to make things better
We have always been close anyway
Stayed the same but nice to be reinforced
Rather than let him go and play on his own, I do more playing with him
We are better friends now, less arguing, less cheeky
It has brought us closer together
We talk more
Talk more about how he feels
More communication between us and helped us get into a routine
More time together
Helped us realise mum is the grown up
Have more time for each other
Closer now
We react to each other better
Improved relationship

We play more together and spend time together

5. How do you feel about your child's transition to full-time school in September now that you have attended the programme?

N/A (2)

It has helped (17)

Mixed (1)

Don't feel any different 8 (not my first child) possibly if it was my first child

Nice to know the teacher a bit better, get to know other mums, feel reassured and more comfortable

Got to know more about what the school does and how they teach etc.

Got to know the school

Better understanding of what my child will be doing in school

Nothing is going to help!

Better understanding of the school ethos

Looking forward to her starting school now

Feel it has given him an advantage somehow

Programme has prepared us both (parent and child)

6. Do you think the programme had any benefits to the schools?

Yes (27)

Had the opportunity to get to know the parents

Good for school to know how to handle the children in school

Especially first time parents

Bringing parents together for a few hours

Good for the teachers to get to know the home life of the child

The schools should run it every summer before children start school.

Opportunity for them to meet the parents, and to get an understanding of the child's background and family

Puts principles of discipline, praise and encouragement in place

Good for the teacher

Shame that only 5 parents attended

Links in with the foundation phase – learning through play

7. Has the programme had any effect on the relationship between you as a parent and the school?

Yes (23)

No (3)

Maybe (1)

Feel I can discuss more with them, feel like we are all on the same level

Feel more comfortable

Feel I can go and ask them if there are any problems.

Got to know the teachers better

Feel I can talk to them more and got to know them better

Feel more relaxed and comfortable with them

More approachable

I know who the teacher is now

Feel closer to the teacher

Better relationship

Nice to have a reason to be in the schools

Good to get over the barrier of the school

Learned more about what they do in school

Feel the school are more ready to talk

Not scared to ask anymore

During the programme but not since

8. How could we change/improve the programme for future parents?

Nothing (7)

No answer (1)

Not sure (2)

Change last session – more for older children

Less American 111 could not understand some of the videos – make them more relevant

Fine as it is. Beneficial to new parents as first child starts school.

Nice to do extra session at the end

Make it an obligatory thing to attend, all parents should attend before their children start school, make it part of children starting school

It was all very good

Offer it to new parents before children start school

More information on what goes on in school, what happens in class?

Shorter course

Start the course at a later time

Try to make it more appealing for parents to join in

Parents may not have attended who would have benefitted

Should make it compulsory

A bit too short – longer, couple of extra weeks/revision/follow-up after a couple of weeks

Videos too short - could do with some time to make notes