# AN EVALUATION OF THE EFFECTIVENESS OF PLAY BANK – A PEER-MEDIATED APPROACH TO DEVELOP THE INTERACTIVE PLAY OF PRE-SCHOOL CHILDREN

A thesis submitted to the University of Manchester for the degree of Doctorate in Educational and Child Psychology in the Manchester Institute of Education

2014

Katherine Rachael Pierce

School of Environment, Education and Development

# Table of Contents

List of Figures ..... 9
List of Appendices ..... 11
List of Acronyms ..... 12
Abstract ..... 13
Declaration ..... 14
Copyright Statement ..... 14
Acknowledgements ..... 15
1. Introduction ..... 16
2. Literature Review ..... 17
2.1 Section Outline ..... 17
2.2 Literature Review Strategy ..... 17
2.2.1 Exclusion Criteria ..... 18
2.3 Social Competence of Young Children ..... 19
2.3.1 Factors impacting on children's social competence ..... 21
2.3.2 Peer interaction and peer-related social competence ..... 24
2.3.3 Children presenting with shy and withdrawn behaviour ..... 26
2.3.4 Social acceptance ..... 27
2.4 Play as a key learning context ..... 29
2.4.1 Developing social interaction skills through play ..... 30
2.5 Supporting the development of social competence in mainstream schools ..... 32
2.6 Peer-mediated intervention ..... 33
2.6.1 Adult and peer mediation of social competence ..... 34
2.6.2 Peer mediated approaches to develop the social competence of young children ..... 36
2.6.3 Peer mediated approaches for shy, withdrawn children ..... 39

2.7 Initial Study of Play Bank ..... 42
2.7.1 Context. ..... 42
2.7.2 The study. ..... 43
2.8 Summary of the Literature ..... 44
2.9 Expected Contribution to Knowledge ..... 45
3. Methodology ..... 46
3.1 Chapter Outline ..... 46
3.2 Research Aims ..... 46
3.3 Research Questions (RQs) ..... 47
3.4 Ontological and Epistemological Positions ..... 47
3.4.1 Ontology ..... 48
3.4.2 Epistemology ..... 49
3.4.3 Axiology ..... 51
3.6 Design ..... 51
3.6.1 Case study approach. ..... 51
3.6.2 A mixed methods approach. ..... 57
3.6.3 Triangulation. ..... 57
3.7 Sampling and Participant Recruitment ..... 58
3.7.1 Participant sampling ..... 59
3.7.2 Recruitment of the school. ..... 59
3.7.3 Recruitment of children ..... 60
3.7.4 Recruitment of Play Supporters ..... 60
3.7.5 Recruitment of teaching staff ..... 61
3.8 School and Participant Information ..... 61

3.8.1 School information. ..... 61
3.8.2 Participant information. ..... 62
3.9 Data Gathering Methods ..... 64
3.9.1 Quantitative data collection. ..... 65
3.9.2 Qualitative data collection. ..... 70
3.10 Data Analysis ..... 72
3.10.1 Quantitative data analysis. ..... 72
3.10.2 Qualitative data analysis. ..... 72
3.11 Critique of Methods ..... 75
3.11.1 Research design ..... 75
3.11.2 Mixed methods. ..... 77
3.11.3 Penn Interactive Peer Play Scale (PIPPS; Fantuzzo et al., 1995). ..... 77
3.11.4 The Pre-school Observation Code (POC). ..... 79
3.11.5 Peer sociometrics. ..... 81
3.11.6 Semi-structured group interviews. ..... 82
3.12 Timeline and Time Budget ..... 83
3.13 Operational Risk Analysis ..... 85
3.14 Ethical Considerations ..... 86
3.14.1 Informed consent. ..... 86
3.14.2 Confidentiality. ..... 87
3.14.3 Right to withdraw. ..... 88
3.14.4 Welfare of participants. ..... 88
4. Findings ..... 89
4.1 Section Outline ..... 89

4.2 Delivery of Play Bank....89
4.3 Missing Data....89
4.4 Mean Quantitative Findings for Research Questions 1 and 2....90
4.4.1 The Pre-school Observation Code (POC).....90
4.4.2 Sociometric nominations.....92
4.4.3 The Penn Interactive Peer Play Scales (PIPPS; Fantuzzo et al., 1995).....97
4.5 Findings for Research Questions 1 and 2 for individual children.....99
4.5.1 Asad.....99
4.5.2 Bilal. .....111
4.5.3 Sarah.....123
4.5.4 Samina. .....133
4.5.5 Leila.....143
4.6 Findings for Research Question 3.....153
4.6.1 Global theme – Facilitators. .....153
4.6.2 Global theme – Barriers. .....166
4.6.3 Further analysis of themes .....174
4.7 Cross Case Analysis.....176
4.8 Summary of Findings.....180
5. Discussion .....181
5.1 Chapter outline .....181
5.2 Study Aims and Research Questions.....181
5.3 Research Questions 1 and 2 - Individual Case Discussion .....182
5.3.1 Asad. .....182
5.3.2 Bilal. .....184

5.3.3 Sarah.....185
5.3.4 Samina.....187
5.3.5 Leila.....189
5.4 Cross Case Analysis.....191
5.4.1 Independence, confidence and positive engagement.....191
5.4.2 Social information processing.....193
5.4.3 Social skill acquisition and social skill performance.....195
5.4.4 Foundation Stage activities which facilitate peer interaction.....198
5.4.5 Social interaction in the classroom.....199
5.5 Research Question 3 - Implementation Issues.....201
5.5.1 Play Supporter aspects.....202
5.5.2 Selecting the pairs.....205
5.5.3 Distinctiveness.....206
5.5.4 Practical aspects.....206
5.7 Limitations of the research.....207
5.6 Implications of Findings.....209
6. References.....211
7. Appendices.....230

Word count: 49, 792

List of Tables

Table 2.1 – Definitions of Social Competence ..... 19

Table 2.2 – Definitions of shyness (Rubin, Bowker & Kennedy, 2009) ..... 27

Table 2.3 – Categories of Play (Parten, 1932) ..... 30

Table 3.1 – Case Study Protocol ..... 54

Table 3.2 – Propositions for the Case Study ..... 56

Table 3.3 – Participant demographics ..... 63

Table 3.4 – Data gathering and data analysis methods ..... 64

Table 3.5 – Timeline and Time Budget ..... 83

Table 3.6 – Operational Risk Analysis ..... 85

Table 4.1 – Group mean percentage of time spent in classroom activities during free play ..... 90

Table 4.2 – Mean frequency of behavioural events occurring during free play observations ..... 91

Table 4.3 – Mean positive and negative nominations from the sociometric activity ..... 92

Table 4.4 – Mean teacher and parent PIPPS ratings ..... 97

Table 4.5 – EYFS Scores in Personal, Social and Emotional Development ..... 100

Table 4.6 – Sociometric nominations and classifications at Time 1, Time 2 and Time 3 ..... 103

Table 4.7 – Organising and basic themes for Concerns ..... 107

Table 4.8 – Organising and basic themes for During the Sessions ..... 109

Table 4.10 – EYFS Scores in Personal, Social and Emotional Development ..... 111

Table 4.11 – Sociometric nominations and classifications at Time 1 and Time 2 ..... 114

Table 4.12 – Organising and basic themes for Concerns ..... 118

Table 4.13 – Organising and basic themes for During the Sessions ..... 120

Table 4.14 – Organising Theme – Interaction in the Classroom ..... 122

Table 4.15 – EYFS Scores in Personal, Social and Emotional Development ..... 123

Table 4.16 – Sociometric nominations and classifications at Time 1, Time 2 and Time 3 ..... 126

Table 4.17 – Organising and basic themes for Concerns ..... 130

Table 4.18 – Organising and basic themes for During the Sessions ..... 131

Table 4.19 – Organising and basic themes for Interaction in the Classroom ..... 132

Table 4.20 – EYFS Scores in Personal, Social and Emotional Development ..... 133

Table 4.21 – Sociometric nominations and classifications at Time 1, Time 2 and Time 3 ..... 136

Table 4.22 – Organising and basic themes for Concerns ..... 140

Table 4.23 – Organising and basic themes for During the Sessions ..... 141

Table 4.24 – Organising and basic themes for Interaction in the Classroom ..... 142

Table 4.25 – EYFS Scores in Personal, Social and Emotional Development ..... 143

Table 4.26 – Sociometric nominations and classifications at Time 1, Time 2 and Time 3 ..... 147

Table 4.27 – Organising and basic themes for Concerns ..... 150

Table 4.28 – Organising and basic themes for During the Sessions ..... 151

Table 4.29 – Organising and basic themes for Interaction in the Classroom ..... 152

Table 4.30 – Organising and basic themes for Routine ..... 155

Table 4.31 – Organising and basic themes for Play Buddy Characteristics ..... 157

Table 4.32 – Organising and basic themes for Taking Notes ..... 159

Table 4.33 – Organising and Basic themes for Interest and Enjoyment ..... 160

Table 4.34 – Organising and basic themes for Play Supporter Role ..... 162

Table 4.35 – Organising and Basic themes for Well matched pairs ..... 164

Table 4.36 – Organising and basic themes for Feeling Special .....165

Table 4.37 – Organising Theme - Logistics .....168

Table 4.38 – Organising and basic themes for Play Buddy characteristics .....170

Table 4.39 – Organising and basic themes for Play Supporter presence .....171

Table 4.40 – Organising and basic themes for Play Supporters' understanding .....172

Table 4.41 – Organising and basic themes for Difficult to engage .....173

Table 4.42 – Cross Case Analysis for Concerns .....176

Table 4.43 – Cross case analysis for During the Sessions .....177

Table 4.44 – Cross case analysis for Interaction in the Classroom .....178

Table 4.45 – Synthesised themes .....179

**List of Figures**

Figure 2.1- Influences on Social Competence. .....22

Figure 2.2 - Peer interaction and social competence .....26

Figure 2.3 – Peer interaction, social acceptance and social competence .....29

Figure 2.4 - Peer interaction, social acceptance and social competence .....31

Figure 3.1 - The relationship between ontology, epistemology and methodologies, .....48

Figure 3.2 - An embedded mulitple-case design with multiple units of analysis .....53

Figure 3.3 - Steps in Thematic Analysis .....74

Figure 4.1 - Distribution of positive and negative nominations across the whole class .....94

Figure 4.2 - Distribution of positive and negative nominations across the whole class .....95

Figure 4.3 - Distribution of positive and negative nominations across the whole class .....96

Figure 4.4 - Percentage of time spent in behavioural states during free play.....101

Figure 4.5 - Frequency of Asad's behavioural events occurring during free play .....102

Figure 4.6 - Time 1, Time 2 and Time 3 PIPPS teacher t-scores for Asad.....104

Figure 4.7 - Time 1, Time 2 and Time 3 PIPPS parent t-scores for Asad .....105

Figure 4.8 - Thematic Network for Asad .....106

Figure 4.9 - Percentage of time spent in behavioural states duringfree play.....112

Figure 4.10 - Frequency of Bilal's behavioural events occurring during free play .....113

Figure 4.11 - Time 1 and Time 2 PIPPS teacher t-scores for Bilal.....115

Figure 4.12 - Time 1 and Time 2 PIPPS Parent t-scores for Bilal .....115

Figure 4.13 - Thematic Network for Bilal .....117

Figure 4.14 - Percentage of time spent in behavioural states during free play.....124

Figure 4.15 - Frequency of Sarah's behavioural events occurring during free play .....125

Figure 4.16 - Time 1, Time 2 and Time 3 PIPPS teacher t-scores for Sarah .....127

Figure 4.17 - Time 1, Time 2 and Time 3 PIPPS Parent t-scores for Sarah.....128

Figure 4.18 - Thematic Network for Sarah.....129

Figure 4.19 - Percentage of time spent in behavioural states during free play.....134

Figure 4.20 - Frequency of Samina's behavioural events occurring during free play .....135

Figure 4.21 - Time 1, Time 2 and Time 3 PIPPS teacher t-scores for Samina.....137

Figure 4.22 - Time 1, Time 2 and Time 3 PIPPS parent t-scores for Samina .....138

Figure 4.23 - Thematic Network for Samina .....139

Figure 4.24 - Percentage of time spent in behavioural states during free play .....144

Figure 4.25 - Frequency of Samina's behavioural events occurring during free play .....145

Figure 4.26 - Pre and Time 2 and Time 3 PIPPS teacher t-scores for Leila.....147

Figure 4.27 - Time 1, Time 2 and Time 3 PIPPS parent t-scores for Leila .....148

Figure 4.28 - Thematic Network for Leila.....149

Figure 4.29 - Thematic Network for Facilitators .....154

Figure 5.1 - A social information processing model of children's social adjustment .....193

Figure 5.2 - Social Behaviour Analysis Framework .....196

Figure 5.3 - The Framework for Effective Implementation .....202

**List of Appendices**

Appendix A - Outline of initial training.....231
Appendix B - Play Bank Guide .....232
Appendix C - The Penn Interactive Peer Play Scales (Fantuzzo et al. 1998) .....243
Appendix D - Semi-structured group interview schedule from the initial study .....247
Appendix E - Revised semi-structured group interview schedule for the current study .....248
Appendix F - Play Checklist .....249
Appendix G - Participant information sheet and consent form – Child .....250
Appendix H - Participant information sheet and consent form – Play Supporter .....255
Appendix I - Opt-out consent for sociometric activity .....259
Appendix J - The Pre-school Observation Code (Bramlett & Barnett, 1993).....261
Appendix K - State categories for the Pre-school Observation Code.....262
Appendix L - Event categories for the Pre-school Obsevration Code .....265
Appendix M - Nvivo screenshot.....268
Appendix N - Manual colour coding.....269
Appendix O - Ethical approval confirmation email .....270

Appendix P - Time 1 Sociogram of Positive Peer Nominations .....271
Appendix Q - Time 1 Sociogram of Negative Peer Nominations .....272
Appendix R - Time 2 Sociogram of Positive Peer Nominations .....273
Appendix S - Time 2 Sociogram of Negative Peer Nominations.....274
Appendix T - Time 3 Sociogram of Positive Peer Nominations.....275
Appendix U - Time 3 Sociogram of Negative Peer Nominations.....276
Appendix V - Comparison of time spent in classroom activities.....277

**List of Acronyms**

| | |
|---|---|
| ASC | Autistic Spectrum Conditions |
| BPS | British Psychological Society |
| DfE | Department for Education |
| DCSF | Department for Children Schools and Families |
| EYFS | Early Years Foundation Stage |
| EP | Educational Psychologist |
| EPS | Educational Psychology Service |
| FS | Foundation Stage |
| HCPC | Health and Care Professions Council |
| LA | Local Authority |
| Ofsted | Office for Standards in Education |
| PIPPS | Penn Interactive Peer Play Scales |
| POC | Preschool Observation Code |
| RQ | Research question |
| SENCo | Special Educational Needs Coordinator |
| TA | Teaching Assistant |
| TAMHS | Targeted Mental Health in Schools |
| TEP | Trainee Educational Psychologist |
| UK | United Kingdom |
| US | United States |

**Abstract**

The University of Manchester

Katherine Pierce

Doctorate in Educational and Child Psychology

2014

An evaluation of the effectiveness of Play Bank – a peer-mediated approach to develop the interactive play of pre-school children.

Interactive play in the Early Years Foundation Stage (EYFS) provides crucial opportunities for young children to develop a range of skills which are important for social development. Play Bank provides structured opportunities based on 'Resilient Peer Treatment' (Fantuzzo et al. 1996; 2005) for children to engage in peer-mediated play sessions, and has been found to increase the play interaction of shy and withdrawn preschool children in an initial small-scale study by the current author. This research seeks to extend the evidence base for Play Bank in UK schools by examining perceptions of change in young children's peer interaction and social competence, as well as school staff's views of the facilitators and barriers to carrying out the intervention.

One primary school was identified within the researcher's current Local Authority and five target children were identified on the basis of teacher observations and EYFS profile scores. The views of 18 peers, two teaching staff and five parents were sought. A multiple embedded case study design was employed, using mixed methods of data collection at three time intervals. The quantitative methods comprised teacher and parent measures of children's play-based social competence, whole class sociometric nominations and structured observations of children's free play. Qualitative data were gathered in a semi structured group interview with the two teaching staff. Quantitative data were summarised using descriptive statistics and qualitative data were transcribed and a thematic analysis applied.

The findings indicated that children who participated in Play Bank sessions displayed increased peer interaction and play-based social competence over the course of time. The study extends understanding regarding implementation issues for Play Bank and provides further evidence for the effects of Play Bank on young children's peer interaction and social competence.

**Declaration**

I declare that no portion of the work referred to in the thesis has been submitted in support of an application for another degree or qualification of this or any other university or other institute of learning;

**Copyright Statement**

**i.** The author of this thesis (including any appendices and/or schedules to this thesis) owns certain copyright or related rights in it (the “Copyright”) and s/he has given The University of Manchester certain rights to use such Copyright, including for administrative purposes.

**ii.** Copies of this thesis, either in full or in extracts and whether in hard or electronic copy, may be made **only** in accordance with the Copyright, Designs and Patents Act 1988 (as amended) and regulations issued under it or, where appropriate, in accordance with licensing agreements which the University has from time to time. This page must form part of any such copies made.

**iii.** The ownership of certain Copyright, patents, designs, trade marks and other intellectual property (the “Intellectual Property”) and any reproductions of copyright works in the thesis, for example graphs and tables (“Reproductions”), which may be described in this thesis, may not be owned by the author and may be owned by third parties. Such Intellectual Property and Reproductions cannot and must not be made available for use without the prior written permission of the owner(s) of the relevant Intellectual Property and/or Reproductions.

**iv.** Further information on the conditions under which disclosure, publication and commercialisation of this thesis, the Copyright and any Intellectual Property and/or Reproductions described in it may take place is available in the University IP Policy (see http://documents.manchester.ac.uk/DocuInfo.aspx?DocID=487), in any relevant Thesis restriction declarations deposited in the University Library, The University Library’s regulations (see http://www.manchester.ac.uk/library/aboutus/regulations) and in The University’s policy on Presentation of Theses.

**Acknowledgements**

This thesis is dedicated to the memory of my lovely Mum who is sadly not here to see this achievement. I know she would have been very proud. I am so grateful to her for giving me the strength of character to pursue my career and make it through the last three years.

Thank you to my supervisor, Catherine Kelly, for her incredible patience, guidance and thoughtful challenge. I am very grateful for her support and willingness to deliberate over the tiniest detail during extended supervision sessions.

Thank you to the school, staff and pupils who gave their time and effort without which this research would not have been possible. The enthusiasm of the staff and their interest for the research, and can-do attitude made them a pleasure to work with.

Thank you to all of my EPS colleagues, especially Rachel Lyons for promoting my research and introducing me to the school, and my supervisors Rona Taylor and Kath Tyldesley for their unwavering support this year.

Thank you to my coursemates, friends and family who kept me smiling throughout, with promises of post-doctorate celebrations and reminders that light exists at the end of the tunnel. A special thanks to my proof-readers, Sheila, Chantelle and Marieke for their superior grammatical knowledge and diligence in performing this task.

Finally, a huge thank you to my fiancé, Lee, who is now exempt from all cooking, cleaning, tidying, washing up, shop runs for chocolate and thesaurus duties for the foreseeable future. I am so grateful for his practical and emotional support which has kept me going throughout. I couldn't have done it without him.

## 1. Introduction

Supporting the development of children's social interaction and communication skills in the early years is a key priority for the researcher's current fieldwork placement provider. The Educational Psychology Service (EPS) and the Local Authority (LA) are currently focusing on early intervention services which promote children's social, emotional and behavioural development. Through current casework and discussion with colleagues in the EPS there appears to be anecdotal evidence of a growing number of children who arrive at pre-school and reception classes with under-developed social skills in the classroom context.

The increasing number of children attending pre-school and nursery settings provides greater opportunities for peer interaction, and highlights the importance of understanding the nature and value of young children's peer interactions. Whilst there has been considerable focus on the role of adults in supporting young children's interaction (Coplan & Prakash, 2003; Williams, Mastergeorge & Ontai, 2010), further research is needed to understand the unique role that peer interaction plays in social, emotional and cognitive development (Gagnon & Nagle, 2004).

The current researcher has developed an interest in peer-related social competence in the early years, including working with staff in primary schools to promote opportunities for young children to develop their social interaction. During placement work as a Trainee Educational Psychologist, the researcher previously carried out a small-scale research project to support foundation stage staff to promote peer interaction for pre-school children in a primary school in a north west local authority EPS. This initial study developed the Play Bank approach and piloted measures to evaluate its effectiveness and feasibility as a context for promoting peer interaction for shy and withdrawn pre-school children. The focus of the current doctoral thesis research is to extend the evidence base to support the use of Play Bank in pre-school classrooms. It is the intention of the researcher to disseminate the findings within the current local authority, as well as share findings with affiliated local authorities and, if possible, to a wider audience.

## 2. Literature Review

### 2.1 Section Outline

This literature review provides the research context and rationale for providing focused opportunities for peer interaction aimed at pre-school children presenting with shy and withdrawn behaviour. It therefore explores:

- Current conceptions and definitions of social competence
- The importance of social competence for long term outcomes
- The rationale for a focus on peer interaction
- The rationale for a focus on children presenting as shy and withdrawn
- The rationale for a peer-mediated approach.
- The rationale for examining implementation issues

Following an outline of the literature review strategy, the literature review will begin with defining and considering the importance of social competence in children's development. The relationship between peer interaction, play, social acceptance and social competence will then be discussed before considering the differences in peer- and adult-mediated interaction and the use and benefits of peer-mediated approaches in education. The penultimate sub-section will discuss approaches aimed at developing the peer interaction of shy and withdrawn children and in particular a series of US studies on Resilient Peer Treatment (RTP, Fantuzzo et al. 1996;2005) will be critiqued. These studies in particular informed the development and evaluation of Play Bank in a previous study conducted by the author. The section will finish with a summary of the literature and the expected contribution to knowledge.

### 2.2 Literature Review Strategy

The literature search was carried out using ERIC, PsychINFO, ISI Web of Knowledge, ASSIA and Science Direct in order to locate research papers relating to social competence, and interactive play in children, and peer mediated approaches to intervention.

The following search terms were used in a range of combinations:

| |
|---|
| Social competence, interactive play, peer interaction, peer-mediated intervention, pre-school children, social skills, peer learning, buddy systems, play buddy, temperament, shy and withdrawn children |

The development of play, peer interaction, and play-based social competence has appeared in the literature intermittently for many decades and some of the early work on the development of play has been influential in our understanding of child development (for example Parten, 1932; Piaget, 1975); therefore date parameters were not utilised during the literature search, in order to encompass all relevant research.

### 2.2.1 Exclusion Criteria

Exclusion criteria were applied in order to focus the literature review on the area of interest and therefore articles with the following attributes were excluded:

- Health related
- Bullying prevention
- Deaf studies
- Adolescents
- Adults
- Computer learning
- Severe Learning Difficulties
- Profound and Multiple Learning Difficulties
- Written in a language other than English

Following the application of the exclusion criteria, a final attempt was made to ‘round up’ papers not identified through database searches by viewing citations and ‘reference harvesting’ of the relevant papers found during the searches.

## 2.3 Social Competence of Young Children

Social competence has long been viewed as a critical developmental milestone of childhood (Brown, Odom & Conroy, 2001), yet there has been much debate in the literature regarding the definition of social competence. Table 2.1 illustrates some of the definitions which have been proposed to date. The focus of this literature review is not to debate the definition and the various issues with measurement (see Rose-Krasnor, 1997) but to consider young children's social interaction with their peers and the related skills and outcomes.

Table 2.1 – Definitions of Social Competence

| Author | Definition of Social Competence |
|---|---|
| **Odom & McConnell (1985)** | 'The interpersonal social performance of children with other children or adults as judged by significant social agents in the child's environment.' P. 9 |
| **Yeates & Selman (1989)** | '…the development of the social-cognitive skills and knowledge, including the capacity for emotional control, to mediate behavioural performance in specific contexts, which in turn are judged by the self and others to be successful and thereby increase the likelihood of positive psychosocial adjustment.' p.66 |
| **Rubin & Rose-Krasnor (1992)** | 'The ability to achieve personal goals in social interaction while simultaneously maintaining positive relationships over time and across situations.' p.4 |
| **Hubbard & Coie (1994)** | 'Being well liked by peers' or 'being able to influence peers and direct their activities effectively, regardless of liking.' p.2 |
| **Guralnick & Neville (1997)** | 'To initiate and sustain interactions with others, to resolve conflicts, to build friendships, and to achieve related interpersonal goals.' p.579 |
| **Rose-Krasnor (1997)** | 'Effectiveness in interaction, from both self and other perspectives.' |

Jamison, Forston and Stanton-Chapman (2012) suggest that pre-school children's social competence has three dimensions:

> '(a) the ability to express interest, understanding, and emotion with peers and adults through interactions
> (b) the ability to join the play of others through interactions and
> (c) the ability to participate in goal-oriented activities with peers'

Similarly, Guralnick (1990) asserts that social competence can be understood in terms of children's interpersonal goals and the appropriate and effective use of social strategies to achieve the 3 goals, namely (a) peer group entry, (b) conflict resolution and (c) maintaining play. If the child is successful in using their social skills to navigate these three goals on a regular basis, they are seen as socially competent (Guralnick, 1990).

Rose-Krasnor and Denham (2009) suggest that social competence in early childhood is concerned with successfully negotiating social challenges, which requires a wide range of skills that develop rapidly during this period. Communication skills, emotion knowledge, self-regulation, effective social skills, and a sense of self-efficacy in social strategies are considered important in the development of social competence (Rose-Krasnor and Denham, 2009). Odom, McConnell & Brown (2008) describe social competence as existing on a continuum, in which one extreme represents highly competent children who are well accepted by their peer group and adopt successful behaviour strategies for social exchanges. The other extreme sees children who are either aggressive and disruptive, or shy and withdrawn; both groups are often rejected or ignored by their peer group.

Raver and Zigler (1997) promote social competence from a holistic perspective, arguing that multidimensional perspectives have highlighted young children's ability to adapt to diverse classroom demands that require them to demonstrate age appropriate social and emotional skills, alongside motivation to learn and achieve. They discuss three kinds of skills, which are important to social competence; emotional regulation, social cognition skills, and communicative skills.

### 2.3.1 Factors impacting on children's social competence

The development of social competence in young children can be affected by a variety of factors, and Odom, McConnell and Brown (2008) divide these into 'inside-out' and 'outside-in' influences. According to their conceptualisation, outside-in factors can be either proximal to the child, for example family or classroom environments, or more distal, such as culture. Inside-out factors can be either pre-determined, such as gender and neurology, or can be developmental differences, for example cognitive and language skills. There exists an interaction between inside-out and outside-in factors, for example in the case of cognitive and language skills, which may be affected by the child's caregiving environment and experience (Odom, McConnell & Brown, 2008).

Figure 2.1 is a model adapted from Odom, McConnell and Brown (2008), drawing on Ladd (1999), Rose-Krasnor and Denham (2009) and Rubin, Bukowski, and Laursen (2009). The model portrays inside-out factors as 'within-child' and outside-in factors as 'environmental', as these are terms more frequently used in educational psychology practice in the UK. The model depicts relationships between within-child and environmental factors and the way in which these impact on social competence.

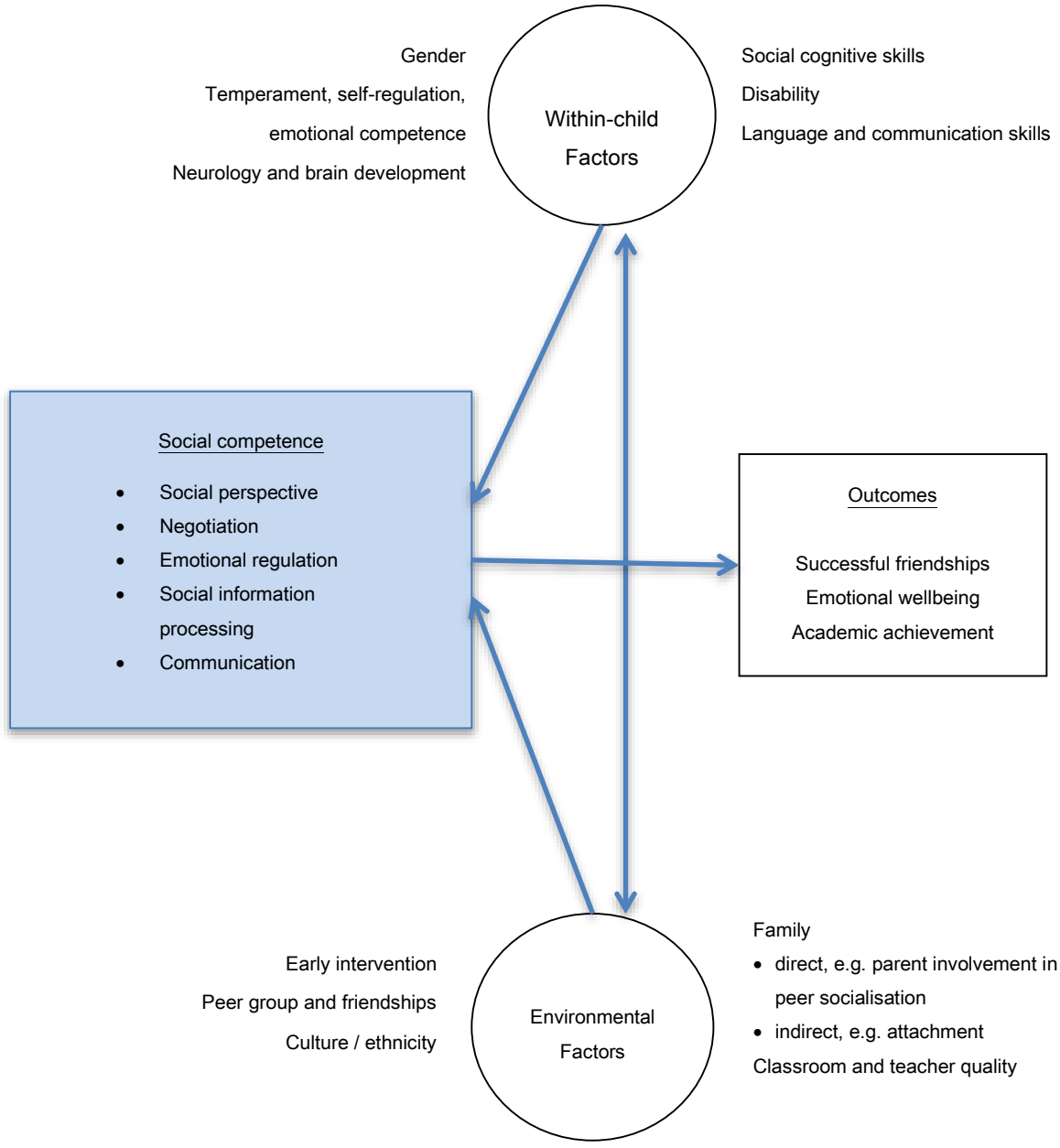



*Figure 2.1- Influences on Social Competence.*
*Adapted from Odom, McConnell and Brown (2008), Ladd (1999), Rose-Krasnor and Denham (2009) and Rubin, Bukowski, & Laursen (2009).*

The complexity of interactions and social exchanges in the early years are affected by the child's language and cognitive development. For example, a child who is still at the egocentric stage is less susceptible to the influences of other children (Piaget, 1975) and will therefore find it difficult to participate in meaningful reciprocal interactions. It therefore follows that children at

different developmental stages may have qualitatively different interactions which could lead to peer rejection and less opportunity to interact. Indeed, children with mild developmental delays exhibit lower levels of sustained interactive play with peers and higher levels of solitary play (Guralnick & Groom,1987a, 1987b; Guralnick, Connor, et al., 1996). Children who are born very premature have been described by their peers as more withdrawn and passive (Nadeau, Tessier, Boivin, Lefebvre & Robaey, 2003) and these difficulties appear to result in relationship difficulties with peers and parents, with very premature children tending to experience lower levels of positive play with peers (Jones, Champion and Woodward, 2013).

Likewise, children with specific language impairments have more difficulties engaging positively with peers and are rated by parents and teachers as having lower levels of social competence than their typically developing peers (McCabe, 2005). Guralnick (1999) found that children with communication disorders were overall less successful in their peer-related social interaction, when compared to typically developing peers. Children with communication disorders, in both mainstream and specialist settings, engaged in fewer instances of active conversation, had a lower rate of positive social behaviour and were less successful in gaining a positive response to their social bids (Guralnick, 1999).

Children's experiences prior to attending preschool have been found to predict peer related social competence. Guralnick and Neville (1997) identified four areas of family influence on children's peer related social competence: (1) parental fostering of their children's peer social network; (2) parental attitudes, beliefs, and knowledge about the competence level of their child, the importance of peer relations and their malleability, and the socialisation strategies to modify their child's peer interactions; (3) the quality of parent-child interactions; and (4) family risk factors. Ladd and Golter (1988) found that children whose mothers took an active role in arranging peer engagements for them had a large number of playmates at pre-school, consistent playmates outside of school networks and were better like by peers. It seems that parents who are committed to developing their child's peer socialisation are more likely to have children who are socially competent, as these children are given a wide range of opportunities within which to develop their skills in social interaction.

In contrast, where children do not have positive family and neighbourhood influences, significant reductions in positive peer play are found. Kenney (2012) noted substantial decreases in the amount of time spent participating in peer play by children living in unsupportive

neighbourhoods, in the poorest physical conditions and with limited amenities. In addition, risk factors such as parental alcoholism adversely affect the development of social competence in children, as a result of decreased parenting capacity and maternal warmth (Eiden, Colder, Edwards & Leonard, 2009). Lack of maternal warmth/sensitivity in the toddler period is thought to affect the development of aspects of self-regulation, such as effortful control and internalisation of parental rules, which are important skills associated with socially competent children (Eiden et al., 2009).

A central tenet of attachment theory is that the child's relationship with their primary caregiver acts as a blueprint for the child's relationships with others. In numerous studies investigating infant attachment and pre-school functioning, it has been found that insecurely attached infants and children have shown less competence with peers and have been less accepted by peers than have secure children (Bohlin, Hagekull, & Rydell, 2000; Suess, Grossman, & Sroufe, 1992).

In addition to parental behaviours and relationships, child temperament is recognised as an important factor in children's peer interaction and acceptance by peers (Eisenberg et al.,1997). As previously mentioned, parental behaviours play a critical role in the child's social and emotional development, and parental influence interacts with child temperament to produce different levels of positive and negative peer play (Gagnon et al., 2013).

### 2.3.2 Peer interaction and peer-related social competence

Children's social competence develops across a number of relationships, such as with family members and other adults (Guralnick, Neville, Hammond & Connor, 2007), however the focus of this research is on peer-related social competence, which is key to the development of positive peer relationships (Richardson & Schwartz, 1998; Rubin et al., 1998). During early childhood, children's social interactions develop in frequency and duration, as well as becoming more sophisticated at the cognitive, linguistic and social levels, and ultimately result in positive adult and peer relationships (Brown, Odom, McConnell and Rathell, 2008). Positive peer interaction is associated with the development of language (Pellegrini, 1984), higher order cognitive skills (Coolahan, Fantuzzo, Mendez & McDermott, 2000), pro-social behaviours

(Fantuzzo, Coolahan, Mendez, McDermott, & Sutton-Smith, 1998), and overall academic success in later life (Ladd, Price & Hart, 1988).

Rose-Krasnor and Denham (2009) describe positive peer interaction as an important 'developmental task' which children need to master in order to achieve social competence. Social competence can therefore be viewed as transactional in nature, in that it emerges from our interactions with social partners, rather than being an internal attribute (Rose-Krasnor& Denham, 2009). Rubin et al. (2009) refer to Rose-Krasnor's (1997) definition of social competence, which places social competence firmly within the context of positive relationships with others. Similarly, Brown, Odom and Conroy (2001) report that positive peer interactions are an important route for children's social development, whilst peer interaction problems are a primary predictor of children's future difficulties in social competence.

Rubin and Coplan (2004) discuss the connection between peer interaction and the development of skills such as social perspective taking, social information processing, and social-behavioral skills. They argue that peer interaction is the context within which children learn to communicate, negotiate and compromise, and this experience leads to increased social-cognitive skills. In turn, increased social-cognitive skills result in more opportunities for social interaction in which relationships with peers begin to form.

Gagnon and Nagle (2004) note that shy and withdrawn children do not tend to enter into play situations readily and so miss out on the early social developmental task of gaining entry into peer groups which must be accomplished in order to form and maintain peer relationships (Guralnick, 1990). It would seem therefore that delayed development of effective peer interaction can potentially have a blocking effect on the development of skills in other areas, including the development of friendships. However, it is difficult to establish the direction of causality between levels of peer interaction and social competence. It has been suggested that a minimum level of social competence acts as a gateway to learning new skills, as it allows access to social and play exchanges in which further skills can be developed (Odom et al., 1999). Figure 2.2 depicts a hypothesised cyclical relationship between peer interaction and social competence and the associated developmental skills.

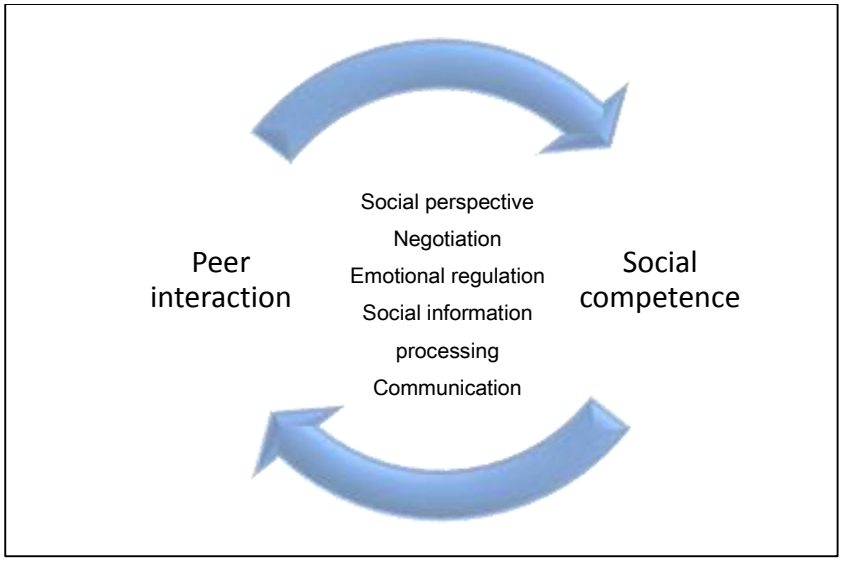



*Figure 2.2 - Peer interaction and social competence*

### 2.3.3 Children presenting with shy and withdrawn behaviour

Difficulty with the development of social competence in the early years is associated with social and emotional adjustment problems in later life (Boivin, Hymel & Bukowski, 1995;Odom, McConnell & Brown, 2008). Slemming et al. (2010) showed that children who are not socially competent in early childhood are associated with twice the risk of school-age emotional difficulties in later childhood. In particular, they argued that preschool 'anxious-fearful' behaviour was associated with school-age emotional difficulties, suggesting that internalising pre-school children can remain so throughout their childhood. Children with social competence difficulties are often categorised as either 'externalising', with aggressive and disruptive behaviour, or 'internalising', with shy and withdrawn behaviour. Children who display aggressive behaviour in the pre-school environment often experience social rejection by their peers, (Rubin, Bukowski, & Parker, 1998; Vaughn, Vollenweider, Bost, Azria-Evans, & Snider, 2003) and maladaptive peer relationships (Crick, Murray-Close, Marks & Mohajeri-Nelson, 2011), whereas shy and withdrawn children demonstrate anxiety in the preschool situation and withdraw from peer interactions (Gazelle & Ladd, 2003. Rubin, Bowker and Kennedy (2009) suggest 4 sub-types of shyness, which can be seen in Table 2.2.

Table 2.2 – Definitions of shyness (Rubin, Bowker & Kennedy, 2009)

| Sub-type of shyness | Definition |
|---|---|
| Inhibition | Fearful and anxious behaviour in unfamiliar contexts |
| Fearful shyness | Inhibited behaviour in response to social novelty |
| Self-conscious shyness | Socially wary behaviour as a result of worrying about others' negative evaluations |
| Social withdrawal | Consistent solitary behaviour in unfamiliar situations or with unfamiliar people |

Each classification of behaviour provided by Rubin et al. (2009) relates to difficulties with peer interactions, as a result of fear or anxiety, which cause the child to avoid social situations. Coplan and Arbeau (2009) discuss temperamentally shy children for whom the pre-school classroom is a stressful place, to which they respond with uncertainty, caution and fear (Kagan, 1997). Shy children display reduced verbal participation in whole class situations, speaking less frequently to their peers and finding the demands of the pre-school classroom, such as talking in front of a group, particularly arduous (Evans, 1993). During free play with peers, shy children in preschool settings show reticent behaviour (Coplan and Arbeau, 2009), often being unoccupied in a play situation, spending prolonged amounts of time as onlookers and experiencing approach-avoidance conflict (Asendorpf, 1990).

### 2.3.4 Social acceptance

The foundations of peer relations are established during the pre-school years and numerous studies have found that pre-school children's negative and positive peer behaviour is correlated with their social acceptance (Denham & Holt, 1993, Vaughn, Colvi, Azria, Caya & Krzysik, 2001). Popular children tend to show socially competent behaviours such as suggesting roles or play themes, adding detail and complexity to enactments, sensitively rejecting others' initiatives and tactfully regulating the social interactions of others (Trawick-Smith, 1992; Hensel, 1991). Whereas it seems that shy and withdrawn behaviour impacts negatively on children's

relationships, as others find it difficult to interact with socially wary children (Rubin & Coplan, 2004). Being less socially skilled, shy and withdrawn children experience social neglect, friendlessness and loneliness which increase the likelihood of a wide range of social and emotional difficulties, poor academic attainment, and absenteeism in later life (Coie, Lochman, Terry & Hyman, 1992; Derosier, Kupershmidt & Patterson, 1994; Rubin, Bukowski & Laursen, 2009).

In contrast, socially competent play behaviours appear to facilitate interaction, which may result in more positive evaluation by peers. During validation of the Penn Interactive Peer Play Scales (PIPPS), Fantuzzo, Coolahan, Mendez, McDermott and Sutton-Smith (1998) found that children who were well liked by their peers were rated by their teachers as having high levels of interactive peer play. Fantuzzo et al. (1998) suggest that, although social competence is a multifaceted construct, the extent to which children are accepted by their peers is linked to their socially competent play behaviour. Further to this, Vaughn et al. (2001) found that children who had reciprocated relationships, as measured by sociometrics, had higher social competence scores than those without reciprocated relationships. Socially competent children have more opportunity to engage in interaction with other children in which they are socially accepted and so they continue to access opportunities which reinforce these skills (Hatch, 1987). If popular children are more socially skilled than unpopular children and interact differently with their peers (Gottman, Gonso and Rasmussen, 1975), it could be argued that the experience of interacting successfully with peers is the mediating factor. It is not clear whether some children are already gifted with being 'popular' upon entry to school and then continue to develop their social competence, through the opportunities to interact which arise as a result of their popularity, or whether children become popular because an existing level of social competence increases their ability to interact with others, and develop successful relationships. What can be assumed, however, is that children who lack social competence and who do not participate in interactive play, appear to be caught in a negative cycle in which they are denied access to important experiences which provide the crucial opportunities they need to develop and practice their social skills (Gagnon & Nagle, 2004). Figure 2.3 depicts the cyclical relationship between peer interaction, social acceptance and social competence.

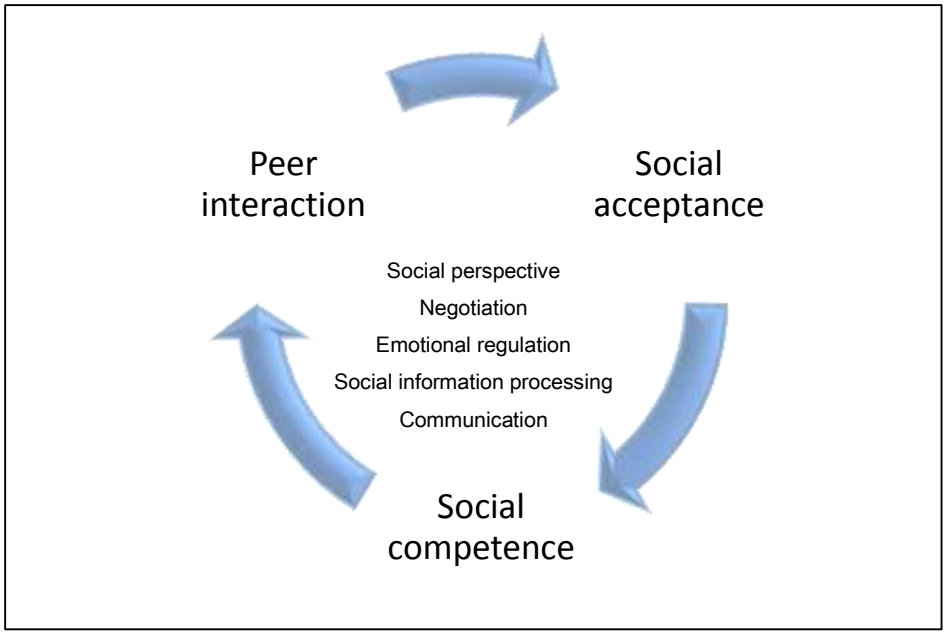



*Figure 2.3 – Peer interaction, social acceptance and social competence*

### 2.4 Play as a key learning context

In early childhood, play is generally considered to be the main context of children's learning. It is a central tenet of developmental psychology that play allows children to construct knowledge as they explore their environment (Bruner, Jolly and Silva, 1976; Piaget, 1975). Play therefore provides the fundamental context for children to develop their cognitive, linguistic, motor and social skills, and learn about the world around them (Coplan & Arbeau, 2009).

Play underpins the Early Years Foundation Stage (EYFS) Handbook (DfE, 2012), which provides guidance on the expected standards for the development, learning and care of children from birth to five. Each area of learning is covered through planned and purposeful play, which can be child or adult led (DfE, 2012). In the framework, 'Playing and Exploring' is one of the three characteristics of effective learning, within which children engage in play for different purposes. Firstly, children 'Find out and explore', which helps them to build concepts, test ideas and find out new information. Secondly, children 'Use what they know' to consolidate understanding, explore ideas, represent experiences through imaginative play, develop narrative thought, and the ability to see other people's perspectives. Finally, 'Being willing to

have a go', children develop their own interests, initiate activities, seek challenge, have a can-do attitude and are willing to take risks, seeing failures as opportunities to learn.

### 2.4.1 Developing social interaction skills through play

The pre-school years are a period in which children have the greatest number of opportunities to develop their interactions with others through the medium of play. The largest proportion of children's social interactions occur during play activities compared to any other classroom activity (Odom, Peterson, McConnell & Ostrosky, 1990). As children develop, the nature of their play becomes more social, moving from sensorimotor and constructive play to socio-dramatic play in the pre-school years (Piaget, 1975). During this time, unoccupied, solitary and onlooking play are thought to decrease, while cooperative and associative play are thought to increase (Parten, 1932, Rubin, Fein & Vandenberg, 1983). Table 2 summarises Parten's (1932) stages of play, and although later researchers cast doubt on the linear sequence described by Parten, and the lack of recognition of cognition in play (Rubin, Maioni & Hornung, 1976), the distinction between social and non-social play continues to be used in contemporary research (Coplan, Rubin & Findlay, 2006).

Table 2.3 – Categories of Play (Parten, 1932)

| | |
|---|---|
| Unoccupied | The child is alone and not occupied in a purposeful play activity |
| Solitary | The child plays with an object/toy and does not involve or show interest in others |
| Onlooker | The child begins to show an interest in the play of others, may stand on the outskirts of an activity but does not yet have the skills to join in. |
| Parallel | The beginning of hierarchical play in which the child begins to play alongside others and may interact with others. |
| Associative | Interactive play begins – the child learns to share and show an interest in a common object or toy with another child |
| Cooperative | The child works with others towards a shared goal and play becomes increasingly complex. Imaginative play emerges and the child performs role play in intricate make believe sequences |

Later combined as "Social Play' by Rubin, Watson & Jambor (1978)

Play can be seen as a developmental domain in itself, in which importance is placed on the development of specific play skills, and the failure to achieve more complex play skills is therefore targeted for intervention. At the same time, play is also a context for the development of other important skills in early childhood (Lifter et al. (2011). Coplan and Arbeau (2009) suggest that play is the main way for children to communicate with each other in social settings and describe play opportunities as the context within which children further advance emerging cognitive, linguistic and social-cognitive skills. Interactive play with peers allows pre-school children to test out social rules in turn-taking, sharing and cooperation, as well as learn about social roles, considering others' perspectives, and inhibiting aggression (Fantuzzo, Sutton-Smith, Coolahan, Manz, Canning, & Debnam, 1995). Given that these skills are readily observable during play, it follows that intervention to promote them takes place within the context of play, an activity which children enjoy and are highly motivated to engage in (Gagnon & Nagle, 2004). Figure 2.4 illustrates the idea that the development of social competence and its relationship with peer interaction and social acceptance takes place within the context of play, suggesting it is an effective context for intervention.

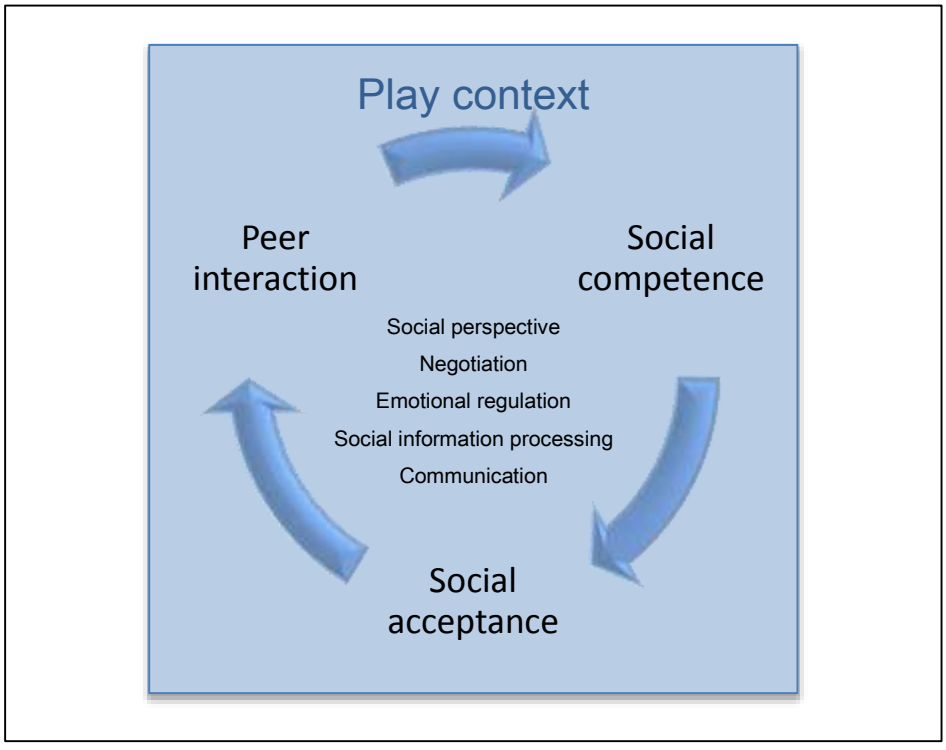



*Figure 2.4 Peer interaction, social acceptance and social competence*

## 2.5 Supporting the development of social competence in mainstream schools

The previous section highlighted that intervention to develop peer interaction would be of benefit to those children who lack social competence, in order to provide structured opportunities in which they can develop a number of skills. The correlation between high levels of peer interactive play and the development of social competence (Gagnon and Nagle, 2004) suggests that play-based interventions designed to improve the play skills of children who fail to engage in play with peers, will positively affect their success in school.

Over recent years in UK schools, there has been a growing emphasis on personal, social and emotional development, and the Early Years Foundation Stage (EYFS) Statutory Framework (DfE, 2012) aims to promote opportunities for children to develop their social skills through play and interaction with others in the classroom (DCSF, 2008). The EYFS Framework supports teachers to observe and assess children in order to plan effectively for children to meet their Early Learning Goals. One of the six areas covered by the EYFS Early Learning Goals is Personal, Social and Emotional Development in which children are assessed against key indicators of development specific to each area. In particular, the Social Development scale of the EYFS Profile assesses the child's developing social skills, such as playing alongside others with interest, interacting with peers through gesture and talk, and forming good relationships with adults and peers. The Inclusion Development Programme (DCSF, 2010) is a government strategy to improve outcomes for children with special educational needs, and provides a teaching unit for practitioners to increase their knowledge of working with behavioural, emotional and social difficulties (BESD) in the early years. The focus of the unit is to support children at the universal level to develop behavioural, social and emotional skills, as well as targeting children for whom BESD practitioners have concerns.

Brown, Odom, McConnell and Rathell (2008) propose an intervention hierarchy which aims to support practitioners to implement intervention which improves peer interaction and peer-related social competence. They describe three levels of intervention; classwide interventions, naturalistic peer interaction interventions and explicit social skills interventions, which are broadly consistent with the Targeted Mental Health in Schools (TAMHS; DCSF, 2008) model of wave 1, 2 and 3 interventions.

## 2.6 Peer-mediated intervention

It is widely accepted within Developmental Psychology that children learn through play, constructing knowledge as they explore their environment (Bruner, Jolly and Silva, 1976, Piaget, 1975). In Social Constructivism (Vygotsky, 1978) and Social Learning Theory (Bandura, 1977), peers play an important part in the process of learning. A crucial point in the learning process is the Zone of Proximal Development which is the difference between what a child may be able to achieve independently and what can potentially be achieved when problem solving with an adult or more capable peers (Vygotsky, 1978). Therefore a child can accomplish a task and develop skills through the process of interacting with, and learning from, a more skilled peer or adult. Piaget (1975) described children's relationships with peers as balanced and egalitarian, in comparison to adult-child relationships which are characterised by dominance and assertion of power. It therefore follows that learning is likely to take place in a different way within a peer to peer relationship in which children can explore and examine thoughts and ideas without adult influences.

Grounded in Social Learning Theory, (Bandura, 1977) there are many interventions which utilise peers as role models and facilitators to improve academic progress. Key to the work of Bandura is observational learning in which children learn behaviour and new skills as a result of modelling by others. The utilisation of skilled peers has consistently been shown to be an effective method of teaching children new skills, (Chan, Lang, Rispoli, O'Reilly, Sigafoos & Cole, 2009; Fuchs & Fuchs, 2005; Goldstein 2002) with benefits for both the target children and their peers, (English, Shafer, Goldstein & Kaczmarek, 1997) as well as maximizing efficiency and capacity of teachers in classrooms where children with additional needs place greater demands on class teachers (Fuchs & Fuchs, 2005). Topping (2005), in a review of the literature, describes peer tutoring as a process by which pupils receive specific training in the role of the tutor, generally to deliver curriculum content and usually involving clear procedures for interaction. Topping (2005) reports that the results of well-organised peer learning interventions are good, and can lead to significant gains in academic achievement in the targeted curriculum area. Meta-analyses of the literature consistently report beneficial effects of peer assisted learning. One such example is a meta-analysis by Rohrbeck, Ginsburg-Block, Fantuzzo, & Miller (2003) which reported positive effect sizes in academic achievement following peer

assisted learning in children ranging from 5.75 years to 11.60 years, and interestingly found that peer assisted learning strategies were more effective for younger rather than older elementary students.

In order to respond to the demands of increasingly diverse classrooms and maximise the capacity of teaching staff to improve reading skills, Fuchs, Fuchs & Burish (2000) created PALS – Peer Assisted Learning Strategies – which pairs high and low ability readers who read together reciprocally. Similarly, Marr, Algozzine, Nicholson and Keller-Dugan (2011) found peer coaching to be more effective in promoting oral fluency and reading comprehension than a control group receiving teaching as usual. Peers have also been shown to be effective in improving the academic progress of pupils with emotional behavioural difficulties (Ryan, Pierce & Mooney, 2008).

Carter, Cushing, Clark & Kennedy (2005) describe peer support interventions for teenagers (aged 12 – 17) with Autistic Spectrum Conditions (ASC) and moderate to severe disabilities, to develop social skills and reduce children's reliance on support staff. In this approach, peers are taught to promote interaction, provide feedback and teaching relating to Individual Education Plan (IEP) goals, and implement behaviour intervention plans. In addition, the peers receive feedback and coaching from teaching staff to help them in their role.

### 2.6.1 Adult and peer mediation of social competence

The EYFS curriculum in UK primary schools is primarily teacher led, and support to develop social competence is often adult-led or adult-mediated. However, it has been suggested that teacher initiations may actually inhibit peer interactions in preschool environments. Bronson, Hauser-Cram, and Warfield (1997) found that teachers allocated more of their time to children with lower competence and a greater number of attempts were made to influence the child's behaviour. However, children were less likely to initiate interactions with peers and more likely to initiate another interaction with an adult following adult initiated interaction, suggesting that high levels of adult interaction might foster adult dependency. Additionally, for those children with disabilities who were the most competent, their peers and tasks were a central focus rather than their teachers. Coplan and Prakash (2003) identified two distinct groups of children who

spent more time interacting with their teachers during free play and these comprised children who were observed to regularly initiate interactions with their teacher and conversely children who tended to be the subject of teachers' initiations. The second group of children is of interest because these children were also observed to engage in more solitary play and anxious behaviour, as well as being rated by teachers as being more socially withdrawn than their peers.

Williams, Mastergeorge and Ontai (2010) emphasise the importance of understanding how adults can help to scaffold and guide young children's peer interactions in order to support the development of social competence. They carried out naturalistic observations of infants in nursery settings in order to investigate the types of scaffolding that practitioners utilised and how these affected children's social competence 6 months later. They identified that practitioners demonstrated adult-centred, child-centred and group scaffolding. Adult-centred scaffolding involved directing children's actions, intervening in conflict situations and encouraging children to join play, and was termed adult-centred because it served the adult's agenda rather than the child's. Child-centred scaffolding on the other hand tended to follow the child's lead and involved less direction, for example by allowing conflict situations to occur and then commenting upon the feelings of the peer, or by focusing a child's attention on their peer by commenting on the peer's play. Group scaffolding involved the adult interacting with two or more children, bridging the children's play and modelling social interaction as an interactive play partner. The findings suggested that children experienced more adult-centred than child-centred scaffolding and interestingly there was no overall change in their peer sociability or peer refusal, (which taken together represented social competence) from time 1 to time 2. Further analysis suggested that infants who received more adult-centred and group scaffolding at time 1 were less sociable with their peers at time 2. Those who received more child-centred scaffolding at time 1 showed less peer refusal at time 2, however peer sociability was not affected by child-centred scaffolding. It appears therefore that adults tend to focus on facilitating interaction in small groups, as well as on classroom management, often intervening in children's interactions to avoid conflicts in order to keep the harmony in the classroom. The effect of over-involvement of adults in children's interactions seems to be reduced social competence and it was hypothesised that this may be because over-directedness interferes with children's natural propensity for social exploration. Similarly, Kontos & Wilcox-Herzog, (1999) suggest that children who engage in greater levels of free play with peers, with lower levels of teacher involvement, gain higher levels of socially competent behaviour. These findings have implications for teacher behaviour in the classroom and suggest that whilst sensitive, child-

centred scaffolding may be helpful, too much adult direction is unhelpful and children need to engage in peer interactions in order to develop skills in social competence.

### 2.6.2 Peer mediated approaches to develop the social competence of young children

Strategies which utilise peers to promote social interaction have typically been implemented for children with Autistic Spectrum Conditions (ASC) or developmental disabilities, whose social skills and interactions with others can be limited. Goldstein, Kaczmarek, Pennington and Shafer (1992) evaluated a peer mediated intervention which paired children with Autistic Spectrum Disorder (ASD) aged between 2 – 6 years and typically developing, socially skilled peers, aged between 3 – 5 years, for play sessions providing activities designed to promote social interaction, such as socio-dramatic and construction activities. Peers received six sessions of training to teach them how to facilitate interaction with the target child. The play sessions were monitored by an adult who remained outside the play area, except to give verbal prompts or positive reinforcement. The sessions were audio-recorded and observed in order to measure instances of verbal communication as well as non-verbal social behaviours. The intervention was applied in an ABCB design to assess the changes in interactions and data was collected over a 5-minute interval. Goldstein et al. (1992) found that the typically developing peers could be trained in the use of facilitative strategies which increased the frequency of their interactions with children with ASD. In addition 4 out of 5 children with ASD showed an increase in the frequency of social interactions during the sessions. The study was well defined, well controlled and a significant level of inter-observer agreement was achieved between observers. However, the sessions took place in an artificial environment and it is unclear if these results generalised to a classroom or any other setting.

Odom et al. (1999) studied the effects of four interventions on the development of social competence in pre-school children with mild to moderate developmental delay. Children participated in one of the following conditions: (1) *Environmental Arrangements* - structured play environments with children without disabilities (2) *Child specific* - social skills training groups (3) *Peer Mediated* - play sessions with trained skilled peers and (4) *Comprehensive* - a combination of the previous three interventions. Results showed that the peer mediated intervention produced the greatest frequency of social interactions and was the only intervention to generate

an effect size considerably greater than the control condition. The authors acknowledge that the findings are surprising, in that the comprehensive intervention was the most intensive, yet was less effective than its composite interventions, and over time, changes were less than that of the control group. The authors hypothesised this was because the teachers were required to do too much when facilitating the comprehensive intervention, and it could be argued that social skills interventions are more effective when they are simpler and easier to implement. Whilst the study is to some extent methodologically sound with clear aims, an adequate sample size of 98 children, a control condition, and reliable and valid measures, there were some limitations. It was not a randomised controlled trial and the authors note that observer bias was a potentially confounding variable. Although the authors found no systematic bias during inter-observer agreement sessions, the observers who carried out the pre- and post-treatment observations had clearly observed the different intervention strategies and as a result, the authors note that they cannot rule out observer bias. In addition, the data was collected at just two locations in the United States and the authors advise caution in generalising the results to other locations. Nevertheless, the findings are interesting and Odom et al. (1999) concluded that interventions which provide mediated opportunities for socially skilled peers to interact with children with developmental delay can be effective in promoting social competence.

Jamison, Forston & Stanton-Chapman (2012) suggest that simply introducing activities in early childhood special education classrooms (ages 3 – 5) which promote joint attention and proximity amongst children can increase the complexity of children's play towards hierarchical play and therefore can potentially lead to increased social competence. They suggest that social proximity plays a key role in developing interactive and more complex social play, yet highlight that classroom structure, children's own interests, and curriculum demands may disrupt the natural proximity which could occur. In addition, individual children may experience difficulties with sensory and gross motor skills which inhibit their ability to be in close proximity to other children and therefore affect their development of social competence.

Jamison et al. (2012) describe a peer buddy approach for use in early childhood special education classrooms (ages 3 – 5), similar to that described by Laushey & Heflin (2000) in which a peer buddy system is implemented in the classroom and children are encouraged to spend time playing and talking with their buddy. In addition, Jamison et al. (2012) suggest that teachers can help to encourage interactive play and close proximity by providing picture prompt cards such as "Stay with your partner, play with your partner, talk with your partner" and help

children with themed interactive play, such as a grocery shop, construction or doctors. Whilst these strategies to increase proximity and interactive play seem sensible and relatively easy to implement in the preschool classroom, Jamison et al. (2012) do not report any supporting evidence for the effectiveness of these strategies.

The limitations of some of the peer-mediated interventions described relate to the extent to which they are resource heavy and rely on teacher involvement. The peer mediated approach described by Goldstein et al. (1992) involves six sessions of training which requires a considerable amount of teacher time, as well as the time needed to monitor the play sessions. In addition, it could be argued that the training of the peer and the level of monitoring required during the sessions was too adult-centred, and that both children might have benefitted from a more child-led naturalistic opportunity to develop their interaction. In fact, the nature of many peer mediated interventions designed for children with developmental disabilities are highly structured (DeKlyen & Odom, 1989) with the use of scripts (Goldstein & Cisar, 1992), gradually withdrawn teacher prompting (Odom, Chandler, Ostrosky, McConnell, & Reaney, 1992) or a combination of several methods (Hundert and Houghton, 1992). It can be argued that, whilst these interventions produce effective outcomes, they are still heavily adult-led and so the effects of the peer involvement cannot be disentangled from the other aspects of the intervention. In addition, the structured nature of these interventions potentially require a large amount of adult time to plan and deliver and this could have an adverse effect on whether they are regularly implemented by class teachers.

In summary, despite some limitations, peer mediation has been evaluated as an effective approach for school aged children to develop academic skills (Fuchs et al. 2000; Marr et al. 2011) and peer interaction in children with moderate to severe disabilities (Carter et al, 2005). Peer mediation has also been used to develop social competence in foundation stage children with ASC (Goldstein et al. 1992), in children with mild to moderate developmental delay (Odom et al. 1999) and children displaying difficulties with social skill acquisition (Jamison et al. 2012).

### 2.6.3 Peer mediated approaches for shy, withdrawn children

The majority of research into peer-mediated social competence has focused on children with developmental disabilities and ASC. Within the wider literature on peer relationships much attention has been paid to rejected and aggressive children (Akhtar & Bradley, 1991; Benish & Bramlett, 2012; Girard, Girolametto, Weitzman & Greenberg, 2011). Perhaps because their behaviour is less overtly problematic for teachers, few researchers have considered the peer relationships of shy and socially withdrawn children (Rubin, Wojslawowicz, Rose-Krasnor, Booth-LaForce, and Burgess (2006), despite the finding that kindergarten teachers believed shyness negatively affects children's social development to the same extent as aggression (Arbeau & Coplan, 2007).

Marchant et al. (2007) evaluated the effects of a peer-mediated approach which aimed to improve the socially withdrawn behaviour of children in the playground. Three children aged 7-11 who had difficulties with peer interactions and tended to avoid social situations, were selected for participation in the study following a behaviour support screening procedure. The children's teachers selected peer partners to help mediate social skills instruction and facilitate playground interaction. The peer partners were selected on the basis of good attendance, positive peer interactions, avoidance of negative peer interactions, ability to follow directions and being someone the target child would feel comfortable with. Three training sessions were carried out by the researchers in the playground and the classroom, in attempts to ensure ecological validity.

Results of the study were mixed, in that, although being paired with a peer partner increased the number of social communicative acts per minute and time spent in appropriate peer play, the partners were withdrawn after three weeks and replaced with adult mediators owing to lack of engagement. The researchers compared the increases in interaction between the peer mediated phase and the adult-mediated phase and found that increases in interaction and peer play were higher during the adult mediated phase; however it is not possible to establish whether the effects were cumulative from the earlier peer-mediated phase. In addition, peer mediation occurred alongside a reward system and social skills training and it is therefore difficult to establish which aspects affected interaction in the children.

The researchers suggest that the limited effectiveness of the peer-mediated intervention may be accounted for by poor relationships between the pair of children. It was found that the target children did not feel comfortable with their peer partners, and the peer partners did not enjoy playing with the target children and missing time playing with their own friends. It is interesting to note that the judgement made about which children the target children would feel comfortable with was made by the teachers and therefore suggests that care must be taken when selecting peers for this type of approach. This would seem to be particularly important for older children who have already established peer relationships. It is possible that peer-mediated approaches may be more successful with younger children, who may be more open to playing with a variety of other children, and less influenced by issues relating to stigma. It could also be argued that this approach, even in the peer mediation phase, was potentially too structured and artificial for interaction to develop naturally. The children were instructed to use social skills, which had been taught by adults, during which they had to pause every five minutes to rate their own behaviour. This is an unnatural process for the children and the frequency of pauses are likely to have interrupted the natural flow of interaction.

#### *2.6.3.1 Resilient peer treatment*

A series of US studies aimed at developing interactive play and social competence in shy, withdrawn pre-school children has been carried out in Head Start settings. Resilient Peer Treatment (RPT) utilises more socially skilled peers to foster better interactive play behaviour in target children. The approach utilises minimal input from adults who simply act as Play Supporters, observing from the outside during play sessions and coach the Play Buddy in between sessions (Fantuzzo, Sutton-Smith, Atkins, Meyers, Stevenson & Coolahan, 1996; Fantuzzo, Manz, Atkins & Meyers, 2005; Coolahan, Fantuzzo, Mendez and McDermott, 2000)

In contrast to, for example, Odom et al. (1999) and Goldstein et al. (1992), Fantuzzo et al. (1996) developed RPT in the children's natural settings in order to address issues of ecological validity identified in their earlier controlled experiments at a research centre (Fantuzzo, Stovall, Scachtel, Goins & Hall, 1987; Fantuzzo, et al., 1988). The play sessions therefore took place in a specially selected play corner within the children's classrooms. RPT was further developed

and results replicated by Fantuzzo et al. (2005) in a study which also aimed to measure generalisability of the skills gained through the intervention.

Fantuzzo et al (2005) utilised the Penn Interactive Peer Play Scale (Fantuzzo, Sutton-Smith, Coolahan, Manz, Canning & Debnam, 1995) to identify suitable children to take part in the intervention. The highest scoring children were selected to be Play Buddies and the lowest scoring children were selected to be Play Partners, i.e. target children. The pair took part in play sessions twice a week in a designated area of the classroom. The play sessions were facilitated by a 'Play Supporter' who observed the play sessions from outside the play corner and mediated the play by coaching the Play Buddy. At the beginning of the session, the Play Supporter would spend a few minutes with the Play Buddy to coach them for the session, and orient the child towards activities that he/she normally engaged in that promoted positive interaction. During the play sessions, the Play Supporter observed the play from outside the play corner and at the end of the play sessions the Play Supporter made positive reinforcing comments about the interactive play to both children. Teacher ratings and independent observation of children during free play two weeks after the intervention revealed significantly higher levels of peer interaction and decreases in solitary play.

Fantuzzo et al. (2005) extended earlier findings by investigating RPT in a classroom setting thus increasing the face validity for participants. However, they did not take into account the multi-faceted nature of social competence, a concept which is constructed from the perspectives of 'social agents' in the child's environment (Odom and McConnell, 1999). Such social agents are likely to include peers and parents who can contribute to a comprehensive measure of social competence which draws information from varied perspectives (Odom, McConnell & Brown, 2008).

Research into RPT has been concerned with establishing firstly the efficacy (Fantuzzo et al., 1987; 1988) and subsequently, the effectiveness (Fantuzzo et al., 1996;2005) of the RPT approach. However, effectiveness studies are usually conducted to help increase understanding of the way in which programmes or interventions are likely to be implemented in natural settings, providing information about the contextual factors which may affect implementation (Greenberg, Domitrovich, Graczyk & Zins, 2005). Beyond consideration of the familiarity of the adult supporting the sessions and the location of the sessions in order to increase acceptability and generalisability of the intervention, Fantuzzo et al. (1996; 2005) were

not explicitly concerned with implementation. They concluded that RPT is 'accessible, nonstigmatising and developmentally and culturally appropriate' yet they do not provide any information about implementation which would likely affect the outcome of the study (Durlak & Dupre, 2008). This is perhaps not surprising, as implementation research for evidence-based interventions aimed at young children is limited (Domitrovitch, Gest, Jones Gill & Sanford De Rousie, 2010).

Given the complexity of school systems (Morrison, 2002) it is likely that there are a number of factors which could affect implementation. Indeed, Durlak and Dupre (2008) identified these factors in a meta-analysis of 82 studies, and found that not only do factors in the community, the organisation, the individuals and the characteristics of the intervention affect implementation, but there is also an interaction between these factors, which illustrates that an ecological perspective is required to understand successful implementation.

## 2.7 Initial Study of Play Bank

Play Bank was developed in an earlier study conducted by the author as part of the doctoral programme. The initial study allowed the researcher to establish the feasibility of Play Bank as a context for promoting peer interaction in pre-school children, as well as informing the methodology of the current research.

### 2.7.1 Context.

A primary school in the researcher's previous placement Local Authority had identified a number of children within the Foundation Stage who were displaying withdrawn behaviour and lower levels of interactive play than their peers. Based on Resilient Peer Treatment, Play Bank was jointly designed by the EPS and the primary school as an approach which aimed to improve interactive play through the provision of structured opportunities in which children could interact and learn from positive role models.

### 2.7.2 The study.

Six target children were identified by their class teacher on the basis of low scores in the area of Personal, Social, and Emotional Development of the Early Years Foundation Stage (EYFS) Profile. Six Play Buddies were identified by class teachers on the basis of high scores in Personal, Social and Emotional Development on the EYFS. Two teaching assistants were identified to fulfil the role of the Play Supporters and received three training sessions, lasting one hour each (for outline of training sessions, see Appendix A). The training covered: the stages of play development; the importance of play and peer interaction; giving praise for positive reinforcement; an overview of the process; the role of Play Supporters; how to observe the children's behaviour in the sessions; and how to complete the Play Checklist. Play Supporters were given an overview of the procedure and example scripts for coaching the Play Buddies, and these have been revised and included in a Play Bank Guide for teaching staff, which was developed for the current study (see Appendix B).

Each Play Supporter facilitated two Play Bank sessions per week, lasting ten minutes each, with three pairs of children. The intervention lasted a total of five weeks, equalling ten sessions per child. Quantitative and qualitative data were gathered from the children's class teachers and the Play Supporters at the beginning and end of the ten-week project. Play Supporters completed Play Checklists during the sessions, however these yielded no clear patterns and difficulties with using the schedule were reported. A group interview was conducted with the Play Supporters which provided insight into the process of running the sessions. The Penn Interactive Peer Play Scales (PIPPS) were utilised to provide a measure of positive play behaviours and the children showed an overall increase in Play Interaction, a decrease in Play Disruption and a decrease in Play Disconnection.

Inclusion of a process evaluation allowed the researcher to gain information about the implementation of Play Bank which was important given that the project was in the early stages of development. The researcher was able to reflect on practical aspects of running the Play Bank sessions, as well as the process of undertaking research in a school environment. The Play Supporters were instrumental in providing information about implementation and identified useful barriers and facilitators which informed the development and delivery of Play Bank in the current study.

The initial study suggested that Play Bank was a feasible approach to facilitate interactive play for shy and withdrawn pre-school children in a UK primary school. Limitations of the initial study were identified in relation to measuring the changes in the children following the sessions. It was acknowledged that there were limitations of gathering data from only one source and suggested that the target children's peer group could be utilised as a potential source of information about their positive play behaviour. In addition, measurement of changes in behaviour was undertaken two weeks following the intervention which did not provide any information about the longer term effects of participating in Play Bank. It was therefore suggested that it would be useful to track the development of the children's behaviour over a longer period of time in the Foundation Stage.

### 2.8 Summary of the Literature

The early years are a crucial time for the development of social competence. The majority of children attend early years provision before school as it is generally accepted that children benefit from the early socialisation opportunities that are provided in such settings (Hartup, 2009). The influence of peers occurs through the natural course of children's interactions, in which they learn to communicate, negotiate and compromise, developing social-cognitive skills that allow positive play experiences with others (Rubin & Coplan, 2004).

For many children, opportunities to play and socialise with other children set the stage for appropriate development, with social skills being learned incidentally. However, there are children for whom skills in social competence do not develop as readily and research has shown they are at risk of social and emotional difficulties in later life (Boivin, Hymel & Bukowski, 1995; Odom, McConnell & Brown, 2008). Shy and withdrawn children are at risk because they find it difficult to access play with other children and therefore miss out on the very opportunities in which the can develop their social competence (Gagnon & Nagle, 2004).

Peer-mediated approaches have been used extensively to support the development of skills in a number of areas (Topping, 2005). However peer mediated approaches to develop social competence have received the most attention in the field of Autistic Spectrum Conditions and global developmental delay (Goldstein, et al., 1992; Odom et al., 1999), and these interventions are often highly structured and adult-led. One study was identified which focused on developing

social competence in shy and withdrawn children (Marchant et al., 2007), although the combination of strategies used makes it difficult to establish the effects of the peer-mediation, and furthermore, this intervention approach required children to participate in artificial conditions which are unlikely to be conducive to natural social interaction.

Play Bank is a peer-mediated approach which provides naturalistic opportunities for pre-school children, displaying shy and withdrawn behaviour, to participate in positive play with a more socially-skilled peer. It is based on Resilient Peer Treatment (Fantuzzo et al., 1996; Fantuzzo et al., 2005) which has been found to be effective in increasing the play-based social competence of pre-school children in the US; yet little is known about the implementation of this approach. An initial study carried out by the author developed and evaluated the feasibility of Play Bank in a Foundation Stage classroom in a UK primary school. The initial study enabled the author to refine the Play Bank approach as a result of collecting implementation data, and to consider additional ways to measure change in the participating children, thus providing the rationale for the current doctoral research.

### 2.9 Expected Contribution to Knowledge

This research will further investigate the use of Play Bank to develop the peer interaction and play-based social competence of pre-school children in UK primary schools. The research will further add to previous knowledge by establishing:

i) Whether any changes are observed in the amount of peer interaction of shy and withdrawn pre-school children
ii) Whether any changes in play-based social competence are reported by teachers and parents
iii) Whether any changes in peer interaction and play-based social competence persist over time
iv) The barriers and facilitators of delivering Play Bank in a UK primary school.

## 3. Methodology

### 3.1 Chapter Outline

This chapter will begin with a statement of the research aims and research questions. Following this, the researcher's epistemological, ontological and axiological positions will be described and the research design, participant sampling and recruitment, data gathering and analysis will be detailed. Following this, a section is included which critiques the researcher's chosen methods for the current research. The chapter will conclude with a timeline, time budget, risk analysis and the ethical considerations of the research.

### 3.2 Research Aims

The literature review revealed a small research base into peer-mediated interventions to develop the interactive play of shy and withdrawn children. Whilst evidence exists from the United States to support the effectiveness of 'Resilient Peer Treatment' (Fantuzzo 1996: 2005), this has not been widely replicated. An initial study conducted by the author developed Play Bank, an approach based on 'Resilient Peer Treatment' in a UK primary school, which highlighted positive outcomes for pupils and identified some facilitators and barriers to implementation. Having developed Play Bank in a UK school and established its feasibility as way of providing interactive play opportunities for pre-school children, this thesis aims to use a case study approach to evaluate Play Bank in two ways:

**Effectiveness evaluation:** this part of the evaluation focuses on whether Play Bank is an effective context to promote the interactive play and play-based social competence of pre-school children.

**Process evaluation:** this part of the evaluation focuses on the barriers and facilitators experienced during implementation, in order to provide useful information to support the implementation of the intervention in UK schools in the future.

### 3.3 Research Questions (RQs)

RQ1. Does participation in Play Bank lead to an increase in peer interaction for pre-school children over a nine-month period?

RQ2. Does participation in Play Bank lead to increased social competence for pre-school children over a nine-month period?

RQ3. What are the barriers and facilitators experienced by the Play Supporters undertaking the intervention?

### 3.4 Ontological and Epistemological Positions

At the outset of a research project, all researchers must consider the assumptions on which their research will be based. Waring (2012) advises that the researcher's position relating to the assumptions which frame their research must be considered in a logical order, and this is represented by the simplified questions set out in the diagram overleaf.

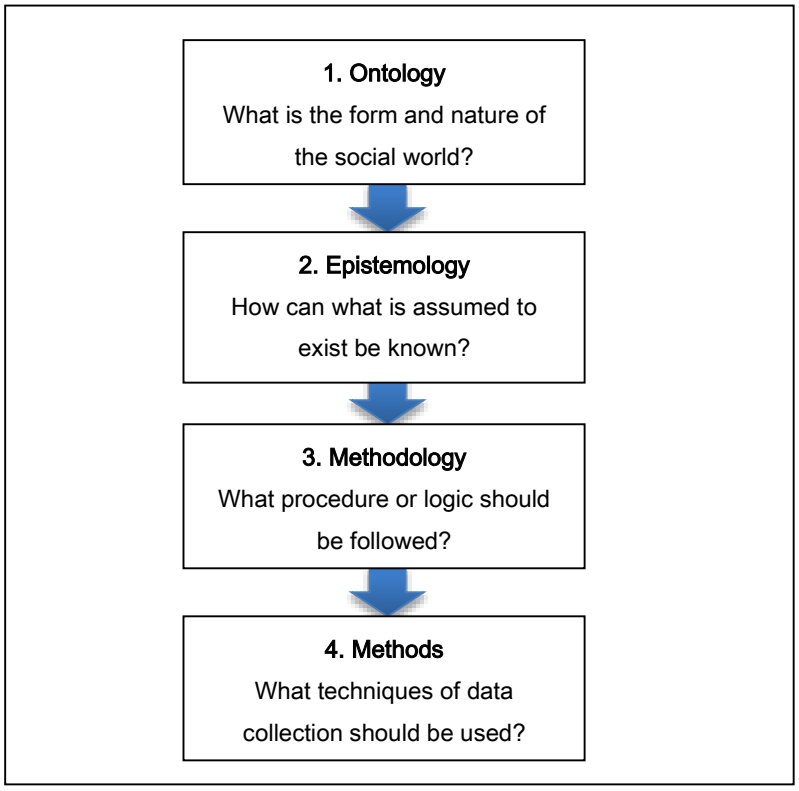



*Figure 3.1 - The relationship between ontology, epistemology and methodologies, from Waring (2012) p.16.*

### 3.4.1 Ontology

Ontology is concerned with the nature of the social entity being investigated, and describes the way in which an individual views reality. Waring (2012) describes ontological positions as existing on a continuum, which, put simply, extends from realism to constructivism. A realist standpoint holds that reality exists completely independently of the individual, and affects, but is not affected by, the individual's own perceptions. Therefore objects have an independent existence and are not dependent on the knower for this existence (Cohen, Manion & Morrison, 2007). At the other end of the continuum, constructivism is the opposite of an objective reality, in that the knower interprets and constructs a reality based on their experience and interactions with the environment. The use of a continuum to depict these ontologies suggests that they are mutually exclusive; indeed they have generally been viewed as irreconcilable, and therefore quantitative and qualitative methodologies associated with realism and constructivism

respectively, are also incompatible (Cupchik, 2001). However, it has been argued that constructivist research is as compatible with a realist standpoint as any other (Barkin, 2003) and constructivist realism is an alternative ontology which accommodates positivism and constructivism and their related methodologies (Cupchik, 2001). Constructivist realism acknowledges that social phenomena exist independently of professional researchers; the real phenomena can be observed by the natural community and understood by more knowledgeable others. Constructivist realism allows scholars to approach the real phenomena in their own way, and choose methods which are compatible with both realist and constructivist paradigms. The richness and holistic nature of qualitative inquiry can be achieved alongside the precision of quantitative methods in order to provide an in-depth examination of the phenomena (Cupchik, 2001).

When considering an ontological position, the researcher was influenced by the dualist aspect of constructivist realism, which is less restrictive than adopting either a constructivist or realist stance. A constructivist realism ontology was therefore chosen for this research as it provides an appropriate basis for real-world research in which changes in behaviour can be quantified, and insight into implementation from the viewpoint of the participants can be gained.

### 3.4.2 Epistemology

Epistemology relates to the way in which knowledge is gained, its various forms and the way it is communicated to other human beings (Cohen, Manion & Morrison (2007). Again, Waring (2012) describes a continuum, in which positivism exists in direct opposition to interpretivism, and placing this within the context of ontological positions, positivism would lie on the same extreme as realism, and interpretivism on the other, concurrent with constructivism. If the researcher were to take a positivist stance on this piece of research, it would be believed that anything which is observable is true; a view compatible with a scientific approach which utilises solely quantitative methods and makes assumptions based on cause and effect. Cohen at al. (2007) argue that this approach is problematic when applied to the study of human behaviour in classroom settings, owing to the lack of regularity and order which normally exists in the natural world, as well as the issues brought about by the complexities of human nature and the intangible effects of social phenomena. In contrast, an interpretivist stance would lead the

researcher to reject the idea that pure knowledge is attainable through the process of scientific observation, and instead believe that reality is known as a result of multiple social constructions which must be interpreted by the researcher. Interpretivism also has its critics, with some suggesting that this approach is too far removed from positivism and has abandoned all attempts at scientific verification (Cohen at al., 2007).

A balanced position between these two epistemologies is critical realism (Bhaskar, 2010), which asserts two main principles:

1) An external reality exists beyond our own beliefs and understanding of the world
2) Reality can only be experienced through the human mind and the meanings which we socially construct for ourselves. (Snape & Spencer, 2003)

Critical realism has been seen as a useful approach for research in practice and value based professions (Anastas, 1998). It recognises that what is observable is true, to a certain extent, but that one must be critical about the social practices being studied (Robson, 2002). Therefore critical realism does not merely accept that any observable phenomena is real, but recognises the interaction of multiple factors which must be evaluated in order to be understood (Bhaskar, 2010).

As Play Bank is an approach about which we know very little in the sense of research evidence, it follows that there is a reality associated with it, which can be discovered through the means of scientific research. Critical realism is an appropriate standpoint for the current research as it allows the researcher to take a pragmatic approach and use the philosophical or methodological approaches that work best for the issue at hand (Robson, 2002). Robson (2002) notes that pragmatism enjoys a long and respectable history and is essentially the study of 'what works'. Critical realism recognises that all measurement is subject to human error (Sayer, 2000) and therefore lends itself well to approaches which use multiple methods of measurement. In order to safeguard against error in interpretation, the current research utilises multiple sources of data in order to triangulate the findings in an attempt to gain a clearer picture of what is happening in reality. The use of multiple measures helps to reduce 'inappropriate certainty', by forcing the researcher to question whether the results obtained from one measure alone are a true measure of reality (Robson, 2002); which in itself is a central aspect of critical realism.

### 3.4.3 Axiology

Axiology is the study of human values which in the context of research, relates to the way in which a researcher's values impact on their research. The axiological position in qualitative research asserts that the research is influenced by the values held by the researcher as well as by the theories, hypotheses or the framework that the researcher is using in his or her particular situation (Tashakkori & Teddlie, 1998).

The researcher's values which have influenced this piece of research have been adopted through the researcher's practice as a Trainee Educational Psychologist. Firstly, it was important for the researcher to hold the needs of the child central to the research project. This influenced the research design and prompted a naturalistic study in which the children were supported by familiar people in their own context to ensure the experience was as ordinary as possible. The rationale was that the children would feel at ease during the play sessions which would help to ensure readiness to learn and enable them to benefit from the sessions. Likewise, they would be more likely to generalise any learning that takes place during the sessions when they are carried out in their own setting rather than an unfamiliar place. Secondly, it is an important part of the EP role to work with schools in order to build capacity and help them to become self-sustainable, which is an effective and more ethical way of working. Therefore, the researcher worked hard to ensure that the school staff took responsibility for the project in the hope that it would prepare them well for running Play Bank again in the future. This influenced decisions relating to the research methods, in that the researcher aimed to be as unobtrusive as possible in order to assist the staff to feel ownership over the project.

## 3.6 Design

### 3.6.1 Case study approach.

Robson (2002) describes the case study as a flexible research design which typically involves:

- The selection of a single case ( or multiple related cases) of a situation, individual or small group

- Study of the case in context
- Collection of information via a variety of data collection methods, including observation and interview

Yin (2003) defines a case study as an empirical enquiry that investigates real-life events in context, particularly when the boundaries between phenomenon and context are not clear. The interactive play sessions which form Play Bank are an extension of the EYFS curriculum, so to study them isolation, using an experimental design which focusses on specific phenomena outside of the real-world context, would restrict judgement of the effectiveness and implementation of Play Bank in context. In addition, Yin (2003) states that case studies have a distinctive place in evaluation research, in helping to explain the causal links in real-life intervention that cannot be captured by experimental methods. Using a case study which combines quantitative measures providing the 'what', with qualitative measures providing the 'how', aims to achieve a more in-depth understanding of the phenomena being studied. Indeed, a case study approach was chosen because case studies rely on multiple sources of evidence which converge in a 'triangulating fashion' (Yin, 2003) and so are in accordance with the researcher's ontological and epistemological stance.

This research employs an embedded multiple-case study design with multiple units of analysis, which is considered a suitable method for investigating contemporary phenomenon within a real life context (Yin, 2009), allowing consideration of specific contextual, environmental and organisational factors. A multiple-case study was identified as an appropriate design in accordance with guidance set out by Yin (2003). Yin (2003) provides the rationale for multiple-case study designs, arguing that increasing the number of cases provides more weight of evidence for assumptions made as a result of the study. The multiple-case study design therefore is based on replication logic, in which similar results across cases would assist with understanding the way in which children's interaction with peers and social competence develops when participating in Play Bank. In order to enhance the insight into the case studies (Yin, 2003) and address the research questions, the case studies includes embedded units of analysis which allows for data analysis at the individual level as well as the implementation level. Figure 3.2, overleaf, displays the cases in context and the three units of analysis being studied. Unit of analysis 1 relates to peer interaction, unit of analysis 2 relates to social competence and these are studied for each case at the individual level. Unit of analysis 3 relates to implementation and this is studied across all cases.

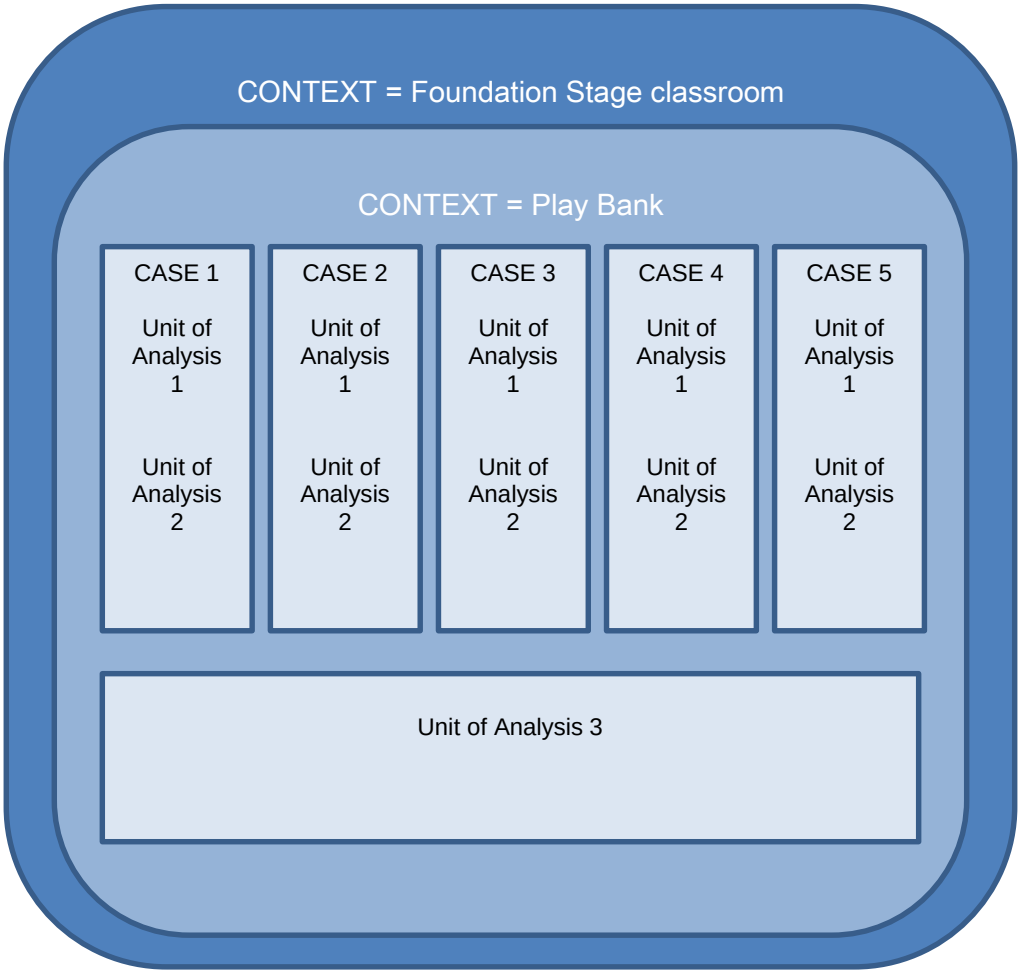



*Figure 3.2 - An embedded mulitple-case design with multiple units of analysis (Yin, 2003)*

#### *3.6.1.1 Case study protocol.*

Yin (2003) asserts that a case study protocol is essential with a multiple-case design as it helps to guide the researcher in their data collection, as well as ensuring a greater level of reliability. Table 3.1, overleaf, outlines the case study protocol designed for this study.

Table 3.1 – Case Study Protocol

| | |
|---|---|
| Overview of the Case Study | **Background**<br>Previous research into peer-mediated interventions for shy and withdrawn pre-school children is limited. One area of study identified 'Resilient Peer Treatment' (Fantuzzo et al., 1996; 2005) which formed the basis for the development of Play Bank. An initial study of Play Bank indicated its feasibility as a classroom intervention to develop the interactive play of pre-school children.<br><br>**Rationale**<br>The focus of the case study is to extend the evidence base to support the use of Play Bank in pre-school classrooms, using a case study approach to evaluate Play Bank in two ways:<br><br>Effectiveness**:** focus on whether Play Bank is an effective context to promote the peer interaction and play-based social competence of pre-school children.<br><br>Process evaluation**:** focus on the barriers and facilitators experienced during implementation, in order to provide useful information to support the implementation of Play Bank in UK schools in the future. |
| Field Procedures | **Access to participants**<br>Initial discussions will take place with the school SENCo or other senior personnel to establish the capacity of the school to take part in the research. The researcher will be directed by these discussions as to the possible participants for the research. The researcher will identify a key member of staff who will be the source of contact for making arrangements for data collection. The key contact person will be asked to inform the researcher of any changes to the list of children selected for Play Bank and to advise if any children are to be absent when observations are scheduled to take place.<br><br>**Resources**<br>The two quantitative measures being used for this study have been procured and agreement to use these as part of the research study sought by the authors. An audio recording will be created by the researcher, which can be played through headphones to signify the intervals for the |

| | |
|---|---|
| | structured observation. The researcher will support the school staff to create the resources needed for the sociometric activity. During the group interview, visual prompts will be provided to remind participants of the questions being asked. A dictaphone will be needed to audio record the interview as well as access to Nvivo 9 qualitative analysis software.<br><br>**Schedule of Data Collection**<br>15.05.13 - Collect Time 1 PIPPS from teaching staff and parents<br>15.05.13 - Collect Time 1 sociometric activity by teachers<br>15.05.13 – Carry out Time 1 free play observations<br>18.07.13 – Group interview with Play Supporters<br>25.07.13 - Collect Time 2 PIPPS from teaching staff and parents<br>25.07.13 - Collect Time 2 sociometric activity by teachers<br>25.07.13 – Carry out Time 2 free play observations<br>06.02.14 –Collect Time 3 PIPPS from teaching staff and parents<br>06.02.14 – Collect Time 3 sociometric activity by teachers<br>06.02.14 – Carry out Time 3 free play observations |
| Case Study Questions | RQ1. Does participation in Play Bank lead to an increase in peer interaction for pre-school children over a nine-month period?<br><br>RQ2. Does participation in Play Bank lead to increased social competence for pre-school children over a nine-month period?<br><br>RQ3. What are the barriers and facilitators experienced by the Play Supporters undertaking the intervention? |
| Guide for the Case Study Report | The case study report will be written up as a thesis dissertation in the house style, according to the university's regulations. A summary report will be written which will be a shared with the school in the form of a written document or a short presentation. |

### *3.6.1.2 Propositions.*

The theoretical framework for the focus of this study was established in the literature review section of this thesis. In addition to understanding the theoretical framework for the research, Yin (2003) advises that theoretical propositions, relating directly to the theoretical framework should be determined at the outset of any research study involving the case study method. The propositions for this case study are displayed by research question, in Table 3.2, and each proposition is related to the relevant literature in the theoretical framework.

Table 3.2 – Propositions for the Case Study

| Research Question | Proposition | Links to literature |
|---|---|---|
| Research Question 1 | The children will engage in higher levels of peer interaction | Fantuzzo et al. (1996; 2005) |
| | The children will engage in higher levels of play with peers | Fantuzzo et al. (1996; 2005) |
| | Engaging in play will promote more interaction with peers | Fantuzzo et al. (1996; 2005) |
| Research Question 2 | The children will be rated as having higher levels of social competence by their teacher and parents | Fantuzzo et al. (1996; 2005) |
| | The children will be rated more favourably by their peers, indicating higher levels of social acceptance | Denham & Holt, (1993)<br>Vaughn et al. (2001)<br>Odom et al. (2006) |
| Research Question 3 | The teaching staff facilitating the sessions will have experienced barriers and facilitators which will provide useful information for future implementation | |

### 3.6.2 A mixed methods approach.

As previously discussed, a researcher's epistemological and ontological position determines the choice of methodology (Waring, 2012), and critical realism leads the researcher to consider a mixed methods approach.

Mixed methods research provides a solution to the problem of qualitative versus quantitative, two strongly opposing views which were the subject of the 'paradigm wars' in the second half of the 20th Century (Biesta, 2012). The aim of mixed methods research is to synthesise the two methods in order to generate a better understanding of social phenomena than would be achieved through the use of only one of the methods.

Tashakkori and Teddlie (2003) discuss the dichotomy in descriptions of quantitative and qualitative methodology, whereby quantitative research questions are largely thought of as explanatory and qualitative research questions as exploratory. They argue that this dichotomy is not necessary because a major advantage of mixed methodology is that it allows the researcher to simultaneously answer both explanatory and exploratory questions within the same study. Mixed methods are considered to originate from a pragmatist paradigm (Tashakkori and Teddlie, 2003) in which decisions about research design are driven by what will be most effective way to answer the research aims. The research aims to study the development of peer interaction and play-based social competence for the Play Bank participants, as well as the processes involved in facilitating Play Bank sessions in a school setting. The researcher identified that these two strands of the evaluation would be most effectively explored through both qualitative and quantitative methods of data collection.

### 3.6.3 Triangulation.

Case study design presents a risk to internal validity, in which the researcher aims to find a causal relationship between events (Yin, 1998), however the use of triangulation can reduce this threat to validity. There are a number of types of triangulation (Creswell & Clark, 2007) and two types, data triangulation and methodological triangulation, are utilised in this research.

Firstly, in order to achieve data triangulation, multiple methods of data collection were chosen, from multiple informants, which seeks to minimise both respondent and researcher bias (Robson, 2002). The Penn Interactive Peer Play Scales (PIPPS; Fantuzzo et al., 1995) was completed by both teachers and parents, as data taken from multiple sources is considered to provide a more reliable measure of social competence than using data from a single source (Waters and Sroufe, 1983). The addition of the Pre-school Observation Code (POC; Bramlett & Barnett, 1993), described in Section 3.9.1.2, aimed to provide another source of evidence regarding the children's interactive play. As the observations were carried out by the researcher, the data taken from the other measures will help guard against the threat posed by researcher bias.

Secondly, combining qualitative and quantitative methods provides methodological triangulation. The use of a qualitative measure; the semi-structured interview; helped to triangulate the findings from the PIPPS and the POC, and provided a different perspective on the effectiveness of Play Bank. The goal is not to achieve complete accuracy of findings, but to present multiple and diverse perspectives that result in a more complete picture than would be possible from an epistemological stance which searches for 'the truth' (Coolican, 2004).

### 3.7 Sampling and Participant Recruitment

The research took place in an inner city suburb of North West England. One primary school was identified to take part in the research, based on their interest in delivering Play Bank. An Educational Psychologist who is a member of the researcher's EPS team had promoted the use of Play Bank as part of her usual practice in schools, and in discussing this particular school's cohort of children, identified that they may benefit from intervention to develop their peer interaction. The availability of a local school to deliver Play Bank and take part in the research drove the sampling strategy, which was therefore opportunistic. A non-probability sample was deemed acceptable, as it is often used in small-scale research studies, particularly those using case study methodology (Cohen et al., 2007). Given the time limitations imposed on the researcher, this type of sample was preferred despite its limited generalisability, owing to the time and cost effectiveness and convenience of working with a local school.

### 3.7.1 Participant sampling

Prior to the researcher's involvement, the class teacher had identified a group of children who she felt needed additional support to develop their interactive play and social skills. At the initial meeting, the researcher provided the class teacher with sampling criteria in order to select six target children to be included in the research. Sampling criteria were applied in order to ensure that the target children displayed the type of difficulties Play Bank was designed to address. The Foundation Stage (FS) phase leader was briefed on the sampling criteria which were then used by the FS phase leader and the class teacher to identify the target children.

The sampling criteria relating to the target children were as follows:

- The child was aged 4-5 and attending the nursery class at the school
- The child was scoring below expected levels on the EYFS Personal, Social and Emotional Development scale. Children with scores less than or equal to 30-50 (developing) in all three scales were included in the sample.

The researcher briefed the class teacher on the selection of appropriate Play Buddies, advising the class teacher to identify children who were more socially skilled than the target children, who would be good role models and would enjoy taking part in the sessions. The Play Supporters were identified from the FS teaching staff by the FS phase leader who recognised that they were the most appropriate people to deliver the Play Bank sessions.

### 3.7.2 Recruitment of the school.

The researcher outlined the research requirements to the school's special educational needs coordinator (SENCo) and the foundation stage phase leader, in order to establish the feasibility of the project. The time commitment required from the school was outlined to ensure that the school were clear about the expectations in order to minimise the chance of attrition at a later stage (see Table 3.6 Operational Risk Analysis, page 83).

### 3.7.3 Recruitment of children

It was initially planned that the researcher would hold an after school meeting for the parents of the children, along with the class teacher, in order to explain Play Bank and the requirements of the research project. However, discussion with the class teacher revealed that parents' attendance at meetings was low and it was felt that the parents may feel more comfortable talking to a familiar person about their children being involved in a new project.

The class teacher approached the parents of the children individually to explain Play Bank and the research project. The class teacher explained to the parents of the target children that she felt their child would benefit from being involved in Play Bank in order to develop their interactive play skills, and gave parents the Play Bank information sheet (from the Teacher Guide, see Appendix B). The class teacher approached the parents of the Play Buddies to explain Play Bank and explained that their child had been selected to take part in the sessions as a Play Buddy, based on their strengths in personal, social and emotional development.

The class teacher explained to all parents that there was also an opportunity for the children to take part in the research project to evaluate Play Bank. The class teacher explained fully the requirements of the research and provided the participant information sheet and consent form (see Appendix G) to take home to assist them to decide whether their child should take part and give informed consent. The class teacher gave the parents two weeks to consider their child's participation in the research, and offered all parents the opportunity to meet with the researcher if they wished to discuss the research further.

As the sociometric activity was considered usual classroom practice, a letter was sent to the parents of the children who were asked to take part, which included an opt-out consent form (see Appendix I) and details of how to contact the researcher if they had any questions.

### 3.7.4 Recruitment of Play Supporters

The Play Supporters were invited to take part in the semi-structured interview on the basis that they were facilitating the Play Bank sessions and would be able provide the greatest level of insight into the changes seen during the sessions, as well as the process of implementation.

The Play supporters were given a participant information sheet and consent form in order to fully inform them of the implications of taking part in the research (see Appendix H).

#### 3.7.5 Recruitment of teaching staff

The teacher, whose role it was to complete the PIPPS, also fulfilled the role of the Play Supporter. She was recruited on the basis of her knowledge of the children and the time spent teaching the children.

### 3.8 School and Participant Information

#### 3.8.1 School information.

The school is a mainstream primary school with an attached pre-school Nursery and is based in an inner city suburb in North West England, an area characterised by low socio-economic status which ranks in the top 20 of most deprived areas in England (English Indices of Deprivation, 2013, Department for Communities and Local Government). The Ofsted report summary provides the following description of the school: (Ofsted, 2011)

> 'This is a smaller-than-average sized primary school. The proportion of pupils known to be eligible for free school meals is above average. There is a high percentage of pupils from minority ethnic groups and the proportion with English as an additional language is almost four times the national average. The percentage of pupils with special educational needs and/or disabilities is broadly average.
>
> Children generally enter the Nursery with well below age-related skills, particularly in numeracy and in communication, language and literacy. Attainment by the end of Year 6 is broadly average and the progress and standards reached by boys are improving apace. Over time, there has been a below average percentage of pupils reaching the higher National Curriculum levels in both key stages.'

### 3.8.2 Participant information.

All names have been replaced with pseudonyms to ensure the participants' anonymity. The school's EYFS phase leader and the SENCo selected two female members of staff to be Play Supporters and deliver the Play Bank sessions. The Play Supporters were the Nursery class teacher, Miss Davis and a highly experienced Nursery teaching assistant, Mrs Woods. Six children who were attending the Nursery were identified to participate in the research. The demographics of the target children can be found below in Table 3.3.

Table 3.3 – Participant demographics

| Name | Age in months | Gender | Ethnicity | Home language | English language proficiency (teacher rated) | EYFS Scores | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Self-confidence and awareness | Managing feelings and behaviour | Making relationships |
| Asad | 4 years, 4 months | Male | Arab British | Arabic | Fluent | 30-50 (emerging) | 22-36 (secure) | 22-36 (secure) |
| Bilal | 4 years, 6 months | Male | Indian | Tamil | Intermediate | 30-50 (developing) | 22-36 (developing) | 22-36 (secure) |
| Sarah | 4 years, 5 months | Female | White British | English | Native | 30-50 (developing) | 22-36 (secure) | 22-36 (secure) |
| Samina | 4 years, 5 months | Female | Asian British | English | Native | 30-50 (developing) | 30-50 (developing) | 30-50 (developing) |
| Leila | 3 years, 10 months | Female | Arab British | Arabic | Fluent | 22-36 (secure) | 30-50 (emerging) | 22-36 (secure) |

### 3.9 Data Gathering Methods

Table 3.4 provides a summary of the data collection methods and how these relate to each research question. The quantitative and qualitative data gathering methods will be described in detail below.

Table 3.4 – Data gathering and data analysis methods

| Research Question | Data Collection method | Time points | Data Analysis |
|---|---|---|---|
| *RQ1. Does participation in Play Bank lead to an increase in peer interaction for pre-school children over a 9-month period?* | Direct observations of social interactions by the researcher using The Pre-School Observation Code (Bramlett & Barnett, 1993), (see Appendix J) | Time 1 – May 2013<br>Time 2 – July 2013<br>Time 3 – February 2014 | Descriptive Statistics |
| | Group Interview – Play Supporters (see Appendix E) | Time 2 – July 2013 | Thematic Analysis |
| *RQ2. Does participation in Play Bank lead to increased social competence for pre-school children over a 9-month period?* | Penn Interactive Peer Play Scales (PIPPS) Teacher and Parent versions (See Appendix C) | Time 1 – May 2013<br>Time 2 – July 2013<br>Time 3 – February 2014 | Descriptive Statistics |
| | Peer Sociometric Activity | Time 1 – May 2013<br>Time 2 – July 2013<br>Time 3 – February 2014 | Descriptive Statistics |
| | Group Interview – Play Supporters (see Appendix E) | Time 2 – July 2013 | Thematic Analysis |
| *RQ3. What are the barriers and facilitators experienced by the Play Supporters facilitating the Play Bank sessions?* | Group Interview - Play Supporters (see Appendix E) | Time 2 – July 2013 | Thematic Analysis |

### 3.9.1 Quantitative data collection.

#### *3.9.1.1 The Penn Interactive Peer Play Scale (PIPPS; Fantuzzo et al., 1995)*

The PIPPS (Fantuzzo et al., 1995) is a 32-item rating instrument designed to measure the interactive play behaviour of pre-school children (see Appendix C). The scale has been developed for use by both teachers and parents, who are asked to rate the frequency of specific behaviours, observed during free play over the preceding two months. The scale asks the rater to indicate how much they have observed behaviours such as 'Comforts others who are hurt or sad' and 'Encourages others to join play', on a Likert scale of 'never', 'seldom', 'often' or 'always'. The PIPPS rates three dimensions of peer play:

- Play Interaction – indicates pro-social behaviour and play strengths, and includes items such as:
    - Encourages others to join play
    - Directs others' actions politely
    - Comforts others when hurt or sad
- Play Disruption – indicates aggressive and anti-social behaviours that prevent positive interactions, and includes items such as:
    - Grabs others' things
    - Disrupts play
    - Doesn't take turns
- Play Disconnection – indicates withdrawn behaviour and lack of participation in play, and includes items such as:
    - Hovers outside play group
    - Withdraws
    - Needs help to start playing

The PIPPS (Fantuzzo et al., 1995) is recommended for use in a number of ways, including evaluating classroom interventions (Fantuzzo & Hampton 2000) and was developed for use in the research studies which evaluated Resilient Peer Treatment (Fantuzzo et al., 1996; 2005). In the initial study carried out by the author, the PIPPS questionnaire was completed by the teaching staff in order to measure peer interactive play behaviour. However it was acknowledged that this resulted in a subjective measurement, in that it only provided information about the children's play in the classroom context by only one source. As discussed in Chapter 1, the multi-faceted nature of social competence suggests that multiple informants are preferable. Therefore, in the current study, parent completion of the PIPPS (Fantuzzo et al. 2005) was added in order to triangulate the teacher's views as well as provide information about the interactive play of the children outside the school context. The PIPPS was completed by the class teacher and parent at three time intervals: one week before beginning the play sessions (Time 1), 2-3 weeks following the final play session (Time 2) and again, 6 months later (Time 3).

#### *3.9.1.2 The Pre-school Observation Code (POC; Bramlett & Barnett, 1993).*

The Preschool Observation Code (POC; Bramlett & Barnett, 1993) is a direct observation system designed to assist educators and researchers in making observations about children's problem behaviour (see Appendix J). The code was designed for use in behavioural assessment, as well as to assess the behaviour of children following intervention (Bramlett & Barnett, 1993). It allows for observations of a wide range of behaviours, using state-event criterion and therefore provides quantitative data which can be used to make comparisons between behaviour observed on different occasions. The POC uses a time- and event-sampling method which allows for recording of specific types of behaviour of interest to the researcher.

The POC enables the researcher to establish the duration of behavioural 'states', as well as the frequency of particular behavioural 'events'. 'States' include wandering around the room, interacting with peers and engaging in play. A momentary time sampling procedure is used to record states, at 30-second intervals, which are then totalled and a percentage is calculated to show the total time spent in each state as a percentage of the total observation time. 'Events' are behaviours with a sudden onset and short duration, such as snatching a toy, smiling at a peer, and approaching a teacher. A frequency count of the behaviour events is carried out in

order to estimate how often these behaviours occur during the observation, therefore providing an estimation of rate.

As the code is used to observe a wide range of behaviours, some of the behaviour categories were not of interest to the researcher and were therefore removed from the schedule for ease of use. The discarded codes can be seen, crossed out on the POC in Appendix J. Silverman, Cassata, Gottfredson & Rosenfield (2009) suggest that minor alterations or removal of irrelevant content from measures which are otherwise psychometrically intact may be warranted. Indeed, Benish & Bramlett (2012) used the POC to investigate the use of social stories to increase positive peer interaction and consequently limited their coding to behaviours of interest such as 'Social Interaction with Peers (SIP)' and 'Positive Motor Interactions' (PMI).

The researcher carried out a 30 minute direct observation of the children during free play using the Pre-school Observation code. An audio recording, which was played through headphones, provided the researcher with the time intervals in which states and events were recorded. Two tables which define the States and Events can be found in Appendices K and L. The free play observations were carried out at all three time intervals.

Fawcett (1996) suggests the benefits of a time sampling method are that it allows for fine-grained detail of behaviour to be recorded and comparisons made, in a way that is easily understood. The POC was identified as a suitable instrument because it measures the level of detail of social interaction that the researcher is interested in, as well as providing a standardised approach that ensures the observer measures the same behaviour in each child.

The POC was chosen in favour of a play checklist (see Appendix F) that was used in the initial study carried out by the author, which included types of interactive behaviours that would be expected to develop in nursery-aged children. In the initial study, the play checklists yielded no clear patterns of behaviour across the 6 children and the Play Supporters reported that the checklists were difficult to complete whilst observing the sessions. It seemed that asking the Play Supporters to complete observation checklists was problematic because, although they were familiar with carrying out observations within the context of the classroom, they had no prior experience of observation in the detailed manner which was required for the purpose of the study.

A potential solution to the issues experienced with observation was considered, whereby the Play Supporters could complete a more detailed observation of the children during free play outside of the sessions, prior to the start of the sessions and at further intervals, when their full attention could be directed towards observing the children without the need to mediate the sessions. The initial observation could then serve as a baseline with which to compare the levels of interaction over the course of time. Alternatively, the researcher, who is trained in observation, could directly observe the sessions and record the interactive behaviour. A further alternative, and a more reliable method of recording the instances of interactive behaviour, would be to video record the sessions and code the behaviour retrospectively, as in Fantuzzo et al. (2005).

However, there is a need to balance the requirements of the research with the capacity of the school to take part in the research. As school staff have limited time, it was important for the Play Supporters to have the flexibility to carry out the play sessions at a time convenient for them. The additional organisation and time needed for the sessions to be videotaped, or equally, the amount of coordination required for the researcher to observe six sessions a week would reduce this flexibility and potentially make the project unmanageable for the Play Supporters. In addition, in keeping with the researcher's axiological position, in the interests of building school capacity, it was important for the school staff to take ownership of the project to ensure they could learn from it and implement it again in the future. The presence of video recording equipment or a researcher carrying out observations would affect the naturalistic aspects of the study and minimise the school's feeling of ownership over the project. It was therefore decided that the researcher would carry out highly structured observations of the children in free play, using the POC (Bramlett & Barnett, 1993) to enable quantitative data to be yielded to track development over the course of the three time intervals.

#### *3.9.1.2.1 Piloting the POC.*

When data gathering measures are used for the first time, it is essential to carry out some degree of piloting or pre-testing of the measure (Silverman, Cassata, Gottfredson and Rosenberg, 2009). The Pre-school Observation Code (POC) is a particularly detailed tool with a specific method, which the researcher had no prior experience of. Whilst the researcher is

trained in observation methods and has gained experience of classroom observation during placement as a Trainee Educational Psychologist, she was not practiced in carrying out observations which involved event sampling. Therefore the POC was trialled during the researcher's day-to-day practice, which allowed the researcher to test and become familiar with the instrument, which included creating and testing an audio recording which alerted the researcher to the time intervals. This enabled the researcher to feel confident in applying the codes and working to a fast-paced time schedule, and in addition, allowed the researcher to train a colleague to use the schedule for the purposes of validation.

The subjective nature of observations means that they can be open to bias and it is important to make attempts to establish that the researcher's coding is accurate and reliable. In order to assess the researcher's own reliability of codings, and reduce observer bias, the researcher established inter-observer agreement before the POC was used as a research tool, by carrying out a joint observation with a second observer. This was followed by comparison and discussion of codes in order to arrive at a level of agreement about codes before undertaking the observation. To ensure the second observer had the skills necessary to carry out the observation, the researcher recruited an Educational Psychologist colleague who was familiar with the school context and had recent research experience, as well as professional experience of carrying out observations and the appropriate professional qualifications, namely a Doctorate in Educational and Child Psychology. An inter-rater reliability analysis using the Kappa statistic was performed to determine consistency among raters The inter-rater reliability for the raters was found to be Kappa = 0.996 ($p = <0.001$).

#### *3.9.1.3 Peer sociometric nominations.*

Sociometric assessment has been used extensively to provide information about the level of peer social acceptance as an indicator of social competence (Odom, McConnell & Brown, 2008). The approach can yield information from peers which is often very salient to children but not accessible to adults (Rubin, Bukowski and Parker, 2006). Peer assessments were therefore identified as a useful method to gain an additional previously untapped perspective, as well as triangulating the data gathered from other sources.

The measurement of social competence in young children using sociometric assessment generally takes one of two forms, peer ratings or peer nominations (Odom et al., 2008). Peer ratings involve each child rating every other child in the class on predetermined dimensions, and are useful to study relationships within the class, as well as providing a single score which can be compared across the group. Peer nominations (Coie, Dodge & Coppottelli, 1982) typically involve each child nominating a fixed number of children on a positive and/or negative dimension, and nominations are then totalled in order to classify children into distinct social groups, such as; neglected, rejected, popular, controversial and average.

Peer nominations using the Coie et al. (1982) method were utilised, adapting the activity so that it was developmentally appropriate for young children. The sociometric activity was conducted with every child in the class on an individual basis. The class teacher provided each child with a board that held photographs of all the children in the class. The children were asked to choose three children they most liked to play with and three children they least liked to play with, indicating their choice by placing the photographs into a box with either a happy or a sad face. The class teacher noted down the choices of all children in the class and anonymised the data, before forwarding to the researcher. The peer sociometric nomination activity was carried out at all three time intervals.

### 3.9.2 Qualitative data collection.

#### *3.9.2.1 Semi-structured group interview.*

A semi-structured group interview was conducted at Time 2 to gain the Play Supporters' perceptions of their experience of facilitating the Play Bank sessions. The interview addressed research questions 1, 2 and 3 (see Table 3.4, page 62). In order to answer research questions 1 and 2, the Play Supporters were asked about their views on i) how the sessions were experienced by the children ii) the changes in interaction during the sessions and iii) any effects noticed in the children during classroom activities. This helped to triangulate the data gathered by the quantitative measures. In order to answer research question 3, the Play Supporters were also asked about their experience of facilitating the sessions and any associated barriers or facilitators . The research questions were given to the Play Supporters in advance of the interview to give them time to reflect on their experiences and orient themselves to the purpose

of the interview. The group interview was audio recorded and a full transcription performed in order to prepare for the thematic analysis (Attride-Sterling, 2001).

The interview method is a suitable tool to be used in combination with other methods, as it can usefully incorporate the participant's perspective when quantitative methods have been used (Robson, 2002), as is the case in the current research. Robson (2002, citing King, 1994 pp 16-17) notes that the qualitative interview is particularly appropriate when historical accounts are required about how a particular phenomenon has developed. The rationale for conducting the interview jointly with both Play Supporters was based on time efficiency, as well as the potential for the participants to feel more relaxed and under less pressure than they may have felt in the one-to-one interview situation. In addition, as the researcher aimed to support the school to learn from the process of implementing the research, it was felt that the Play Supporters would benefit from hearing each others' experiences and perspectives.

The interview method was used in the initial study carried out by the author as a means of collecting data from the Play Supporters relating to the implementation of Play Bank. The interview provided a rich source of data relating to the barriers and facilitators of Play Bank sessions, as well as considerations for future implementation of the sessions. The discussions which took place during the interview largely shaped the way in which Play Bank was developed for the current study, providing the researcher with a clear understanding of the practical issues which need to be addressed.

During the preparation stage of this research, the researcher reflected on the use of the interview in the initial study (for the schedule, see Appendix D) and concluded that many of the implementation issues had been addressed, which left scope for the interview to serve a different purpose in the current study. In addition, the researcher felt that the initial study lacked qualitative information from the Play Supporters about the way in which the interaction developed over the course of the sessions. As a result, the interview schedule was revised (see Appendix E) to include prompts about the progress made by the children during the sessions and it was decided that the Play Supporter interview would be used to triangulate the quantitative measures being used in the current study.

## 3.10 Data Analysis

The data analysis methods used for each of the research questions can be seen in Table 3.4 on page 62 and are described in more detail below.

### 3.10.1 Quantitative data analysis.

Descriptive statistics were used to summarise and compare individual participant scores arising from the PIPPS, the Pre-school Observation Code and the peer sociometric nominations. For the PIPPS data analysis, T-scores were calculated individually for each of the participants, across the three dimensions of the PIPPS, Play Interaction, Play Disruption and Play Disconnection, in order to analyse the difference in scores at the three time intervals. In addition, overall mean scores were presented in order to consider the overall differences across the three time intervals.

For the sociometric data, Walsh's Classroom Sociometrics; a computer program; was used to compute the data and produce sociograms of positive and negative nominations, as well as assign classifications of social status to the children based on their nominations. In addition, a frequency count shows the number of positive and negative nominations received by each target child.

Finally, the researcher's structured observations were summarised according to the observed states and events in order to analyse any changes in interactive behaviour. State behaviours were analysed by the percentage of time the child spent in particular states during the observation period and the frequency of events was calculated in order to give an estimation of rate.

### 3.10.2 Qualitative data analysis.

A thematic analysis, using thematic networks, as described by Attride-Stirling (2001), was applied to the data drawn from the semi-structured group interview with the Play Supporters. Attride-Sterling (2001) describes the purpose of thematic analysis as seeking to 'unearth the themes salient in a text at different levels' (p.387).

Figure 3.3 shows the six steps in thematic analysis proposed by Attride-Stirling (2001). The process of analysis begins with the identification of basic themes, which through re-examination of the data are then refined and classified into similar groups, then combined under organising themes. Finally, global themes are identified which encapsulate the main points of the data. Thematic networks are constructed by working inwards from the basic themes through to the global themes, which can then be described and explored whilst returning to the original text. Thematic networks are a useful way to organise the thematic analysis, as they illustrate the relationships between themes and make the process of interpreting text more explicit.

**ANALYSIS STAGE A: REDUCTION OR BREAKDOWN OF TEXT**

**Step 1. Code Material**
(a) Devise a coding framework
(b) Dissect text into text segments using the coding framework

**Step 2. Identify Themes**
(a) Abstract themes from coded text segments
(b) Refine themes

**Step 3. Construct Thematic Networks**
(a) Arrange themes
(b) Select Basic Themes
(c) Rearrange into Organizing Themes
(d) Deduce Global Theme(s)
(e) Illustrate as thematic network(s)
(f) Verify and refine the network(s)

**ANALYSIS STAGE B: EXPLORATION OF TEXT**

**Step 4. Describe and Explore Thematic Networks**
(a) Describe the network
(b) Explore the network

Step 5. Summarize Thematic Networks

**ANALYSIS STAGE C: INTEGRATION OF EXPLORATION**

**Step 6. Interpret Patterns**

*Figure 3.3 - Steps in Thematic Analysis, from Attride-Stirling (2001)*

Another method of conducting thematic analysis is proposed by Braun and Clarke (2006) who recommended a six-stage process for identifying, analysing and reporting patterns within data sets. This process was also considered as a method of data analysis, as it is frequently cited in the literature and emphasises similar processes such as getting to know the data, producing codes which are further refined into themes and reporting the analysis with the assistance of thematic maps. However the Attride-Stirling (2001) method was chosen as it uses three levels of themes which are clearly defined: basic, organising and global. There is a systematic process for identifying the levels of themes which is made explicit in the paper, and is therefore easy for the researcher to follow when conducting their own analysis. In contrast, the Braun & Clarke (2007) paper is less clear about the process for identifying different levels within the analysis and only briefly mentions sub-themes, without providing any real guidance on what constitutes a sub-theme or how one should be identified. The inductive process of working from basic themes up to global themes advocated by Attride-Sterling (2001) was considered more systematic by the author and helped to make the large amount of data more manageable to process. The Braun and Clarke (2007) process of thematic analysis could be described as more deductive, allowing the researcher to move through different levels of analysis freely. Indeed, Braun and Clarke (2007) note that the benefit of thematic analysis is its flexibility, however the current author preferred the structure provided by the Attride-Sterling (2001) model.

The thematic analysis was driven by theory uncovered during the literature review, as well as the researcher's interests, which arose from an in-depth knowledge of the research topic achieved during the preliminary study. The questions and prompts in the interview schedule were therefore theory driven, and the researcher had this in mind when drawing themes from the data. However, despite the researcher's previous experience, an open-minded approach was maintained about the topics which might arise during the interview, owing to the novel context in which the research took place. Indeed a number of themes arose from the data, which were not anticipated, and as a result the analysis of these themes was data driven. Therefore a combination of deductive and inductive approaches (Braun & Clarke, 2006) was adopted in order to represent what was salient for both the researcher and the participants.

The interview was audio transcribed and qualitative analysis software, Nvivo 9, was used to apply initial codes to the interview data. Following initial coding, the data were re-examined and codes were loosely grouped into initial organising themes in order to organise the codes into

manageable sections (see Appendix M). A further examination of the data enabled the codes to be combined into basic themes within organising themes. The researcher intended to achieve this by colour coding the basic themes using Nvivo 9, however, software compatibility issues had reduced the functionality of the program preventing the researcher from using the colour-coding function. As a result, the thematic analysis was continued using a manual pen and paper approach, which the researcher felt on reflection, was a useful way of approaching the data because it allowed the researcher to get a closer feel for the data than if viewing it through a computer screen. The basic themes were therefore colour coded manually to provide a clear visual representation of the different themes at this early stage (see Appendix N). A further refining of themes was carried out after the themes were constructed into a thematic network (Attride-Stirling, 2001).

## 3.11 Critique of Methods

### 3.11.1 Research design

The chosen methodology for this piece of research was a case study design (Yin, 2009), as the small sample size means that each case can be examined in more detail, and the design can include both quantitative and qualitative analysis. Case studies have been criticised for their lack of scientific rigour (Yin, 2003) and the difficulty with generalising results, which is particularly true given that the sample is not representative of the larger population. However, Yin (2003) asserts that whilst case studies are not generalisable to populations, they are generalisable to theoretical propositions. In addition, there is a risk, to which some researchers have succumbed, of using a case study to illustrate evidence in support of a theory. However, Yin (2003) advises that researchers ensure that all data is reported openly and fairly, whilst also highlighting that experimental methods are also open to bias.

An alternative research design which could have been utilised is a quasi-experimental design, the one group pre-test-post-test (Cohen, Manion & Morrison, 2007). This would provide a measurement of the effects of an independent variable, such as a peer-mediated play intervention, on the dependent variable, such as interactive play. In a pre-test-post-test design, the pre- and post-test measures show the difference observed in the dependent variable and

when compared against a control group, the researcher can attribute any changes on the post-test measure to the effects of the intervention. The use of a control group as part of an experimental design may have controlled for alternative explanations of the changes in behaviour, however to truly control all variables in a naturalistic environment is challenging.

Alternatively, a single-case research design, such as the ABCB reversal design could have been employed, as seen in Goldstein et al. (1992). Goldstein et al. (1992) used a reversal design rather than a withdrawal design (i.e. return to baseline) in order to demonstrate that changes in target child behaviour were related to peer behaviour, in a relatively short period of time. Whilst this would provide robust evidence, it would have been difficult to implement an ABCB research design for this research study owing to the demands it would have placed on the school staff who were carrying out the intervention. This design would require school staff to be deployed to carry out the intervention for a total of 18 weeks in order to carry out the intervention, reversal and return to intervention phases. In a busy school with a number of children requiring intervention and small group input from teachers, 18 weeks spent on one group of children would be difficult to justify. A possible solution to this may have been to carry out an ABAB design which would have reduced the total intervention time to 12 weeks, however, this may also have stretched school resources. In addition, it may have had ethical implications owing to the same group of children receiving the intervention twice when a second group of children could have benefitted from the intervention instead.

Although the design of the study does not carry the gold standard of a randomized controlled trial, it does provide a high level of ecological validity which is achieved through evaluating routine practice (Barkham & Mellor-Clark, 2003) and usefully enables the findings to be generalised to other school environments. Whilst a case study design may limit the extent to which changes in behaviour can be attributed to participating in Play Bank, owing to the lack of a control or comparison group, it is worth considering the expected changes peer interaction and social competence in this age group. Hojnoski et al. (2009) studied the verbal interactions of children in a Nursery setting and showed that increases in verbal interaction were modest between the ages 3 to 5 years, increasing from .10 for 3 year olds, to .17 for 4 year olds and .20 for 5 year olds. Likewise, Williams, Mastergeorge and Ontai (2011) reported no changes in peer sociability over the course of 6 months, suggesting that changes in social competence can also be modest in young children, despite intervention.

### 3.11.2 Mixed methods.

A multi-method approach to the study of behaviour is an indicator of quality behavioural research, because multiple informants can contribute different types of information that may help to better define a behavioural construct (e.g., Achenbach, McConaughy, & Howell, 1987; Waters and Sroufe, 1983). However, there are issues with combining paradigms within one research project, which can present conflicting demands. For example, the sample size usually adopted for qualitative studies which have less focus on inferential statistics is considerably smaller than needed for quantitative studies, which then becomes problematic when analysing the quantitative data (Morse, 2002). Indeed, the quantitative data could not be subjected to statistical analysis because the sample size was too small. However, the benefit of supplementing the quantitative data with qualitative data lies in the opportunity to focus on the individual stories of the children, from the perspective of the Play Supporters.

### 3.11.3 Penn Interactive Peer Play Scale (PIPPS; Fantuzzo et al., 1995).

The Penn Interactive Peer Play Scale (PIPPS) has been used by Fantuzzo et al. (1996, 2005) to identify levels of interactive play amongst children in a pre-school setting, for the purposes of identifying children to be targeted for intervention. However, it can also be used to create a common language between parents, inform an early childhood curriculum, and as in the current study, to evaluate classroom interventions (Fantuzzo & Hampton, 2000).

Fantuzzo et al. (1995) carried out a series of common factor analyses and were able to determine construct validity, as well as high levels of internal consistency for all three factors of the PIPPS. The preschool version of the PIPPS was standardised (Fantuzzo, Coolahan, Mendex, McDermott & Sutton-Smith, 1998) with predominantly African American children in an urban district between the ages of 37 and 64 months, a sample not representative of the current study's population. A later study by Gagnon and Nagle (2004) provided some validation beyond the initial standardisation sample to include a sample of primarily Caucasian children living in a more rural area, however this is still a relatively narrow sample which is also not reflective of the sample used in the current research. Whilst the age range and geographical setting are appropriate, the PIPPS was not standardised for the current study's population and so caution must be taken with interpreting the results of the PIPPS (Fantuzzo et al. 1995; McWayne,

Sekino, Hampton and Fantuzzo, 2002). Nevertheless, the PIPPS was found to be the most appropriate research tool available to the researcher to measure play-based social competence and is therefore being used with the acknowledgement that results may not be truly representative.

In general, rating scales are a useful method of gathering data because they allow sensitivity and differentiation of response whilst still producing numerical data (Cohen, Manion & Morrison, 2007). A disadvantage of rating scales is that they are subject to participants' biases and it is not possible for the participant to add any further detail to their answer, which may have been crucial to the topic being investigated. In addition, it is suggested that there is a trend of participants opting for the mid-point on a rating scale, which may not truly reflect their feelings or opinions, yet this is guarded against in the PIPPS with the use of an even number scale.

Teacher ratings have been established as accurate and reliable measures of children's social play behaviour (Coplan & Rubin, 1998) perhaps because teachers spend a large amount of time with children in their class, and so can give reliable judgements about their behaviour. Webster-Stratton & Lindsay-Woolley (1999) argue that teachers are able to provide valid judgements about children's externalising behaviour problems, yet are less able to detect social competence. Other studies (McWayne, Sekino, Hampton & Fantuzzo, 2002; Ogden, 2003) argue that pre-school teachers are valid sources of information about social competence and moreover, pre-school rating scales provide a valuable source of information concerning young children's social behaviour which is often a quicker, less expensive alternative or addition to behavioural observations (Coplan & Rubin, 1998).

A limitation in the way the PIPPS is being used in this study relates to the time period in which it will be administered. The PIPPS instructions state that teachers and parents should rate behaviour based on the past two months, however the PIPPS is being administered two weeks after the final session and participants will be asked to rate children's behaviour at that time. It could be argued that the PIPPS, used as a static measure, may not be sensitive enough to detect any changes in behaviour. Despite this criticism it was the most suitable measure available to the researcher which measured the constructs of interest and, on balance, it was decided that the benefits outweighed the risks. In addition, to address the potential lack of sensitivity, free-play observations using a time- and event-sampling method were used in order to triangulate the PIPPS data.

The Teacher-Child Rating Scale (TCRS; Hightower et al., 1986) could have been selected as an alternative to the PIPPS as it has been used to measure social competence in recent studies of pre-school children (Brophy-Herb, Lee, Nievar & Stollak, 2007; Pianta, La Paro, Payne, Cox, & Bradley, 2002) and also has a parent version, the Parent-Child Rating Scale (PCRS). It is made up of 38 items, of which 20 refer to social competence, including items relating to shy and withdrawn behaviour such as 'shy, timid' and 'anxious, worried', which are not represented in the PIPPS. However, there are a number of items relating to behaviours which were not of interest to the researcher, such as learning behaviours and task orientation, which would have been redundant.

### 3.11.4 The Pre-school Observation Code (POC).

Observational research is a preferential method in social research as it gives direct access to social interactions and tells us what is actually happening, rather than relying on participant reports (Muijs, 2004). The type of observation carried out can provide either qualitative or quantitative data and is therefore either favoured or rejected by researchers depending on their paradigm or epistemology and ontology. Observations are criticised for their lack of generalisability, when viewed from a positivist standpoint (Coolican, 2004), although reliability can be increased by the use of reliability checks such as inter-observer agreement, as discussed in section 3.8. However, positivists would agree that realism in observation is high, as the experiences recorded by the observer are usually genuine (Coolican, 2004). From a constructionist perspective, the naturalistic observation is preferred because of its ability to generate rich data and a greater understanding of the phenomenon, something which the structured observation cannot provide (Coolican, 2004). However, for the current research, the use of a time-sampling method, which generalises quantitative data, provides a 'reliable but not rich' set of data which can be used to compare observations.

Fawcett (1996) suggests the benefits of a time-sampling method are that it allows for fine-grained detail of behaviour to be recorded and comparisons made, in a way that is easily understood. The disadvantages of a time-sampling approach include a risk of unrepresentative sampling, potential for bias owing to the use of predetermined codes, and a lack of analysis about why certain behaviours occur. However, the purpose of the observation schedule was to

identify any behavioural changes in interaction over the course of time, rather than trying to provide explanatory data.

Prior to identifying the POC (Bramlett & Barnett, 2003) as a useful measure for the free-play observations, the researcher considered the use of The Interactive Peer Play Observational Coding System (Fantuzzo et al. 1996). It would seem a feasible option for the current research as it has been used previously for the purposes of evaluating RPT (Fantuzzo et al., 1996; 2005), and it provides data on the different levels of interactive play which children engage in, such as solitary play, through to interactive and collaborative play. However, the researcher was aware that whilst the children would be observed during 'free play', the setup of a Nursery classroom is such that children might only engage in play for a proportion of their time alongside other activities such as mark-making, arts/crafts, and the book corner. It would have been logistically challenging, and less ecologically valid to engineer play situations for the purposes of the observation and so the researcher had to consider the most appropriate way of observing the children's interactions during their 'free play' time. To use the Interactive Peer Play Observational Coding System in this context may have resulted in little data being recorded if the children did not engage in play activities for the duration of the observation.

### 3.11.5 Peer sociometrics.

Peer sociometrics are an accepted and well-used method of measuring social competence in children (Bukowski & Cillessen, 1998; Newcomb, Bukowski, & Pattee, 1993). Peer social relationships are often viewed as an overall measure of social competence, because early social acceptance and interaction with the peer group appears to be a facilitator of social competence (Odom, Zercher, Li, Marquart, Sandall & Brown, 2006).

Acknowledging the importance of early intervention in building peer relationships, many researchers have investigated the use of classroom sociometrics with pre-school children (Howes, Rubin, Ross & French, 1988; Wu, Hart, Draper & Olsen, 2001; Olson & Brodfield, 1991) and have found that they are reliable informants. Wu, Hart, Draper & Olsen (2001) examined the concordance of sociometric nominations between teachers and peers, and found high reliability in teacher and peer views of popularity, however they found less stability in peer nominations compared to teacher nominations over time, which might be expected given that these measures can tap into social information which is accessible by children but not adults (Rubin, Bukowski and Parker, 2006).

Peer nominations were chosen for this study rather than peer ratings, owing to the time requirements, as well as the capacity of the class teacher carrying out the sociometric activity. The peer rating technique, as described previously in section 3.9.1.3, requires all children to rate every other child in the class which would have taken considerably more time to administer and as a result, may have been difficult to achieve with young children given their attention span. Cillesen (2009) notes that peer nominations are more frequently used than peer ratings because of the impracticality of collecting ratings across large groups.

Some of the disadvantages associated with sociometrics relate to the practical difficulties with performing the activity. It is time consuming and can be threatened by difficulties accessing all of the participants particularly over the course of time, for example when children may move schools and can no longer be accessed (Cillesen, 2009). There are ethical issues involved with asking peers to make negative judgements about others (Terry & Coie, 1991), however Cillesen (2009) argues that these are judgements which most children make on a daily basis and with careful delivery which respects privacy, the researcher can minimise the ethical implications, such that the risk is small compared to the benefits gained by collating sociometric data.

### 3.11.6 Semi-structured group interviews.

Semi-structured interviews are a commonly used method in qualitative research as they allow researcher to directly as participants about the subject being studied, in order to answer our research questions (Robson, 2002). There are disadvantages to the interview method which must be weighed up against the advantages when considering the research design. Conducting an effective interview requires skill from the researcher in interpreting additional messages which might be given in addition what is being said, for example through non-verbal communication (Robson, 2002). As a Trainee Educational Psychologist, the researcher has a good understanding of non-verbal cues and the interpretation of people's communication and so felt capable of using the interview method for this study.

A potential limitation of the use of a group interview for this study may have been around conflict between the two interviewees' personalities or the tendency of one interviewee to dominate over the other. The researcher was mindful of this during planning and ensured the use of a structure which enabled both interviewees to be heard. This is an advantage of using a semi-structured interview, as it provides enough structure to maintain a controlled interview and fulfil the researcher's requirements, yet it also allows freedom for varying amounts of time to be spent on, and for new questions to be asked about, topics of interest which may arise (Banister, Bunn, Burman, & Daniels, 2011).

Interviews generate a large amount of data and so a disadvantage lies in the amount of time taken to analyse the data, and make sense of it against the research questions. Whilst the data is rich, it can be messy (Banister et al., 2011) and therefore there are other more time efficient data collection methods that can be used to gain participants views, such as questionnaires. As stated previously, interviewing the two Play Supporters together aimed to increase time efficiency, and whilst questionnaires may have been even more efficient, they would not have provided the flexibility and access to rich, in-depth data which the interview provides.

### 3.12 Timeline and Time Budget

A timeline and time budget, shown in Table 3.5 were completed to assist with research planning.

Table 3.5 – Timeline and Time Budget

| Purpose | Activity | Time Budget | Completed By |
|---|---|---|---|
| **Preparation** | Discuss Play Bank with Supervisor and other EPs involved in project | 2hrs | 20.12.12 |
| | Reading and rationale. | 12hrs | 04.01.13 |
| | Arrange meeting with Primary School to discuss intervention and research requirements | 1.5hrs | TBA mid January |
| | Design interview schedules | 2hrs | 04.01.13 |
| | Complete draft thesis proposal | 14hrs | 04.01.13 |
| | Write information sheet and consent letters for parents | 1hr | 31.01.13 |
| | Write information sheet and consent forms for Play Supporters | 1hr | 31.01.13 |
| | Complete draft thesis proposal following tutor feedback and send in Ethical Approval Form. | 10 hrs | 04.02.13 |
| | Attend thesis panel | 2hrs | 18.02.13 |
| | Plan parent information evening | 1hr | 29.03.13 |
| | Design Play Supporter training | 7 hrs | 29.03.13 |
| | Design sociometric rating activity | 7 hrs | 08.04.13 |
| | Complete Literature Review (A2) | 21hrs | 15.04.13 |
| | Send information letters and consent forms to parents and teaching staff | 2hrs | 22.04.13(if ethics granted) |
| | Hold parent information evening | 1hr | 26.04.13 |
| | Meet with Play Supporters and teachers, collect consent forms and go through measures | 2hrs | 26.04.13 |
| | Deliver Play Supporter training | 3hrs | 03.05.13 |
| **Data Collection (Time 1)** | Distribute Time 1 PIPPS to teaching staff and parents | 1hr | 26.04.13 |
| | Collect Time 1 PIPPS from teaching staff and parents | 1hr | 09.05.13 |
| | Teaching staff to carry out sociometrics with children | 2hrs | 09.05.13 |
| | Carry out Time 1 free-play observations of target children | 3-4hrs | 10.05.13 |

| | | | |
|---|---|---|---|
| **Intervention period (Stage 1 analysis)** | Play Bank begins | - | w/c 13.05.13 |
| | Score and analyse Time 1 PIPPS | 7hrs | 27.05.13 |
| | Score and analyse Time 1 free-play observations | 7hrs | 28.05.13 |
| | Play Bank ends | - | w/e 28.06.13 |
| **Data Collection (Time 2)** | Distribute Time 2 PIPPS to teaching staff and parents | 1hr | 08.07.13 |
| | Group interview with Play Supporters | 1hr | 01.07.13 |
| | Collect Time 2 PIPPS from teaching staff and parents | 1hr | 15.07.13 |
| | Deadline for teaching staff to carry out Time 2 sociometric activity | - | 16.07.13 |
| | Free-play observation | 3-4hrs | 16.07.13 |
| **Data Analysis (Time 2)** | Transcribe the group interview | 5hrs | 31.07.13 |
| | Thematic Analysis of the group interview transcription | 14hrs | 09.08.13 |
| | Score and analyse Time 2 PIPPS | 7hrs | 13.09.13 |
| | Score and analyse Time 2 free-play observation | 7hrs | 14.09.13 |
| | Score and analyse sociometric data | 6hrs | 30.09.13 |
| **Data Collection (Time 3)** | Distribute Time 3 PIPPS | 1hr | 10.01.14 |
| | Deadline for staff to complete Time 3 PIPPS | - | 18.01.14 |
| | Deadline for staff to complete Time 3 sociometric activity | - | 18.01.14 |
| | Time 3 free-play observation | 3hrs | 19.01.14 |
| **Data Analysis (Time 3)** | Score and analyse Time 3 PIPPS measures | 7hrs | 25.01.14 |
| | Score and analyse Time 3 free-play observation | 7hrs | 26.01.14 |
| | Score and analyse sociometric data | 7hrs | 27.01.14 |
| **Write Up** | Methodology | 7hrs | 31.10.13 |
| | Results | 21hrs | 06-09.02.14 |
| | Discussion | 35hrs | By 28.03.14 |
| | Final write up and submit to University | 35hrs | May 2014 |
| | Feedback to School | 1hr | June 2014 |

### 3.13 Operational Risk Analysis

An operational risk analysis, shown in Table 3.6, was carried out during the research planning stage in order to identify risks and related contingency plans.

Table 3.6 – Operational Risk Analysis

| **Risk** | **Level of Risk** | **Contingency Plan** |
|---|---|---|
| Parents of children to be involved in Play Bank may not give consent for their data to be collected as part of the evaluation | Medium | Give full information about the nature of the research and the way the information will be used to evaluate the success of the intervention. Aim to send out consent as soon as Ethics approval has been granted. |
| Too many parents may opt out of allowing their child to take part in the sociometric exercise making the exercise invalid | Low | Class teacher to complete the sociometric exercise on behalf of the children. |
| School Staff may not give consent to take part in the research. | Low | Have discussion with school to scope out the interest in the project and the feasibility of teaching staff being able to take part in the research. Hold a meeting with the teaching staff to explain the evaluation and give full information about the nature of the evaluation and the way the information will be used. Give out consent form at the initial meeting. |
| Teaching staff may not be able to meet deadlines for pre and post measures | Low to medium | Make clear the requirements of the research and the importance of deadlines at first meeting with staff. Give teaching staff enough notice to complete the measures by the required deadline. |
| Intervention may be delayed due to unforeseen circumstances | Low to medium | Allow for extra time for the intervention in case of unforeseen circumstances. |
| Play Supporters may not give consent to take part in the group interview | Medium | Meet with the Play Supporters at the earliest possibility to explain the interview, what questions may be asked and how the information will be used. Gain informed consent for the interview to be recorded, transcribed and analysed. Arrange the interview for a convenient time for Play Supporters to attend. |

| | | |
|---|---|---|
| Play Supporters may decide to pull out of running the intervention | Low to medium | Ensure staff have full and clear information about the expectations and time commitment involved to enable them to make an informed decision to participate. Discuss contingency plans with school and establish if there are other members of staff who could fill in if necessary. |

### 3.14 Ethical Considerations

Due regard is given to the British Psychological Society (BPS) Code of Ethics (2009) throughout the research project. The researcher practices according to the Health & Care Professions Council Standards of Proficiency (HCPC, 2010). The research proposal was submitted to the School of Education Research Integrity Committee and was deemed to be a medium level of risk. Ethical approval was granted on 10th May 2013 (see Appendix O). Minor amendments were made to the research plan in March, May and July 2013 and these were submitted to the Research Integrity Committee.

#### 3.14.1 Informed consent.

Ethical approval was sought from the School of Education Research Committee and following approval, the researcher distributed participant information sheets and consent forms to the school staff. It was originally planned for the researcher to hold an information evening for the parents of the children participating in Play Bank, however, following advice from the class teacher about the nature of parents' participation and willingness to engage with outside agencies, it was decided that the research should be explained by a familiar person. The parents were therefore given the full details of the project and the participant information sheet and consent form (see Appendix G). The parents were invited to contact the researcher at any time if they required any further information or had any concerns about the research. The parents were given a period of two weeks to take away the participant information and make a decision about their child's participation in the research. As the sociometric activity was considered to be a method used as part of usual classroom practice, the parents of the children

asked to take part in the class sociometric activity received a participant information sheet outlining the activity and an opt-out consent form (see Appendix I). All participants were informed of their right to withdraw from the research at any time, without detriment to them.

### 3.14.2 Confidentiality.

Participants in research have the right to remain anonymous and it is therefore important to ensure that confidentiality is strictly adhered to throughout the research. This is particularly relevant to the teaching staff who were asked for their personal opinions in an interview which was audio recorded, transcribed and extracts used in the research write-up. It was acknowledged that when the Play supporters were discussing barriers, they may have wanted to talk about issues caused by their school and so confidentiality was important in this respect. Play Supporters were informed that their quotes may be used in the research write-up but that all personal references would be anonymised, including the school name and location so that the Play Supporters could not be identified with their data. However, the researcher acknowledges that within the school environment, the teaching staff were readily identifiable as being involved in the project by other staff members and would therefore be connected with the opinions expressed in the research write-up. The teaching staff were made aware of this possibility and were therefore given the option to inform the researcher if there were any aspects of the interview that they would not wish to be made public, despite the anonymisation of their details. In addition, all questionnaires were anonymised, and along with the audio transcripts were stored securely in a locked filing cabinet.

The confidentiality of the target children's classmates who took part in the sociometric rating activity was strictly maintained and all results were made anonymous through the use of codes. The results of sociometric nominations are potentially sensitive in nature and could be upsetting for parents if the nominations are negative towards their child, therefore the anonymisation of the nominations was important to maintain the confidentiality of the raters and to prevent the nominations being associated with particular children.

### 3.14.3 Right to withdraw.

The Play Supporters and teachers were employed by the school and it was acknowledged by the researcher that these participants could feel under obligation to complete the research as part of their school duties and may not have felt able to withdraw if they wished to. It was therefore made clear from the outset that participants are under no obligation to complete the research and it would not adversely affect them if they felt they needed to withdraw at any time during the research.

### 3.14.4 Welfare of participants.

The researcher took precautions to ensure the wellbeing of all participants was not compromised by the additional demands of the research. The researcher acknowledged the need to consider the teaching staff's welfare and ensure the research was completed in a way that did not cause undue stress for the participants. In order to do this, the researcher communicated clearly the requirements of the research, and planned, in advance, suitable time scales for participants, as well as opportunities to meet and provide support for participants at each stage of the research.

As the parents of the children were asked to complete a questionnaire about their child's play skills, it was recognised that there was potential for this to be a sensitive subject for parents if they had any concerns about their child's play skills. It is also acknowledged that the questions in the questionnaire may have highlight concerns about their child's behaviour that parents hadn't previously recognised. To safeguard parents' welfare, the class teacher communicated to the parents that should they have any concerns they would be able to discuss these with their child's class teacher in the first instance. The class teacher was encouraged to contact the researcher if the parents wished to discuss this further.

## 4. Findings

### 4.1 Section Outline

The following section will begin by providing details on the timing of the delivery of Play Bank and missing data before presenting the research findings according to each research question. For research questions 1 and 2, the quantitative findings will be examined at the whole group and individual levels in order to examine the changes in peer interaction and play-based social competence in the children. Qualitative data will be presented which aims to triangulate the quantitative findings. Finally, qualitative data will be presented for research question 3 which will examine the process of implementing Play Bank.

### 4.2 Delivery of Play Bank

Play Bank sessions were planned to take place in the summer term, beginning mid way through the first half term, however delays gaining ethical approval and subsequently collecting initial data meant the sessions started two weeks later than planned. This meant that the sessions ran for one week prior to the half term holiday and then continued for the remaining five weeks. Owing to staff shortages, two of the planned 12 sessions did not take place. One of the target children did not take part in Play Bank as they sustained an injury, which resulted in a long period of absence and so this child was removed from the study. Of the remaining five children, four completed all 10 sessions delivered by the Play Supporters. Sarah only received five sessions because her Play Buddy went on an extended holiday half-way through the course of the sessions and was not replaced.

### 4.3 Missing Data

One of the target children, Bilal, did not return to the school in September following the delivery of the Play Bank sessions. Therefore the Time 3 data for Bilal is missing. The Time 2 sociometric nomination activity was missing nominations from six children out of a class of 24 because it was carried out at the end of the school term, and a number of children had been taken out of school early for extended holidays. The Time 3 sociometric activity was also missing Nominations from one child who was absent and Bilal, who had the left the school.

### 4.4 Mean Quantitative Findings for Research Questions 1 and 2

The findings from quantitative analysis of the data provided by the Pre-School Observation Code, (POC) the sociometric rating activity and the Penn Interactive Peer Play Scales (PIPPS) parent and teacher versions will now be presented.

#### 4.4.1 The Pre-school Observation Code (POC).

The free play observations were coded using the POC in order to gather quantitative data about the children's play behaviour at Time 1 and Time 2. The POC allows the researcher to compare the percentage of time children spend engaged in particular activities during free play, as well as the frequency of specific behaviours of interest, and positive and negative interactions. There are two categories of behavioural states which can be coded alongside another states, namely social interaction with peers and teacher monitoring/interacting. The behavioural states are therefore not mutually exclusive and do not add up to 100%.

Table 4.1 shows the mean percentage of time spent during observation by the group of children in behavioural states at the three time points.

Table 4.1 – Group mean percentage of time spent in classroom activities during free play

| | Mean % of time spent in states | | |
|---|---|---|---|
| | Time 1 | Time 2 | Time 3 |
| Play | 37.3 | 21 | 32.5 |
| Non-purposeful play | 1.7 | 0 | 0 |
| Unoccupied behaviour | 13 | 18.3 | 10 |
| Disruptive behaviour | 0 | 0.3 | 4.17 |
| Other behaviour | 12.3 | 24 | 20 |
| Social interaction with peer | 10.3 | 8 | 17.9 |
| Teacher monitoring/interacting | 4.7 | 8 | 5 |
| Pre-academics | 24.6 | 32.7 | 30 |

At each time point, the group of children as a whole spent the largest proportion of their time engaging in either play or pre-academics. The time spent engaging in play decreased from 37.3% to 20% at the Time 2 observation and then increased again at the Time 3 observation. The overall time spent by children socially interacting with a peers across activities was lower, and this decreased from 10.3% at Time 1 to 8% at Time 2. However, this increased again to 17.9% at Time 3. The children spent 13% of their time engaging in unoccupied behaviour at Time 1 and this increased to 18.3% at Time 2, and decreased to the lowest level, 10%, at Time 3.

Table 4.2 – Mean frequency of behavioural events occurring during free play observations

| | Mean no. of Events in 30 minutes | | |
|---|---|---|---|
| | Time 1 | Time 2 | Time 3 |
| Positive motor interactions | 9 | 25 | 55 |
| Positive verbal interactions | 8 | 28 | 55.5 |
| Negative motor interactions | 8 | 2 | 6.5 |
| Negative verbal interactions | 3 | 1 | 4 |
| Activity change | 3 | 0 | 5 |
| Child approaches teacher | 3 | 1 | 10 |

Table 4.2 shows the group mean levels of behavioural events recorded during the observations at each of the time points. The group means showed an overall increase in positive interactions and an overall decrease in negative interactions and teacher approaches by the child. The group mean frequency of positive motor interactions increased from 9 at Time 1 to 25 at Time 2. This represents an increase in positive non-verbal interaction such as making eye contact, smiling, passing a toy to another child. Positive non-verbal interaction then decreased to 12 at Time 3. The group mean frequency of positive verbal interactions increased from 8 to 28 following the sessions, suggesting a considerable increase in verbal interaction by the group of children. The positive verbal interactions then decreased to 6 at Time 3. The group mean frequency of negative motor interactions decreased from 8 to 2 at Time 2, indicating that negative behaviours such as snatching from other children decreased. However, the negative motor interactions then increased to 4 at Time 3. The group mean of negative verbal interactions decreased from 3 to 1 following the sessions, however this increased again to 4 at Time 3. Finally, the mean group rate at which the child approached the teacher decreased from 3 at Time 1 to 1 at Time 2 and decreased further to 0 at Time 3.

In summary, the free play observations using the POC indicated varied levels of interaction across the three time points. The overall time spent engaging in social interaction with peers was relatively low, however this increased over the course of time. The frequency of positive interactions increased and negative interactions decreased.

### 4.4.2 Sociometric nominations.

A sociometric rating activity was carried out with the whole class in order to measure levels of social acceptance amongst the target children's peers over the course of the three time points. The sociometric activity data was analysed to provide a mean number of positive and negative nominations at Time 1, Time 2 and Time 3, which are displayed in Table 4.3. The children's nominations were entered into software to create a sociogram, which allows us to gain an overall view of the social relationships within the class and clearly shows those children who are less socially accepted as well as those who have established mutual relationships. The sociograms for positive and negative nominations at each time interval can be found in Appendices P through U, with the target children highlighted in blue. The number of nominations received by the children in the sociogram enables their level of social acceptance to be classified as one of the following: popular, rejected, neglected or controversial. Children who do not receive enough nominations to be classified in any of these groups are considered to be within the average range.

Table 4.3 – Mean positive and negative nominations from the sociometric activity

| | Time 1 | Time 2 | Time 3 |
|---|---|---|---|
| Mean positive nominations (reciprocal) | 2.8(0.4) | 2.4(0.6) | 3(1.25) |
| Mean negative nominations (reciprocal) | 3(0.2) | 1(0.6) | 2.75(0.2) |

The group of target children received a mean of 2.8 positive nominations from their peers at Time 1. This was slightly lower than the mean positive nominations received by the non-target

children in the class, which was 2.9. A mean of 3 negative nominations was received by the group of target children at Time 1, which is slightly higher than the mean number of nominations received by the non-target children in the class, which was 2.8. At Time 2, the mean number of positive nominations appeared to have decreased to 2.4, however these nominations were missing the nominations of 6 children, which is a total of 18 nominations. Likewise, the mean negative nominations also decreased to 1, and the missing data may also have skewed this comparison.

Figure 4.1 shows the distribution of positive and negative peer nominations, along with the classifications obtained in the centre next to the child's name or number. As can be seen, 3 out of 5 children did not receive a classification at Time 1, suggesting their level of social acceptance was within the average range. Only 1 child received a classification of Neglected at Time 1, which suggests that they were the most socially withdrawn in the group. Finally, 1 child received a classification of Controversial, which reflects a high number of both negative and positive nominations, suggesting the child's peers have formed mixed views of them socially.

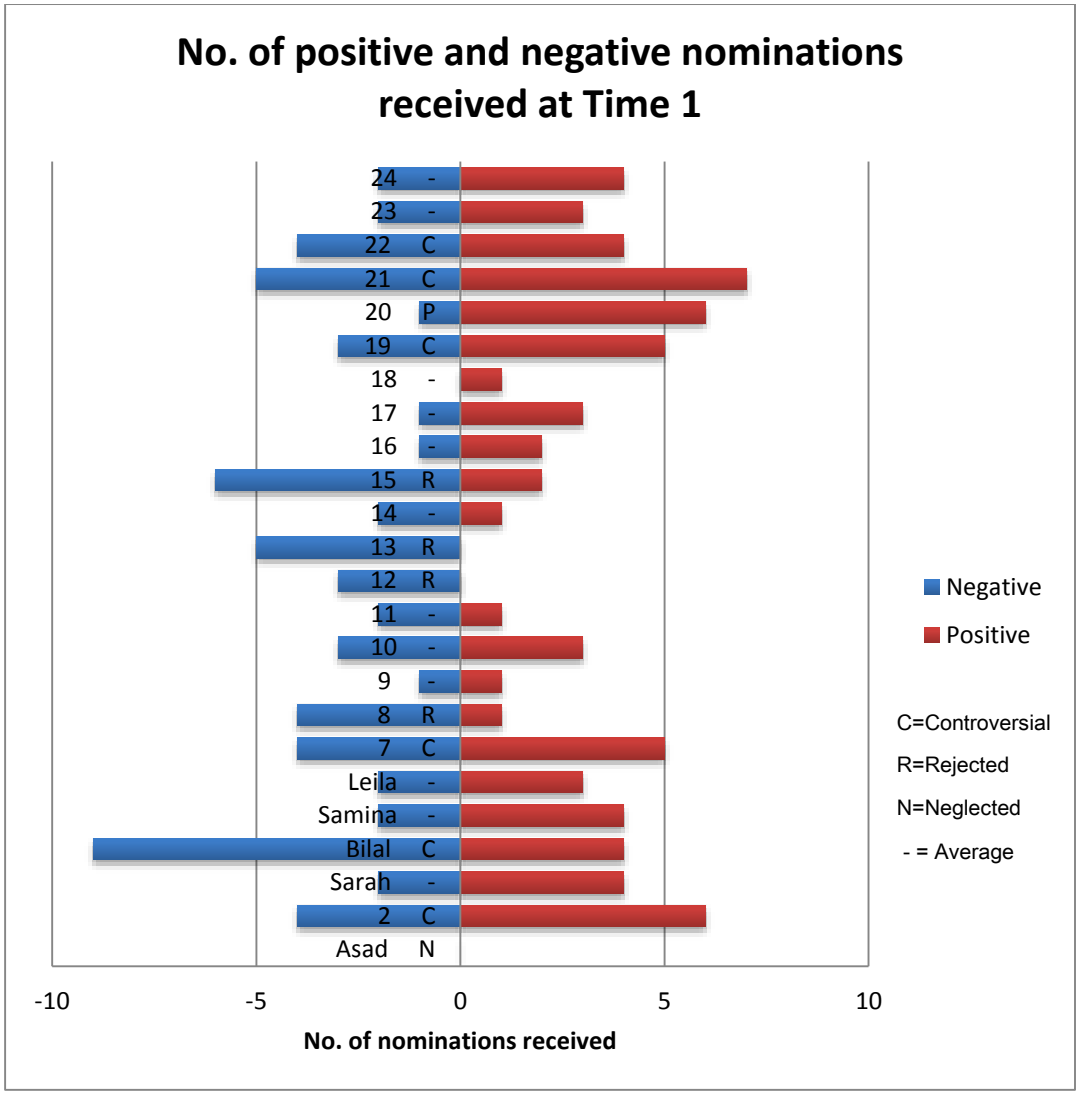



*Figure 4.1 - Distribution of positive and negative nominations across the whole class from the sociometric activity at Time 1*

Figure 4.2 shows the distribution of positive and negative peer nominations, and the classifications obtained at Time 2. There were changes from Time 1 to Time 2 in the classifications of 3 of the children, and 2 stayed the same. Increases in peer acceptance were noted for 3 of the children who had increased positive nominations. The total reciprocal nominations received by the group increased from 2 at Time 1 to 3 at Time 2. Again, it must be noted that the Time 2 sociometric activity did not contain the nominations of the whole class, and the 18 missing nominations from the 6 children may have substantially affected these results. The Time 2 sociograms in Appendices R and S reflect the reduced number of nominations made as a result of the children who were absent.

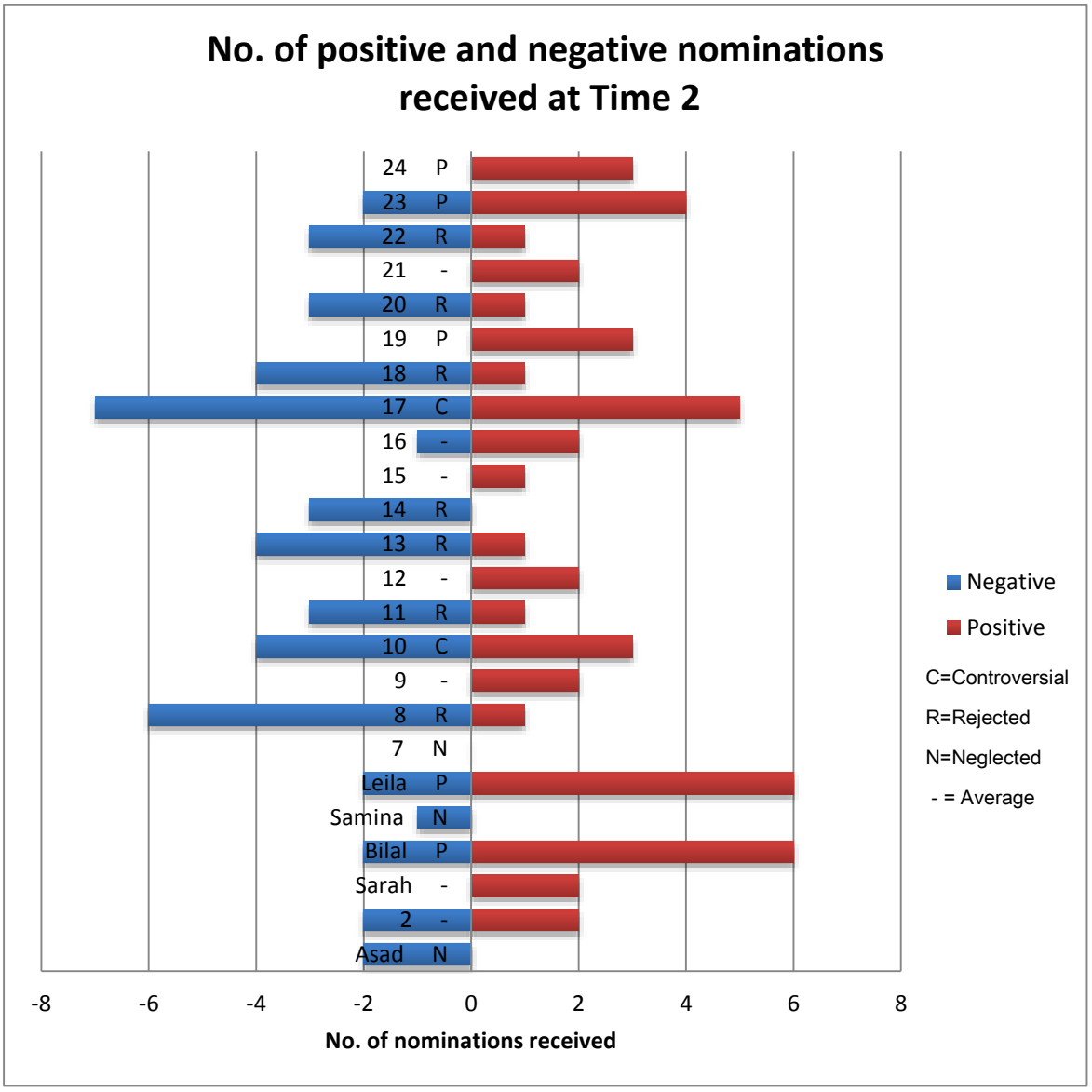



*Figure 4.2 - Distribution of positive and negative nominations across the whole class from the Time 2 sociometric activity*

Figure 4.3 shows the distribution of positive and negative peer nominations, and the classifications obtained at Time 3. Two of the children shifted positively in their classifications suggesting increased social acceptance, whereas the other three children remained the same. The Time 3 sociograms can be found in Appendices T and U and these illustrate the reciprocal nominations received by the children, of which the positives increased from 3 at Time 2 to 5 at Time 3.

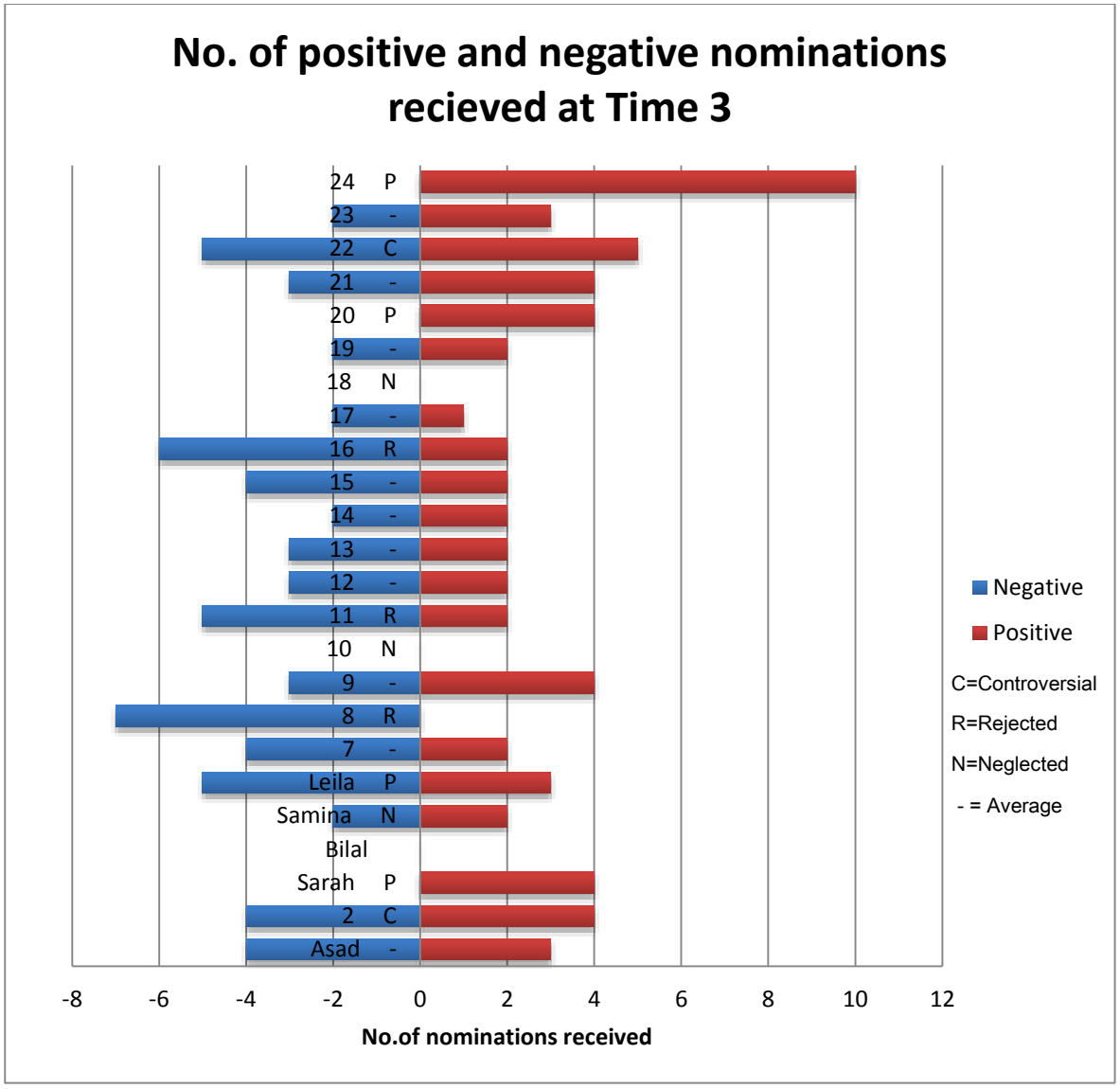



*Figure 4.3 - Distribution of positive and negative nominations across the whole class from the Time 3 sociometric activity*

### 4.4.3 The Penn Interactive Peer Play Scales (PIPPS; Fantuzzo et al., 1995)

The PIPPS (see Appendix C) provides teacher and parent ratings of play behaviour across three dimensions: Play Interaction, Play Disruption and Play Disconnection. Raw scores are translated into t-scores, based on a mean of 50 and a standard deviation of 10. Therefore, a t-score of 50 represents an average score based on the standardisation sample, and a t-score more than one standard deviation above or below the mean (i.e less than 40 or more than 60) represents a higher or lower than average score.

Table 4.4 – Mean teacher and parent PIPPS ratings

| **Teacher** | **Time 1** | **Time 2** | **Time 3** |
|---|---|---|---|
| Play Interaction t-score | 47.6 | 57.6 | 62 |
| Play Disruption t-score | 48.2 | 41.6 | 38.75 |
| Play Disconnection t-score | 53.8 | 41.2 | 42.5 |
| **Parent** | | | |
| Play Interaction t-score | 60.4 | 64.4 | 60.5 |
| Play Disruption t-score | 45.6 | 40 | 37.25 |
| Play Disconnection t-score | 52.2 | 40 | 42.25 |

The PIPPS teacher and parent ratings were converted into mean t-scores for each dimension and can be found in Table 4.1. The mean Time 1 t-score for Play Interaction, rated by the teacher, was 47.6 which shows that the children's pro-social behaviours were in the average range, despite being identified as the children with the most delay in their social development in the class. This could suggest that overall, the children's pre-school class may have above average play-based social competence compared with the US normative sample, or that the teacher ratings were an over-estimation of the children's development of these skills. The mean t-score rated by parents was higher and just above average, at 60.4, suggesting parents viewed their children as displaying more pro-social behaviour in play than the teacher did. The mean Time 1 t-score for Play Disruption, rated by the teacher, was 48.2, which indicates that the children's overall level of disruption was within the average range. The mean t-score of the

parent ratings suggests parental agreement, as it is not particularly discrepant at 45.6. The mean Time 1 t-score for Play Disconnection, rated by the teacher, is 53.8 which also suggests that the children's overall level of disconnection in play was within the average range prior to the start of the sessions. The parental ratings were in agreement with a mean t-score of 52.2.

There was an overall increase in the teacher ratings of the children's pro-social behaviour which is shown in Table 4.4 by an increase of 10 (=1 standard deviation) in the mean t-score at Time 2 and a further increase to 62 at Time 3. The parent's ratings also showed an increase of 4 in the mean t-score at Time 2, however this was not sustained and a decrease was seen at Time 3, back to the same level as Time 1.

The children's overall level of disruption in play appeared to decrease at Time 2 according to the teacher ratings. The mean t-score reduced from 48.2 at Time 1, to 41.6 at Time 2, and then reduced further at Time 3 to 38.75, which was below average. There was also a steady decrease in the parent ratings of the children's disruption during play from 45.6 at Time 1, to 40 at Time 2 and falling below average, at 37.25, at Time 3.

There was an overall decrease at Time 2 in both the teacher and parent ratings of the children's disconnection in play, which is shown by a decrease of 12.6 and 14.9 respectively (= >1 standard deviation) in the mean t-score.

In summary, the PIPPS teacher and parent ratings, despite some variation in their ratings, were in overall agreement on the direction of the changes in the children's behaviour following the children's participation in Play Bank. Both teachers and parents gave ratings on the PIPPS which suggested an overall improvement in pro-social behaviour, and levels of disruption and disconnection during play over the course of time.

## 4.5 Findings for Research Questions 1 and 2 for individual children

The findings for the individual children will now be presented, beginning with some context for the child, including teacher assessed EYFS profile scores in Personal, Social and Emotional Development at Time 1. This will be followed by data gathered from the quantitative measures at Time 1, Time 2 and Time 3 and finally qualitative data from the Play Supporters interview will be presented giving their view of progress for each child.

N.B The Play Buddies are referred to using the following pseudonyms:

- Kyra (Asad's Play Buddy)
- Ahmed (Bilal's Play Buddy)
- Hana (Sarah's Play Buddy)
- Ariane (Samina's Play Buddy)
- Clara (Leila's Play Buddy)

### 4.5.1 Asad

#### *4.5.1.1 Case description.*

Asad is a 4-year-old British Arab boy, whose home language is Arabic and second language is English. He speaks Arabic at home with his parents and siblings and he speaks a fluent level of English at school with his peers and teachers. Asad joined the Nursery in September 2013 and lives with his parents and two brothers at home. Asad's EYFS profile scores in Personal, Social and Emotional Development indicate below expected development for his chronological age (see Table 4.5). Asad was selected to take part in Play Bank after another child dropped out and he was identified on the basis of the sociometric activity, in which he was the only child classified as neglected by his peers. Asad took part in 10 out of 12 sessions.

Table 4.5 – EYFS Scores in Personal, Social and Emotional Development

| Chronological age – 52 months | |
|---|---|
| Scale | Developmental age range (Emerging/Developing/Secure) |
| Self-confidence and awareness | 30–50 (Emerging) |
| Managing feelings and behaviour | 22-36 (Secure) |
| Making relationships | 22-36 (Secure) |

The researcher's notes indicated that during the Time 1 observation, Asad spent the majority of his time engaging in solitary play, favouring the construction toys and outdoor play. There were other children around when Asad was playing in the construction area but he did not seem interested in interacting with the other children. On one occasion, Asad was approached by another child who wanted to join his play but Asad dismissed the child's attempts to interact, shaking his head. Asad tended to change activity quite frequently when he was playing outside. He engaged in some positive interaction in the garden while looking at seedlings and spent time with a group of interested children talking about which plants had grown the most.

#### *4.5.1.2 The Pre-school Observation Code (POC).*

The free play observations provided information about Asad's behavioural states and the nature of his interactions in the classroom at Time 1, Time 2 and Time 3. Figure 4.4 illustrates the range and percentage of time spent in various behavioural states observed in 30 minutes using the POC at the three time intervals. Asad spent a similar amount of time engaging in play throughout the three observations, however there was a slight increase in play at Time 3. Asad spent 11.7% of his time in social interaction with peers at Time 1 and this increased to 15% at Time 2, however this increase was not sustained and fell to 5% at Time 3. There was a reduction in non-purposeful play at Time 2 and this was sustained at Time 3. Asad's unoccupied behaviour decreased from 11.7% to 10% at Time 2, and this reduced again to 5% during the Time 3 observation. Asad spent 13.3% of his time displaying disruptive behaviour during the Time 3 observation, compared to no disruptive behaviour during the previous observations. The Time 3 observation occurred towards the end of a morning session and

Asad spent a proportion of his time tidying up, therefore this activity was categorised as other behaviour.

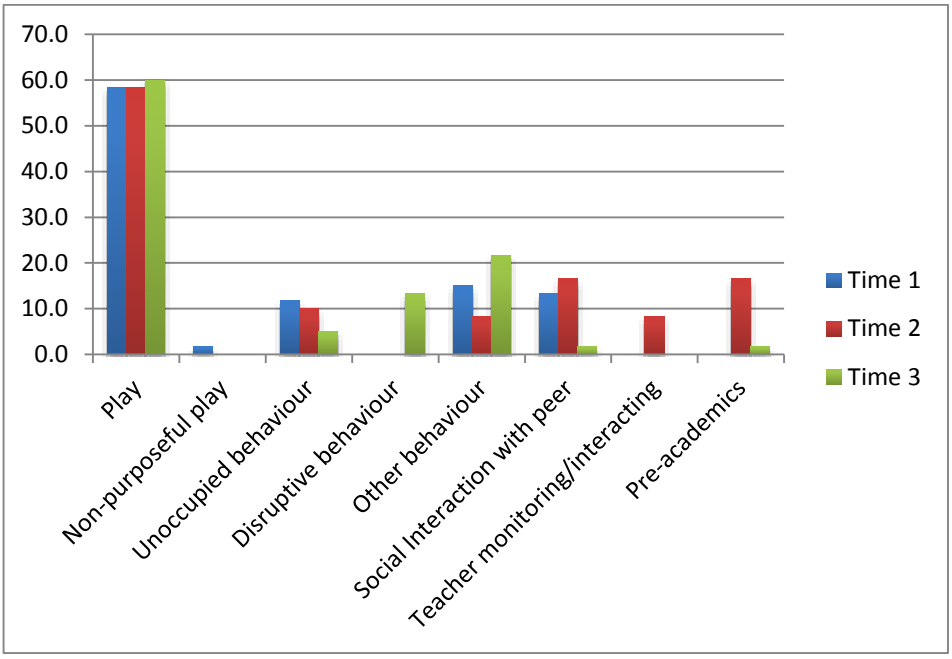



*Figure 4.4 - Percentage of time spent in behavioural states during a 30 minute free play observation, at Time 1, Time 2 and Time 3*

Figure 4.5, below, illustrates the nature and frequency of Asad's interaction with his peers observed in 30 minutes, using the POC at the three time intervals. The frequency of Asad's positive motor interactions increased from 4 at Time 1 to 17 at Time 2 and then decreased again to 12 at Time 3. The frequency of Asad's positive verbal interactions increased from 5 at Time 1 to 18 at Time 2 and then decreased again to 6 at Time 3. The frequency of Asad's negative verbal interactions decreased from 3 at Time 1 to 1 at Time 3 and then increased again to 4 at Time 3. There were no instances of negative verbal interactions during the Time 1 and Time 2 observations, and there were 4 instances at Time 3. Asad did not approach the teacher during any of the observations.

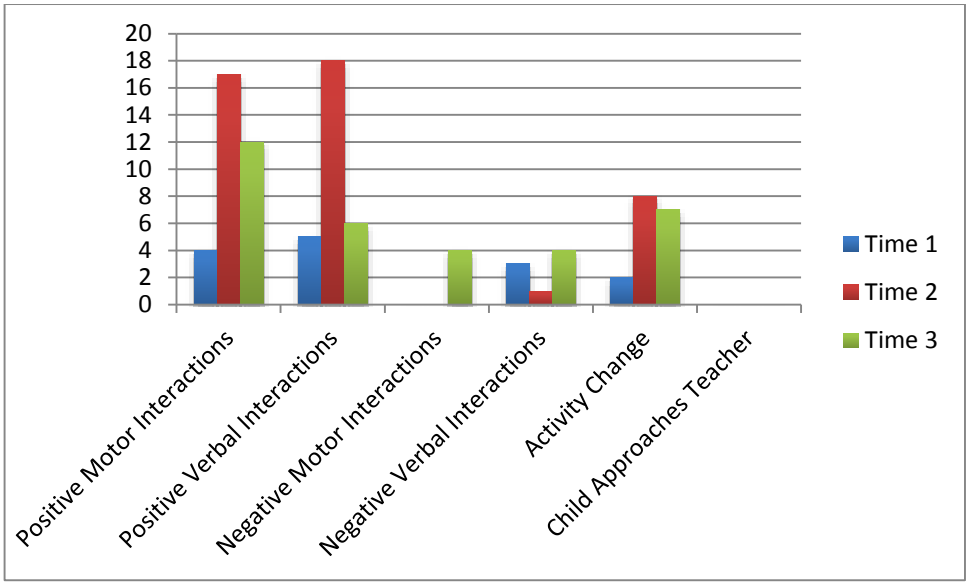



*Figure 4.5 - Frequency of Asad's behavioural events occurring during a 30 minute free play observation, at Time 1, Time 2 and Time 3*

Qualitative notes made by the researcher during the Time 2 observation showed that Asad frequently moved around the Nursery, changing activities and moving from one group of children to another. While Asad was playing trains with another boy inside the classroom, one of the other target children, Bilal, tried to join the play and Asad rejected him, saying, "No Bilal", and Bilal left the area. Asad received invites to play on two occasions, which he accepted and ran to follow the children outside. Outside, he spent some of his time watching others but also played with a few different boys, interacting with two other boys when playing with the trucks on the floor and when riding a two-seater bike with another boy. He appeared lost when one group of children he was with moved away to do something else.

At Time 3, the researcher's qualitative notes indicated that Asad still tended to flit around the classroom or outside, from one group to another. He played outside for the majority of the observation, playing alone on the bikes and in the Little Tikes car. There was little interaction with others, although other children approached Asad while he was in the car and he generally reciprocated positively. However, on one occasion another child was trying to move his car and Asad repeatedly pushed his hand away rather than communicating his wishes verbally. Part of the observation included tidy up time, and whilst Asad did comply with tidying away the toys, he also stopped frequently to play with the things he was tidying, such as the bricks, a car, and a puzzle.

#### *4.5.1.3 Sociometric nominations.*

The sociometric activity at Time 1 suggested that Asad was neglected by his peers. Table 4.6 shows the number of positive and negative nominations he received, the number of these that were reciprocal, and the classification he was given as a result of the nominations received.

Asad received no positive or negative nominations at Time 1 and no positive nominations at Time 2. Asad received one negative nomination at Time 2 and this was reciprocal. The small number of nominations meant that Asad was classified as neglected at both Time 1 and Time 2. At Time 3, Asad's positive and negative nominations both increased to 3 and 4 respectively and this caused a shift in his classification from neglected to average. At Time 3, Asad also received 1 negative reciprocal nomination but this was with a different child to the one nominated at Time 2. The findings from the sociometric activity therefore suggest that over the course of time, Asad's social acceptance amongst his peers improved.

Table 4.6 – Sociometric nominations and classifications at Time 1, Time 2 and Time 3

| | Time 1 | Time 2 | Time 3 |
|---|---|---|---|
| No. of positive nominations | 0 | 0 | 3 |
| No. of negative nominations | 0 | 1 | 4 |
| No. of reciprocal positive nominations | 0 | 0 | 0 |
| No. of reciprocal negative nominations | 0 | 1 | 1 |
| Classification | Neglected | Neglected | Average |

#### *4.5.1.4 The PIPPS teacher and parent ratings.*

Asad scored within the average range on the Play Interaction and Play Disconnection scales and at the top end of the average range for Play Disruption at Time 1.

Figure 4.6 shows the teacher's ratings for each dimension of the PIPPS, Time 1, Time 2 and Time 3. According to the teacher, Asad's play interaction in the classroom decreased from Time 1 (t=52) to Time 2 (t=48), and this increased again at Time 3 (t=58). Asad's level of

disruption in play decreased from Time 1 (t=44) to Time 2 (t=41) and decreased again at Time 3 (t=31). Asad's level of play disconnection increased from Time 1 (t=43) to Time 2 (t=51) and decreased again at Time 3 (t=43). The findings from the teacher PIPPS indicated that Asad's social competence had moved in the expected direction at Time 3.

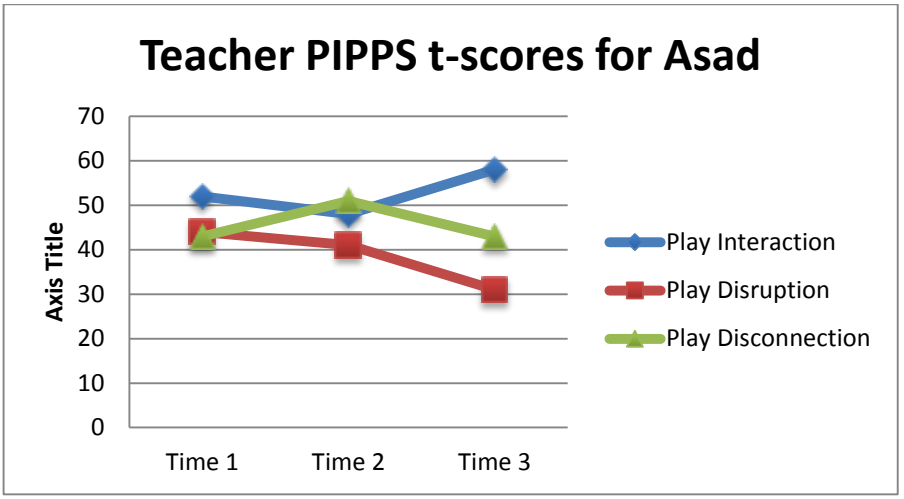



*Figure 4.6 - Time 1, Time 2 and Time 3 PIPPS teacher t-scores for Asad*

Figure 4.7, overleaf, shows the parent's ratings for each dimension of the PIPPS, at Time 1, Time 2 and Time 3. According to the parent ratings, Asad's play interaction increased from Time 1 (t=58) to Time 2 (t=67) and then decreased again at Time 3 (t=52). Asad's level of disruption during play decreased from Time 1 (t=56) to Time 2 (t=35) and increased again at Time 3 (t=58). Asad's level of disconnection during play decreased from Time 1 (t=52) to Time 2 (t=38) and increased again at Time 3 (t=52).

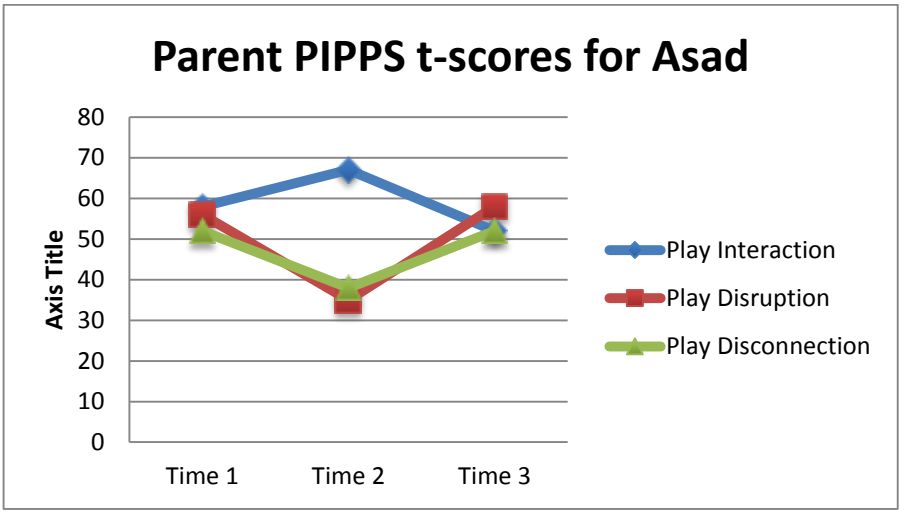


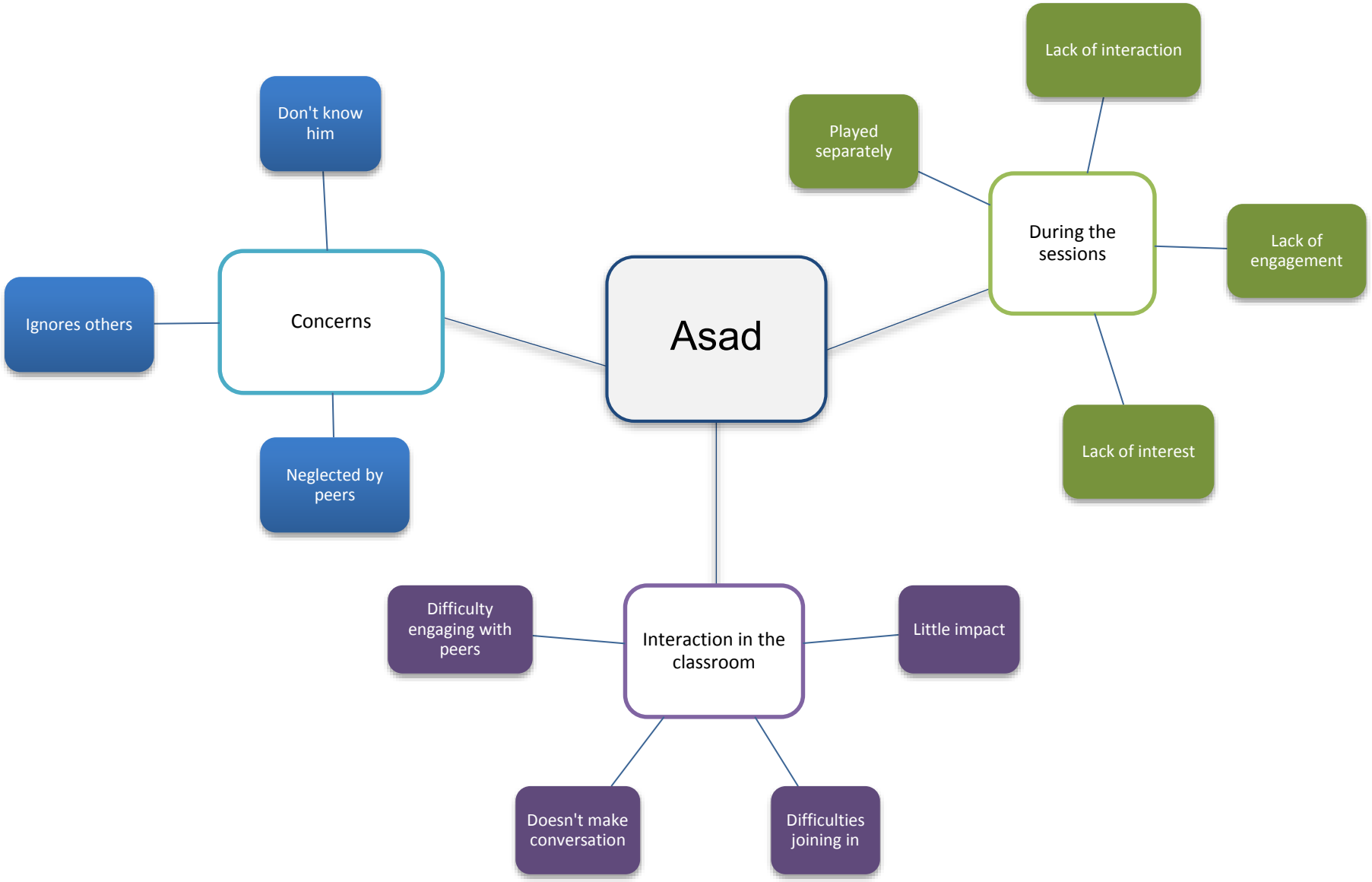

*Figure 4.7 - Time 1, Time 2 and Time 3 PIPPS parent t-scores for Asad*

#### *4.5.1.5 Play Supporter group interview.*

A group interview was conducted at Time 2 with Mrs Woods and Miss Davis, the two Play Supporters who delivered the Play Bank sessions. The Play Supporters were asked about the changing nature of the interaction between the pairs of children as well as any changes they had seen in the target children following delivery of Play Bank. The interview schedule can be found in Appendix E.

The thematic analysis of the data produced 3 organising themes and 12 basic themes for Asad: Concerns, During the Sessions and Interaction in the Classroom; and these can be seen in the thematic network in Figure 4.8. These themes will now be discussed in turn, with illustrative examples from the Play Supporter interview transcript.

*Figure 4.8 - Thematic Network for Asad*



*4.5.1.5.1 Organising theme – Concerns.*

The first theme derived from the data for Asad provides the Play Supporters' views on the concerns they have about his social interaction in the Nursery. Whilst this was not a question that formed part of the interview schedule, the Play Supporters spontaneously discussed their concerns about Asad in the classroom and gave the impression that their concerns had not alleviated following the sessions. This organising theme encompasses 3 basic themes which are displayed, along with illustrative examples from the interview transcript, in Table 4.7. The Play Supporters described Asad as a child who has had difficulty engaging with his peers and was often unresponsive when others spoke to him. They were concerned that Asad was the only child who was classed as neglected during the Time 1 sociometrics, which was what prompted them to include him in Play Bank after another child dropped out. Asad seemed to go unnoticed in the classroom, and hadn't made any special friendships; the Play Supporters felt this might be because he doesn't make enough effort with the other children. The Play Supporters felt that they don't know Asad very well and found it difficult to think about what he likes to play with.

Table 4.7 – Organising and basic themes for Concerns

| **Organising theme – Concerns** | |
|---|---|
| **Basic themes:** | **Examples** |
| Ignores others | "Mm and when you talk to him he just doesn't answer you" |
| | "Yeah he just goes like that" (shrugs) |
| | "When adults speak to him he ignores them and sometimes when the children speak to him he just he ignores them aswell." |
| Neglected by peers | "He's the one who wasn't mentioned at all in the sociometrics. He wasn't mentioned at all, nobody said they wanted him or didn't want him, he just wasn't in it at all. He just seems to be one of those who's forgotten." |
| | "He doesn't seem to have made any special friendships, most of them have a special friend that they've made a close friendship with. But he doesn't particularly have anyone does he?" |

| | |
|---|---|
| | “Maybe it’s because he doesn't make the effort with anyone. And if someone doesn't make the effort then people just give up on you eventually and think, ‘well I can’t be bothered’. You don’t make any effort so why should I try?” |
| Don’t know him | “He's one of those children that you just don't really know, you know you always have that one child that you just don’t really know, that's what he's like isn’t he? Cos I don't really feel like I know him.” |
| | “It's quite hard to know what he likes to play with.” |

*4.5.1.5.2 Organising theme – During the Sessions*

The second organising theme reflects the Play Supporter’s views about what happened between the pair of children during the sessions she facilitated. This theme illustrates the difficulties that Asad experienced in engaging with his Play Buddy and encompasses 4 basic themes, which are displayed along with illustrative examples from the interview transcript in Table 4.8. The Play Supporter who facilitated Asad’s sessions felt that he showed a lack of interest in the sessions and did not tend to ask about the sessions like the other children did. She felt he couldn’t be bothered to engage with the sessions. She described the interaction between the two children, which seemed unbalanced, with Kyra, the Play Buddy doing lots of the talking and Asad watching her. When Asad tried to interact and join the play with the dolls house, Kyra rejected his play ideas. The two children resorted to playing separately because they were interested in different things, although Kyra persevered with Asad by choosing to play next to him.

Table 4.8 – Organising and basic themes for During the Sessions

| **Organising theme: During the sessions** | |
|---|---|
| **Basic themes:** | **Examples** |
| Lack of interest | "He just didn't seem like he couldn't be bothered." |
| | "Asad never seemed to ask." (about the sessions) |
| Unbalanced interaction | "When it first started, Kyra was doing all the talking and all the commentary, she's really good at the running commentary, she enjoys small world play and all that. So she was all for that." |
| | "Asad was kind of watching, and then when he'd, when they were playing with the dolls house, he'd try to put something in it and she'd be like, 'no that doesn't go there.'" |
| Played separately | "And then after a bit he'd take himself off and choose something else to play with and she'd follow him but then she'd get a puzzle but do it at the side of him." |
| | "Still towards the end it was forced getting them to interact with each other cos they both just seemed to want to do what they were doing." |
| Limited engagement | "Asad didn't do anything. At times he'd engage with her but just not like any of the others have." |
| | "They were just really hard to engage with each other. Cos Kyra would talk to Asad but he wouldn't really give her anything back, to keep the conversation going. |
| | "He just doesn't seem to have engaged with it at all." |
| | "He was quite hard to engage, he just, he still wasn't making any conversation, it was quite hard to get him to engage with his play buddy." |

*4.5.1.5.3 Organising theme – Interaction in the Classroom.*

The third organising theme relates to the Play Supporters' general observations of Asad's levels of interaction in the classroom following the sessions. This theme illustrates the Play Supporters' views that the sessions made little impact on Asad's peer interaction in the classroom and they continued to have concerns about Asad. This organising theme comprises

four basic themes which are displayed, along with illustrative quotes from the interview transcript in Table 4.9. When asked about Asad's interaction in the classroom following the sessions, the Play Supporters focused on his verbal interaction, suggesting he doesn't make much conversation in the classroom with his peers. The Play Supporters had quite negative perceptions of Asad, suggesting that he can't be bothered to make conversation. They reported that he finds it difficult to join in with activities taking place in the classroom, often needing an adult to encourage him to get involved. Overall, the Play Supporters gave the impression that they felt the sessions didn't have a great deal of impact on Asad, using the word 'still' suggests that they continue to have concerns about him.

Table 4.9 – Organising and basic themes for Interaction in the classroom

| **Organising theme – Interaction in the classroom** | |
|---|---|
| **Basic themes:** | **Examples** |
| Doesn't make conversation | "I don't remember, this morning, when he was making that flower I don't remember him making conversation with anybody." |
| | "He's not chatty is he at all." |
| | "He can't be bothered basically, he can't be bothered talking to them." |
| Difficulties joining in | "But he came over and looked like he was interested and whereas all the others would say, 'Can I make one, or what are you doing? He kind of, he didn't say anything until I asked him, 'Do you want to join in?'" |
| | "So unless there's an adult there saying oh Asad do you want to do this..." |
| Little impact | "But Asad now still, I think he's the only one out of it that just doesn't seem to have as much impact on." |
| | He's still just now, he just seems to, he wanders quite a lot, |

### 4.5.2 Bilal.

#### *4.5.2.1 Case description.*

Bilal is a 4-year-old, Indian boy whose home language is Tamil and whose second language is English. Bilal joined the Nursery in September 2013 and is the only Tamil speaking child attending the Nursery. He lives at home with his mother and brother, and they speak Tamil at home, and Bilal speaks English at school with his peers. The Nursery staff report that Bilal's level of English is intermediate. Bilal's EYFS profile scores in Personal, Social and Emotional Development indicate below expected development for his chronological age (see table 4.10). Bilal took part in 10 out of 12 sessions.

Table 4.10 – EYFS Scores in Personal, Social and Emotional Development

| Chronological age – 54 months | |
|---|---|
| Scale | Developmental age range (Emerging/Developing/Secure) |
| Self-confidence and awareness | 30–50 (Developing) |
| Managing feelings and behaviour | 22-36 (Developing) |
| Making relationships | 22-36 (Secure) |

The researcher's qualitative notes indicated that during the Time 1 observation, Bilal rarely engaged in play with other children. He hovered around the edges of groups of children in different areas of the classroom such as the home corner, the mark-making area and the construction area. Bilal divided his time during the observation between playing alone and standing and watching other children play; he seemed interested in what they were doing but didn't join in with their play. Bilal was very quiet and spoke rarely to the other children. The other children in the class didn't extend any invitations to Bilal to play with them.

#### *4.5.2.2 The Pre-school Observation Code (POC).*

The free play observations provided information about Bilal's behavioural states and the nature of his interactions in the classroom at Time 1 and Time 2. Figure 4.4 illustrates the range and percentage of time spent in various behavioural states observed in 30 minutes using the POC at the two time intervals.

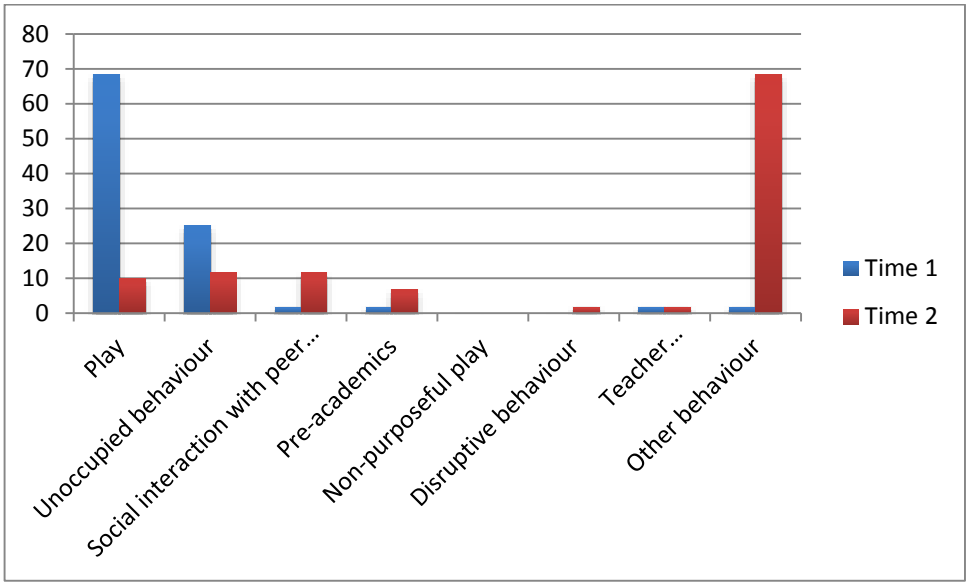



*Figure 4.9 – Percentage of time spent in behavioural states during a 30-minute free play at Time 1 and Time 2.*

The time Bilal spent engaging in play reduced from 68.3% at Time 1 to 10% at Time 2. At Time 2, a large proportion of Bilal's time was coded under the category 'other behaviour' because he took part in helping to clean and sort all of the outdoor toys ready for the summer holidays; he spent 68% of his time during the observation undertaking this activity.

The time Bilal spent engaging in unoccupied behaviour decreased following the sessions from 25% to 11.7% and this suggests that he spent less time hovering outside of the play group and watching others. The time Bilal spent engaging in social interaction increased from a low rate of 1.7% at Time 1 to 11.7% at Time 2.

Figure 4.10 shows the frequency of Bilal's interactions with other children during a 30 minute observation of free play, at Time 1 and Time 2. Bilal showed a consistent increase in both positive motor and positive verbal interactions following the sessions. He made 18 verbal

interactions at Time 2 compared to 5 at Time 1, and he made 17 positive motor interactions at Time 2 compared to 4 at Time 1. Bilal was not observed to make any negative interactions at Time 2. These increases suggest that at Time 2, he was engaging more with his peers, both verbally and non-verbally and spending more time overall in social interaction with his peers.

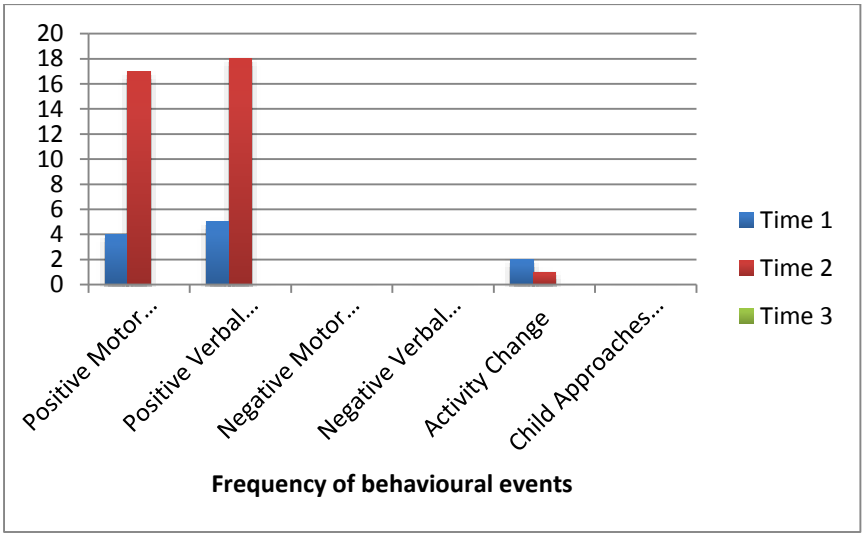



*Figure 4.10 – Frequency of Bilal's behavioural events occurring during free play at Time 1 and Time 2*

Qualitative notes made by the researcher during the Time 2 observation showed that Bilal was engaging in more activities in the Nursery class. He was observed joining in with games rather than hovering and watching from the outskirts and this was exemplified by a game he was playing with four other children who were climbing in and out of a large cardboard box. During this game he didn't communicate verbally but smiled and made eye contact and helped another child get into the box. Bilal was also seen engaging in interaction with another child in which they were spontaneously measuring who was tallest. Again, Bilal made lots of eye contact and smiled but he tended to use gestures rather than speech when he communicated.

#### *4.5.2.3 Sociometric nominations.*

The sociometric activity at Time 1 suggested that Bilal was rejected by some of his peers, whilst being accepted by others prior to the start of the sessions, meaning he received a classification of controversial. Table 4.12 shows the number of positive and negative nominations he

received, the number of these that were reciprocal, and the classification he was given as a result of the nominations received.

Bilal received 6 positive nominations at Time 2, compared to 3 positive nominations at Time 1. Bilal's negative nominations reduced from a high number of 9 at Time 1 to a much lower 2 at Time 2 and this resulted in a shift in classification from controversial to popular. At Time 2, two of Bilal's positive nominations were reciprocal, and one of his negative nominations was reciprocal. There was a reduction in the number of negative reciprocal nominations he received from Time 1 to Time 2. The sociometric nominations suggest that Bilal was more socially accepted at Time 2.

Table 4.11 – Sociometric nominations and classifications at Time 1 and Time 2

| | Time 1 | Time 2 | Time 3 |
|---|---|---|---|
| No. of positive nominations | 3 | 6 | - |
| No. of negative nominations | 9 | 2 | - |
| No. of reciprocal positive nominations | 0 | 2 | - |
| No. of reciprocal negative nominations | 2 | 1 | - |
| Classification | Controversial | Popular | - |

#### *4.5.2.4 The PIPPS teacher and parent ratings.*

Bilal scored within the average range on each of the scales of the PIPPS at Time 1. There was some discrepancy between the teacher and parent ratings of Bilal's play interaction and play disruption; in each case the parent rated Bilal more favourably, giving a higher score on play interaction and a lower score on play disruption.

Figure 4.11 shows the teacher's ratings for each dimension of the PIPPS at Time 1 and Time 2. According to the teacher, Bilal's play interaction in the classroom increased from Time 1 (t=46) to Time 2 (t=50). Bilal's level of disruption in play decreased considerably from Time 1 (t=52) to Time 2 (t=35). Bilal's level of play disconnection decreased from Time 1 (t=55) to Time 2 (t=49). The findings from the teacher PIPPS indicated that Bilal's social competence had moved in the expected direction at Time 2.

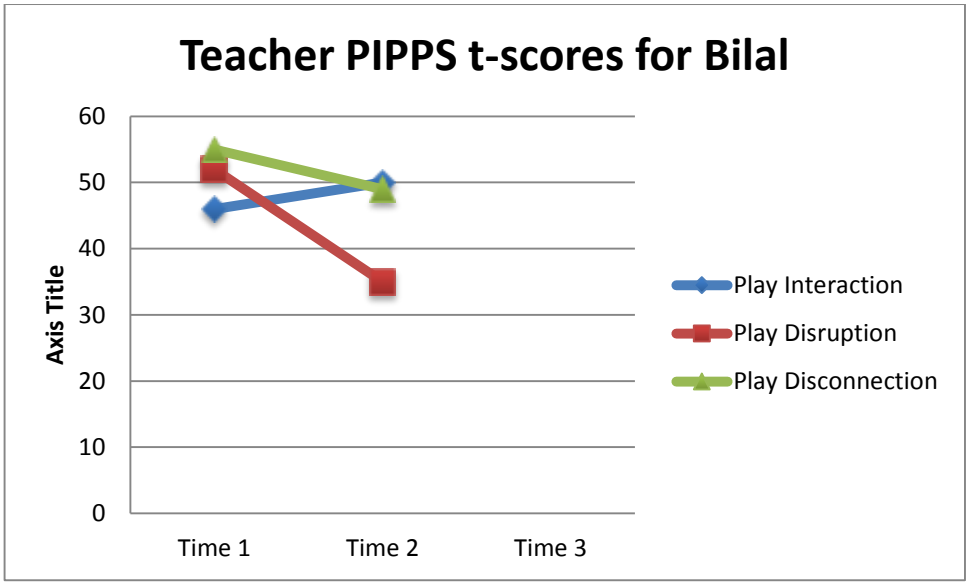



*Figure 4.11 - Time 1 and Time 2 PIPPS teacher t-scores for Bilal*

Figure 4.12 shows the parent's ratings for each dimension of the PIPPS, at Time 1 and Time 2. According to the parent ratings, Bilal's play interaction increased from Time 1 (t=60) to Time 2 (t=65). Bilal's level of disruption during play decreased from Time 1 (t=43) to Time 2 (t=31) and his level of disconnection during play decreased considerably from Time 1 (t=55) to Time 2 (t=35).

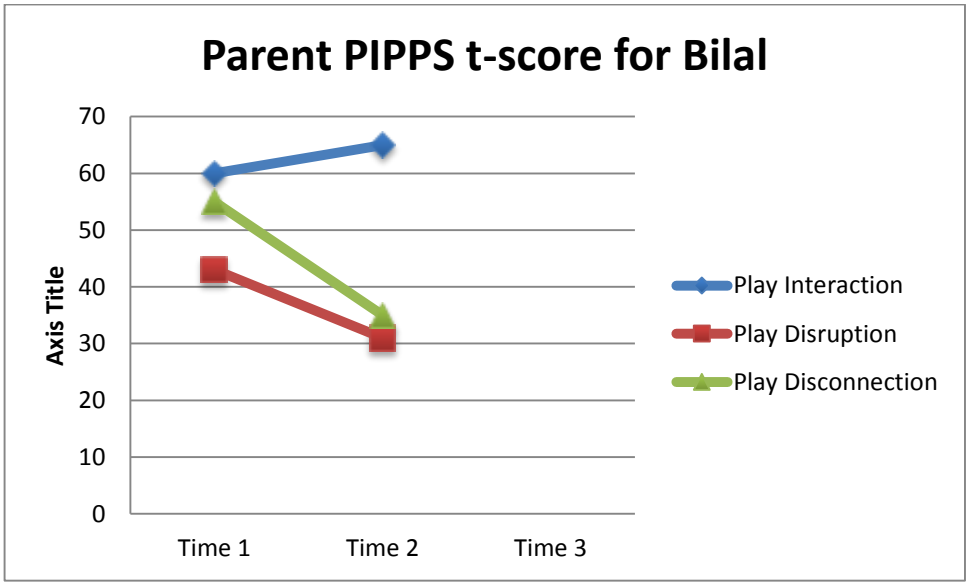
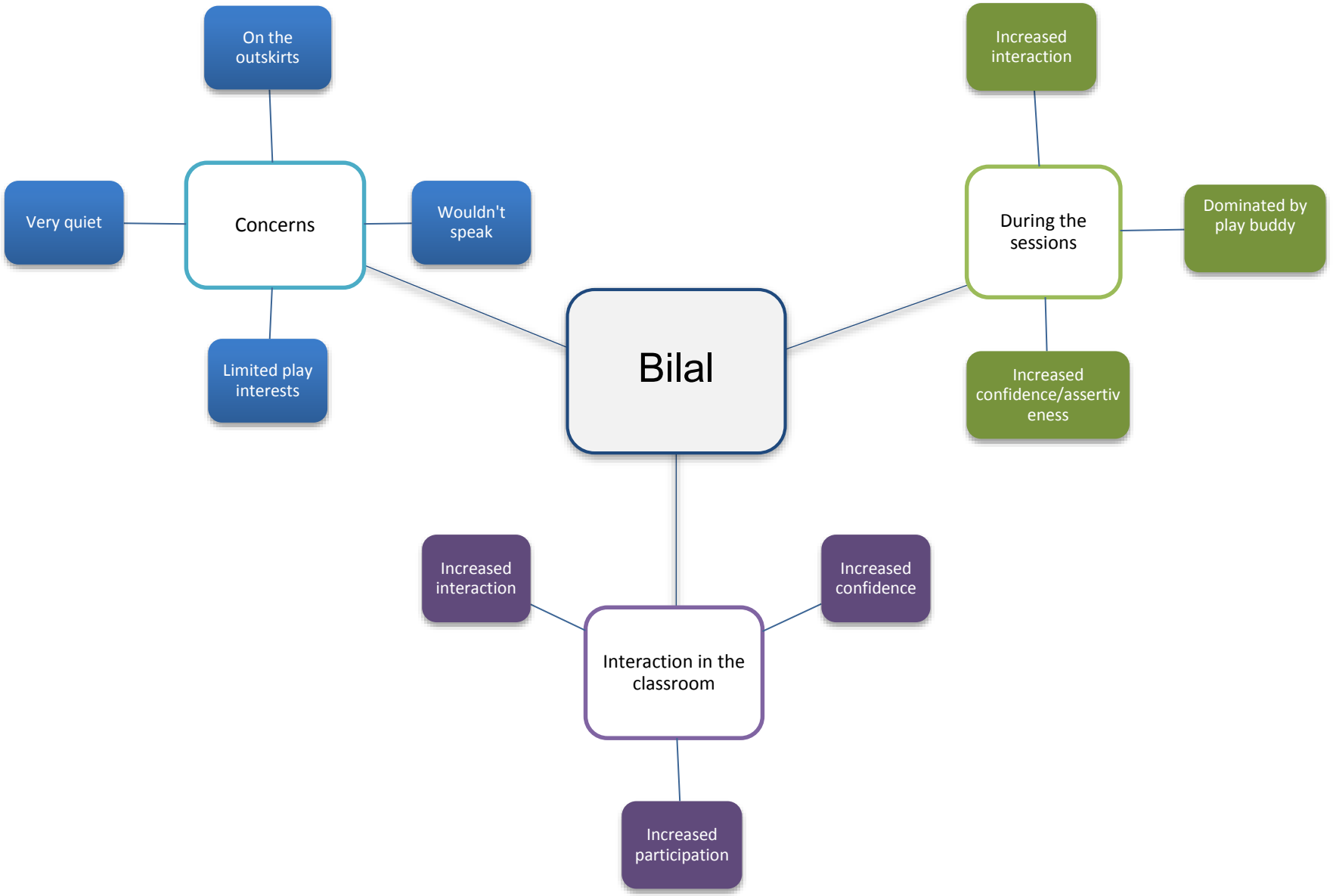



*Figure 4.12 - Time 1 and Time 2 PIPPS Parent t-scores for Bilal*

#### *4.5.2.5 Play Supporter group interview.*

Thematic analysis of the Play Supporter group interview produced 3 organising themes for Bilal: Concerns; During the Sessions and Interaction in the Classroom (see Figure 4.13). These will now be discussed in turn, with illustrative examples from the Play Supporter interview transcript.

*Figure 4.13 - Thematic Network for Bilal*



*4.5.2.5.1 Organising theme – Concerns.*

The first theme derived from the data for Bilal provides the Play Supporters' views on the concerns they had about Bilal's interaction in the Nursery prior to the start of the sessions. This theme encompasses 4 basic themes, which are displayed along with illustrative examples from the interview transcript, in Table 4.12. The Play Supporters had noticed that prior to the sessions, Bilal would often be on the outskirts and watch the other children play. Mrs Woods described how Bilal would refuse to speak when she attempted to interact with him, and stand and look at her instead. Miss Davis described Bilal's limited play interests prior to the sessions; she recalled him engaging in a solitary activity for most of the day. Both of the Play Supporters had an overall impression that Bilal was a quiet boy who was happy engaging in quiet activities and that this was seen as desirable behaviour by other parents in the Nursery.

Table 4.12 – Organising and basic themes for Concerns

| **Organising theme – Concerns** | |
|---|---|
| **Basic themes:** | **Examples** |
| On the outskirts | "No cos he just used to stand on the outskirts didn't he?" |
| | "Or stand and watch…" |
| | "yeah, whereas now.." |
| Wouldn't speak | "Like instead of saying yes, yes I do want to play, he'd be like (silence)" |
| | "Whereas before he'd just sort of stand and look at you with big eyes" |
| Limited play | "Before he would just constantly ride the bike around all day long" |
| Very quiet | "He's very quiet isn't he?" |
| | "Bilal again is just very quiet, it's just how he is." |
| | "We've got families who'll say if only their kids would sit there like him (Bilal) and his brother do. But they're quite happy to just sit quietly and get on with it, they wouldn't be running around or anything like that." |

*4.5.2.5.2 Organising theme – During the Sessions.*

The second organising theme relates to the behavioural changes that the Play Supporter observed during the sessions. This theme illustrates the way in which Bilal's skills developed throughout the sessions as well as what the Play Supporter felt was happening in the interaction between the two boys. This encompasses 4 basic themes, which are displayed along with illustrative examples from the interview transcript, in Table 4.13.

In the initial sessions the Play Supporter recalled that Bilal's verbal interaction with his Play Buddy was limited. He kept hold of the toys that he wanted to play with, and the Play Supporter felt that this was how he was conveying ownership over the toy, rather than using verbal communication with his Play Buddy. The Play Supporter felt that in the beginning, Bilal's Play Buddy, Saeed, was doing the majority of the interaction, and choosing the play. Bilal followed Saeed's lead and did what he was doing.

The Play Supporters felt that Bilal may have been overwhelmed by his Play Buddy who appeared to be much more confident than Bilal. They explained that they thought Bilal's Play Buddy would be a good choice to bring out Bilal's confidence, but reflected that it may have inhibited him during the sessions instead. However, the Play Supporter who facilitated Bilal's sessions reported that Bilal became more assertive over the course of the sessions. His confidence increased so that he didn't feel that he had to follow Saeed when he attempted to boss him around. Bilal increasingly showed initiative in play and began to choose the activities. This seemed to change the power dynamic so that the Play Buddy would then follow Bilal's choice of play. Bilal seemed to make more attempts to interact during later sessions, however the Play Supporter reported that she found it difficult to know what Bilal was saying and that he remained very quiet. The Play Supporter reported that Bilal increased his non-verbal interaction perhaps more than his verbal interaction.

Table 4.13 – Organising and basic themes for During the Sessions

| **Organising theme – During the Sessions** | |
|---|---|
| **Basic themes:** | **Examples** |
| Increased interaction | "And if you sort of look at the conversation log and the amount of times that he interacted during the conversation wasn't a lot." |
| | "He'd sort of keep hold of things as Saeed tried to take them off him to put in the dolls house and he'd sort of keep hold of them to say no you're not having that one I've got that one." |
| | "Did you see him attempt to interact more or?" (Interviewer) "Towards the end, yeah, but he's very very quiet and he was very very distant so it's difficult to hear what he's actually saying sometimes so he sort of whispers and you sort of couldn't always hear what he was saying to Saeed but he'd obviously said something that was impacting on what they were doing." |
| | "I think he became sort of more, non-verbal communication." |
| | "He'd sort of smile at Saeed rather than it being verbal." |
| Dominated by Play Buddy | "Cos at first it was all Saeed, Saeed, Saeed (Play Buddy) he initiated play, he chose what they were going to do and Bilal was just like a little sheep and yeah if you're doing it I'll do it." |
| | "Cos like Saeed was like, we're playing this come on, Bilal we're playing this." |
| | "He would come and have a look and then take over." |
| | "Bilal might have been a overwhelmed." |
| | "Overwhelmed by him yeah. We'd thought he'd be quite good and bring him out but he didn't did he really, he just sort of squashed him a little bit." |
| Increased confidence and assertiveness | "He was more confident in not going along with what Saeed was doing and doing his own thing instead." |
| | "I think he just stopped following Saeed's bossy instructions basically." |
| | "I'm fed up of listening to you, I'm going to do this." |
| | "Quite often he'd start something separate and Saeed would go towards what he was doing." |

| | |
|---|---|
| | “It was a case of no I don’t want to do that, I'm going to do this puzzle instead.” |
| | “Whereas he just took himself over that side and found something else to do.” |

*4.5.2.5.3 Organising theme – Interaction in the Classroom*

The third organising theme relates to the effects that the Play Supporters had noticed in Bilal following the sessions and illustrates that there had been some change in Bilal’s social interaction in the classroom with his peers. This theme encompasses 3 basic themes which are displayed, along with illustrative examples from the interview transcript, in Table 4.14.

Following the sessions, the Play Supporters had noticed that Bilal was more confident to interact with the other children in the classroom. They discussed his verbal interaction, however they found this difficult to measure. The Play Supporters felt that Bilal’s interaction could be affected by the presence of an adult, as they described the way in which he became quieter when an adult was listening to him. This suggests that Bilal is interacting with other children, yet because he alters his behaviour in the presence of teaching staff they cannot get an accurate picture of the ways in which he interacts.

Both of the Play Supporters noticed Bilal becoming more involved in activities in the Nursery, rather than watching from the outskirts as he did previously. They noticed that he relied less on riding the bikes around than he did before, and plays with two other boys more frequently now.

The Play Supporters noticed increased confidence in Bilal following the sessions, which meant that he was better able to contribute in class and participate in activities. However, there was an acknowledgement that whilst Bilal has made some improvements, he still lacks confidence in front of the class. It was recognised that Bilal is keen to interact and play with others, but he still sometimes lacks the confidence to join in and play with the other children. Despite these ongoing concerns, Mrs Woods reiterated the changes she noticed in Bilal, which related to the three basic themes of increased interaction, participation and confidence.

Table 4.14 – Organising Theme – Interaction in the Classroom

| **Organising theme – Interaction in the Classroom** | |
|---|---|
| **Basic themes:** | **Examples** |
| Increased interaction | "He's got more confident in interacting with the others." |
| | "And like I say the verbal with him is very difficult to pick out because he's so quiet and whispery." |
| | "Especially if he thinks you're listening. You know as soon as he thinks your listening that's it, cos he can be quite loud outside and as soon as you're there and he obviously knows that you've looked at him, that's it, he's like whispering." |
| Increased Participation | "Participating in what they're doing, and getting himself involved instead of just watching what they're doing" |
| | "He doesn't stand back as much as he used to." |
| | "Yeah, whereas now... He does get himself involved." |
| | "Bilal doesn't seem to just sit and ride the bike anymore." |
| | "But he is getting a lot better he's started to play a lot with A and B" |
| Increased confidence | "But he's more confident at getting stuck in with what's going on now." |
| | "Yeah his talk book is always brilliant but he's not got the confidence to share it, he is getting better at that." |
| | "No I think Bilal wants to do it, but I just don't think he's confident enough to do it. I think he really wants to be in there, cos you can see sometimes when he's watching the others play that he really wants to be in there but he just hasn't got that, I can do that and I''ll go and have a go." |
| | "You say to him do you want to play and he'll be like.. he'll just take himself off somewhere else." |
| | "But then he'll quite often gravitate back and he'll watch again." |
| | "He's got more confident in interacting with the others and participating in what they're doing, and getting himself involved instead of just watching what they're doing." |

### 4.5.3 Sarah.

#### *4.5.3.1 Case description.*

Sarah is a 4 year old, white British girl who lives at home with her mother, stepfather, one younger and three elder siblings. Sarah joined the Nursery in September 2013. The Nursery staff report that Sarah has expressive language delay with unclear speech sounds. Sarah's EYFS profile scores in Personal, Social and Emotional Development indicated below expected development for her chronological age (see Table 4.19). Sarah took part in 5 out of 12 sessions because her Play Buddy went on an extended holiday part way through and was not replaced.

Table 4.15 – EYFS Scores in Personal, Social and Emotional Development

| Chronological age – 53 months | |
|---|---|
| Scale | Developmental age range (Emerging/Developing/Secure) |
| Self-confidence and awareness | 30–50 (Developing) |
| Managing feelings and behaviour | 22-36 (Secure) |
| Making relationships | 22-36 (Secure) |

The researcher's qualitative notes indicated that during observation at Time 1, Sarah engaged in play activities in which she tended to follow the other children. She played a chasing game with another child outside, during which she briefly interacted with smiles and squeals. She also engaged in pre-academic activities in which she worked alongside others without interacting. Sarah spent a third of the observation time playing alone on a laptop, an activity on which she was very focused and therefore didn't interact with the children around her, despite their excitement over a giant garden snail.

#### *4.5.3.2 The Pre-school Observation Code.*

The free play observations provided information about Sarah's behavioural states and the nature of her interactions in the classroom at Time 1, Time 2 and Time 3. Figure 4.14 illustrates

the range and percentage of time spent in various behavioural states observed in 30 minutes using the POC at the two time intervals.

The free play observations indicated that at Time 2, Sarah spent an increased amount of time engaging in play activities and her unoccupied behaviour also increased. Across the three observations there was some variation in the percentage of time she spent socially interacting with peers (11.7%, 6.7% and 11.7% respectively, see Figure 4.14). Sarah spent more time engaging in play activities during the Time 2 observation, 41.7%, compared to 23.3% at Time 1. At Time 1 and Time 3 Sarah spent a large proportion of her time engaged in pre-academic activities, for example 70% of the observation at Time 3 was spent using the laptop. Sarah also engaged in a solitary activity at Time 2, spending 38.3% of her time watering the plants.

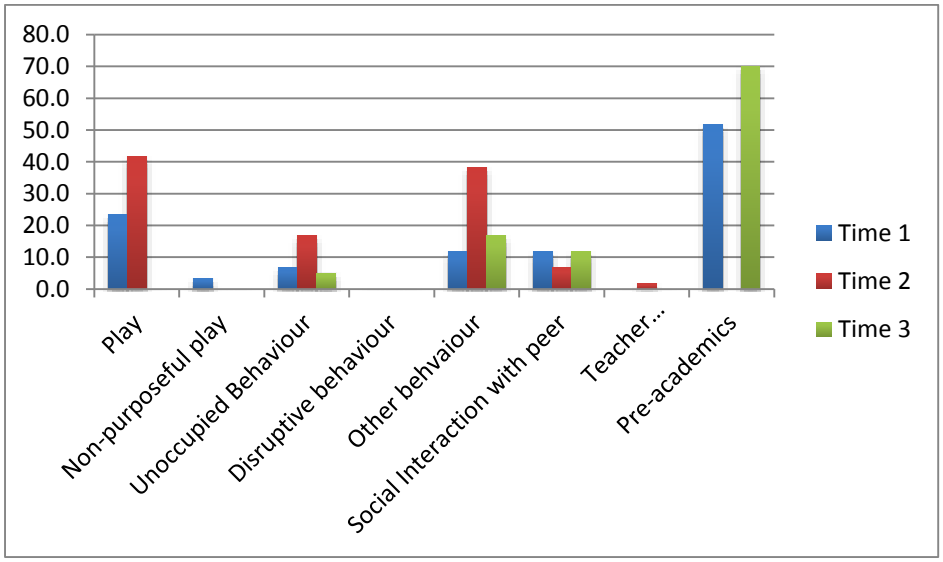



*Figure 4.14 - Percentage of time spent in behavioural states during a 30-minute free play observation, at Time 1, Time 2 and Time 3.*

Figure 4.15 shows the frequency of Sarah's interactions with other children during the 30 minute observations of free play. The frequency of Sarah's positive verbal interactions increased from 10 to 20 at Time 2 and her positive motor interactions reduced slightly from 10 to 9. Her negative motor interactions increased from 1 to 4 and her negative verbal interactions decreased from 7 to 0.

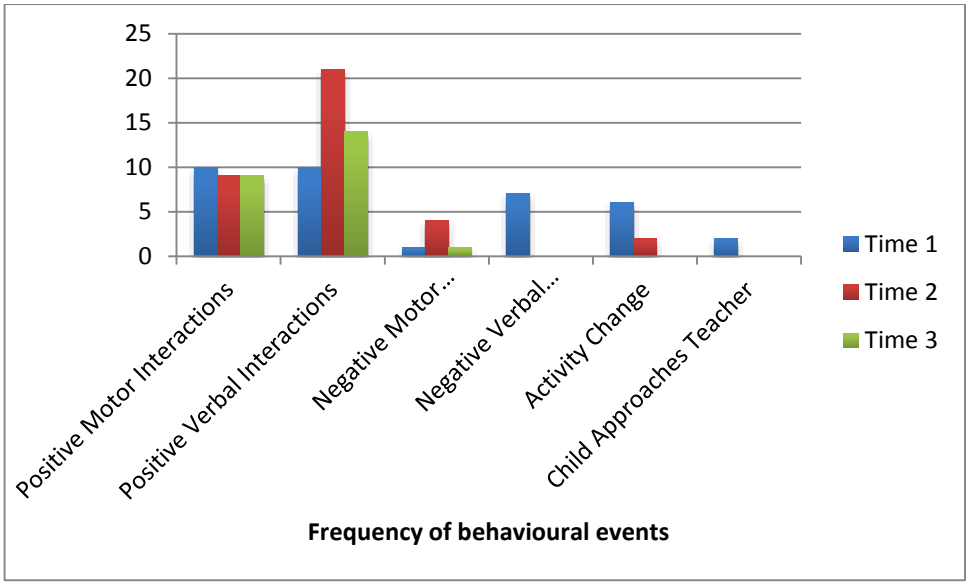



*Figure 4.15 - Frequency of Sarah's behavioural events occurring during Time 1, Time 2 and Time 3 observations of free play*

Qualitative notes made by the researcher during the Time 2 observation showed a similar pattern of behaviour to the earlier observation. Sarah engaged in a small amount of play with her brother in which he pushed her around in a Little Tikes car. Sarah's interaction mainly consisted of instructions given to her brother to "go faster!" or "push me again!" Outside in the garden area, Sarah stood and watched two other children watering the plants for a while before picking up the watering can to join in; at which point the other children finished their watering and moved away and Sarah continued alone.

During the Time 3 observation, Sarah spent the whole 30 minutes at the mark-making table making valentines cards. She interacted with other children, however this tended to be functional communication in order to get her needs met, for example if she needed the Sellotape. She was joined by various other children, with four children around the table at one point who were all concentrating on their relative projects with little interaction between the group. At the end of the observation, Sarah engaged in some interaction with two other children in which they were measuring and discussing who was tallest.

#### *4.5.3.3 Sociometric nominations.*

The findings from the sociometric activity for Sarah suggest no concerns regarding Sarah's social acceptance at Time 1 as she did not receive a classification, which indicates she was in the average range. Table 4.16 shows the number of positive and negative nominations Sarah received, the number of these that were reciprocal, and the classification she was given as a result of the nominations received.

Sarah received 2 positive nominations at Time 2, which was a reduction from 4 positive nominations at Time 1, however her negative nominations also reduced from 2 to 0 at Time 2. At Time 3, Sarah's positive nominations increased again to 4 and her negative nominations remained at 0, which changed her classification to popular. Sarah received 1 reciprocal nomination at Time 2 and this figure remained the same at Time 3, although with a different child. The findings from the sociometric activity suggest that at Time 3 Sarah's social acceptance within her peer group had improved.

Table 4.16 – Sociometric nominations and classifications at Time 1, Time 2 and Time 3

| | Pre | Post | Time 3 |
|---|---|---|---|
| No. of positive nominations | 4 | 2 | 4 |
| No. of negative nominations | 2 | 0 | 0 |
| No. of reciprocal positive nominations | 0 | 1 | 1 |
| No. of reciprocal negative nominations | 0 | 0 | 0 |
| Classification | Average | Average | Popular |

#### *4.5.3.4 The PIPPS teacher and parent ratings.*

Sarah scored within the average range on the three dimensions of the PIPPS at the Time 1 stage according to the teacher's ratings. She scored above average for play interaction and play disruption, and in the average range for disconnection, according to the parent ratings.

Figure 4.16 shows the teacher's ratings for each dimension of the PIPPS, at each time point. According to the teacher, Sarah's play interaction in the classroom increased from Time 1 (t=46)

to Time 2 (t=56), and increased again at Time 3 (t=62). Sarah's level of disruption in play increased from Time 1 (t=39) to Time 2 (t=54) and decreased again at Time 3 (t=39). Sarah's level of play disconnection decreased from Time 1 (t=57) to Time 2 (t=38) and increased again at Time 3 (t=47). The findings from the teacher PIPPS indicated that Sarah's social competence had moved broadly in the expected direction at Time 3.

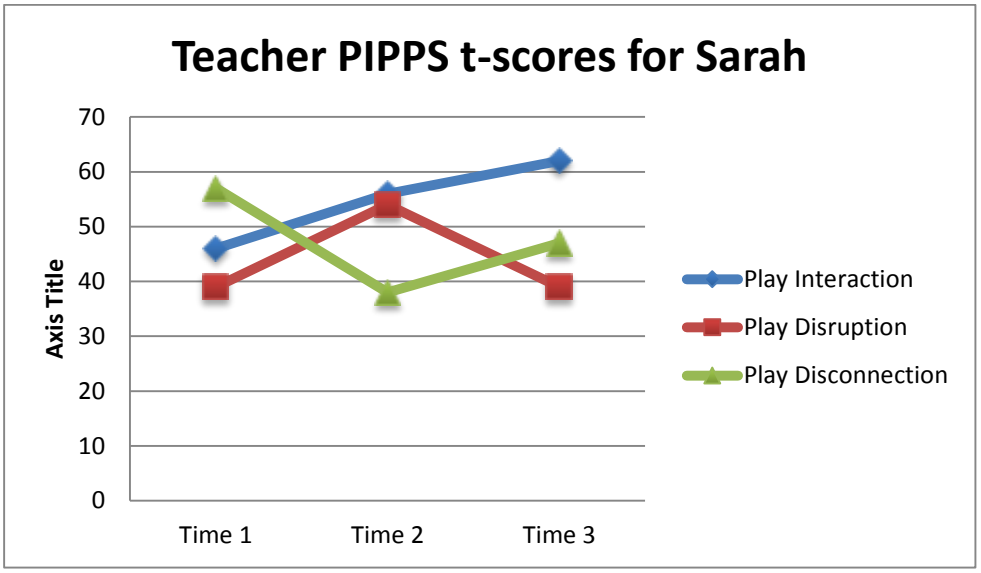



*Figure 4.16 – Time 1, Time 2 and Time 3 PIPPS teacher t-scores for Sarah*

Figure 4.17 shows the parent's ratings for each dimension of the PIPPS, at Time 1, Time 2 and Time 3. According to the parent ratings, Sarah's play interaction decreased slightly from Time 1 (t=64) to Time 2 (t=62) and then increased again at Time 3 (t=64). Sarah's level of play disruption decreased from Time 1 (t=66) to Time 2 (t=43) and then decreased again at Time 3 (t=26). Sarah's level of play disconnection decreased from Time 1 (t=51) to Time 2 (t=45) and decreased further at Time 3 (t=35). The findings from the parent PIPPS indicated that Sarah's social competence had moved broadly in the expected direction at Time 3.

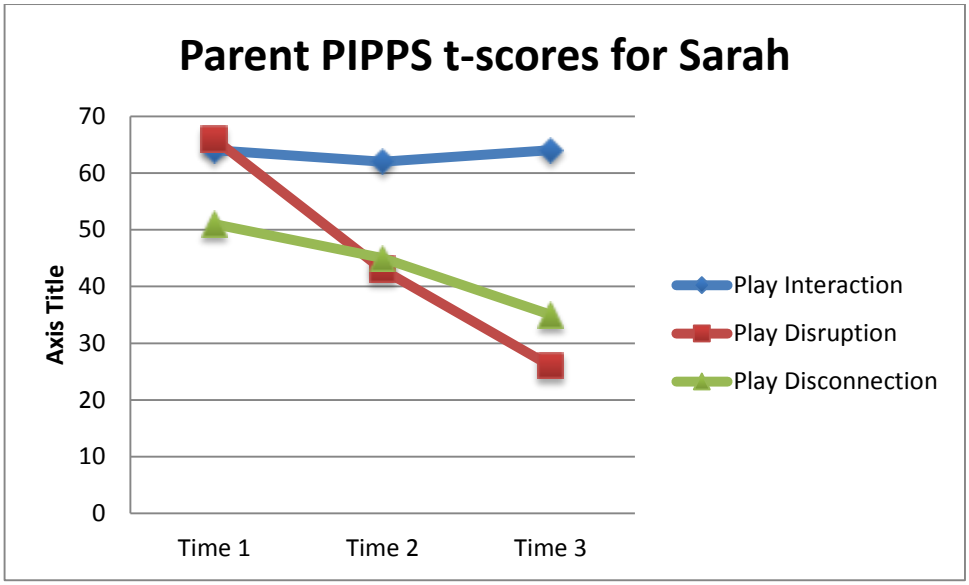
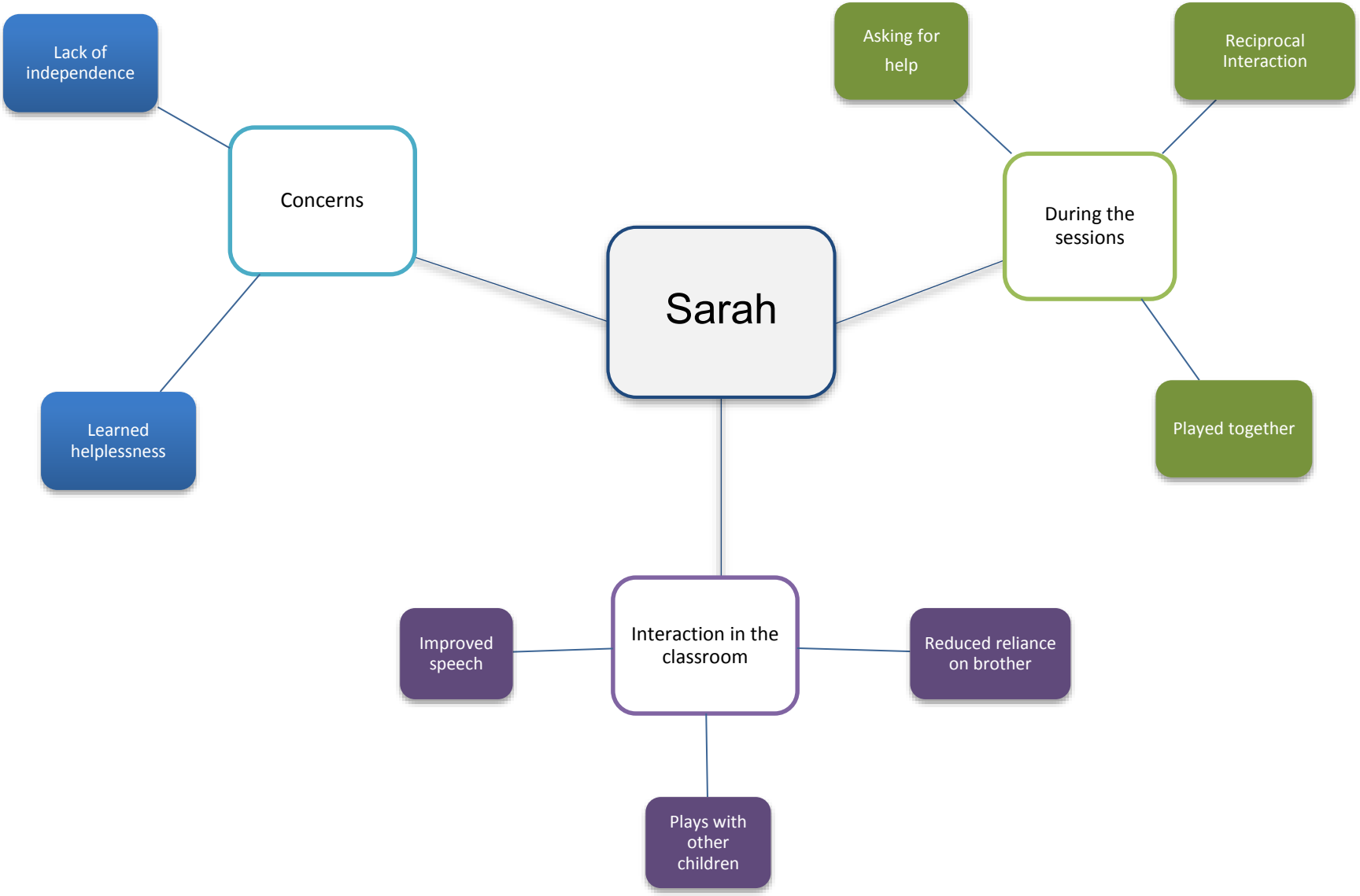



*Figure 4.17 – Time 1, Time 2 and Time 3 PIPPS Parent t-scores for Sarah*

#### *4.5.3.5 Play Supporter group interview*

Thematic analysis of the Play Supporter group interview produced 3 organising themes for Sarah: Concerns, During the Sessions and Interaction in the Classroom and can be seen in Figure 4.18. These will now be discussed in turn, with illustrative examples from the Play Supporter interview transcript.

*Figure 4.18 - Thematic Network for Sarah*



*4.5.3.5.1 Organising theme – Concerns.*

The first organising theme reflects the concerns that the Play Supporters raised about Sarah and encompasses 2 basic themes, which are displayed along with illustrative quotes from the interview transcript, in Table 4.17. The concerns that the Play Supporters raised related to Sarah's lack of independence and ability to do things for herself. They felt that Sarah lacked skills to do things independently, such as tidying up, because she hadn't had the opportunities to learn them because people often do things for her. They described a certain learned helplessness in that Sarah had become used to asking people to do things for her rather than attempting them herself, despite being capable. The presence of her brother in Reception, who shared the same classroom, seemed to exacerbate this.

Table 4.17 – Organising and basic themes for Concerns

| **Organising theme – Concerns** | |
|---|---|
| **Basic themes:** | **Examples** |
| Lack of independent skills | "No because at tidy up time she doesn't know where to begin because she doesn't know how to do it, because everyone else has done it for her." |
| | "She avoids it, she just wanders doesn't she? You watch her out the corner of your eye and she just wanders from one corner to the other not actually doing anything." |
| Learned helplessness | "She's got three older brothers so she's used to them doing everything for her. It's not that she's not capable, she can do it herself but I think she just says, 'I need a drink', and someone will get it for her. You know, or she'll say, 'I want my snack', and A will take her to the cafe and get her snack for her." |
| | "She quite happily lets him, she's like A do this for me, A do that for me." |
| | "And he'll do it all for her." |

*4.5.3.5.2 Organising theme – During the Sessions.*

The second organising theme represents the changes the Play Supporter saw in Sarah's interaction with her Play Buddy during the sessions. This theme comprises 3 basic themes, which are displayed along with illustrative quotes from the interview transcript, in Table 4.18. The Play Supporter felt that one of the changes seen in Sarah was that she was more likely to ask her Play Buddy for help as the sessions progressed. She felt that the pair interacted well together from the beginning, and described the children discussing their activities together. Although the girls sometimes had different interests, they appeared to want to spend the time together, and Sarah was keen to do the activities her Play Buddy had chosen.

Table 4.18 – Organising and basic themes for During the Sessions

| **Organising theme – During the Sessions** | |
|---|---|
| **Basic themes:** | **Examples** |
| Asking for help | "Sarah's not particularly good at it [a puzzle] is she, so she had to ask for help." |
| | "So she had to ask for help and it was quite good." |
| | "I think further on in the sessions you can see Sarah's asking Hana for help more, she needs help with something she'd be like, 'can you help, I need help'". |
| Reciprocal interaction | "And they did talk about what each other were doing as well quite a lot." |
| | "Asking questions you know of what the other one was doing, and 'do you want this one?, I've got this one, do you want this one?'" |
| | "They interacted quite well together." |
| | "They both talked, they both interacted loads when they were playing together." |
| Played together | "They did sometimes choose different activities and then gravitate towards each other and have a go at both activities together." |
| | But she wanted to do it [the puzzle] because Hana was doing it. |

*4.5.3.5.3 Organising theme – Interaction in the classroom.*

The third organising theme relates the effects noticed in Sarah in the classroom by the Play Supporters and encompasses 3 basic themes, which are displayed along with illustrative quotes from the interview transcript, in Table 4.19. The Play Supporters had noticed that Sarah's speech and language skills had improved over the period of time that the sessions took place. This relates closely to the second theme because the Play Supporters had wondered whether Sarah's improved speech was because she was spending less time with her brother. The Play Supporters felt that a positive effect of the sessions for Sarah was that it helped her to reduce her reliance on her older brother. They had noticed that she plays with other children now and this may have been because she enjoyed playing with someone new during the play sessions.

Table 4.19 – Organising and basic themes for Interaction in the Classroom

| **Organising theme – Interaction in the Classroom** | |
|---|---|
| **Basic themes:** | **Examples** |
| Improved speech | "And it has improved quite a lot recently, over the last few months." |
| | "Yeah, probably the last 6-8 weeks." |
| | "Yeah her language has come on a lot." |
| | "I was gonna say, she's not spending as much time with A [her brother] now and obviously because A's got speech and language…" |
| | "We wondered whether she was just copying what she's heard from A." |
| Reduced reliance on brother | "But you see it's had an impact on her because she doesn't rely on A as much now does she?" |
| | "A's decided he's going to take himself off and he doesn't want or need Sarah there so she just finds something else to do." |
| Plays with other children | "Yeah she does play with other children." |
| | "So playing with her [the Play Buddy] will have made her [Sarah] think she was nice to play with so maybe I'll go and join these." |

### 4.5.4 Samina.

#### *4.5.4.1 Case description.*

Samina is a 4 year old, British Asian girl whose first language is English, which is the language spoken in the home. Samina lives at home with both of her parents, two elder siblings and one younger sibling. She has attended the Nursery since September 2013. Samina's EYFS profile scores in Personal, Social and Emotional Development indicated below expected development for her chronological age (see Table 4.20). Samina took part in 10 out of 12 sessions.

Table 4.20 – EYFS Scores in Personal, Social and Emotional Development

| Chronological age – 53 months | |
|---|---|
| Scale | Developmental age range (Emerging/Developing/Secure) |
| Self-confidence and awareness | 30-50 (Developing) |
| Managing feelings and behaviour | 30-50 (Developing) |
| Making relationships | 30-50 (Developing) |

The researcher's qualitative notes indicated that during the Time 1 observation Samina was quite adult dependent and frequently approached the teaching staff in the room. She held the teaching assistant's (TA) hand until the TA managed to direct her towards clearing and washing up the plates in the café. Samina also spent time engaging in pre-academics at the mark-making table in which she communicated with the other children in relation to the tasks they were completing. Samina displayed a range of positive non-verbal interaction with smiles, good eye contact and gestures but her verbal interaction was more limited.

#### *4.5.4.2 The Pre-school Observation Scale.*

The free play observations provided information about Samina's behavioural states and the nature of her interactions in the classroom at Time 1, Time 2 and Time 3. Figure 4.19 illustrates the range and percentage of time spent in various behavioural states observed in 30 minutes using the POC at the two time intervals.

Samina spent very little time (3.3%) engaged in play activities during the Time 1 observation and this reduced to 0% at Time 2, however this increased markedly at Time 3 to 30%. Samina spent 15% of her time socially interacting with peers during the Time 1 observation and this reduced to 5% at Time 2. The largest proportion of Samina's time during the Time 1 observation was spent helping out with tidying up in the café, which was coded as other behaviour at 33%. At Time 3, Samina's social interaction increased again to 16.7%, which was slightly higher than at Time 1. Samina's engagement in pre-academic activities increased from 26.7% at Time 1 to 58.3% at Time 2 and then reduced to 48.3% at Time 3. The amount of time that Samina spent engaged in activities with a teacher was 16.7% at Time 1 and this increased to 20% at Time 2 and then decreased to 13% at Time 3.

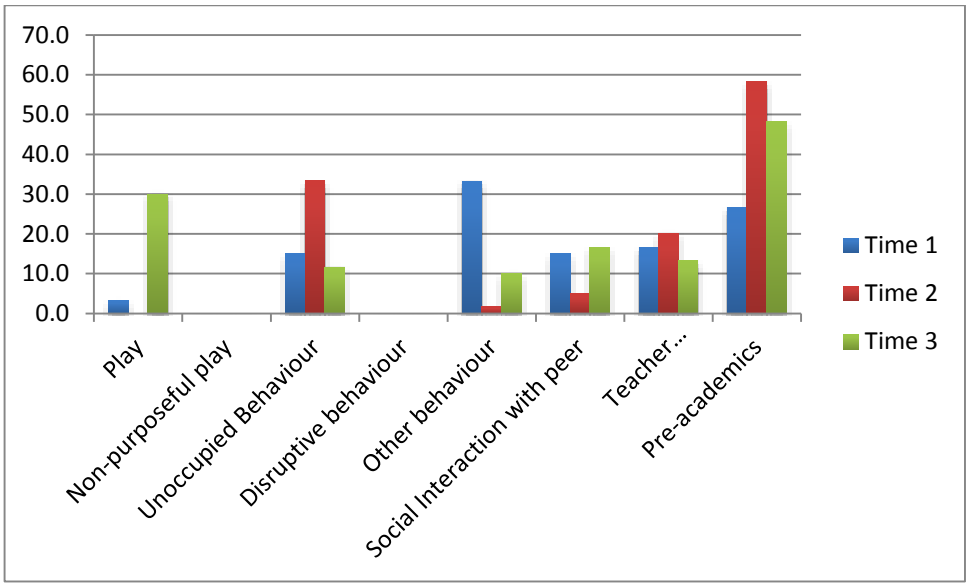



*Figure 4.19 - Percentage of time spent in behavioural states during a 30-minute free play observation at Time 1, Time 2 and Time 3*

Figure 4.20 displays the frequency of Samina's interactions with other children during the free play observations at Time 1, Time 2 and Time 3. Samina showed a small increase in her positive verbal interactions from 8 to 11 at Time 2 and this increased again at Time 3 to 22. There was a decrease in Samina's positive motor interactions from 22 to 12 at Time 2, and this increased again at Time 3 to 21. The frequency of Samina's approaches to the teacher decreased considerably at Time 2 from 22 to 6 and this was sustained at Time 3 with only 5 instances of approaching the teacher recorded.

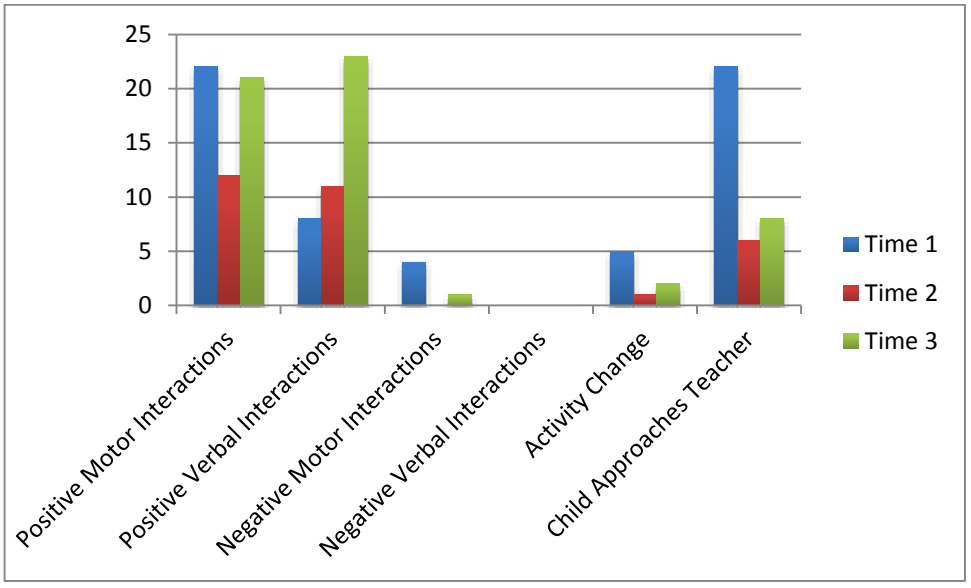



*Figure 4.20 - Frequency of Samina's behavioural events occurring during free play at Time 1, Time 2 and Time 3*

Qualitative notes made by the researcher during the Time 2 observation showed that Samina spent the majority of her time engaging in pre-academic activities, at the mark-making table and at a teaching assistant-led craft activity. At the mark-making table, Samina was sitting with one other child and they were later joined by another child, however there was minimal interaction between the three, who were focused on their activities. The unoccupied behaviour recorded for Samina in this observation related to her waiting around at the craft activity to join in once a space at the table became free, and then waiting for the teaching assistant to help her with the activity. During the activity the group of children sang a song and Samina joined in and clapped her hands with the other children.

During the Time 3 observation, Samina often watched other children with interest while she was going about her own activities. She spent two thirds of her time during the observation at the art table and there was minimal interaction between Samina and two other girls who all worked separately, making models. Samina playfully chased another girl over to the sand tray and they both giggled before agreeing to play outside and getting their coats. Samina and the girl joined another girl outside and began an energetic game of 'tig' around the playground and climbing on the climbing frame. A teacher in the playground engaged in interaction with the girls and joined in with their game at times. This game promoted lots of positive interaction between

the girls as they negotiated with each other about the rules of tig and helped each other outsmart the teacher.

#### *4.5.4.3 Sociometric nominations.*

The sociometric activity suggested that there were no concerns regarding Samina's social acceptance prior to the start of Play Bank, as she did not receive a classification, which indicates she was in the average range. Table 4.21 displays the number of positive and negative nominations, the number of these that were reciprocal and the classification generated from the pattern of nominations.

At Time 2, Samina's positive nominations decreased from 4 to 0, and her negative nominations also decreased from 2 to 1. At Time 3 both positive and negative nominations had increased again to 2, and both of Samina's positive nominations were reciprocated. At Time 2, the overall reduction in nominations resulted in Samina being classed as neglected by her peers, however increased nominations resulted in an increase to average social acceptance at Time 3. Therefore the sociometric nominations indicated that over the course of time Samina's social acceptance increased and she had two reciprocal friendships. It must be noted that the findings were possibly skewed by the number of children absent from the Time 2 sociometric activity, particularly given that two of the children who positively nominated Samina at Time 1 were absent for the activity.

Table 4.21 – Sociometric nominations and classifications at Time 1, Time 2 and Time 3

| | ime 1 | Time 2 | Time 3 |
|---|---|---|---|
| No. of positive nominations | 4 | 0 | 2 |
| No. of negative nominations | 2 | 1 | 2 |
| No. of reciprocal positive nominations | 2 | 0 | 2 |
| No. of reciprocal negative nominations | 0 | 1 | 0 |
| Classification | Average | Neglected | Average |

#### *4.5.4.4 The PIPPS teacher and parent ratings.*

Samina scored within the average range on most dimensions of the PIPPS, as rated by both the parent and teacher at Time 1. The exception being that the teacher rated Samina's play interaction as above average and the parent rated Samina's play disruption as below average.

Figure 4.21 displays the teacher's ratings for each dimension of the PIPPS, at Time 1, Time 2 and at Time 3. According to the teacher, Samina's play interaction in the classroom did not change from Time 1 (t=64) to Time 2 (t=64), and increased slightly at Time 3 (t=66). Samina's level of disruption in play decreased from Time 1 (t=48) to Time 2 (t=43) and decreased again at to below average at Time 3 (t=37). Samina's level of play disconnection decreased from Time 1 (t=55) to below average at Time 2 (t=38) and decreased further at Time 3 (t=35). The teacher ratings indicated that Samina's social competence moved in the expected direction over the course of time.

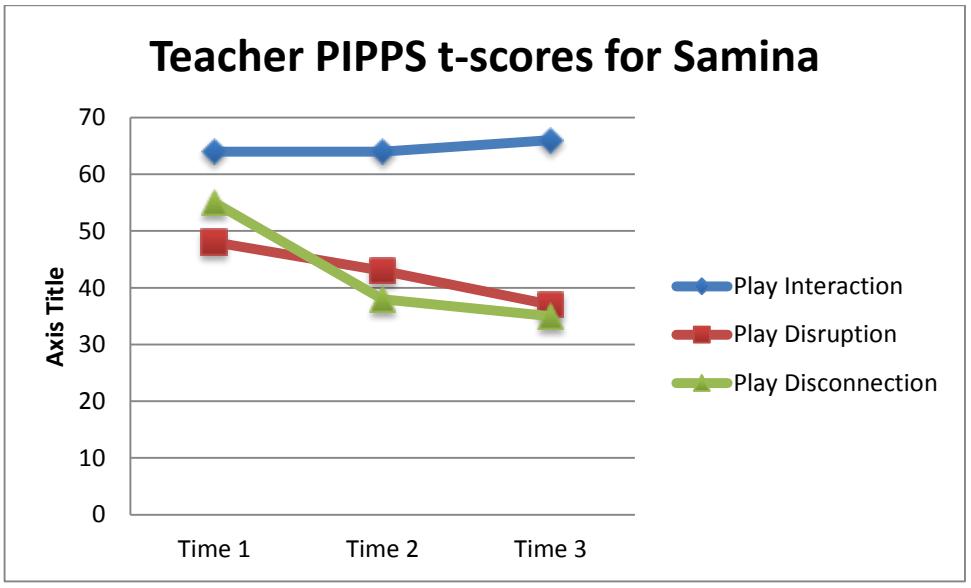



*Figure 4.21 – Time 1, Time 2 and Time 3 PIPPS teacher t-scores for Samina*

Figure 4.22 shows the parent's ratings for each dimension of the PIPPS at Time 1, Time 2 and Time 3. According to the parent, Samina's play interaction increased from Time 1 (t=52) to above average at Time 2 (t=66) and then decreased again at Time 3 (t=62) although this

remained higher than at Time 1. Samina's level of play disruption increased from below average at Time 1 (t=26) to Time 2 (t=44) and then decreased again at Time 3 to the same level as Time 1 (t=26). Samina's level of play disconnection decreased from Time 1 (t=43) to below average at Time 2 (t=35) and this was sustained at Time 3 (t=35). The parent ratings indicated that Samina's social competence moved broadly in the expected direction over the course of time.

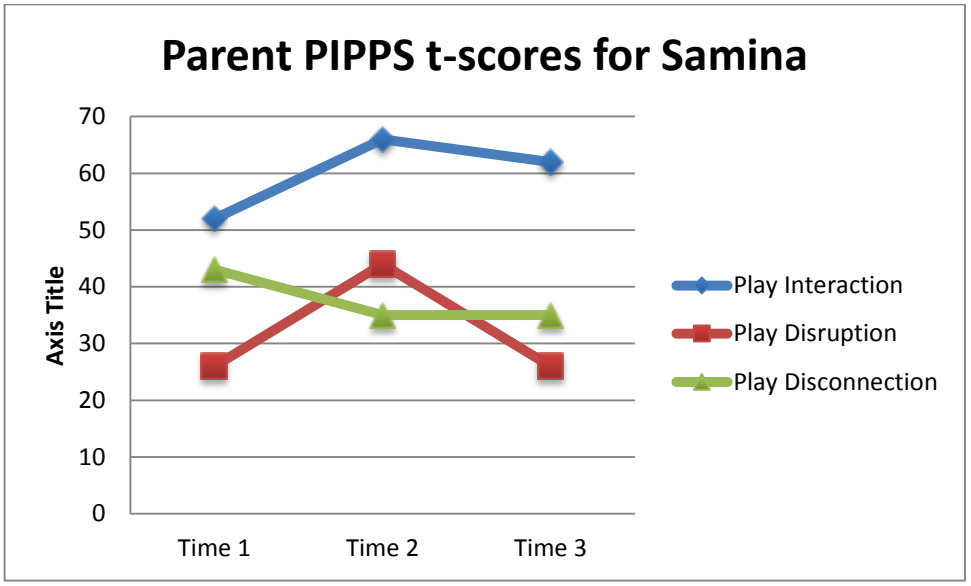
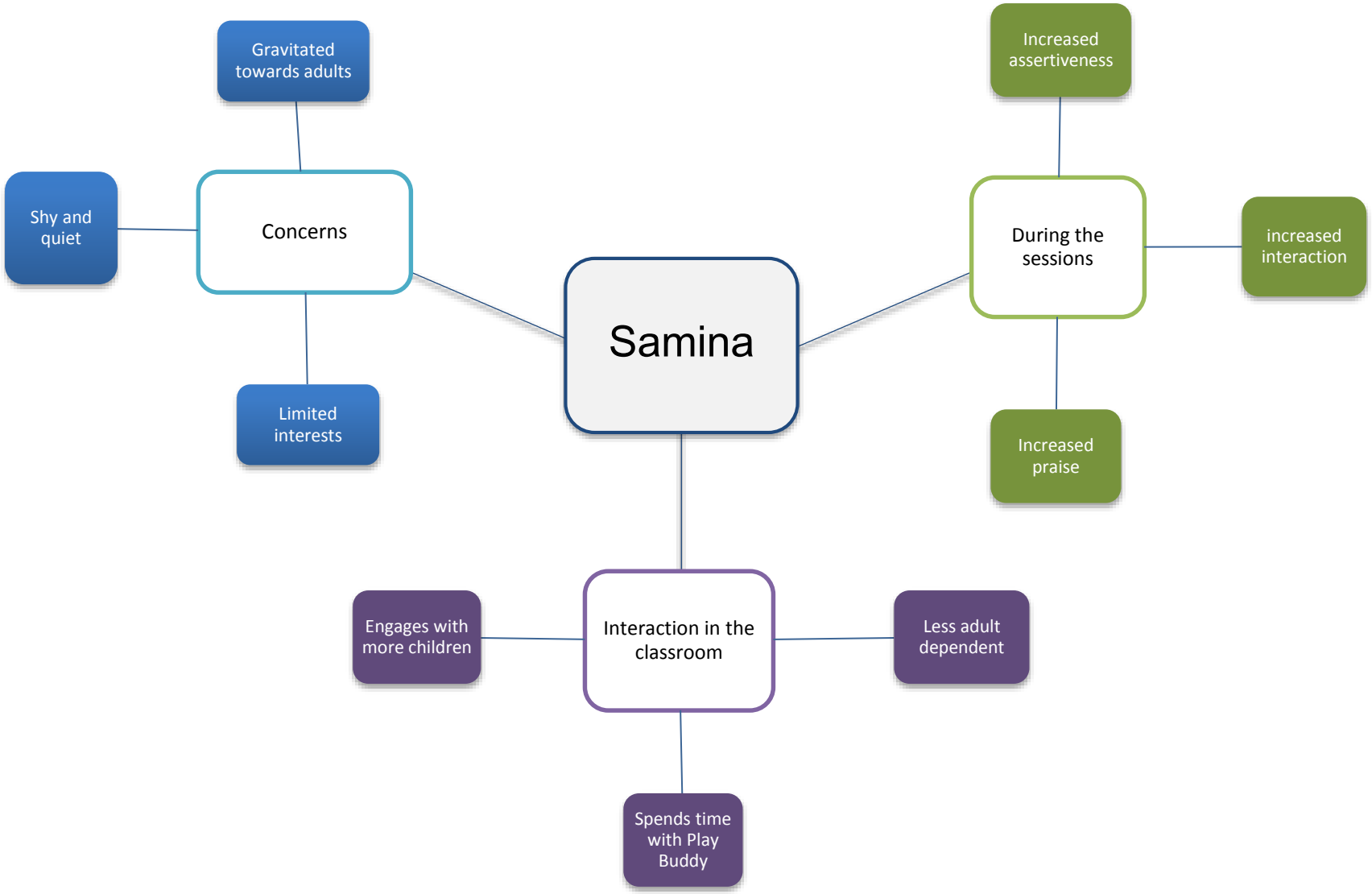



*Figure 4.22 – Time 1, Time 2 and Time 3 PIPPS parent t-scores for Samina*

#### *4.5.4.5 Play Supporter group interview.*

Thematic analysis of the Play Supporter group interview produced 3 organising themes for Samina: Concerns, During the Sessions and Interaction in the Classroom and these are illustrated in Figure 4.23. These will now be discussed in turn, with illustrative examples from the Play Supporter interview transcript.

*Figure 4.23 - Thematic Network for Samina*



*4.5.4.5.1 Organising theme – Concerns.*

The first theme derived from the data for Samina provides the Play Supporters' views on the concerns they had about Samina's interaction in the Nursery prior to the start of the sessions. This theme encompasses 3 basic themes, which are displayed along with illustrative examples from the interview transcript, in Table 4.22. The Play Supporters briefly discussed Samina's interest in friends, suggesting that she liked to play with the same small group of girls and they gave the impression they felt that this was somehow limiting her. When describing the positive changes seen in the classroom, the play supporters made comparisons with Samina's previous tendency to always play with the same girls and always spend time writing and drawing. Samina was described as shy and quiet by the Play Supporters, and they ascribed a permanency to these traits as though they were part of her personality that might not change. The Play Supporters had both recognised that Samina appeared to seek out the adults in the classroom and preferred to spend time with adults generally.

Table 4.22 – Organising and basic themes for Concerns

| **Organising theme – Concerns** | |
|---|---|
| **Basic themes:** | **Examples** |
| Limited interests | "Just that little group of girls that she likes to play with." |
| | "Rather than it just being them and always writing and drawing." |
| Shy and quiet | "She's, sometimes I think she's quite shy still." |
| | "Sometimes, I think she just likes her own company sometimes. She's a child who likes to read and write and sit quietly, she just likes her own company, she's one of those children that just likes to be by herself and do stuff on her own." |
| Gravitates towards adults | "I think she would sort of gravitate to where there's an adult." |
| | "She likes to be around the adults as well Samina doesn't she?" |

*4.5.4.5.2 Organising theme – During the Sessions.*

The second organising theme derived from the interview data reflects the Play Supporter's views of Samina's behaviour and the changes in Samina during the sessions. This organising

theme comprises 3 basic themes and these are displayed, along with illustrative quotes from the interview transcript, in Table 4.23. The Play Supporter who facilitated Samina's sessions discussed the children praising each other and spoke as if this was an intended outcome of Play Bank. She described praising the children when they praised each other and seemed pleased that this pair was the best at praising each other. The interaction between the two children clearly increased from the initial session in which the Play Supporter reported there was no interaction between the two children. As time went on, Samina began to initiate more of the play and invite Ariane to play with her. Finally, the Play Supporter also described Samina's assertiveness within the play sessions, which enable her to play the games she was interested in.

Table 4.23 – Organising and basic themes for During the Sessions

| **Organising theme – During the Sessions** | |
|---|---|
| **Basic themes:** | **Examples** |
| Increased praise | "They were the best pair for praising each other, their interaction, out of my pairs." |
| | "Erm and that was when they were saying, 'well done' or 'you've done such a good job'" |
| | "And I'd said that was really nice when you said well done to Samina and then she was starting to do it towards the end." |
| | "Yeah and she was praising Ariane a lot." |
| Increased interaction | Researcher – "What was the nature of their play and their interaction when you very first started?"<br>"It was zilch. Samina would do her thing and Ariane would do her own." |
| | "But now she'll be like, 'Ariane shall we play this, do you want to play it with me?; and they'll play together." |
| Assertiveness | "I think Samina stood her ground quite a lot." |
| | "So she was saying, 'No I want to play this." |

*4.5.4.5.3 Organising theme – Interaction in the Classroom.*

The third organising theme derived from the data relates to the changes that the Play Supporters had noticed in Samina in the classroom following the sessions. It illustrates that there had been some positive change in Samina's interaction with others in the classroom. This organising theme comprises 3 basic themes and these are displayed, along with illustrative quotes from the interview transcript, in Table 4.24. The Play Supporters had noticed that Samina and her Play Buddy had developed a relationship outside of the play sessions. They would often continue playing together after the sessions and chose to spend time with each other when they wouldn't have done so previously. In addition, Samina appeared to have widened her choice of playmates, which the Play Supporters seemed to feel was important for her to do. They also felt that participating in the sessions had made an impact on Samina's reliance on adults, suggesting that she spends less time clinging to adults than previously.

Table 4.24 – Organising and basic themes for Interaction in the Classroom

| **Organising theme – Interaction in the Classroom** | |
|---|---|
| **Basic themes:** | **Examples** |
| Spends time with Play Buddy | "Yeah like Samina and Ariane would go off and then they'd go and play together after they'd finished, they didn't every time but most of the time they'd find something to do together." |
| | "Like when we've been in the carpet sessions sometimes they'll sit together." |
| | "I see them going to choose to play with each other and talking to each other a lot more." |
| | "I mean sometimes they'll sit together at dinner." |
| | "Yeah cos I don't think they were choice friends before, they weren't the kind of girls who'd go round together. Whereas now they will, so..." |
| Engages with more children | "She's learned to talk to somebody else that isn't just that little group of girls that she likes to play with, I think she's realised that there's other girls that she could play with." |
| | "Erm Samina seems to engage with a lot more children." |

| | |
|---|---|
| | “She goes to Kyra quite a lot more now and she does go to Ariane.” |
| | “When she plays outside she plays with [pause] she plays with a bigger group outside.” |
| Less adult dependent | “Whereas now she's not as obviously staying attached to your side or at the table where you are, so it has made an impact on her hasn't it?” |

### 4.5.5 Leila.

#### *4.5.5.1 Case description.*

Leila is a 4 year old, British Arab girl who is bilingual, speaking both Arabic and English in the home with her parents and sibling and English with her peers in school. Leila lives at home with both parents, and one younger sibling. She has attended the Nursery since September 2013. Leila’s EYFS profile scores in Personal, Social and Emotional Development indicated below expected development for her chronological age (see Table 4.25). Leila took part in 10 out of 12 sessions.

Table 4.25 – EYFS Scores in Personal, Social and Emotional Development

| Chronological age – 46 months | |
|---|---|
| Scale | Developmental age range (Emerging/Developing/Secure) |
| Self-confidence and awareness | 22-36 (Secure) |
| Managing feelings and behaviour | 30-50 (Emerging) |
| Making relationships | 22-36 (Secure) |

Qualitative notes taken by the researcher during the Time 1 observation indicated that Leila was a focused girl who spent her time engaging in pre-academic activities and sand play. Leila seemed to follow her own interests rather than actively seek out other children to play with, although she did interact with the different children who joined her table or came to play at the sand pit. At the sand pit, Leila joined in with play initiated by another child, taking turns to fill up a bucket with sand, using some good non-verbal communication and giggling at the other child. However she stood back and watched when a second child arrived who began to lead the play with new ideas, before both children left and Leila remained playing on her own.

#### *4.5.5.2 The Pre-school Observation Code.*

The free play observations provided information about Leila's behavioural states and the nature of her interactions in the classroom at Time 1, Time 2 and Time 3. Figure 4.24 illustrates the range and percentage of time spent in various behavioural states observed in 30 minutes using the POC at the three time intervals. The time spent by Leila engaging in social interaction with her peers slightly reduced from 18.3% at Time 1 to 16.7% at Time 2 and increased again to 40% at Time 3. The time spent engaging in play decreased considerably from 33.3% to 0% at Time 2, and then increased again to 40% at Time 3. The time spent in pre-academic activities increased from 43.3% to 81.7% at Time 2 and then decreased markedly to 0% at Time 3. The time spent in unoccupied behaviour increased from 11.7% to 15% at Time 2 and increased again to 18.3% at Time 3.

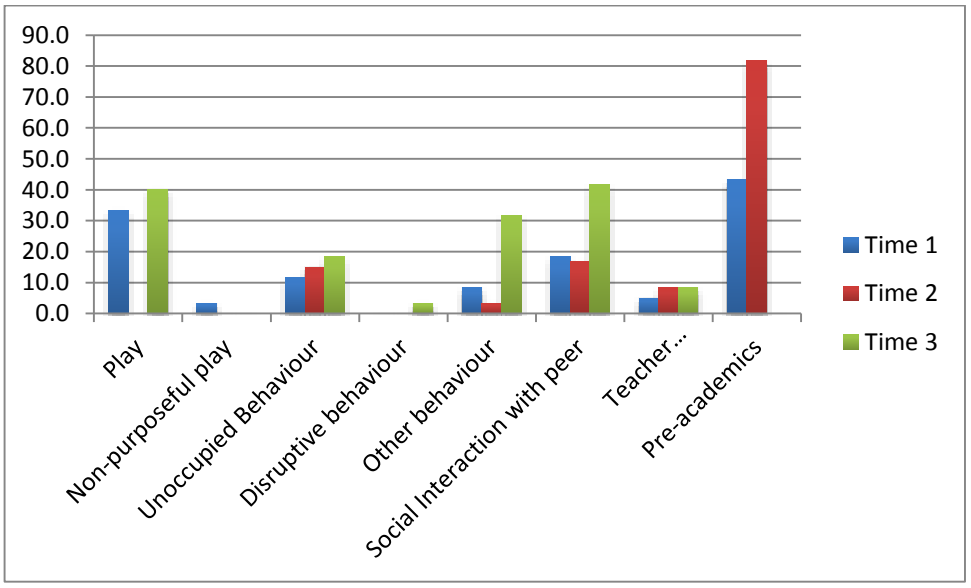



*Figure 4.24 - Percentage of time spent in behavioural states during a 30 minute free play observation at Time 1, Time 2 and Time 3.*

Figure 4.25 below illustrates the nature and frequency of Leila's interaction with her peers observed in 30 minutes, using the POC at the three time intervals. The frequency of Leila's positive motor interactions reduced from 23 at Time 1 to 11 at Time 2 and increased markedly to 54 at Time 3. The frequency of Leila's positive verbal interactions increased from 12 at Time 1 to 39 at Time 2 and increased again to 48 at Time 3. The frequency of Leila's negative motor

interactions reduced from 5 at Time 1 to 1 at Time 2 and then increased to 2 at Time 3. There were no instances of negative verbal interactions at Time 1, and this increased to 2 at Time 2 and then reduced again to zero at Time 3. The frequency of Leila approaching the teacher reduced from 4 at both Time 1 and 2, to zero at Time 3.

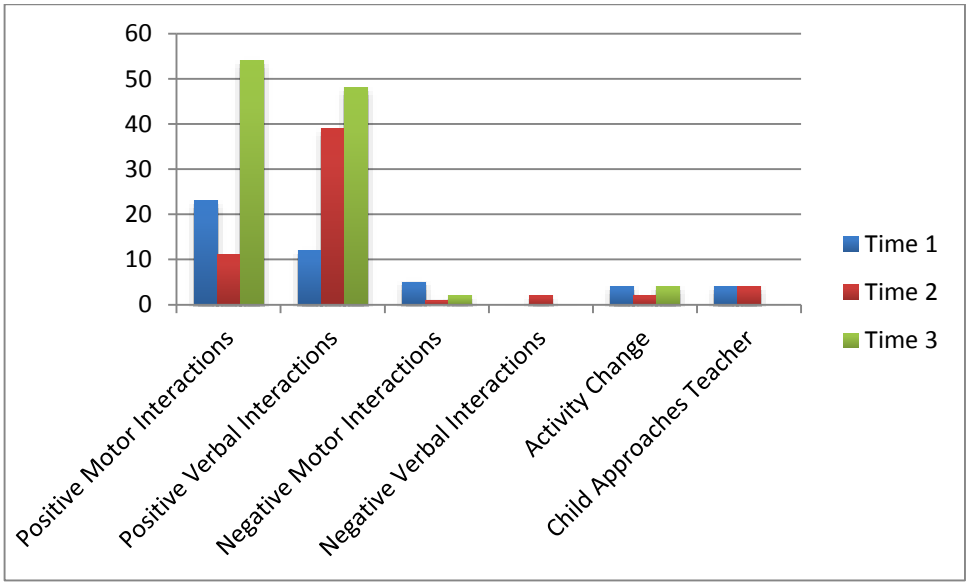



*Figure 4.25 - Frequency of Samina's behavioural events occurring during free play, at Time 1, Time 2 and Time 3*

Qualitative notes made by the researcher during the Time 2 observation showed that Leila continued to spend a lot of time engaging in pre-academics at the writing table, with a number of other girls. At the beginning of the observation, a teacher was sitting at the table and Leila sat very close to her, interacting very little with the other children. The adult left the table and one girl remained and Leila asked her about what she'd been making. They both chatted about their projects, showing each other what they had made and discussing new ideas.

At Time 3, the researcher's qualitative notes showed that Leila engaged in some highly imaginative play with another girl, in which they were pretending to be mermaids. The other girl led the play, providing the ideas and showing a higher level of imaginary play, however Leila joined in with enthusiasm, copying the girl's movements and offering her own sound effects, "splash!" and crying, "Ah, help me, I can't swim now!" She also spent some time in the snack café where she sat with another girl and chatted while they ate their snack. She was smiley and

showed interest in the other children, sitting at the table with open body language which encouraged others to come and join her.

#### *4.5.5.3 Sociometric nominations.*

The sociometric activity at Time 1 suggested there were no concerns regarding Leila's social acceptance, as she did not receive a classification therefore indicating that she was in the average range. Table 4.26 displays the number of positive and negative nominations, the number of these that were reciprocal and the classification generated from the pattern of nominations.

At Time 2, Leila's positive nominations increased from 3 to 6 and then decreased again to 3 at Time 3. Leila's negative nominations remained at 2 over the course of Time 1 and 2 and then increased to 5 at Time 3. No positive reciprocal nominations were received at Time 1 and 2, however Leila received 2 positive reciprocal nominations at Time 3. At Time 2, the increase in positive nominations resulted in a change in classification from average to popular. At Time 3, the occurrence of a high number of negative nominations alongside positive nominations resulted in a classification of controversial. The findings from the sociometric activity therefore suggest that Leila was more socially accepted by her peers over the course of time, yet she was also rejected by more of her peers, resulting in a controversial status.

Table 4.26 – Sociometric nominations and classifications at Time 1, Time 2 and Time 3

| | Time 1 | Time 2 | Time 3 |
|---|---|---|---|
| No. of positive nominations | 3 | 6 | 3 |
| No. of negative nominations | 2 | 2 | 5 |
| No. of reciprocal positive nominations | 0 | 0 | 2 |
| No. of reciprocal negative nominations | 0 | 0 | 0 |
| Classification | average | Popular | Controversial |

#### *4.5.5.4 The PIPPS teacher and parent ratings.*

Leila scored within the average range on all three dimensions of the PIPPS at Time 1. Figure 4.26 shows the teacher's ratings for each dimension of the PIPPS, at Time 1, Time 2 and Time 3. According to the teacher, Leila's play interaction in the classroom increased from Time 1 (t=46) to Time 2 (t=66), and then decreased at Time 3 (t=62). Leila's level of disruption in play decreased from Time 1 (t=44) to Time 2 (t=35) and then increased again at Time 3 (t=48). Leila's level of disconnection in play decreased from Time 1 (t=51) to Time 2 (t=38) and then increased again at Time 3 (t=45).

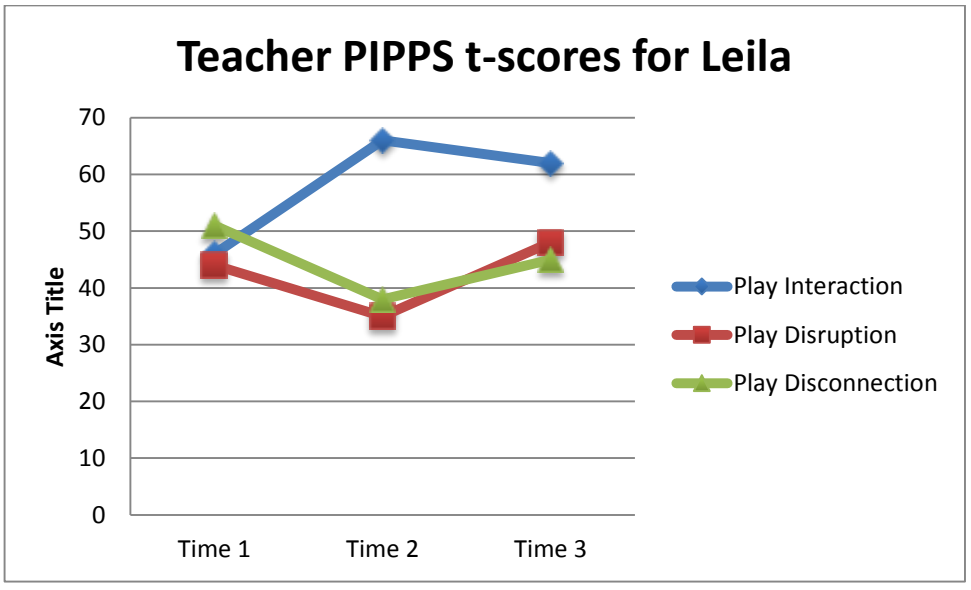



Figure 4.26 - Pre and *Time 2* and *Time 3 PIPPS t*eacher t-scores for Leila

Figure 4.27 below shows the parent's ratings for each dimension of the PIPPS, at Time 1, Time 2 and Time 3. According to the parent, Leila's play interaction at home increased from Time 1 (t=56) to Time 2 (t=62), and increased further at Time 3 (t=64). Leila's level of disruption in play increased from Time 1 (t=37) to Time 2 (t=47) and then decreased again at Time 3 (t=39). Leila's level of disconnection in play decreased from Time 1 (t=60) to Time 2 (t=47) and remained the same at Time 3 (t=47).

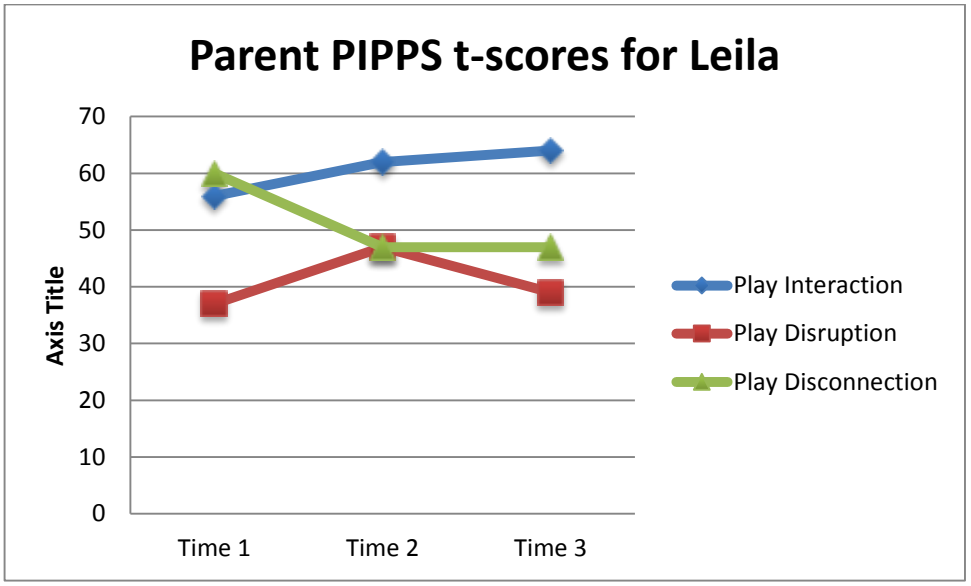
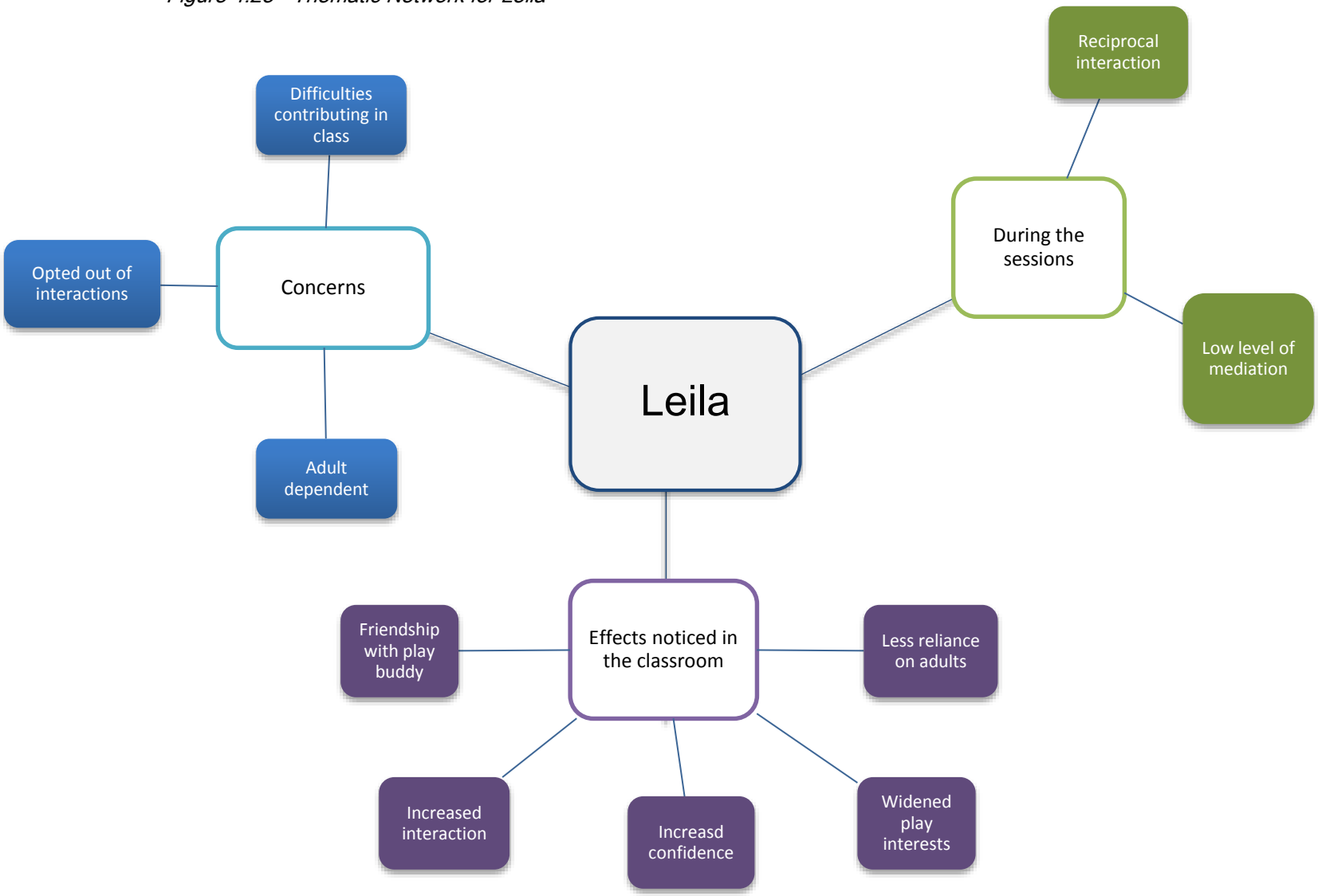



*Figure 4.27 - Time 1, Time 2 and Time 3 PIPPS parent t-scores for Leila*

#### *4.5.5.5 Play Supporter group interview.*

The thematic analysis of the interview data produced 3 organising themes for Leila: Concerns, During the Sessions and Interaction in the Classroom, which can be seen in Figure 4.28. These will now be discussed in turn, with illustrative examples from the Play Supporter interview transcript.

*Figure 4.28 - Thematic Network for Leila*



*4.5.5.5.1 Organising theme – Concerns.*

The first theme derived from the data for Leila provides the Play Supporters' views on the concerns they had about Leila's interaction in the Nursery prior to the start of the sessions. This theme encompasses 3 basic themes, which are displayed along with illustrative examples from the interview transcript, in Table 4.27. The Play Supporters described instances where Leila had found it difficult to contribute in group situations in the classroom. It appeared as though Leila was keen to participate but that she found it difficult to speak out loud. The Play Supporters suggested that Leila tended to give up in situations that required her to interact with her peers. When the teaching staff tried to encourage Leila to interact by suggesting she asked her peers for help on an activity, she would rather opt out of the activity than ask them for help. They recalled that prior to the sessions, Leila was one of the children who tended to follow the adults around and seemed to rely on the adults for interaction.

Table 4.27 – Organising and basic themes for Concerns

| **Organising theme – Concerns** | |
|---|---|
| **Basic themes:** | **Examples** |
| Difficulties contributing in class | "Like in group time, share and talk and things she'd be another one who didn't really comment and just show her pictures." |
| | "She'd sometimes put her hand up to answer a question and then wont answer." |
| | "She'd just sit there and then look at you, it was like come on Leila what did you want to tell me?" |
| | "It'd take her half an hour to get her answer out and then you've gone off it." |
| Opted out of interactions | "Yeah she'd be like 'nah I don't want to do it then.'" |
| | "Yeah she wouldn't bother." |
| Dependent on adults | "Cos Leila at times was at times one who'd just follow me around." |
| | "And she just like wants to talk to you doesn't she." |

*4.5.5.5.2 Organising theme – During the Sessions.*

The second organising theme derived from the interview data reflects the Play Supporter's views of Leila's behaviour and the changes in Leila during the sessions. This organising theme comprises 2 basic themes and these are displayed, along with illustrative quotes from the interview transcript, in Table 4.28. The Play Supporter who facilitated Leila's play sessions reported that there was a good level of interaction between the two girls from the outset, despite them not being friends beforehand. The Play Supporter described the children as being happy together and she gave the impression she felt that she didn't need to mediate or coach the children in these sessions. In comparison to other children's sessions where the interaction clearly progressed, the Play Supporter didn't discuss changes in Leila's interaction in any detail and this is possibly because the children interacted well from the beginning.

Table 4.28 – Organising and basic themes for During the Sessions

| **Organising theme – During the Sessions** | |
|---|---|
| **Basic themes:** | **Examples** |
| Reciprocal Interaction | "You know they were just a really good pair that chatted away." |
| | "That'll be my Leila and Clara, my pair of chatterboxes." |
| | "They talked constantly, asked each other questions, where does this go and what's that etc." |
| | "I think they were talking about that in the sessions. Chatting about the babies." |
| Low mediation | "They were quite happy to be together and play together right from the beginning." |
| | Researcher - "And how about the coaching?"<br>"They didn't need an awful lot." |

*4.5.5.5.3 Organising theme - Interaction in the Classroom.*

The third organising theme derived from the data relates to the changes that the Play Supporters had noticed in Leila in the classroom following the sessions. It illustrates that there had been some positive change in Leila's interaction with others in the classroom. This organising theme comprises 5 basic themes and these are displayed, along with illustrative quotes from the interview transcript, in Table 4.29. The Play Supporters described a number of positive changes in Leila in the classroom. Leila seemed to rely less on adults and the Play Supporters felt that this was an important outcome. She also widened her choice of playmates in the classroom and what kinds of activities she chose to participate in. Her increased participation may have been as a result of increased confidence, which the Play Supporters made several references to. In comparison to the difficulties described with approaching and interacting with other children before the sessions, Leila appeared more able to go and ask another child for help when prompted to by her teacher. In addition, she was also able to tell her teachers and the rest of the group about her talk book in front of the class. Finally, the Play Supporters had noticed that Leila and her Play Buddy, Clara were spending time with each other outside of the sessions, choosing to play together and work together in the writing area. They felt that the two girls had formed a friendship which enabled Leila to seek support and company, instead of not knowing where to play.

Table 4.29 – Organising and basic themes for Interaction in the Classroom

| **Organising theme – Interaction in the Classroom** | |
|---|---|
| **Basic themes:** | **Examples** |
| Less reliance on adults | "But now she's quite happy to take herself off, from me or from you." |
| | Researcher – "So less dependent on adults?"<br>"Yeah"<br>"Definitely" |
| | "I think for Leila it was just about … taking her away from adults." |
| Widened play interests | "I think for Leila it was just about widening her choice of who she plays with." |
| | "Yeah and what she plays with. Getting her to try new things." |
| | "And I think Leila will try more things now." |

| | |
|---|---|
| | “Yeah definitely…she’ll have a go now.” |
| Increased confidence | “I thinks she's just gained confidence hasn't she in herself.” |
| | “She's a lot more confident now isn't she?” |
| | “She has come out of herself a lot as well.” |
| Increased interaction | “Yeah they can do it and they'll show you how to do it. And she will go and ask now.” |
| | “Whereas now she'll tell you all about it.” |
| Friendship with play buddy | “And I think having a friendship with Clara, its someone else she can fall back on and rely on if she wants something or she doesn't know where to play or something.” |
| | “I don’t think they were children who would have chosen to play with each other before the sessions but they do now don’t they?” |
| | “They're quite often in the writing area together aren’t they?” |

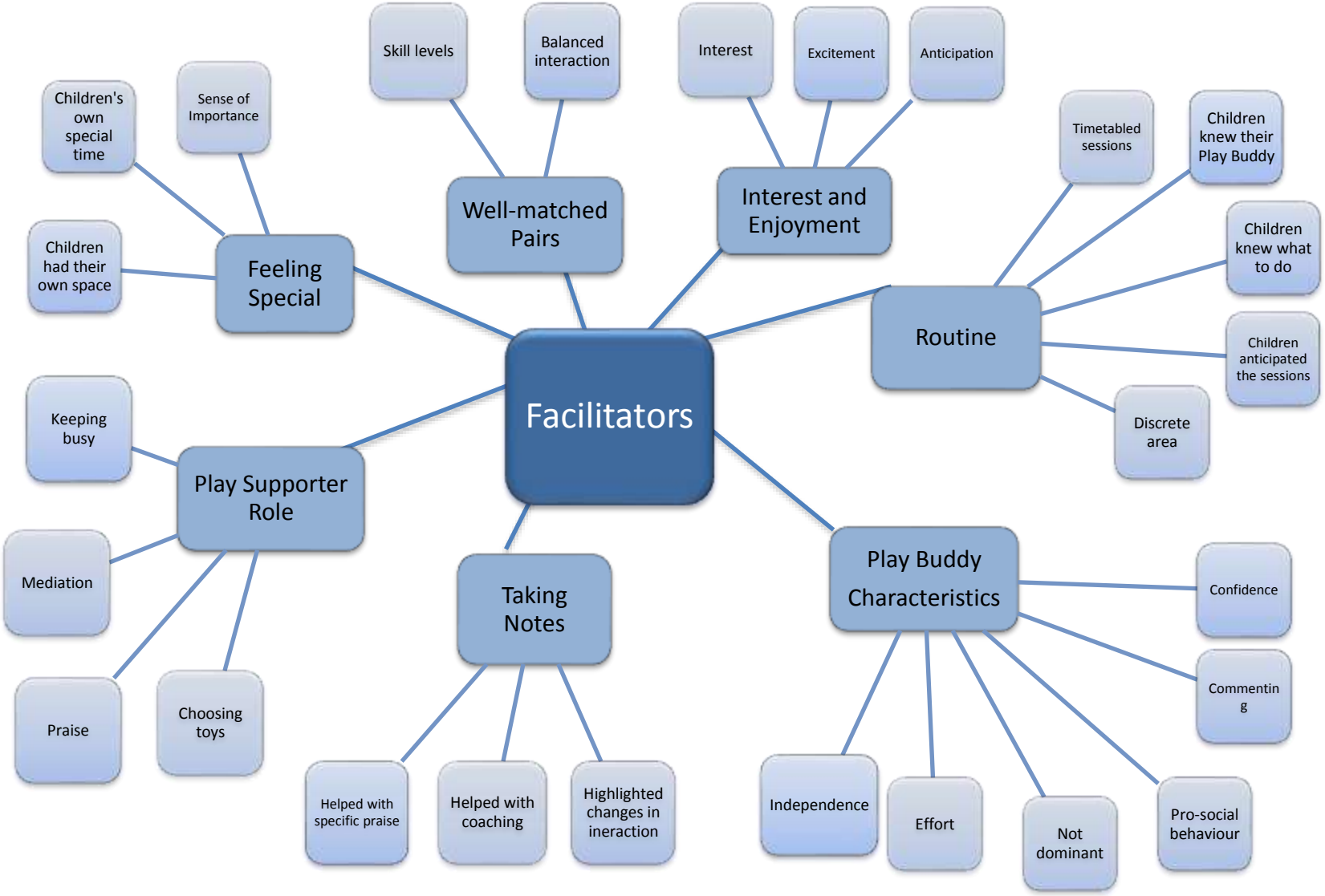
### 4.6 Findings for Research Question 3

The semi-structured group interview provided the data to address this research question. The play supporters were asked about their experience of running the sessions, which revealed some useful insights into the barriers and facilitators to the successful implementation of Play Bank. Two global themes were extrapolated from the data, Barriers and Facilitators. The two global themes will now be discussed in turn with illustrative examples from the interview transcript.

#### 4.6.1 Global theme – Facilitators.

The first global theme, Facilitators, represents the factors the Play Supporters found helpful when running the sessions. The facilitators identified by the Play Supporters broadly fell into four areas. There were logistical factors that made the sessions easier to implement, and there were interpersonal factors relating to the children, which appeared to facilitate the interaction between the pairs. There were also factors relating to the role of the Play Supporters and factors relating to positive feelings towards Play Bank. A thematic network for the global theme, Facilitators, can be seen in Figure 4.29.

*Figure 4.29 - Thematic Network for Facilitators*



#### *4.6.1.1 Organising theme – Routine.*

This organising theme represents the importance of creating a routine in order to facilitate the integration of the sessions into the curriculum. It encompasses 4 basic themes, which are displayed along with illustrative quotes from the interview transcript, in Table 4.30. The Play Supporters felt that timetabling the sessions to take place across a whole morning or afternoon made it easier for them to set up the sessions. Following the same routine of the sessions also seemed to help the children taking part in Play Bank to know what was happening and get ready for their session. The children understood that it was a discrete session and knew how long it lasted for. The Play Supporters used a sand timer, which helped the children keep to the routine of the session and may have avoided disagreements about finishing their games. At the beginning, the Play Supporters found it difficult because other children would want to come into the play corner. Ensuring the sessions took place in the same area each time helped the other children in the class to realise that the sessions were taking place and the area was not available for them to use. The other children in the classroom began to recognise that the area and the toys were being used for Play Bank and waited until the sessions were finished to enter the area. One Play Supporter reported that all of the children knew who their Play Buddy was and they felt that this helped with the running of the sessions because the children would go off and find their Play Buddies.

Table 4.30 – Organising and basic themes for Routine

| **Organising theme – Routine** | |
|---|---|
| **Basic themes:** | **Examples** |
| Timetabled sessions | "It was fairly easy wasn't it? And then for the sessions we used to just set it up, whoever was doing the first session used to just set it up." |
| | "And we'd just alternate wouldn't we, then I'd do my pair and you'd do yours." |
| | "So if Miss Davis was doing the first session she'd set it up or if I was doing the first session I'd set it up and then we'd just leave it running then for the rest of the afternoon." |
| | "As soon as yours had finished they'd know then that it was their turn." |

| | |
|---|---|
| Children knew what to do | “And then you'd get them coming to you saying is it my turn next and I'd say oh it's Mrs Woods’ group next and then it'll be our turn.” |
| Discrete session | “And so they definitely saw it as being a discrete session where..” |
| | “Yeah with a beginning and an end.” |
| | “Oh look the sand's run out its time for us to tidy up for the next ones, you know and they were quite sort of organised.” |
| | “Mm it wasn't kind of right you can use that area, or now you can't. It was actually you couldn't use that area for the morning.” |
| | “After a couple of sessions they kind of got used to when you're around that area they shouldn’t go in there, they should wait.” |
| | “And then afterwards if there were things left out they would say are we allowed to go and play with those things now? Weren't they? It's like, can we go and play with those things now, now they've had a turn.” |
| Children knew their play buddy | “All the children now know who their play buddy is, they can go and get them” |
| | “But Sarah knew her Play Buddy had gone, because when we were doing it and I sent someone to go and get their Play Buddy, Sarah knew - she said I can't do it because she's not here.” |
| | “He [Asad] knew that Kyra was his play buddy, he knew that, he knew that that's what they were doing.” |

#### *4.6.1.2 Organising theme – Play Buddy Characteristics.*

Each of the Play Buddies were chosen because they were considered more socially skilled than the target child. This organising theme represents the insight provided by the Play Supporters into the characteristics of the Play Buddy which they believed were helpful and affected the success of the sessions. This theme comprises 6 basic themes, which are displayed along with illustrative quotes from the interview transcript, in Table 4.31.

The Play Supporters felt that some of the Play Buddies were confident to try new activities and this was an area they wanted the target children to improve in, so the Play Buddies were

important role models for the target children. The Play Buddies who commented on their own play were predicted to be useful partners, as the Play Supporters felt that commenting would facilitate interaction between the pair. Some of the Play Buddies demonstrated pro-social behaviour during the sessions, which helped to maintain harmony and ensured the children continued to play together. There were several instances where the Play Buddy conceded to the target child, which possibly showed a level of maturity and an understanding that it would be better for everyone if they conceded. It appeared that the sessions were more successful for the pairs when the Play Buddy didn't dominate the target child. The Play Supporters described instances where the Play Buddies were persistent in their efforts to engage their partners, suggesting they had an understanding of their role. The Play Supporters talked about independence throughout the interview, in relation to the target children's lack of independence and the how this was supported by Play Buddies who were independent. The Play Supporters placed importance on the goal of becoming independent in play and being able to try new activities. They felt that independent Play Buddies were a good role model for the target children who lacked independence.

Table 4.31 – Organising and basic themes for Play Buddy Characteristics

| **Organising theme – Play Buddy Characteristics** | |
|---|---|
| **Basic themes:** | **Examples** |
| Confidence | "Whereas Clara's got the confidence to try anything new, she just gets stuck in there." |
| | "Whereas Ahmed's a very smiley child and very outgoing and confident." |
| | "Whereas you've got Ariane who's just used to diving in there and getting stuck in and getting everyone else around her to come and get stuck in as well." |
| Commenting | "She'll quite often give a commentary when she's playing, like she describes quite well what she's doing." |
| | "Kyra was doing all the talking and all the commentary, she's really good at the running commentary." |
| | "And because Kyra does give a running commentary and he [Asad] doesn't, we thought that they would be a good pair. |

| | |
|---|---|
| | "Yeah she talks to herself while playing, she asks herself questions and answers them." |
| Pro-social behaviour | "Yeah because that's what Clara's like isn't she. She's sort of very... she notices things and say oh that's a nice one, you've done a nice one." |
| | "She was saying oh it's your turn now." |
| | "Clara said I don't want the boy one, Leila had given her the boy one, but she didn't make any attempt to take it [the other toy, from Leila], she still played with it even though she didn't really want the boy one. Cos I think by that point it was more important to just play." |
| | "So she [Samina] was saying no I want to play this and Ariane would be like ok then." |
| Not dominant | "No she [Clara] wouldn't try and dominate what was going on because she's not that type of child. And I think that was quite nice for Sarah." |
| | "We thought that they would be a good pair cos she doesn't take over, she's not particularly bossy." |
| Persistence | "She'd follow him but then she'd get a puzzle but do it at the side of him." |
| | "Maybe she thought if I follow him maybe he'll talk to me." |
| | "Ariane would try and engage Samina." |
| Independence | "Whereas Clara … and her sister very sort of, do everything for themselves don't they, they've been brought up to do it for themselves so I think that's been a good influence hasn't it?" |
| | "You know if I'm doing it, you can do it." |
| | "Yeah cos I think at home they've just been brought up like that, that you know you can do it yourself, you don't ask for help you just do it." |

#### *4.6.1.3 Organising theme – Taking Notes.*

The Play Supporters took notes during the session about the interaction they were observing, the types of play and the activities being chosen. This wasn't a requirement of the research and so was not guided by the researcher, but it was a practice that the Play Supporters were familiar with because they had experience of carrying out observations in Nursery. This theme reflects how the Play Supporters found the process helpful in facilitating the sessions. It comprises 3

basic themes, which are displayed along with illustrative quotes from the interview transcript, in Table 4.32.

The Play Supporters found that making notes during the sessions helped them to notice the changes in the interaction and the power balance between the pairs. One of the Play Supporters found it helpful to record if the Play Buddy was being too dominant and this would inform her coaching of the Play Buddy in the next session. Both of the Play Supporters found it useful to make notes about specific behaviours they had observed in the children, so that they could then provide praise for this at the end of the session.

Table 4.32 – Organising and basic themes for Taking Notes

| **Organising theme – Taking Notes** | |
|---|---|
| **Basic themes:** | **Examples** |
| Highlighted changes in interactions | "Yeah we just jotted down didn't we, what sort of activities they chose and how they interacted with each other." |
| | "Because we'd made notes on who was leading the play then you could see then that there were weeks that Samina had said, "Oh let's play this |
| | "And then you can look back at it and see whether the balance has changed, whether your target child is actually interacting more and making the decisions." |
| Helped with coaching | "Who it was who was who was like dominating the play." |
| | "Cos it showed that if it was always Ariane for example taking over then I'd be able to say next time make sure you let Samina have a go." |
| Helped with Praise | "And was there anything that helped you to give that praise?" |
| | "I think making the notes helped [with the praise], sort of jotting things down." |
| | "… cos I'd written down things like when, if they'd helped." |
| | "Or if they'd said well done or good job (to each other) I'd at the end, I'd always comment on 'Oh I liked it when you said well done'." |

#### *4.6.1.5 Organising theme – Interest and Enjoyment.*

This Play Supporters spoke positively about the sessions, and this organising theme reflects that most of the children enjoyed and looked forward to their play sessions, naming it 'Play Buddy Time'. This theme comprises 2 basic themes, which are displayed along with illustrative quotes from the interview transcript, in Table 4.33. The Play Supporters reported that the children showed excitement for the sessions and anticipated the start of the sessions when they saw the Play Supporters arranging the Play Corner. Both the Play Buddies and the target children showed an interest in the sessions, asking the staff when the sessions were happening next.

Table 4.33 – Organising and Basic themes for Interest and Enjoyment

| **Organising Theme – Interest and Enjoyment** | |
|---|---|
| **Basic themes:** | **Examples** |
| Excitement and anticipation | "They were excited as well weren't they, when it was like, can you go and find you play buddy, 'Ooh it's play buddy time!'" |
| | "And then you'd get them coming to you saying is it my turn next?" |
| | "As soon as you put anything out, as soon as they see you going into the area to set things out…" |
| | "It's, 'Is it play buddies time, is it play buddies time now?'" |
| Interest | "Clara used to come to me quite often and then Ariane would (both Play Buddies) but then Samina started too…they'd both ask quite often." |
| | "They'd sometimes come and say to us wouldn't they, is it play buddy time today?" |
| | "Cos I think especially the girls would have played all afternoon together once they got into it especially if they were doing something like playing with the dolls house they would have played all afternoon, they didn't want to stop at tidy up time when it was time for them to finish." |

#### *4.6.1.6 Organising theme – Play Supporter Role.*

The role of the Play Supporter was to coach the Play Buddy prior to the sessions, praise both of the children at the end of the session and mediate the play if necessary. During the sessions, the role of the Play Supporter was to remain in the background where possible and this theme reflect the Play Supporters thoughts about the aspects of their role that facilitated the sessions. This theme comprises 5 basic themes, which are displayed along with illustrative quotes from the interview transcript, in Table 4.34.

The Play Supporters provided different activities for the children to play with over the course of the sessions and they noticed that some activities promoted more interaction than others. Both Play Supporters felt that a giant floor puzzle, whereby the children needed to work together, promoted interaction and in particular conversation. More specifically, one of the Play Supporters felt that it was the problem solving aspect of the activity that encouraged the interaction between the two children in one particular session. One of the Play Supporters found that providing new activities helped to engage the children in the sessions because in her experience, the children were keen to play with new toys when they were introduced into the Nursery.

The Play Supporters felt that the praise was easy to implement because they frequently used praise within the classroom and because the children often did something praiseworthy. It was felt that the effects of the praise were different for different pairs of children, and some benefitted from the praise more than others. For one particular pair, the Play Buddy began to praise the target child frequently, as a result of the Play Supporter's praise. The Play Supporter felt that the Play Buddy praising the target child helped to improve the interaction.

The Play Supporters described instances where they had needed to mediate the play or interaction between the pairs of children. The mediation appeared to be helpful for the pairs in which the Play Buddy was over dominant or where there was a lack of engagement. The mediation was also needed when the children wanted to interact with the Play Supporters instead of interacting with each other. One Play Supporter was able to divert the attention back to the other child in order to encourage the interaction. One Play Supporter found that an effective way to ensure the children didn't focus on interacting with her was to remain outside of the Play Corner and occupy herself with a task.

Table 4.34 – Organising and basic themes for Play Supporter Role

| **Organising Theme – Play Supporter Role** | |
|---|---|
| **Basic themes:** | **Examples** |
| Selecting toys | "The dolls house definitely got a lot of interaction going, they loved that. There was that spotty dog game, my pairs loved that." |
| | "There was one jigsaw puzzle, it was huge one, that big floor one…"<br>"…The floor puzzle yeah."<br>"That one was alright, Ariane and Samina worked really well with that."<br>"Yeah quite a lot of conversation came out of that with mine." |
| | "When they did the giant floor puzzle, and it was quite hard because some of the pictures, the piece, it was quite a difficult puzzle. So then they worked really hard together and they were saying, 'this one goes here', and the other was saying 'no it doesn't go there,' and they were like 'maybe this one goes here'. Because they were problem solving there seemed to be quite a lot of conversation going on, that gave them a lot to talk about." |
| | "That was quite easy I thought because we just tried to choose activities that were sort of new to them, things that they hadn't seen before…cos they like up for anything new aren't they? As soon as they see anything new it's 'can we play with it, can we play with it', so I thought that was quite easy." |
| | "As soon as the dolls house came out, everybody wanted to do it, they wanted to have a go." |
| Praise | "It was quite easy really, cos we're sort of used to praising them aren't we constantly." |
| | "We generally do, we're always praising them aren't we?" |
| | "There was always something you could praise them for, something well that they've done." |
| | "Yeah it did depend on the partnership I think, how dominant the Play Buddy was compared to the target child, depended how much coaching and how much praise they needed." |

| | |
|---|---|
| | “I think for Ariane and Samina they probably needed that praise and coaching to say, to make sure they took turns and it wasn't just the Play Buddy dominating.” |
| | “Whereas where it was more balanced I don’t think they needed it as much.” |
| | Researcher - “Was there anything specific about the skills of the play buddy or was it about the skills of the target child that improved the interaction?”<br>“Erm, I think all the praise that Ariane was giving.”<br>“I mean Ariane and Samina did like, ‘well done Samina, well done Ariane’." |
| Mediation | “Why don't you let your play buddy choose this time, cos you chose the activity last time, so let them choose and see what they would like to play with. Cos like Ahmed was like, we're playing this come on, Bilal we're playing this. And it was like, ‘maybe Bilal doesn't want to play with that, maybe he'd like to choose what you play with today.’” |
| | “So I was saying to her let Samina do it and she wants your help she'll ask you for it.” |
| | “I think when it was Kyra and Asad sometimes I had to step in and say, ‘oh Kyra why don't you show Asad that’, just to try to get them to engage a bit more.” |
| | “They were like asking me and I was saying, ‘well ask your play buddy if they know where it goes or which way you need to turn it til it fits.’” |
| Keeping Busy | “At the beginning they wanted to ask you but once they realised you were actually doing something else, they talked to each other more.” |
| | “We just kind of made notes and then helped the others with the Selotape and things, so that you weren't actually watching what they were doing you were just helping them find the end of the selotape and stapling things and pretending you weren't involved in what they were doing. So they had to then speak to each other.” |

#### *4.6.1.7 Organising theme – Well-matched Pairs.*

This organising theme represents the Play Supporters' views that the success of the sessions was affected by the way in which the children were paired. Where the pairs were well matched, the Play Supporters felt this facilitated the interaction. This theme comprises 2 basic themes, which are displayed along with illustrative quotes from the interview transcript, in Table 4.35.

The Play Supporters noticed that with some of the pairs of children, the interaction was more balanced and both children appeared to interact equally. For one pair who interacted well, the Play Supporter felt it was less about the skills of the Play Buddy and more about the two children being similar. One of the Play Supporters felt that a particular pair of children was well-matched because they were of different skill levels and so it encouraged the target child to look to the more skilled child for help, which therefore encouraged interaction.

Table 4.35 – Organising and Basic themes for Well matched pairs

| **Organising Theme – Well-matched Pairs** | |
|---|---|
| **Basic themes:** | **Examples** |
| Balanced interaction | "They were quite a good pairing, they were quite a balanced pair. They were fairly quiet but they both talked, they both interacted loads when they were playing together." |
| | "They were also more balanced and that meant they didn't need me so much, they asked each other things and I didn't need to intervene." |
| | "Yeah it was quite a good balance when you look at the conversation log, it was quite a good balance between the two of them." |
| | "Probably because they were very similar level of quietness." |
| | "Yeah they were closer socially and that seemed to be helpful." |
| Different skill levels | "They were puzzle choosers those ones. And Sarah's not particularly good at it is she, so she had to ask for help. But she wanted to do it because Hana was doing it. So she had to ask for help and it was quite good." |
| | "Sarah's asking Hana for help more, she needs help with something she'd be like 'can you help? I need help'. Cos Hana's quite good academically, so it was like, yeah I'll help you." |

#### *4.6.1.8 Organising theme – Feeling Special.*

The final organising theme reflects the Play Supporter's sense that the children who had taken part in Play Bank felt special; they felt important that they were taking part in something that not all of the children in the class were doing. This theme comprises 2 basic themes, which are displayed along with illustrative quotes from the interview transcript, in Table 4.36.

The children gained a sense of importance from taking part in the sessions and this was evident in the children generally. The Play Buddies also felt important as they recognised that they had a special job to do. It is interesting to note that one Play Supporter felt that the sense of importance balanced out throughout the sessions, as the target child gained more skills. The Play Supporters also felt that the children took ownership over the sessions and saw it as their time to play with their play buddy. Treating the sessions as something special perhaps made the children more excited to take part.

Table 4.36 – Organising and basic themes for Feeling Special

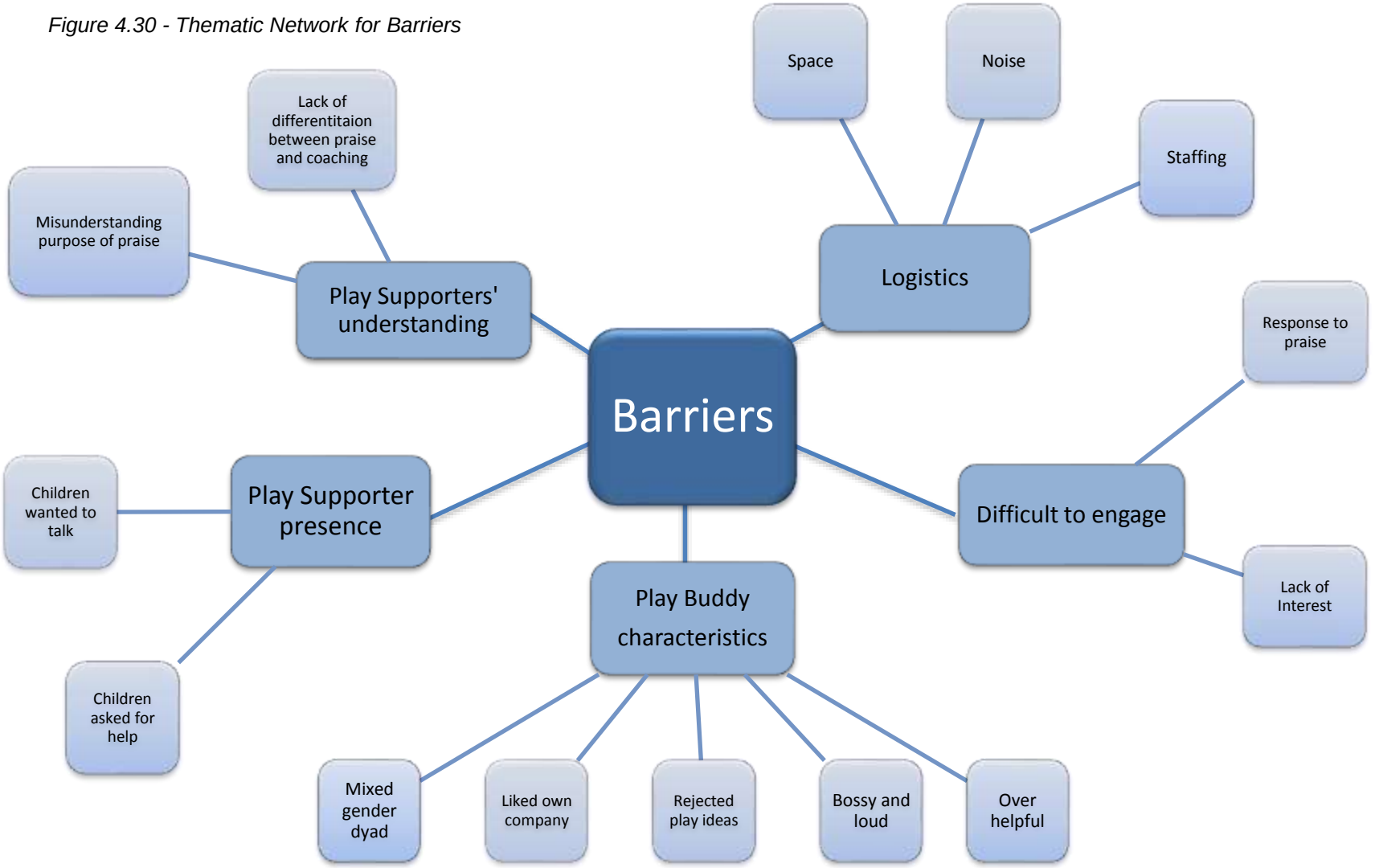
| **Organising Theme – Feeling Special** | |
|---|---|
| **Basic themes:** | **Examples** |
| Sense of importance | "I think it made them feel a little bit important didn't it?" |
| | "That's for Play Buddies time, you know a bit of importance." |
| | "Ariane was like, she wants a job." |
| | "Yeah she's like Ahmed, it's my job, a bit of importance isn't it." |
| | "I think at the beginning, like Ahmed, he thought he was very important cos we'd said, you know you're really good at playing and you're really good at talking about what you're doing when you're playing. And you know we'd like Bilal to be really good like you. And I think he sort of thought he was really important at the beginning but then I think it sort of balanced out didn't it?" |
| | "Once they get into it, it sort of just balances out, as they're learning new skills, it just balances." |
| | "And think yeah that's our time now." |

| | |
|---|---|
| Special time | “They were so excited to go and have their own special time.” |
| | “That’s for Play Buddies time.” |

### 4.6.2 Global theme – Barriers.

The global theme, Barriers, represents the difficulties that the Play Supporters experienced when delivering the sessions, which in different ways may have impacted on the overall effectiveness. Overall, the Play Supporters were very positive about running the sessions, adopting a can-do attitude to solving problems and as a result identified considerably fewer barriers than facilitators. This theme comprises 5 organising themes, which are illustrated in Figure 4.30 and will now be discussed in turn.

*Figure 4.30 - Thematic Network for Barriers*



#### *4.6.2.1 Organising theme – Logistics.*

This organising theme represents the logistical issues that the Play Supporters experienced when setting up and running the sessions. This theme comprises 3 basic themes, which are displayed along with illustrative quotes from the interview transcript, in Table 4.37.

The Play Supporters discussed the issues they had experienced with identifying a suitable space for the play corner. Initially they used a separate room from the classroom that was used frequently for phonics sessions and was therefore familiar to the children. The Play Supporters discussed the compromise that existed between using an area that provided enough space for a variety of activities and needing to retain staffing levels in the main classroom. The result was that they opted to set up the play corner in the book area of the classroom, which was not quite big enough. In addition, the Play Supporters felt that a disadvantage of having the play corner in the main classroom was the noise of the other children, which made it difficult to hear what the children were saying. The original separate room would have provided a quieter space where the Play Supporters could hear the children better. The greatest barrier experienced by the Play Supporters was staff absence and this prevented two of the sessions from taking place. The Play Supporters explained that having supply staff in the classroom meant that they couldn't be taken off timetable to do the Play Bank sessions because they had to supervise the supply staff. This highlighted that Play Bank wasn't adopted as part of the essential curriculum but as an additional intervention

Table 4.37 – Organising Theme - Logistics

| **Organising Theme – Logistics** | |
|---|---|
| **Basic themes:** | **Examples** |
| Space | "We tried to use in here at first but then because it left staffing down in there, then we tried to use the book area more. It wasn't too bad but it's just not quite a big enough space is it, you know to set it up." |
| | "Mm, it's got all that bit there covered so they don't really go under there." |
| | "Mm whereas in here would have been better than that because you've got more |

| | |
|---|---|
| | space.” |
| | “Yeah whereas in that area you couldn't really be putting dressing up clothes because there wasn't the space.” |
| | “Whereas in here you could put them out and it'd be interesting to see if the space made a difference to the whole programme.” |
| Noise | “In here was better because you could actually hear what they were saying to each other.” |
| | “Whereas in there its hard to sort of tune in to the conversation when there's 25 other kids conversing around you.” |
| Staffing | “Just when we were short staffed.”<br>“Yeah staffing.” |
| | “Cos we were short staffed weren't we, we had a few staff off, we've had a lot of supply in. When you've got supply in you can't really be taken off timetable to do something specific because you need to be sort of on top of the supplies.” |
| | “We missed a couple didn't we but we just tried to fit them in, when we had Karen in the afternoon.” |

#### *4.6.2.2 Organising theme – Play Buddy characteristics.*

Whilst the Play Buddies were chosen for their social skills, there were some characteristics that the Play Supporters felt may have negatively affected the sessions. This organising theme represents the insight provided by the Play Supporters into the characteristics of the Play Buddy they believed were unhelpful and may have affected the interaction between the two children in the session. This theme comprises 5 basic themes, which are displayed along with illustrative quotes from the interview transcript, in Table 4.38.

The Play Supporters commented that one of the Play Buddies often wanted to help her partner and do things for her, and this opposed what the Play Supporters wanted to achieve, which was

to foster independence in the target child, Samina. The Play Supporters described some of the Play Buddies as bossy and loud and these are characteristics which may not have been conducive to encouraging shy and withdrawn children to interact. Likewise, Asad's play buddy often rejected his play ideas as she had strong ideas of where she wanted something to go or how it should look. In addition, Asad's Play Buddy was described as a child who liked her own company and to immerse herself in imaginary play, which is perhaps why she may have found it difficult to take on board Asad's ideas. Finally, the mixed gender dyad of Asad and Kyra may have been a barrier owing to Asad's preference for playing with boys. The Play Supporter also felt that Asad may have been encouraged not to play with girls, suggesting this was a cultural norm.

Table 4.38 – Organising and basic themes for Play Buddy characteristics

| **Organising Theme – Play Buddy characteristics** | |
|---|---|
| **Basic themes:** | **Examples** |
| Over helpful | "Right at the beginning I had to say to Ariane, why don't you let Samina do it for herself." |
| | "She's one of them she wants to help you do everything." |
| Bossy and loud | "Just that little bit too loud." |
| | "Ariane can be quite bossy as well." |
| | "Saeed is very sort of bossy and loud." |
| Rejected play ideas | "When they were playing with the dolls house, he'd try to put something in it and she'd be like no that doesn't go there." |
| | "If Kyra said to him no that goes there, he would go oh ok it goes there then, even though you could tell when he was looking he didn't think it went there." |
| Liked own company | "But then again she likes that time on her own sometimes." |
| | "She'll get the small world play figures and make up her own little story and play with them in her own world." |
| | "She is one who quite happily will spend all day playing on her own." |
| | "Yeah it could have been that, quite possibly. He does prefer boys." |

| | |
|---|---|
| Mixed gender dyad | “I think that within his community, the girls don’t play with boys, I think it's, the girls aren't encouraged to play with boys are they?” |

#### *4.6.2.3 Organising theme – Play Supporter presence.*

This theme relates to some of the issues the Play Supporters experienced with trying to remain outside the play corner and not interfere with the interaction happening between the two children. This theme comprises 2 basic themes, which are displayed along with illustrative quotes from the interview transcript, in Table 4.39.

The Play Supporters reported that, particularly at the beginning, the children would want to talk to them and it was perhaps unusual for the children to have a teacher in close proximity that wasn’t interacting with them. There were certain activities that made it more likely for the children to interact with the Play Supporters, for example when it was too challenging and they needed help. The Play Supporter identified that it was important that they thought of activities which the children could play independently.

Table 4.39 – Organising and basic themes for Play Supporter presence

| **Organising Theme – Play Supporter presence** | |
|---|---|
| **Basic themes:** | **Examples** |
| Children wanted to talk | “Yeah Ariane and Samina always wanted to talk to me.” |
| | “At the beginning they wanted to ask you.” |
| Children asked for help | “Cos they were like asking me for help and I was saying well ask your play buddy.” |
| | “It's like, last time we had snap but then I think it was hard cos when we played SNAP they wanted us to be in there and wanted us to tell them how to do it so that was a bit (inaudible) trying to think of activities that they didn't need us.” |

#### *4.6.2.4 Organising theme – Play Supporters' understanding*

This theme reflects the Play Supporters' different understanding of some of the aspects of Play Bank which may have affected the way they facilitated the sessions. This theme comprises 4 basic themes, which are displayed along with illustrative quotes from the interview transcript, in Table 4.40.

The Play Supporters focused on the children's praise for each other and appeared to see this as a desired outcome of their own praise of the children. Whilst praising another child is a useful pro-social behaviour to encourage, the purpose of the praise was to reinforce the children's interactive behaviour in order to encourage more of this behaviour. It seems as though the Play Supporters' misunderstanding of the purpose of their praise may have meant they stopped giving praise to those children who were good at praising each other. In addition, when the Play Supporters discussed the praise and coaching, they tended to combine them together, suggesting that they may not have appreciated the different purposes of each technique (see Appendix B for an explanation of the purposes of the praise and coaching).

Table 4.40 – Organising and basic themes for Play Supporters' understanding

| **Organising Theme – Play Supporters' understanding** | |
|---|---|
| **Basic themes:** | **Examples** |
| Misunderstanding the praise | "No cos I think probably out of all of my pairs, they were the ones who were least likely to say, 'well done' or 'I like that, I like your picture.' They were least likely to praise each other." |
| | "No, I don't think with those two it made any difference whatsoever. They praised each other." |
| | "Yeah because that's what Clara's like isn't she? She's sort of very... she notices things and says, 'oh that's a nice one, you've done a nice one.'" |
| | "I think the praise, they both picked up on it. They were the best pair for praising each other, their interaction, out of my pairs." |
| | "And I'd said, 'that was really nice when you said well done to Samina', and then she was starting to do it towards the end." |

| | |
|---|---|
| Lack of differentiation between praise and coaching | "I think for Samina and Ariane they probably needed that praise and coaching to say, to make sure they took turns and it wasn't just the play buddy dominating." |
| | "Yeah it did depend on the partnership I think, how dominant the play buddy was compared to the target child, depended how much coaching and how much praise they needed." |

#### *4.6.2.5 Organising theme – Difficult to engage.*

The final organising theme relates to the difficulties the Play Supporter had with engaging Asad in the sessions. This theme comprises 2 basic themes, which are displayed along with illustrative quotes from the interview transcript, in Table 4.41.

The Play Supporter found it difficult to engage Asad and he didn't seem particularly interested in the sessions, in comparison to the other children. She gave the impression that this remained the same throughout and there wasn't a great deal of interaction happening even in the final sessions. The Play Supporter felt that Asad wasn't motivated by the praise and reflected on his level of motivation for rewards in the classroom, which was low. It appears as though Asad may not have been motivated to take part by the aspects of Play Bank that motivated the other children.

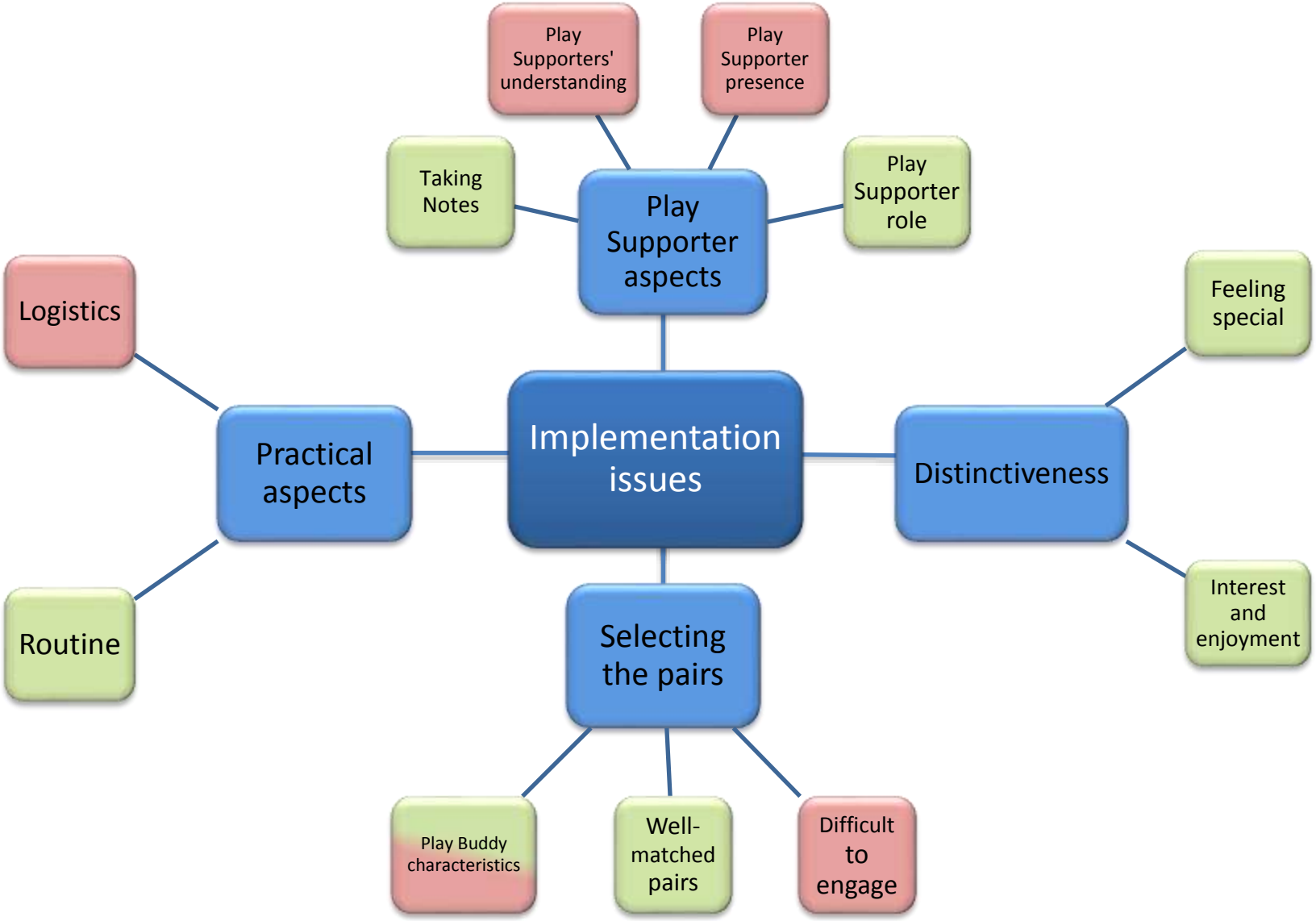
Table 4.41 – Organising and basic themes for Difficult to engage

| **Organising Theme – Difficult to engage** | |
|---|---|
| **Basic themes:** | **Examples** |
| Limited interaction | "There was just no getting anything out of him, he didn't seem to want to." |
| | "Asad never seemed to ask, he was quite hard to engage, he just, he still wasn't making any conversation, it was quite hard to get him to engage with his play buddy." |
| Not motivated by praise/rewards | "Same really, he's not one for stickers or attention." |
| | "He's not bothered about star of the week or taking the trophy home." |

### 4.6.3 Further analysis of themes

Following the thematic analysis of the Play Supporters' views about the implementation of the Play Bank sessions, it became clear that there were some common themes which were similar across both barriers and facilitators. A further appraisal of the themes was therefore carried out in order to identify the most pertinent themes. The thematic network in Figure 4.31 illustrates the second level of analysis which identified 4 synthesised organising themes, (to be discussed in the final chapter). The organising themes are colour-coded red for barriers and green for facilitators, and a mixture of both colours denotes the theme was both a barrier and a facilitator.

*Figure 4.31- Synthesised themes for Barriers and Facilitators*



### 4.7 Cross Case Analysis

Following the thematic analysis of the interview data for each of the case studies, a cross case analysis was performed in order to identify common themes across the qualitative data. The use of cross case analysis for two or more cases can allow for more substantial conclusions to be drawn from the case study and therefore increases the robustness of the findings (Yin, 2003). The cross case analysis was conducted for each organising theme, across all 5 cases, (see Tables 4.42, 4.43 and 4.44) and the analysis allowed for synthesis of some of the basic themes into new organising themes. The 3 synthesised themes in Table 4.45 reflect the most pertinent topics to emerge from the interview data and will be discussed in the final chapter.

Table 4.42 – Cross Case Analysis for Concerns

| | Asad | Bilal | Sarah | Samina | Leila |
|---|---|---|---|---|---|
| Ignores others | ✓ | | | | |
| Neglected by peers | ✓ | | | | |
| Don't know him | ✓ | | | | |
| On the outskirts | | ✓ | | | |
| Wouldn't speak | | ✓ | | | |
| Limited play interests | | ✓ | | ✓ | |
| Shy and quiet | | ✓ | | ✓ | |
| Lack of independent skills | | | ✓ | | |
| Learned helplessness | | | ✓ | | |
| Gravitated towards adults | | | | ✓ | |
| Difficulties contributing in class | | | | | ✓ |
| Opted out of interactions | | | | | ✓ |
| Adult dependent | | | | | ✓ |

Table 4.43 – Cross case analysis for During the Sessions

| | Asad | Bilal | Sarah | Samina | Leila |
|---|---|---|---|---|---|
| Played separately | ✓ | | | | |
| Unbalanced interaction | ✓ | | | | |
| Lack of engagement | ✓ | | | | |
| Lack of interest | ✓ | | | | |
| Increased confidence / assertiveness | | ✓ | | ✓ | |
| Increased interaction | | ✓ | | ✓ | |
| Dominated by Play Buddy | | ✓ | | | |
| Asking for help | | | ✓ | | |
| Reciprocal interaction | | | ✓ | | ✓ |
| Played together | | | ✓ | | |
| Increased praise | | | | ✓ | |
| Low level of mediation | | | | | ✓ |

Table 4.44 – Cross case analysis for Interaction in the Classroom

| | Asad | Bilal | Sarah | Samina | Leila |
|---|---|---|---|---|---|
| Difficulty engaging with peers | ✓ | | | | |
| Doesn't make conversation | ✓ | | | | |
| Difficulties joining in | ✓ | | | | |
| Little impact | ✓ | | | | |
| Increased interaction | | ✓ | | | ✓ |
| Increased participation | | ✓ | | | |
| Increased confidence | | ✓ | | | ✓ |
| Reduced reliance on brother | | | ✓ | | |
| Plays with other children | | | ✓ | | |
| Improved speech | | | ✓ | | |
| Engages with more children | | | | ✓ | |
| Spends time with Play Buddy | | | | ✓ | ✓ |
| Less adult dependent | | | | ✓ | ✓ |
| Widened play interests | | | | | ✓ |

Table 4.45 – Synthesised themes

| Initial Basic Theme | Synthesised organising theme |
|---|---|
| Lack of independent skills | Independence |
| Learned helplessness | |
| Gravitated towards adults | |
| Adult dependent | |
| Engages with more children | Positive Engagement |
| Played together | |
| Plays with other children | |
| Increased participation | |
| Increased interaction | |
| Spends time with Play Buddy | |
| Shy and quiet | Confidence |
| Difficulties contributing in class | |
| Increased confidence | |
| Increased confidence/assertiveness | |

### 4.8 Summary of Findings

The quantitative and qualitative findings for research questions 1 and 2 have indicated a number of changes in peer interaction and play-based social competence across three time points, for 5 target children taking part in Play Bank. The children's social interaction with peers increased over the course of time, as did their positive verbal and non-verbal interactions. Overall, increases were seen in play-based social competence according to teachers and parents, indicated by increased pro-social behaviours, decreased disruption and decreased disconnection during play. Slight changes in the expected direction were seen in the children's social acceptance, although examination of the findings at the individual level revealed some variation across the 5 target children.

There were some general trends in the data at the group level. Gender effects were found in the types of classroom activities the children engaged in, with girls favouring pre-academic activities and boys favouring play. Increases in social interaction were associated with increases in play engagement for the girls but not for the boys, however overall time spent in social interaction was minimal across the three time points. All of the children engaged in more positive than negative verbal interactions across each of the time points.

The qualitative findings for research question 3 revealed barriers and facilitators experienced by the Play Supporters delivering the Play Bank sessions. The facilitators experienced were related to: the children's enjoyment of the sessions and feeling special as Play Bank participants; the positive characteristics of the Play Buddy and the way in which the pairs were matched; the Play Supporters' role; and the ease of which the sessions were incorporated into the classroom routine. There were fewer barriers identified than facilitators and these related to: logistical issues; the Play Supporter's presence and their understanding of the rationale; and difficulties engaging a particular child.

# 5. Discussion

## 5.1 Chapter outline

In this chapter, the findings will be discussed at the individual level, followed by the cross case themes and some interesting trends found in the data. Following this, the implementation issues will be considered, and will be discussed according to the synthesised organising themes identified during further analysis (see table 4.45, page 176). Finally, the limitations of the study will be acknowledged and the implications of the findings for pre-school classroom pedagogy and educational psychology practice will be considered.

## 5.2 Study Aims and Research Questions

The first aim of this research was to evaluate the effectiveness of Play Bank by investigating changes in children's levels of peer interaction and play-based social competence. Research questions 1 and 2 address this aim:

RQ1. Does participation in Play Bank lead to an increase in peer interaction for pre-school children over a 9-month period?

RQ2. Does participation in Play Bank lead to increased social competence for pre-school children over a 9-month period?

The second aim of this research was to evaluate the process of Play Bank in order to gain some insight into the barriers and facilitators to implementation in a school setting. Research question 3 addresses this aim:

RQ3. What are the barriers and facilitators experienced by the Play Supporters undertaking the sessions?

## 5.3 Research Questions 1 and 2 - Individual Case Discussion

### 5.3.1 Asad.

Initial concerns about Asad related to his lack of engagement with his peers and reluctance to communicate with others. At 52 months, Asad's self-confidence and awareness was rated by his teacher on the EYFS profile to be within the 30-50 month range, and his ability to make relationships and manage his feelings and behaviour were judged to be in the 22-36 month range. Asad spent varying amounts of time interacting with his peers across the three time points, with the highest levels of social interaction at Time 2. Asad spent the majority of his time engaging in play activities at all three time points, however given the relatively little time spent in social interaction, it can be concluded that his interactions were not limited to the context of play and that much of his play was solitary, particularly at Time 3. Asad made a considerably higher number of verbal and non-verbal interactions with his peers at Time 2, however this decreased again at Time 3.

Asad's play-based social competence remained within the average range over the course of time, according to his teacher, with some variation in the dimensions at each of the time points. His pro-social play behaviours increased overall by Time 3, however they decreased at Time 2 and Asad continued to be classified as neglected by his peers at that time. The Play Supporters also reported that Asad was having difficulties joining in play and interacting with his peers at Time 2. Asad appeared to be most disconnected in his play at Time 2, and the Play Supporters indicated that Asad hadn't interacted well with his Play Buddy during the sessions. At Time 3, Asad's disconnection was rated at the same level as Time 1 and he received increased positive and negative nominations, no longer being classified as neglected by his peers. Asad's disruptive behaviour during play in the classroom decreased across the time points to a level below average at Time 3. In the home environment, Asad's social competence at Time 3 was similar to Time 1, however a change in the expected direction was seen at Time 2 by the parent, which wasn't seen by teacher. At Time 2, the parent rated Asad's pro-social behaviour during play in the above average range and his disruptive behaviour and level of disconnection in play in the below average range.

It is interesting to see that although the Play Supporters did not feel that participating in Play Banks sessions was a successful experience for Asad, there were some positive changes observed in his peer interaction by the researcher following the sessions. It may have been that the Play Supporters were influenced by their experience of Asad during the sessions, which was that he did not engage well with the process. Therefore because the Play Supporters hadn't seen any changes in interaction during the sessions, this may have affected their overall perception of Asad and caused them to believe there had been little change in his interaction in the classroom. In the interview, the Play Supporters reported feeling like they did not know Asad very well and so had there been any positive changes in Asad's interaction, they may not have been noticed. Likewise, the teacher PIPPS ratings may also have been influenced by the experience of Asad during the sessions as these are in line with the findings from the Play Supporter interview. In contrast, the parent's ratings of Asad's social competence increased at Time 2, and they had not been influenced by what had occurred during the sessions. However, the parent may have been influenced by the expectation that Asad's social competence would improve as a result of participation in Play Bank, or it may be that there was a change in Asad's interaction in the home context which was observed by the parent but not the teacher. Alternatively, it is acknowledged that the researcher's observation only provides a brief snapshot of a child's behaviour and it possible that the levels of interaction seen during the observation were not representative of the nature of Asad's interaction generally at that time.

It is useful to consider whether different types of activities encouraged Asad to interact with his peers, as his engagement in play remained the same across the time points yet his social interaction differed. During time 1, Asad interacted with his peers whilst looking at new seedling plants outside, which the children seemed excited about, pointing out which seedlings had grown the most. During time 2, the majority of Asad's interaction occurred during outdoor play, which is in contrast with time 1, where much of Asad's play indoors was solitary. It may be that outdoor play is more conducive to interactive play for Asad than other activities, or it may be that Asad was more able to interact during play in the classroom because of his experience of playing with another child in the sessions.

### 5.3.2 Bilal.

Bilal's solitary play and tendency to hover around the outskirts of groups were the main causes of concern for his teachers and this prompted his inclusion in Play Bank. At 54 months, Bilal's self confidence and awareness was judged to be in the 30-50 month range on the EYFS profile and his ability to manage feelings and behaviour and make relationships in the 22-36 month range.

Bilal spent the majority of his time engaged in play activities at Time 1 with very little time spent engaging in social interaction with his peers, suggesting that his play was mainly solitary at Time 1. At Time 2, the amount of time Bilal spent engaged in play decreased considerably, and instead he was engaged in helping to clean and sort all of the outdoor toys before the summer holidays. This activity was very repetitive and the small group of children who were taking part in this engaged in little interaction as they went about their task. It could be concluded that this was not a realistic reflection of the amount of play or social interaction that Bilal was engaging in at that stage in the year. However, it could also be argued that this may have been reflective of the activity choices Bilal was making and he may have chosen to take part in the sorting activity specifically because the social demands of the task were low and he could keep busy without having to engage in play with other children. However, despite the time spent engaging in the tidying activity, overall Bilal did spend more time engaging in social interaction with his peers and the frequency of his verbal and non-verbal interactions with his peers did increase at Time 2. Nevertheless, it is difficult to know whether Bilal might have spent more time engaging in play, and shown a higher frequency of interactions with his peers if the tidying activity was not happening at the time of the observation. A key finding for Bilal was that at Time 2, his unoccupied behaviour had decreased, and although this may have been as a result of his engagement in the sorting activity, it does suggest that he spent less time watching other children and more time participating in activities than at Time 1.

According to both the teacher and parent, Bilal's social competence appeared to increase at Time 2, demonstrated by increased pro-social play behaviour, reduced disruption and reduced disconnection during play. His peers indicated that he was more socially accepted, with two reciprocal nominations and a classification of popular. The Play Supporters also perceived Bilal to be more confident in the classroom, engaging in more interaction and participating in more activities, having become increasingly confident and assertive during the Play Bank sessions.

An unexpected finding from the Play Supporter interview was that during the Play Bank sessions, Bilal's Play Buddy tried to dominate the play. However, despite the tendency for Bilal's Play Buddy to dominate, Bilal made progress in his social competence and social interaction with peers over the course of time. It seems that the most important behavioural change during the sessions for Bilal may have been increased assertiveness and confidence. As the sessions went on, Bilal increasingly directed the play and this affected the power dynamic in the relationship. It is possible that having a dominating partner may have encouraged Bilal to become more assertive in order to have his needs met, although the disadvantage of this being that as Bilal became more assertive, the two boys played less together because they were interested in different activities and Bilal was not prepared to give in to his Play Buddy's demands. Whilst increased assertiveness and confidence is a positive outcome, the opportunities for interaction were likely to have decreased. Despite this, Bilal's interaction in the classroom had increased following the involvement in Play Bank and so it may have been that confidence and assertiveness were the mediating factors for Bilal.

### 5.3.3 Sarah.

Initial concerns about Sarah focused on her levels of independence and reliance on her brother who was a year older but shared the same classroom. At 53 months, Sarah's development on the EYFS profile in managing feelings and behaviour and making relationships was judged to be in the 22-36 month range. Sarah tended to spend time in solitary activities at Time 1 and this continued at Time 2. There was little change in the time spent engaging in social interaction with peers across the three time points. However, at Time 2, Sarah was making more verbal interactions and the Play Supporters had also noticed an increase in interaction during the sessions. Sarah spent a large proportion of her time at Time 1 and Time 3 engaging in pre-academic activities and as a result, spent less of her time engaging in play.

Some aspects of Sarah's social competence increased according to the teacher, however there was some variation across the time points. Sarah's pro-social behaviour during play steadily increased over time and the Play Supporters noticed less reliance on her brother, and more engagement with other children. There was little variation in the parent ratings of Sarah's pro-

social behaviour across the three time points, which remained above average, perhaps meaning there was little need for improvement. At Time 2, the teacher ratings of Sarah's disconnection in play decreased considerably to below the average range, yet her disruption increased considerably. Interestingly, Sarah's negative non-verbal interactions were also highest at this time point. In contrast, in the home environment Sarah's disruption decreased markedly and she became less disconnected in her play over the course of time. From both the parent and teacher's perspective, Sarah's social competence had moved in the expected direction by Time 3. Sarah's social acceptance changed over the three time points, increasing from within the average range to popular at Time 3, with 1 reciprocal friendship. Both positive and negative nominations decreased at Time 2, however the absence of a high number of children from the Time 2 sociometrics may have skewed the data. An additional finding was that the Play Supporters also noticed some improvement in Sarah's speech and language, which they felt could have been related to reduced time spent with her brother.

It is of note that Sarah only took part in 5 out of 12 sessions, yet some changes were still seen in Sarah's interaction across the time points. However the two children interacted well together during the sessions from the beginning and did not appear to have a period of adjustment in which they got to know each other. This may mean that the benefit of 5 sessions of balanced interaction could perhaps compare to a higher number of sessions in which the interaction developed slowly.

The distribution of Sarah's time followed an interesting pattern throughout the three time points. It is interesting to see that when engagement in pre-academic activities was high and play engagement decreased, so did Sarah's verbal interaction. Sarah's verbal interaction was highest during the time when her engagement in play was highest, suggesting that for Sarah, play activities are most conducive to interaction. However, Sarah's disruption in play was highest at Time 2 according to the teacher, and this may suggest that while Sarah was engaging in more play, she may have been having some difficulties engaging appropriately with her peers. On the other hand, the teacher also rated her pro-social behaviours as increasing at Time 2 and it may have been that the teacher was more aware of Sarah's play behaviour following the Play Bank sessions, and therefore noticed both her strengths and difficulties more during play.

The parent's experience of Sarah's play behaviour differed from that of her teachers, particularly relating to Sarah's disruption which suggests that her play-based social competence was different across contexts. It may have been that there were high levels of disruptive play or arguments between Sarah and her siblings within the home context which improved around Time 2 and continued to do so. It may have been Sarah's experience of interacting positively with a peer that contributed to her becoming less disruptive in play at home, or equally it may have been contextual factors within the home.

### 5.3.4 Samina.

Samina was described as reliant upon adults and limited in her play interests at Time 1. At 53 months, Samina's personal, social and emotional development was assessed by her teacher to be developing within the 30-50 month range.

Samina spent the most time interacting with her peers and engaging in play at Time 3. At Time 2, Samina engaged in no play activities and instead spent the majority of her time engaging in pre-academic activities and unoccupied behaviour, with less time spent engaging in social interaction with her peers. However, the Play Supporters reported that Samina had widened her choice of play interests at Time 2. Samina's verbal interactions increased over the course of time and the Play Supporters also noticed this during the sessions. The rate at which Samina approached her teacher decreased considerably during the Time 2 observation, suggesting less reliance on adults, and the Play Supporters also felt that Samina spent less time with adults at Time 2.

Samina's play-based social competence moved within the expected direction across the three time points and the Play Supporters reflected this within the group interview. Samina's pro-social play behaviour was rated at above average and there was little change over time, however her play disconnection and disruption steadily decreased over the three time points. Samina's play-based social competence within the home environment remained within the average or above average range with some variation across the time points. Her pro-social play behaviours were highest at Time 2 and decreased but remained above average at Time 3. Interestingly, the parent rated Samina's disruption in play to be highest at Time 2, where it had increased from below average to within the average range. Samina's play disconnection

decreased steadily over the course of time and was below average at Time 3. Samina's peers indicated she was well accepted at Time 1 and Time 3, with two reciprocal friendships. However at Time 2 Samina's nominations reduced as a whole and she was classified as neglected by her peers. Although as previously stated, a high absence of children from the Time 2 sociometrics may have skewed the data. The Play Supporters reported that Samina had developed a friendship with her Play Buddy at Time 2 and it is interesting to note that this was not reflected in the sociometric nominations.

An important finding for Samina appeared to be her reduced reliance on teachers and this is noteworthy given the evidence within the literature of the limiting nature of adult interaction (Bronson, Hauser-Cram, and Warfield, 1997; Vitiello, Booren, Downer and Williford, 2012; Williams, Mastergeorge and Ontai, 2009). Examining the proportion of time in which teachers engaged with Samina reveals some interesting patterns. During Time 1, Samina approached the teacher very frequently and a teacher interacted with or monitored Samina for a relatively high proportion of time in comparison to the rest of the children (see table in Appendix V). It might be suggested that the time spent by the teacher interacting with Samina was high because of the high number of approaches Samina made to the teacher. However, during Time 2, Samina's approaches to the teacher reduced considerably but the time spent by the teacher interacting with Samina increased, suggesting that the teacher was initiating the majority of the interaction with Samina. The increased teacher interaction can partly be explained by Samina's involvement in a teacher-led activity, however it is possible that the teacher focused more on Samina and so inhibited her peer interaction in some way. Samina's verbal interactions did increase at Time 2, despite the increased teacher interaction, however the increase is small in comparison to the increase seen at Time 3, and it could be questioned whether more gains in interaction might have been seen if the teacher wasn't interacting with Samina to the same extent.

Samina's peer interaction and play-based social competence steadily increased within the classroom environment and it is possible that the Play Bank sessions contributed to this, however these increases may have occurred within the normal course of her development. Similar to Sarah's pattern of interaction, Samina's verbal interaction was at its highest at the time when her engagement in play was also at its highest, suggesting that play was also conducive to verbal interaction for Samina. Likewise, Samina interacted with her peers for the

least amount of time during Time 2, when the majority of her time was spent engaging in pre-academic activities.

It is unfortunate that the Time 2 sociometric activity was skewed by the missing data as it may have been that Samina was considered neglected by her peers at Time 2 because the children who rated her positively at Time 1 were absent for the activity. Otherwise, Samina's social acceptance appeared to be fairly stable from Time to Time 3 and this may suggest that Samina had some stable relationships within the Nursery. Indeed, the Play Supporters made reference to Samina always playing with the same children, yet it was their perception that this was a negative thing and that Samina should be encouraged to broaden her choice of playmates. It could be argued that having a stable friendship group at nursery age is a positive indicator of Samina's ability to make relationships with others and so it is interesting that the Play Supporters viewed this negatively.

### 5.3.5 Leila.

Initial concerns for Leila centred around her tendency to opt out of interactions with other children and her reliance on adults, as well as difficulties participating in group situations. At 46 months, Leila's EYFS scores in self-confidence and awareness and ability to make relationships were judged to be in the 22-36 month range, and her ability to manage feelings and behaviour in the 30-50 month range.

Leila was reported to interact well with her Play Buddy during the Play Bank sessions. She was more confident to initiate interactions in the classroom and showed more verbal interaction with her peers at Time 2 than at Time 1. At Time 2, the majority of Leila's time was spent in pre-academic activities and she didn't engage in any play activities, spending less time overall engaging in social interaction with her peers. Leila spent the most time engaging in play at Time 3 which corresponded with considerably more time socially interacting with peers, and her verbal and non-verbal interactions were also highest level at Time 3. The Play Supporters noticed at Time 2 that Leila seemed to rely less on adults following the sessions and at Time 3, Leila made no approaches to the teacher.

According to her teacher, Leila's play-based social competence was highest at Time 2, with above average pro-social skills and below average disconnection and disruption. At Time 3, Leila's teacher rated her pro-social skills to have decreased but they still remained above average and her disconnection and disruption had increased to within the average range. Leila's pro-social skills and her disconnection during play at home steadily increased over the course of time. Her play disruption was highest at Time 2, however it reduced again at Time 3. Leila's social acceptance varied across the three time points, changing from average to popular at Time 2 and then to controversial at Time 3. Leila received the most positive nominations at Time 2 and received a high number of overall nominations at Time 3, which included two positive reciprocal nominations. With the exception of increased disruption, the most positive changes in social competence and peer acceptance were see at Time 2 for Leila which could suggest that participating in Play Bank sessions helped to develop her skills in social interaction.

The changes seen in her interaction were less positive however, with only her verbal interactions increasing following participation in Play Bank. The researcher observations may have failed to capture the changes in Leila's interactions or equally, Leila's interactions may not have improved. However this would be unexpected given the increased PIPPS scores of her play-based social competence and the Play Supporters positive reports about the level of interaction observed in the sessions between Leila and her Play Buddy. An alternative explanation could be that Leila's interactions followed a similar pattern to the other two girls, and that her interactions were affected by the types of activities she engaged in during the observations. Leila's interaction with her peers was highest at Time 3 and this co-occurred with the largest amount of time spent in play. This finding across each of the girls is consistent with findings in the literature which suggest that the highest levels of peer interaction occur within the context of play (Odom & Peterson, 1990). The lower level of interaction seen in Time 2 may therefore have been related to the low level of play Leila engaged in and the higher level of pre-academic activities, suggesting that pre-academic activities may not encourage social interaction amongst children.

However, it could also be interpreted that the fluctuations in Leila's levels of interaction were related to some other variable than her experience of taking part in the Play Bank sessions. In addition, the positive changes described by the Play Supporters and reflected in the teacher's PIPPS ratings may not have been reflective of changes in Leila but may have been influenced

by their positive experience of the sessions and may have overestimated Leila's levels of social competence at that time. In contrast, the minimal changes in Leila's pro-social behaviours reported by the parent could have been more accurate because they weren't influenced by how well Leila interacted during the sessions, however it also may have been because there was little change in Leila's pro-social behaviour in the home context. However, the parent and the teacher PIPPS ratings were in line with each other suggesting that, either Leila's level of disconnection decreased in both contexts, or the teacher ratings of her disconnection were not influenced by their experience of the success of the play sessions.

## 5.4 Cross Case Analysis

A cross case analysis was conducted for each of the basic themes arising from the Play Supporter interview data, in order to identify salient themes which might help to answer research question 1. The cross case analysis can be found in Section 4.7. Whilst conducting the cross case analysis, it became clear that there were some similar basic themes across the cases which could be synthesised into a new organising theme, reflecting some of the more pertinent findings. The original basic themes and synthesised organising themes are displayed in Table 4.45 on page 176.

### 5.4.1 Independence, confidence and positive engagement

Throughout the Play Supporter interview there were several references to independence, indicated by the synthesis of 7 basic themes into one organising theme. The Play supporters focused on independence, without prompting from the researcher, suggesting that they saw independence as an important outcome for pre-school children in their class. There had been concerns about all three of the girls' levels of independence and the Play Supporters reported progress in this area, describing the girls as less reliant on others at Time 2.

The researcher had not anticipated that independence would be of interest, however it is recognised that independence would be a factor in the development of peer interactions and social competence. Related to independence is the construct of autonomy; an autonomous

child can be described as having qualities of initiative, agency and self-determination (Deci and Ryan, 1985, cited Mendez, Fantuzzo and Cicchetti, 2002). Indeed, Mendez, Fantuzzo and Cicchetti (2002) studied a number of personal attributes of children which might indicate adaptive social functioning and found correlations between autonomy and children with a profile of highly adaptable pro-social behaviour. A lack of autonomy would presumably lead to more reliance on teachers, and therefore increased teacher interaction, of which the disadvantages have been discussed earlier.

Confidence was also an important theme which was reported for Bilal, Samina and Leila, and the five basic themes which make up the synthesised theme reflect the changes from the initial concerns to the way they were viewed by the Play Supporters at Time 2, with all three of the children showing increased confidence and/or assertiveness. Children's self-awareness and confidence naturally increase as they develop and so these changes may have been developmental, however the increases in confidence were noticed by the Play Supporters over a relatively short period of time, for three out of five children taking part in the Play Bank sessions. Therefore it is possible that the additional opportunities to engage in play, receiving praise from their teacher, and feeling part of something special may have contributed to the children's increased confidence.

The Play Bank sessions were associated with positive engagement on the whole, with seven basic themes representing four of the children (Bilal, Sarah, Samina and Leila) and reflecting engagement both within the sessions and in the classroom. Some of the children interacted well during the sessions from the outset, whereas for others, the interaction developed over the course of the sessions. In the classroom, positive engagement was demonstrated by increased participation in activities, new friendships and choices of playmates, as well as increased interaction.

Whilst there are a number of factors which may have affected the children's positive classroom engagement, it could be that the opportunities created by Play Bank to play with another child in a safe space, provided positive experiences for the children which encouraged them to interact more with their peers and participate more in classroom activities. As discussed in Chapter 1, children who lack social competence appear to be caught in a negative cycle in which they do not access opportunities to develop their confidence and skills such as positive interaction

(Gagnon and Nagle, 2004) and therefore structured opportunities for positive play provided by the Play Bank sessions may have helped to break this cycle.

### 5.4.2 Social information processing.

The negative cycle referred to by Gagnon and Nagle (2004) could be understood in the context of social information processing theory (Dodge, 1986; Crick & Dodge, 1994). Figure 5.1 illustrates Crick and Dodge's (1994) model of social information processing of children's social adjustment.

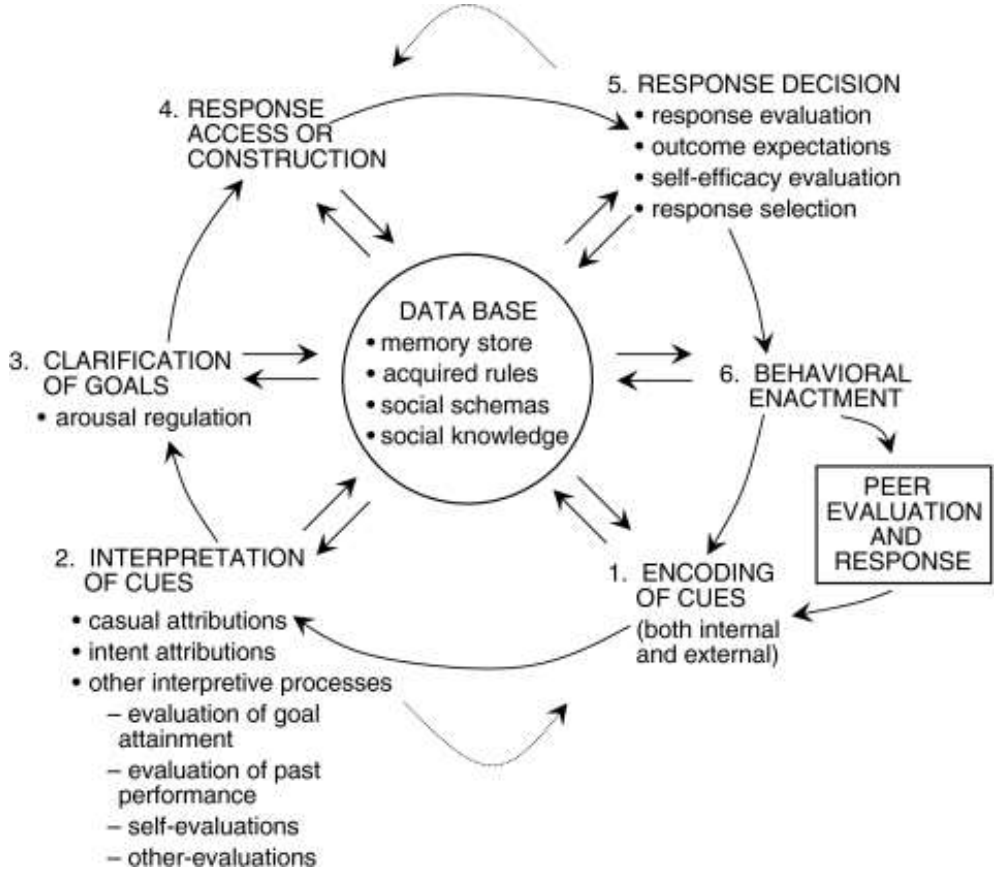



*Figure 5.1 - A social information processing model of children's social adjustment from Crick and Dodge (1994).*

Placing the experience of shy and withdrawn children within the social information processing model, it seems that they may have previously encoded unsuccessful social experiences, which they interpreted negatively and as a result associated with negative mental representations. The negative representations, or memories, are linked with associated responses which, when evaluated, cause the child to stand back and refrain from interaction. It is possible that the positive experiences within the Play Bank sessions helped to break the cycle by replacing previously encoded negative cues with positive experiences, and in turn effective responses, associated with positive mental representations of playing with their Play Buddy. The child's evaluation of the social situation would now be based on their positive experience of another child reciprocating their initiated interaction during the sessions, which could mean they may be more inclined to join in play or initiate interactions in future. A quote from one of the Play Supporters illustrates this idea well:

"So playing with her [the Play Buddy] will have made her [Sarah] think, 'she was nice to play with, so maybe I'll go and join these.'"

(Mrs Woods)

### 5.4.3 Social skill acquisition and social skill performance.

Whilst there was positive engagement with the sessions overall, it is important to reflect on the difficulty Asad experienced interacting during the sessions. Whilst there were factors relating to Asad's Play Buddy (discussed in Section 5.5) which may have affect his interaction, the relative lack of interaction seen in Asad's sessions, in comparison to the other pairs of children, may also relate to the type of difficulties each of the children was experiencing in their social interaction with peers.

Frey, Elliott and Gresham (2011) make the distinction between social skill acquisition and social skill performance and suggest that consideration of the type of social skill difficulty should be made when designing intervention. An 'acquisition deficit' relates to a difficulty acquiring the necessary social skills, or difficulty applying appropriate social skills in a given situation, and therefore these skills must be explicitly taught. A 'performance deficit' relates to a difficulty in performing social skills to an acceptable level, despite the child possessing the skill, and being able to perform the given skill in a different context. In addition, Frey, Elliott and Gresham (2011) describe two categories of competing problem behaviours which prevent social skill acquisition or performance: externalising behaviours; and pertinent to this group of children, internalising behaviours. These social skills strengths and needs are represented in the Social Behaviour Analysis Framework (Frey, Elliott and Gresham, 2011 - see Figure 5.1) which was created as part of an assessment to intervention approach, included in the Social Skills Improvement System — Ratings Scales (SSiS-RS; Gresham & Elliott, 2008).

| | **No Competing Problem Behaviours** | **Competing Problem Behaviours** |
|---|---|---|
| **Social Skills Strengths** | *Assessment results*<br>• Valued social skills observed frequently<br>• No or very low frequency of problem behaviours<br><br>*Intervention goal*<br>• Use natural reinforcers to maintain frequency of social skills | *Assessment results*<br>• Valued social skills observed frequently<br>• Moderate to high frequency of problem behaviours<br><br>*Intervention goal*<br>• Eliminate or decrease problem behaviours and use natural reinforcers to maintain frequency of social skills. |
| **Social Skills Acquisition deficits** | *Assessment results*<br>• Valued social skills in desired area(s) not observed or very infrequently observed<br>• No or very low levels of problem behaviours<br><br>*Intervention goal*<br>• Teach social skills directly and reinforce occurrences to increase frequency | *Assessment results*<br>• Valued social skills in desired area(s) not observed or very infrequently observed<br>• Moderate to high levels of problem behaviours<br><br>*Intervention goal*<br>• Eliminate or decrease problem behaviours and concurrently teach social skills directly and reinforce occurrences to increase frequency |
| **Social Skills Performance Deficits** | *Assessment results*<br>• Valued social skills observed but they are inconsistent and at a frequency below expectations<br>• No or very low frequency of problem behaviours<br><br>*Intervention Goal*<br>• Reinforce social skills to increase frequency of occurrence | *Assessment results*<br>• Valued social skills observed but they are inconsistent and at a frequency below expectations<br>• Moderate to high frequency of problem behaviours<br><br>*Intervention Goal*<br>• Eliminate or decrease problem behaviours and concurrently reinforce social skills to increase frequency of occurrence |

*Figure 5.2 - Social Behaviour Analysis Framework (Frey, Gresham and Elliot, 2011)*

Given the different patterns of interaction seen during the Play Bank sessions amongst the group of children, this framework could be used to hypothesise which type of social skills difficulties each of the children were experiencing. Asad appeared to find it difficult to interact with his Play Buddy during the sessions, and so the opportunity created by participating in Play Bank sessions did not appear to support Asad to interact with his Play Buddy. Therefore it could be suggested that Asad had difficulties with social skills acquisition, along with competing internalising problem behaviours, according to the framework. This would indicate that, according to the intervention goal in the matrix, the next steps for Asad might be more explicit teaching of social skills.

In contrast, based on their successful interaction during the sessions, Bilal, Sarah, Samina and Leila would perhaps be classed as children with performance difficulties, because they clearly possessed some skills in interaction, however they tended not to use their skills consistently in the classroom to engage with other children. It may have been that for these children, participating in play in a safe space as part of a dyad was less threatening and allowed them to engage more positively. According to the framework, the intervention goal for these children would be to reinforce social skills in order to increase their frequency and in Play Bank this would be achieved through the praise element, as well as through the positive experience of interacting with their Play Buddy.

There is further support in the literature for the proposition that social skills difficulties can exist at the behavioural level rather than at a knowledge level. Wichmann, Coplan and Daniels (2004) also found that in older shy and withdrawn children, social cognitive deficits were associated with social withdrawal. Hypothetical vignettes were used to identify social cognitions and it was found that the children had performance related difficulties which can be affected by social fears, rather than lacking the social knowledge needed for socially competent behaviour. Likewise, Rubin, Wojslawowicz, Rose-Krasnor, Booth LaForce and Burgess (2006) found that shy and withdrawn children did not differ from other children in their acquisition of mutual best friendships, suggesting that the social withdrawal experienced as part of a larger group did not appear to influence children's ability to make close dyadic relationships. They hypothesised that interacting with one peer may be less anxiety provoking than a larger group which also fits with a performance view of socially withdrawn behaviour.
It seems therefore that Play Bank is an approach which might be provided for children showing performance type difficulties in order to promote safe opportunities for interaction. The

children's response to Play Bank could then be monitored as assessment through intervention, to test the hypotheses around performance difficulties for shy and withdrawn children.

### 5.4.4 Foundation Stage activities which facilitate peer interaction

The consideration of patterns of interaction across classroom activities was not an intended outcome of this study, however the variance in the pattern of interaction across the children, over the three time points highlights the possibility that classroom activities promote different levels of interaction. In a US study of 44 pre-school classrooms, Booren, Downer and Vitiello (2012) found that children's patterns of interaction with their peers and teachers differed across classroom activities, with a higher frequency of peer interaction occurring in some activities (free choice, recess, meals, small group) than others (large group, teacher directed).

Kontos, Burchinal, Howes, Wisseh, and Galinsky (2002) used eco-behavioural analysis, which is concerned with the relationship between the context of children's learning and behaviour, in order to understand how specific aspects of the environment promote children's learning and development. They sought to identify which classroom contexts co-occurred with more complex peer interactions by coding interactions according to level of complexity, and coding activities based on predetermined categories. They found that complex interaction with peers was most likely to occur in creative activities (e.g. play and art activities), and in language arts (looking at books, story time, music and dance, circle time) than in gross motor activities (e.g running, skipping) and manipulative activities (e.g puzzles, lego). It is interesting therefore that one of the activities identified by the play supporters that appeared to facilitate interaction through problem solving was a jigsaw puzzle. Kontos et al. (2002) found that children have more complex interactions with a task, rather than their peers, when it is cognitively demanding and it may be the case that in a free play situation this leads to solitary play as the child is motivated to achieve their cognitive goals. However, in the context of the Play Bank sessions, the expectation of the children to play together may have encouraged their joint problem solving and therefore higher levels of interaction.

There were some gender differences observed in the children's choice of activities during free play. The three girls spent considerably more time than the boys engaging in pre-academic activities and in contrast, the boys spent more time engaging in play activities than the girls,

although the difference was not as marked. This would perhaps be expected according to stereotypes about children's gender related play (Fabes, Martin & Hanish, 2004), however the level of social interaction for the girls increased when they engaged in play, whereas this was not the case for the boys. It was expected that engaging in play would facilitate more interaction for all of the children and so it was surprising that this was not the case. One possibility for this finding may relate to the types of play the children were engaging in, and although this was not recorded during the observation, it could be that girls and boys engage in different types of play, which as a result promote different amounts of interaction. Socio-dramatic play begins to appear between the ages of 3 to 6 (Smith, 2005), however, Colwell and Lindsey (2005) found that girls spend more time engaging in pretend play than do boys, Pretend play by nature incudes more discussion around roles and themes, and Coplan and Arbeau (2008) propose that pretend play provides the 'adaptive content' for the majority of young children's social interactions. Therefore it may have been that the girls engaged in more pretend play than the boys which perhaps promoted higher levels of peer interaction.

### 5.4.5 Social interaction in the classroom

Finally a surprising trend observed across each of the children's observation data was the limited amount of time spent by the children socially interacting with their peers within the Nursery classroom (see Appendix V). Clearly these were children who had been identified as shy and withdrawn, so it was expected that they would have reduced interaction, however the percentage of time spent in social interaction indicates much lower levels of social interaction than might be expected in a pre-school environment, which one assumes is designed to support children's learning through interaction with their peers (Bandura, 1977; Vygotsky, 1978). It is difficult to know how much the small sample of children in this study tells us about the levels of social interaction for the rest of the class, and it may have been that the level of interaction for this group of children was quite different from their peers; or it may reflect low levels of social interaction generally in the Nursery classroom.

Attempts were made to establish whether the levels of social interaction observed within this study were representative of those reported in the literature however there is little research into the typical levels of interaction in pre-school classrooms. Booren, Downer & Vitiello (2012) observed levels of interaction in a preschool classroom across different activity settings, using

the InCLASS observational system (Downer, Booren, Lima and Luckner, 2010), which assigns a global score for levels of peer interaction on a scale of 0-7, equating to low, medium and high ranges. They observed levels of peer communication across a large sample of pre-school children during free play and rated this with a score of 3.74 which was in the medium range. In comparison, the levels of interaction in the current study would probably be placed at the bottom of the low range, at around 12% of the total observation time. Either the target children's levels of interaction were much lower than the rest of the class, or the levels of interaction in the class were generally lower than average. This might indicate higher levels of solitary behaviour, or perhaps the classroom environment may not have been facilitative of social interaction.

Alternatively, there may be a higher level of solitary, onlooker and associative play in Nursery classrooms than is typically assumed. Hojnoski et al. (2009) found a steady developmental progression in the levels of peer interaction in a mainstream preschool classroom from the age of three to five, using an eco-behavioural observation time sampling method. Their data indicated that whilst children spent the majority of their time engaged in play, the proportion of intervals spent in social interaction with peers or 'Talk to Peer' for 4 year olds in the mainstream setting was low, at 0.17, whereas for solitary play or 'No Talk', the proportion was considerably higher at 0.60. Irrespective of these findings, the frameworks used by early years practitioners and developmental assessments used by Educational Psychologists would indicate that the pre-school year is a time where children are expected to develop their social interaction with peers. The EYFS Development Matters framework (Early Education, 2012) expects children to become interested and join in others' play between 22-36 months and initiate play with others initiate and reciprocate interactions at 30-50 months. At 40-60 months children are expected to learn to play cooperatively, take turns and form positive relationships with others. Likewise, the P.I.P Developmental Charts suggest that children are expected to begin to cooperate in play with other children at 24 months and play cooperatively with other children by 48 months.

Given the emphasis on children learning through interaction with their peers during play, it is surprising that more emphasis has not been placed upon research to identify how much children interact with their peers in pre-school environments, and what aspects of the pre-school environment facilitate interaction. As can be seen, there is a small research base which uses eco-behavioural approaches to study the effects of the child's environment on their behaviour, however much of this research has been directed towards comparing different types of education settings and children with and without disabilities (Hojnoski et al. 2009). Similarly,

there has been much emphasis in the literature on teacher involvement and the effect this has on children's interactions (Booren, Downer & Vitiello, 2012; Bronson, Hauser-Cram, and Warfield, 1997; Coplan and Prakash, 2003; Vitiello, Booren, Downer and Williford, 2012; Williams, Mastergeorge and Ontai, 2009) however, given the child centred nature of the EYFS curriculum and the ethos of continuous provision, where children make many of their own choices, it can be questioned why we are not looking in closer detail at the interactions between children. It appears that the current pedagogy relies on children learning social skills incidentally throughout the course of their everyday learning, and when children fail to pick up these skills adults intervene to deliver adult-led social skills interventions. Play Bank therefore offers an alternative approach which focuses on creating optimal opportunities for children to interact positively in the context of play, in a way that can be monitored and supported by adults where necessary. The adult role therefore is not to teach skills but to mediate where necessary and to analyse how the context, including the Play Buddy can be optimised to support the development of the children who may benefit from additional support.

### 5.5 Research Question 3 - Implementation Issues

There is strong empirical evidence to suggest that the outcomes of programs or approaches delivered in real-world contexts are affected by the way in which they are implemented (Durlak & Dupre, 2008). As Play Bank is in the early stages of development and is designed to be delivered by school staff, there is a need to understand the implementation issues which could affect the way the approach is delivered in schools, and ultimately the outcome for the children involved.

Durlak and Dupre (2008) hypothesised that a multi-level ecological perspective should be used to understand successful implementation and proposed a framework which illustrates implementation variables in five areas; innovations, providers, communities, the prevention delivery system (i.e. organisational capacity) and the prevention support system (i.e. training and technical assistance). The consideration of the implementation issues relating to Play Bank identified a number of factors represented in this framework and these are highlighted in the blue boxes which have been added to the diagram in Figure 5.3. The implementation issues

will now be discussed according to the four synthesised themes identified during the further analysis of the interview data (see Figure 4.45, page 176.)

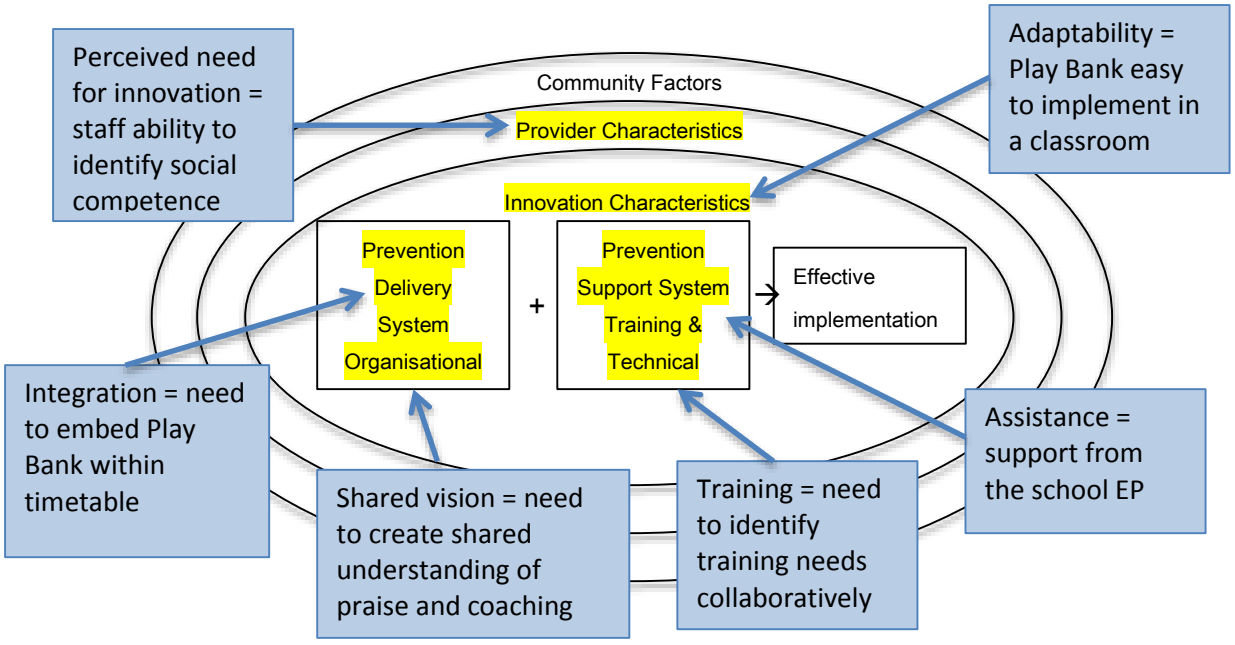



*Figure 5.3 The Framework for Effective Implementation (Durlak & Dupre, 2008)*

### 5.5.1 Play Supporter aspects.

The role of the Play Supporter in facilitating the Play Bank sessions is a key element of the approach. The rationale of Play Bank reduces the emphasis on adult involvement to ensure that the sessions are as naturalistic as possible and the interaction between the two children is child- rather than adult-led. The findings of this study suggest that an approach which minimises adult involvement in children's interactions can have positive effects on the development of interaction between the two children, and supports previous research which identified reduced levels of peer interaction during activities involving higher levels of adult interaction (Booren, Downer & Vitiello, 2012; Bronson, Hauser-Cram, and Warfield, 1997;

Coplan and Prakash, 2003; Vitiello, Booren, Downer and Williford, 2012; Williams, Mastergeorge and Ontai, 2009).

The success of the Play Supporter's role appears contingent on finding the balance between observing the sessions to make adequate adjustments for the children, then mediating where necessary, and remaining outside the play corner and employing strategies to remain unobtrusive. The Play Supporters discussed the ways they ensured the children focused their attention on each other, rather than the Play Supporter, which suggests that they were successful in remaining outside of the play corner and promoting the children's interaction.

It is important that the Play Supporters have a clear understanding of their role, as well as the underlying rationale for the different elements of the approach. The Play Supporters' different understanding of the praise element of the sessions may have resulted in less praise being given to some of the pairs, which in turn may have limited the scope for reinforcement of the positive interactive behaviours. This has been a point of reflection for the researcher and has encouraged some thinking around the level of training that is needed for teaching staff to begin facilitating Play Bank sessions, as well as the ongoing support which might be provided by Educational Psychologists.

Early discussions with the school SENCo and EYFS phase leader concluded that the Play Supporters' level of knowledge and experience was sufficient to carry out the Play Supporter role without the more in-depth training (see Appendix A) which was developed as part of the initial study. Therefore the Play Supporters received a 1.5 hour information session, which focused on their role in the delivery of the sessions outlined in the Play Bank guide (see Appendix B), rather than the underlying theory about interactive play and the purpose of praise to reinforce positive behaviours. However, in view of the different understanding of the purpose of praise, it appears that the researcher and possibly the more senior school staff, may have made assumptions about the knowledge of the Play Supporters.

On the part of the researcher there was an awareness of her own status as a Trainee Educational Psychologist, and working in an unfamiliar school, not wanting to undermine the experience and level of training of the teaching staff. There was recognition of the power balance in the relationship between the researcher and the teaching staff, and the researcher was conscious of not appearing more 'expert' than 'collaborative' (Gutkin, 2009). A possible

solution to this might have been for the researcher to facilitate a focused discussion in the initial planning stage, which would be collaborative in nature and would have allowed the development of a shared understanding of the purposes of play, praise, and the development of social competence. This could have provided the basis for training which was tailored to meet the needs of the Play Supporters and ensured the rationale of Play Bank was implemented with fidelity.

A second reflection about the Play Supporter role arose from the quality of the discussion about the children's interaction during the Play Supporter interview. The Play Supporters' spontaneous references to interaction were infrequent during the interview and the researcher needed to prompt them to discuss interaction as well as the other aspects that the Play Supporters were interested in, such as confidence and independence. In addition, the Play Supporters often referred to interaction as conversation, perhaps overlooking the non-verbal aspects of interaction that could be the first steps towards verbal interaction for shy and withdrawn children. This made the researcher aware that the Play Supporters were possibly not cued in to the 'micro-level' of children's interactions (Booren at al., 2012; Vitiello et al., 2012), to the extent that the researcher, and indeed the Play Supporters in the initial study were. It is hypothesised that the change in the Play Supporters' role in observation, which was reduced after the initial study, may have resulted in less focus on interaction. Whilst the previous observation schedule used in the initial study was too complex for the Play Supporters to complete during the sessions, and was consequently discarded, it appears that it may have cued them in to observing the children's interactions more closely. An alternative approach could help to find the balance between ensuring the Play Supporters are focused on interaction yet free to facilitate the sessions. The Play Supporters could be supported to carry out initial observations of the target children during free play, perhaps alongside the researcher, or in practice, the school EP. This would help to prime the Play Supporters to observe the interaction at a closer level and notice changes in verbal and non-verbal interaction which could shape the coaching and praise elements of the sessions.

### 5.5.2 Selecting the pairs.

The current findings suggest that selection of the Play Buddies, along with matching process for the pairs of children appears to be a crucial aspect of the Play Bank sessions. In particular, one of the difficulties noted for Asad during his Play Bank sessions was the lack of engagement with his Play Buddy and the apparent difference in their play interests. It is hypothesised that a mixed gender dyad may have added to Asad's difficulties in interaction with his Play Buddy, particularly because the Play Supporters reported that Asad's usual choice of playmates were boys. Fabes, Martin and Hanish (2004) cite estimates made by Fabes (1994), which suggest that over half of young children's peer interactions involve play with same-sex peers and less than 10% involve play with opposite-sex peers, the remaining time being accounted for by mixed-sex group interactions. In an earlier paper, Fabes, Martin and Hanish (2003) carried out extensive observations of 4 year olds during free play over the course of three years and found that the proportion of time children spent in opposite-sex dyadic play was lower than same-sex dyadic play. Further to this, it was also found that boys tended to spend more time engaging in same-sex group play rather than same-sex dyadic play, which has implications for the Play Bank sessions. It may be that engagement during sessions is more optimal for boys if they are made up of small groups rather than pairs. However this would need careful consideration regarding the selection of a Play Buddy or Buddies and the implementation of the coaching aspect.

As discussed earlier in section 5.3.2, Bilal's Play Buddy potentially encouraged greater levels of assertiveness in Bilal because of the Play Buddy's tendency to dominate during interaction. Surprisingly, Bilal's Play Buddy, Saeed was described as bossy and loud and these personality characteristics are not particularly pro-social and perhaps would not be associated with the desired characteristics of a Play Buddy for a shy and withdrawn child. It draws attention to the way in which the school staff selected the Play Buddies, and how school staff might make the distinction between a confident, active child and one who displays pro-social behaviours conducive to the coaching role. This suggests that Play Buddies might be chosen for the effects that their characteristics might have on the target child. Indeed, where there had been concerned about children's lack of independence, the Play Supporters discussed the positive influence of having independent Play Buddies as role models:

> "Whereas Clara … and her sister very sort of, do everything for themselves don't they, they've been brought up to do it for themselves so I think that's been a good influence hasn't it?"

However, whilst positive effects were reported for Bilal, caution would be advised against pairing children purposefully with an over-dominating partner because, depending on the dynamic, there is the potential for the target child to have a negative experience which could affect their participation in the sessions.

### 5.5.3 Distinctiveness

It could be argued that the utility of any intervention or approach in schools is likely to be affected by the extent to which children enjoy taking part in it, and as a result how engaged they become with the process. Most of the children were positive about the Play Bank sessions and the reported feeling of the sessions being 'special' created a sense of something distinctive about Play Bank. This was also found during the initial study and suggests that it is important to engender positive feelings, such as excitement, about what is essentially a structured play opportunity. It may have been thought of as something special because only a select few children were chosen to take part, yet at the same time, there were enough children participating to ensure they didn't feel stigmatised. Alternatively, as discussed in Section 2.6.3 the stage of development of the children may have meant that they were immune to the negative feelings of stigma. It is also possible that it was the way in which the Play Supporters introduced the idea of Play Bank which made the children feel part of something special, and elevated its status as an activity in the classroom.

### 5.5.4 Practical aspects

Brown, Odom, McConnell and Rathell (2008) note that despite adequate evaluation of peer interaction interventions, there still remains a gap between research and practice. The successful dissemination of an intervention or approach following establishment of an evidence base, rests not only on its effectiveness but on the likelihood it will be implemented by practitioners (Brown et al., 2008). The final theme relating to implementation relates to some of the practical aspects of Play Bank which are likely to impact on whether the approach is

adopted as part of the EYFS curriculum. In favour of implementation are the relatively low setup requirements and the ease with which the Play Supporters were able to incorporate the sessions in the routine of the school day. This was achieved by the use of a particular area in the classroom for the Play Corner and although there were initial logistical issues about choosing the right area, it was concluded that an area within the classroom was preferable to a separate room. The selection of an appropriate area must include consideration of space, as it is beneficial if the space is big enough to allow for socio-dramatic play, which was not possible in the space chosen for this study.

The issue of staffing was raised by the Play Supporters as a barrier to implementation, because the Play Supporters were 'taken off timetable' to facilitate the Play Bank sessions which meant that when staffing was low, they had to be redeployed for timetabled activities. It was interesting to hear that the sessions were not prioritised or considered to be part of the timetable, given the relatively low levels of interaction displayed by the children in the classroom, and the importance of social competence. It raises questions about which skills were given more importance in the curriculum and indeed, what level of importance is placed on the development of peer interaction and social competence in the Early Years. It seems that staffing may not be the issue; rather, more work may need to be done with teaching staff to promote the importance of addressing difficulties faced by shy and withdrawn children.

### 5.7 Limitations of the research

Play Bank is an approach which is in the early stages of development and evaluation as an effective method for promoting peer interaction and social competence. As a result, there are a number of areas which need to be investigated in order to better understand how the approach supports the development of the aforementioned skills. Therefore, some of the limitations of this research relate to the aspects of Play Bank that were not investigated as part of this study.

Firstly, it is recognised that it would have been useful to measure the types of play the children engaged in, beyond the limited qualitative notes made by the researcher. This is especially pertinent considering the interesting trend that levels of peer interaction appeared to differ according to classroom activity, and in particular, that increased play seemed to relate to

increased interaction for the girls but not the boys. Differentiating between, for example, constructive, physical, exploratory and pretend play activities may have provided some insight into the types of play which promoted peer interaction and tested the hypothesis that more interaction occurred as a result of higher levels of pretend play in girls compared to boys. This could have implications for the play sessions, in that Play Supporters might want to focus on providing more opportunities for pretend play, as well as informing teachers about the potential importance of pretend play in peer interactions. It is however acknowledged that these notions are based on the identification of trends, rather than statistical correlations and therefore caution should be made when interpreting the data, nevertheless, even at a non-statistical level it encourages interesting reflection about the nature of young children's play and the level of attention that is paid to children's choice of activities during free play. Further research into Play Bank might be supplemented by the investigation of the types of play occurring alongside levels of peer interaction, in a larger sample which would allow for statistical correlations.

Secondly, it was beyond the scope of this study to examine the implementation and specific effects of the praise and coaching aspects of Play Bank. It is therefore difficult to know how well these were implemented in the current study, beyond the conclusions made as a result of the Play Supporters' comments during the interview. In addition, if they were implemented correctly and consistently, it is not known how each of these aspects contributed to the increases in interaction and social competence seen in the children. In order to make conclusions about the effects of each of these aspects, they would need to be studied separately. It would be useful to conduct a series of studies which implement Play Bank using structured play opportunities with a Play Buddy only, with structured play opportunities including coaching but no praise, and finally with structured play opportunities and the praise element but no coaching.

Thirdly, the researcher reflected on the Play Supporter interview and felt that whilst it provided information on a wide range of topics, it perhaps lacked depth and rich discussion about the nature of the children's interaction in the sessions. One explanation for this has already been discussed, relating to the potential lack of focus on interaction by the Play Supporters. However, an alternative viewpoint is that the interview style and the structure imposed by the researcher may have inhibited further exploration of key elements. Because the researcher had gained an understanding of Play Bank through conducting the initial study, and had new priorities for data collection, it may have been that the revised interview schedule was too ambitious and meant the researcher spent less time exploring topics than would have been

possible with fewer priorities. In addition, because the researcher's thinking about Play Bank had progressed over the course of time, it is possible that some questions which might have been asked from a naïve point of view were not asked, or not fully explored, yet may still have provided useful information. It is a learning point for the researcher to consider the effects of prior knowledge of a topic on the nature of an interview and the disadvantages of taking a more deductive approach.

Finally, it is acknowledged that the small scale of this study presents some limitations. The study only provides information about the delivery of Play Bank for five children in one school setting, and while the high levels of ecological validity may allow for generalisation to similar school contexts, it is difficult to draw meaningful conclusions for the wider population from some of the group mean data, particularly given the variation amongst the children. A larger sample size would have provided a more representative sample and allowed for statistical analysis of the changes in behaviour of participants.

### 5.6 Implications of Findings

This research aimed to extend the evidence base for the use of Play Bank in pre-school classrooms and further increase understanding of the implementation issues which might affect outcomes for children. The study met these aims and provided useful information for school staff who may consider facilitating Play Bank sessions in the pre-school classroom for shy and withdrawn children. Play Bank has been conceptualised as an initial approach which could be delivered prior to more structured, adult-led intervention, in order to enable naturalistic opportunities for peer interaction which otherwise might be difficult for children with performance type difficulties to access. School staff found the approach simple to establish as part of a classroom routine which makes it ideal for assessment through intervention to identify whether the difficulties are related to performance or skill acquisition (Frey, Elliott & Gresham, 2011).

In addition, this research has raised some interesting points about the composition of pre-school classrooms, in terms of available activities which promote interactive play. With further knowledge of such activities, teaching staff can take a pro-active approach to monitoring the play of children with social competence difficulties, in order to identify which, if any, play-based opportunities for interaction they are engaging in. In particular, looking in closer detail at the

types of activities children are regularly choosing to spend their time in, could identify those children who habitually engage in solitary activities such as mark-making or computer games which limit their opportunities to socialise with their peers.

Finally, Educational Psychologists may benefit from the findings of this research as part of their role in schools and early years settings to identify, monitor and support children with social competence difficulties in the EYFS. EPs can support schools to implement a graduated response (DfES, 2001), whereby Play Bank is provided as part of the plan-do-review process, and response to intervention (Fuchs & Fuchs, 2006) could be evaluated in the context of the Social Behaviour Analysis Framework (Frey, Elliott & Gresham, 2011). EPs are skilled at applying theory to practice and in making theory accessible to non-psychologists and so are well placed to support school staff in their understanding of the relationship between social interaction, social acceptance and social competence. It is hoped that this research and the Play Bank approach will be disseminated in the researcher's current local authority and that the EPS will be pivotal in supporting its implementation in schools and early years settings.

## 6. References


Achenbach, T,M., McConaughy, S.H., and Howell, C.T., (1987). Child/adolescent behavioral and emotional problems: implications of cross-informant correlations for situational specificity. *Psychological bulletin,* 101, 213-232.

Akhtar, N., & Bradley, E. J. (1991). Social information processing deficits of aggressive children: Present findings and implications for social skills training. *Clinical Psychology Review*, *11*(5), 621-644.

Arbeau, K. A., & Coplan, R. J. (2007). Kindergarten teachers' beliefs and responses to hypothetical pro-social, asocial, and anti-social children. *Merrill-Palmer Quarterly*, *53*(2), 291-318.

Asendorpf, J. B. (1990). Beyond social withdrawal: Shyness, unsociability, and peer avoidance. *Human development*, *33*(4-5), 250-259.

Attride-Stirling, J. (2001) Thematic Networks: An analytic tool for qualitative research. *Qualitative Research*, 1, 3, 385-405.

Bandura, A. (1977). *Social Learning Theory*. New York: General Learning Press.

Banister, P., Bunn, G., Burman, E., & Daniels, J. (2011). *Qualitative Methods In Psychology: A Research Guide:* Berkshire: Open Uniersity Press.

Barkham, M., & Mellor-Clark, J. (2003). Bridging evidence-based practice and practice-based evidence: developing a rigorous and relevant knowledge for the psychological therapies. *Clinical Psychology & Psychotherapy*, 10, 6, 319-327.

Benish, T.M. & Bramlett, R.K. (2011): Using social stories to decrease aggression and increase positive peer interactions in normally developing pre‐school children. *Educational Psychology in Practice: theory, research and practice in educational psychology*, 27(1),1-17

Bhaskar, R. (2010). *Reclaiming reality: A critical introduction to contemporary philosophy*. Oxon: Routledge.

Biesta, G. (2012). Philosophy of education for the public good: Five challenges and an agenda. *Educational Philosophy and Theory*, *44*(6), 581-593.

Boivin, M., Hymel, S., & Bukowski, W. M. (1995). The roles of social withdrawal, peer rejection, and victimization by peers in predicting loneliness and depressed mood in childhood. *Development and Psychopathology*, *7*(04), 765-785.

Booren, L.M., Downer, J.T. & Vitiello, V.E., (2012) Observations of Children's Interactions with Teachers, Peers, and Tasks across Preschool Classroom Activity Settings, Early Education and Development, 23:4, 517-538.

Braun, V. & Clarke, V. (2006) Using thematic analysis in Psychology. *Qualitative Research in Psychology*, 3, 77-101.

Bramlett, R. K., & Barnett, D. W. (1993). The Development of a Direct Observation Code for Use in Preschool Settings. *School Psychology Review*, *22* (1), 49-62.

Bronson, M. B., Hauser-Cram, P., & Warfield, M. E. (1997). Classrooms matter: Relations between the classroom environment and the social and mastery behavior of five-year-old children with disabilities. *Journal of Applied Developmental Psychology*, 18, 331–348.

Brophy-Herb, H. E., Lee, R. E., Nievar, M. A., & Stollak, G. (2007). Preschoolers' social competence: Relations to family characteristics, teacher behaviors and classroom climate. *Journal of Applied Developmental Psychology*, *28*(2), 134-148.

Brown, W. H., Odom, S. L., & Conroy, M. A. (2001).An intervention hierarchy for promoting young children's peer interactions in natural environments.*Topics in Early Childhood Special Education*, *21*(3), 162-175.

Brown, Odom, McConnell and Rathell, (2008) Peer Interaction Interventions for Pre-school Children with Developmental Difficulties. *In W. H. Brown, S. L. Odom, & S. R. McConnell*

*(Eds.), Social competence of young children: Risk, disability, and intervention* (pp. 3-29). Baltimore, MD: Paul H. Brookes.

Bruner, J.S., Jolly, A. & Silva, K. (1976) *Play: its role in development and evolution.* Harmondsworth: Penguin.

Bukowski, W. M., &Cillesen, A. H. (1998) Sociometry then and now: Building on six decades of measuring children's experiences with the peer group. *New Directions for Child Development*, 80, 1–97.

Carter, E. W., Cushing, L. S., Clark, N. M., & Kennedy, C. H. (2005). Effects of peer support interventions on students' access to the general curriculum and social interactions. *Research and Practice for Persons with Severe Disabilities*, *30*(1), 15-25.

Chan, J.M., Lang, R., Rispoli, M., O'Reilly, M., Sigafoos, J. & Cole, H. (2009) Use of peer-mediated interventions in the treatment of autism spectrum disorders: A systematic review. *Research in Autism Spectrum Disorders,* 3 (2009) 876–889

Cillesen, A.H.N., (2009) Sociometric Methods. In Rubin, K. H., Bukowski, W. M., & Laursen, B. P. (Eds.).(2009). *Handbook of peer interactions, relationships, and groups*. New York: Guilford Press.

Cohen, P. A., Kulik, J. A., &Kulik, C. L. C. (1982). Educational outcomes of tutoring: A meta-analysis of findings. *American Educational Research Journal*, *19*(2), 237-248.

Cohen, L., Manion, L., & Morrison, K. (2007).*Research methods in education – 6th edition*. London: Routledge.

Coie, J. D., Dodge, K. A., & Coppotelli, H. (1982). Dimensions and types of social status: A cross-age perspective. *Developmental psychology*, *18*(4), 557.

Coie, J. D., Lochman, J. E., Terry, R., & Hyman, C. (1992). Predicting early adolescent disorder from childhood aggression and peer rejection. *Journal of Consulting and Clinical Psychology*, *60*, 5, 783.

Colwell, M. J., & Lindsey, E. W. (2005). Preschool children's pretend and physical play and sex of play partner: Connections to peer competence. *Sex Roles*, *52,* 7-8, 497-509.

Coolahan, K., Fantuzzo, J., Mendez, J. & McDermott, P. (2000) Preschool Peer Interactions and Readiness to Learn: Relationships Between Classroom Peer Play and Learning Behaviors and Conduct. *Journal of Educational Psychology,* 92, 3, 458-465.

Coolican, H (2004) *Research Methods and Statistics in Psychology, 4th Edition*. Oxon: Hodder and Stoughton.

Coplan, R.J., & Arbeau, K.A., (2009) Peer Interactions and Play in Early Childhood. In Rubin, K. H., Bukowski, W. M., & Laursen, B. P. (Eds.).(2009). *Handbook of peer interactions, relationships, and groups*. New York: Guilford Press.

Coplan, R.J., & Prakash, K. (2003) Spending time with teacher: characteristics of preschoolers who frequently elicit versus initiate interactions with teachers. Early Childhood Research Quarterly, 18, 143–158

Coplan, R. J., & Rubin, K. H. (1998). Exploring and assessing nonsocial play in the preschool: The development and validation of the preschool play behavior scale. *Social Development*, *7*, 1, 72-91.

Coplan, R. J., Rubin, K. H., & Findlay, L. C. (2006). Social and nonsocial play. In Fromber, D.P. & Bergen, D (Eds.) *Play from Birth to Twelve: contexts, perspectives, and meanings*. New York: Garland. Accessed online on 30.05.2014 at: http://www.rubin-lab.umd.edu/pubs/Downloadable%20pdfs/kenneth_rubin/Play/Social%20and%20Nonsocial%20Play.pdf

Creswell, J. W., & Clark, V. L. P. (2007). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage publications.

Crick, N.R., Murray-Close, D., P.E.L., Marks & N. Mohajeri-Nelson (2011) Aggression and Peer Relationships in School-Age Children. In Rubin, K. H., Bukowski, W. M., & Laursen, B. P.

(Eds.) (2009). *Handbook of peer interactions, relationships, and groups*. New York: Guilford Press.

Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social information-processing mechanisms in children's social adjustment. *Psychological bulletin*, *115*, 1, 74.

Cupchik, G. (2001). Constructivist Realism: An Ontology That Encompasses Positivist and Constructivist Approaches to the Social Sciences. *Forum: Qualitative Social Research*, 2, 1, 29-39.

Denham, S. A., & Holt, R. W. (1993). Preschoolers' likability as cause or consequence of their social behavior. *Developmental Psychology*, *29*, 2, 271.

DeKlyen, M., & Odom, S. L. (1989). Activity structure and social interactions with peers in developmentally integrated play groups. *Journal of Early Intervention*, *13*, 4, 342-352.

Department for Children, Schools and Families (2008). *Excellence and Enjoyment: Social and Emotional Aspects of Learning. Revised Early Years Foundation Stage Version*. Nottingham: DCSF Publications.

Department for Communities and Local Government (2013) English Indices of Deprivation, accessed at http://data.gov.uk/dataset/english_indices_of_deprivation on 22nd February 2014.

Department for Education (2012) *Statutory Framework for the Early Years Foundation Stage*. London: HMSO.

Department for Education and Skills (2001) *Special Educational Needs Code of Practice*. London: HMSO.

DeRosier, M. E., Kupersmidt, J. B., & Patterson, C. J. (1994). Children's academic and behavioral adjustment as a function of the chronicity and proximity of peer rejection. *Child development*, *65*, 6, 1799-1813.

Domitrovich, C.E., Gest, S.D., Jones, D, Gill, S & Dandfor DeRousie, R.M. (2010) Implementation Quality Lessons learned in the context of a Head Start REDI trial. *Early Child Research Quarterly*, 25, 3, 284-298.

Downer, J. T., Booren, L. M., Lima, O. K., Luckner, A. E., & Pianta, R. C. (2010). The Individualized Classroom Assessment Scoring System (inCLASS): Preliminary reliability and validity of a system for observing preschoolers' competence in classroom interactions. *Early Childhood Research Quarterly*,*25*, 1, 1-16.

Durlak, J.A., & DuPre, E.P. (2008) Implementation Matters: A Review of Research on the Influence of Implemntation on Program Outcomes and the Factors Affecting Implementation. *American Journal of Community Psychology*, 41, 327-350.

Early Education (2012) *Development Matters in the Early Years Foundation Stage*. London: Early Education

English, K., Shafer, K., Goldstein, H. & Kaczmarek, L. (1997) Teaching Buddy Skills to Preschoolers. *Innovations: American Association on Mental Retardation, Research to Practice Series,* 9, 4-44.

Eiden, R. D., Colder, C., Edwards, E. P., & Leonard, K. E. (2009). A longitudinal study of social competence among children of alcoholic and non-alcoholic parents: Role of parental psychopathology, parental warmth, and self-regulation. *Psychology of Addictive Behaviors*, *23*, 1, 36.

Eisenberg, N., Fabes, R. A., Shepard, S. A., Murphy, B. C., Guthrie, I. K., Jones, S. (1997). Contemporaneous and longitudinal prediction of children's social functioning from regulation and emotionality. *Child Development,* 68, 642–664.

Evans, M. A. (1993). Communicative competence as a dimension of shyness. In Rubin, K. H., & Asendorpf, J. B. (Eds.) Social Withdrawal, Inhibition and shyness in Childhood (pp. 189-212). New Jersey: Lawrence Erlbaum.

Fabes, R.A., Martin, C.L., & Hanish, L.D. (2003) Young Children's Play Qualities in Same-, Other-, and Mixed-Sex Peer Groups. *Child Development*, 74, 3, 921–932.

Fantuzzo, J., Coolahan, K. C., Mendez, J. L., McDermott, P. A.,& Sutton-Smith, B. (1998). Validation of constructs of peer play with African American Head Start children: Penn Interactive Peer Play Scale. *Early Childhood Research Quarterly, 13,* 411–431.

Fantuzzo, J. W., & Hampton, V. R. (2000). Penn interactive peer play scale: A parent and teacher rating system for young children. In Gitlin-Weiner, K., Sandgrund, A., & Schaefer, C (Eds.), *Play diagnosis and assessment (2nd ed.).* (pp. 599-620). Hoboken, NJ: John Wiley & Sons Inc.

Fantuzzo, J., Jurecic, L., Stovall, A., Hightower, A. D., Goins, C.,& Schachtel, D. (1988). Effects of adult and peer social initiations on the social behavior of withdrawn, maltreated preschool children. Journal of Consulting and Clinical Psychology, 56,34–39.

Fantuzzo, J., Manz, P., Atkins, M. & Meyers, R. (2005). Peer-Mediated Treatment of Socially Withdrawn Maltreated Preschool Children: Cultivating Natural Community Resources, *Journal of Clinical Child & Adolescent Psychology*, 34, 2, 320-325.

Fantuzzo, J., Stovall, A., Schachtel, D., Goins, C., & Hall, R. (1987). The effects of peer social initiations on the social behaviour of withdrawn maltreated preschool children. *Journal of Behaviour Therapy and Experimental Psychiatry*, 18, 357-363.

Fantuzzo, J., Sutton-Smith, B., Atkins, M., Meyers, R., Stevenson, H., Coolahan, K. (1996). Community-based resilient peer treatment of withdrawn maltreated preschool children. *Journal of Consulting and Clinical Psychology, 64,* 1377–1386.

Fantuzzo, J., Sutton-Smith, B., Coolahan, K. C., Manz, P. H., Canning, S., & Debnam, D. (1995). Assessment of preschool play interaction behaviors in young low-income children: Penn Interactive Peer Play Scale. *Early Childhood Research Quarterly*, *10*, 1, 105-120.

Fawcett, M., (1996) *Learning Through Child Observation*. London: Jessica Kingsley Publishers.

Ford, M (1982) Social cognition and social competence in adolescence. *Developmental Psychology*, 18, 323 – 340.

Frey, J.R., Elliott, S.S., Gresham, F.M. (2011). Preschoolers' Social Skills: Advances in Assessment for Intervention Using Social Behaviour Ratings. *School Mental Health*, 3, 179 – 190.

Fuchs, D., & Fuchs, L.S. (2005) Peer-Assisted Learning Strategies: Promoting Word Recognition, Fluency, and Reading Comprehension in Young Children. *Journal of Special Education*, 39(1), 34-44.

Fuchs, D., & Fuchs, L. S. (2006). Introduction to Response to Intervention: What, why, and how valid is it?. *Reading Research Quarterly*, *41*, 1, 93-99.

Fuchs, D., Fuchs, L. S., & Burish, P. (2000) Peer-assisted learning strate-gies: An evidence-based practice to promote reading achievement. *Learning Disabilities Research and Practice,* 15(2), 85–91

Gagnon, S. G., Huelsman, T. J., Reichard, A. E., Kidder-Ashley, P., Griggs, M. S., Struby, J., & Bollinger, J. (2013). Help Me Play! Parental Behaviors, Child Temperament, and Preschool Peer Play. *Journal of Child and Family Studies*, 1-13.

Gagnon, S.G. & Nagle R.J. (2004) Relationships between peer interactive play and social competence in at-risk preschool children. *Psychology in the Schools*, 41, 2, 2004.

Gazelle, H., & Ladd, G. W. (2003). Anxious solitude and peer exclusion: A diathesis–stress model of internalizing trajectories in childhood. *Child Development*, *74*, 1, 257-278.

Girard, L., Girolametto, L., Weitzman, E., & Greenberg, J., (2011): Training Early Childhood Educators to Promote Peer Interactions: Effects on Children's Aggressive and Prosocial Behaviors. *Early Education & Development*, 22, 2, 305-323.

Goldstein, H (2002) Communication Intervention for Children with Autism. *Journal of Autism and Developmental Disorders,* 32, (5), 373-396.

Goldstein, H., & Cisar, C. L. (1992). Promoting interaction through sociodramatic play: Teaching scripts to typical preschoolers and classmates with disabilities. *Journal of Applied Behavior Analysis*, 25, 289-305.

Goldstein, H., Kaczmarek, L., Pennington, R., & Shafer, K. (1992) Peer mediated intervention: attending to, commenting on, and acknowledging the behaviour of preschoolers with Autism. *Journal of Applied Behaviour Analysis*, 25, 289-305

Gottman, J., Gonso, J., & Rasmussen, B. (1975). Social interaction, social competence, and friendship in children. *Child Development*, 709-718.

Greenberg, M. T., Domitrovich, C. E., Graczyk, P. A., Zins, J. E. (2005)*The Study of Implementation in School-Based Preventive Interventions: Theory, Research, and Practice (Volume 3).* Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.

Gresham, F.M., & Elliott, S.N. (2008) *Social Skills Improvement System: Rating Scales*. Bloomington: Pearson Assessments.

Guralnick, M. J. (1990). Social competence and early intervention. *Journal of Early Intervention*, *14*, 1, 3-14.

Guralnick, M. J. (1999). Family and child influences on the peer-related social competence of young children with developmental delays. *Mental Retardation and Developmental Disabilities Research Reviews*, *5*, 1, 21-29.

Guralnick M.J., Connor, R., Hammond M., Gottman, J.M., Kinnish, K. (1996). Immediate effects of mainstreamed settings on the social interactions and social integration of preschool children. *American Journal of Mental Retardation*, 100, 359–377.

Guralnick, M.J., Groom, J.M., (1987a). Dyadic peer interactions of mildly delayed and nonhandicapped preschool children. *American Journal of Mental Deficiency*, 92, 178–193.

Guralnick, M.J., Groom, J.M. (1987b). The peer relations of mildly delayed and nonhandicapped preschool children in mainstreamed playgroups. *Child Development*, 58, 1556–1572.

Guralnick, M.J., Neville, B. (1997). Designing early intervention programs to promote children's social competence. In Guralnick M.J., (Ed).*The effectiveness of early intervention.* Baltimore: Brookes.

Guralnick MJ, Neville B, Hammond MA, Connor RT. (2007). The friendships of young children with developmental delays: A longitudinal analysis. *Journal of Applied Developmental Psychology*, 28, 64–79.

Hartup, W.W. (2009) Critical Issues and Theoretical Standpoints. .In Rubin, K. H., Bukowski, W. M., & Laursen, B. P. (Eds.) *Handbook of peer interactions, relationships, and groups*. New York: The Guilford Press.

Hatch, J.A. (1987). Peer interaction and the development of social competence. *Child Study Journal,* 17, 169–183.

Health and Care Professions Council (2010) *Standards of Proficiency for Practitioner Psychologists*. London: HCPC.

Hensel, N. H. (1991). Social leadership skills in young children. *Roeper review*, 14, 1, 4-6.

Hightower, A. D., Work, W. C., Cowen, E. L., Lotyczewski, B. S., Spinell, A. P., Guare, J. C., & Rohrbeck, C. A. (1986). The Teacher-Child Rating Scale: A brief objective measure of elementary children's school problem behaviors and competencies. *School Psychology Review*, *15*, 3, 393-409.

Hojnoski, R.L., Allison S. Margulies, A.S., Barry, A., Bose-Deakins, J., Sumara, K.M. & Harman, J.L. (2008). Analysis of Two Early Childhood Education Settings: Classroom Variables and Peer Verbal Interaction, Journal of Research in Childhood Education, 23, 2, 193-209.

Howes, C., Rubin, K. H., Ross, H. S., & French, D. C. (1988). Peer interaction of young children. *Monographs of the society for research in child development*, i-92.

Hubbard, J. A., & Coie, J. D. (1994). Emotional correlates of social competence in children's peer relationships. *Merrill-Palmer Quarterly ,* 1-20.

Hundert, J., & Houghton, A. (1992). Promoting social interaction of children with disabilities in integrated preschools: A failure to generalize. *Exceptional Children*, 58, 4, 311-320.

Jamison, K.R., Forston, L.D., & Stanton-Chapman, T.L. (2012). Encouraging social skill development through play in early childhood special education classrooms. *Young Exceptional Children*, 15, 2, 3 – 19.

Jones, K. M., Champion, P. R., & Woodward, L. J. (2013). Social competence of preschool children born very preterm. *Early human development*, 89, 10, 795-802.

Kagan, J. (1997). Temperament and the reactions to the unfamiliarity. *Child Development*, 68, 139-143.

Kenney, M. K. (2012). Child, family, and neighborhood associations with parent and peer interactive play during early childhood. *Maternal and Child Health Journal*, 16, 1, 88-101.

Kontos, S., Burchinal, M., Howes, C., Wisseh, S., & Galinsky, E. (2002). An eco-behavioral approach to examining the contextual effects of early childhood classrooms. *Early Childhood Research Quarterly*, *17*, 2, 239-258.

Kontos, S., & Wilcox-Herzog, A. (1997). Influences on children's competence in early childhood classrooms. *Early Childhood Research Quarterly*, *12*, 3, 247-262.

Laushey, K. M., & Heflin, L. J. (2000). Enhancing social skills of kindergarten children with autism through the training of multiple peers as tutors. *Journal of Autism and Developmental Disorders*, 30, 183-193.

Ladd, G. W., & Golter, B. S. (1988). Parents' management of preschooler's peer relations: Is it related to children's social competence?. *Developmental Psychology*, *24*, 1, 109-117.

Ladd, G. W., Price, J. M., & Hart, C. H. (1988). Predicting preschoolers' peer status from their playground behaviours. *Developmental Psychology*, 59, 986-992.

Ladd, G. W., & Burgess, K. B. (1999). Charting the relationship trajectories of aggressive, withdrawn, and aggressive/withdrawn children during early grade school. *Child Development*, 70, 910–929.

Lifter, K., Foster-Sanda, S., Arzamarski, C., Briesch, J., & McClure, E. (2011). Overview of play: Its uses and importance in early intervention/early childhood special education. *Infants & Young Children*, *24*,3, 225-245.

Marchant, M. R., Solano, B. R., Fisher, A. K., Caldarella, P., Young, K. R., & Renshaw, T. L. (2007). Modifying socially withdrawn behavior: A playground intervention for students with internalizing behaviors. *Psychology in the Schools*, *44*,8, 779-794.

Marr, M.B., Algozzine, B., Nicholson, K., & Keller-Dugan, K. (2011) Building Oral Reading Fluency With Peer Coaching. *Remedial and Special Education*, 32, 3, 256-264.

McCabe, P. C. (2005). Social and behavioral correlates of preschoolers with specific language impairment. *Psychology in the Schools*, *42*,4, 373-387.

McCandless, B. R., & Marshall, H. R. (1957) A picture sociometric technique for preschool children and its relation to teacher judgments of friendship. *Child Development*, 28, 139–147.

McConnell, S.R., & Odom, S.L. (1999) A multi-measure performance based assessment of social competence in young children with disabilities. *Topics in Early Childhood Special Education*, 19,2, 67-74.

McWayne, C., Sekino, Y., Hampton, G., and Fantuzzo, J., (2002). Penn Interactive Peer Play Scale – Teacher and Parent Rating Scales for Preschool and Kindergarten Children. Unpublished Manual: University of Pennsylvania.

Morrison, K. (2002). *School leadership and complexity theory*. Oxon: Routledge.

Morse, J. M., Barrett, M., Mayan, M., Olson, K., & Spiers, J. (2002). Verification strategies for establishing reliability and validity in qualitative research. *International Journal of Qualitative Methods*, *1*, 2, 1-19.

Muijs, D., (2004) *Doing Quantitative Research in Education with SPSS*. London: Sage Publications.

Nadeau, L., Tessier, R., Boivin, M., Lefebvre, F. and Robaey, P. (2003), Extremely Premature and Very Low Birthweight Infants: A Double Hazard Population? *Social Development*, 12, 235–248.

Newcomb, A. F., Bukowski, W. M., &Pattee, L. (1993). Children's peer relations: A meta-analytic review of popular, rejected, neglected, controversial, and average sociometric status. *Psychological Bulletin*, 113, 99–128.

Odom, S. L., Chandler, L. K., Ostrosky, M., McConnell, S. R., & Reaney, S. (1992). Fading teacher prompts prom peer‐initiation interventions for young children with disabilities. *Journal of Applied Behavior Analysis*, *25*, 2, 307-317.

Odom, S. L., McConnell, S. R., & Brown, W. H. (2008). Social competence of young children: Conceptualization, assessment, and influences. *In W. H. Brown, S. L. Odom, & S. R. McConnell (Eds.), Social competence of young children: Risk, disability, and intervention* (pp. 3-29). Baltimore, MD: Paul H. Brookes.

Odom, S. L., McConnell, S. R., McEvoy, M. A., Peterson, C., Ostrosky, M., Chandler, L. K., & Favazza, P. C. (1999). Relative effects of interventions supporting the social competence of young children with disabilities.*Topics in Early Childhood Special Education*, *19*, 2, 75-91.

Odom, S.L., Peterson, C., McConnell, S. & Ostrosky, M. (1990) Ecobehavioral analysis of early education/specialized classroom settings and peer social interaction. *Education & Treatment of Children*, 13, 4, 316 – 331

Odom, S. L., Zercher, C., Li, S., Marquart, J. M., Sandall, S., & Brown, W. H. (2006). Social acceptance and rejection of preschool children with disabilities: A mixed-method analysis. *Journal of Educational Psychology*, 98, 4, 807.

Office for Standards in Education (2011) Inspection report: name of school. Available from <www.ofsted.co.uk> accessed 15 December 2013.

Ogden, T. (2003). The validity of teacher ratings of adolescents' social skills. *Scandinavian Journal of Educational Research*, *47*, 1, 63-76.

Olson, S. L., & Brodfeld, P. L. (1991). Assessment of peer rejection and externalizing behavior problems in preschool boys: A short-term longitudinal study. *Journal of abnormal child psychology*, *19*, 4, 493-503.

Parten, M. B. (1932). Social participation among pre-school children. *Journal of Abnormal and Social Psychology*, 27, 243-269

Pellegrini, A. D. (1984). The social cognitive ecology of preschool classrooms. *International Journal of Behavioral Development*, 7, 321–332.

Piaget, J. (1975) *Child's Conception of the World.* (translated by Joan and Andrew Tomlinson). Totowa, New Jersey: Littlefield, Adams.

Pianta, R. C., La Paro, K. M., Payne, C., Cox, M. J., & Bradley, R. (2002). The relation of kindergarten classroom environment to teacher, family, and school characteristics and child outcomes. *The Elementary School Journal*, 225-238.

Pierce, K.R. (2012) An evaluation of the effectiveness of Play Bank – a peer mediated play intervention to develop the interactive play of Foundation Stage children. *Unpublished manuscript.*

Raver, C. C., & Zigler, E. F. (1997). Social competence: An untapped dimension in evaluating Head Start's success. *Early Childhood Research Quarterly*, *12*, 4, 363-385.

Richardson, P., & Schwartz, I. S. (1998).Making friends in preschool: Friendship patterns of young children with disabilities. *Making friends: The influences of culture and development*, 65-80.

Rohrbeck, C. A., Ginsburg-Block, M. D., Fantuzzo, J. W., & Miller, T. R. (2003). Peer-assisted learning interventions with elementary school students: A meta-analytic review. *Journal of Educational Psychology*, 95, 2, 240.

Robson, C (2002) *Real World Research, 2nd Edition*. Oxford: Blackwell Publsihing.

Rose-Krasnor, L. (1997). The nature of social competence: A theoretical review. *Social development*, 6, 1, 111-135.

Rose-Krasnor, L. & Denham, S. (2009) Social and Emotional competence in Early Childhood. In Rubin, K. H., Bukowski, W. M., & Laursen, B. P. (Eds.) *Handbook of peer interactions, relationships, and groups*. New York: The Guilford Press.

Rubin, K.H, Bowker, J.C., & Kennedy, A.E., (2009) Avoiding and Withdrawing from the Play Group. In Rubin, K. H., Bukowski, W. M., & Laursen, B. P. (Eds.) *Handbook of peer interactions, relationships, and groups*. New York: The Guilford Press.

Rubin, K. H., Bukowski, W. M., & Laursen, B. P. (Eds.).(2009). *Handbook of peer interactions, relationships, and groups*. New York: The Guilford Press.

Rubin, K.H., Bukowski, W., & Parker, J.G. (1998). Peer interactions, relationships, and groups. In Damon, N. & Eisenberg, W. (Eds.) *Handbook of Child Psychology, 5th ed., Vol. 3,* 619–700.

Rubin, K.H., & Coplan, R.J. (2004) Paying Attention to and Not Neglecting Social Withdrawal and Social Isolation. Merrill-Palmer Quarterly, 50, 4, 506-534.

Rubin, K.H., Fein, G.G., & Vandenberg, B. (1983) Play. In Hetherington, E.M. (Ed.) *Handbook of Child Psychology*, 4th edition, 693-774.

Rubin, K.H., Maioni, T.L., & Hornung, M. (1976). Free play behaviors in middle and lower class preschoolers: Parten and Piaget revisited. *Child Development*, 47, 414-419.

Rubin, K. H., & Rose-Krasnor, L. (1992). Interpersonal problem solving and social competence in children.*Handbook of social development: A lifespan perspective*, 283-323.

Rubin, K. H., Wojslawowicz, J. C., Rose-Krasnor, L., Booth-LaForce, C., & Burgess, K. B. (2006). The best friendships of shy/withdrawn children: Prevalence, stability, and relationship quality. *Journal of abnormal child psychology*, *34*, 2, 139-153.

Ryan, J.B., Pierce, C.D., & Mooney, P. (2008). Evidence-based teaching strategies for students with EBD.*Beyond Behavior*, 22-29.

Rydell, A. M., Bohlin, G., &Thorell, L. B. (2005). Representations of attachment to parents and shyness as predictors of children's relationships with teachers and peer competence in preschool. *Attachment & Human Development*, *7*, 2, 187-204.

Sayer, A (2000) *Realism and Social Science*. London: Sage.

Silverman, A., Cassata, J.C., Gottfredson, G., & Rosenfield, S., (2009) Choosing measures for school-based research: Scientific and practical considerations. *In Dinella, L.M., (2009). Conducting science-based psychology research in schools,* 107-127. Washington: American Psychological Association.

Slemming, K., Sørensen, M. J., Thomsen, P. H., Obel, C., Henriksen, T. B., & Linnet, K. M. (2010). The association between preschool behavioural problems and internalizing difficulties at age 10–12 years. *European Child & Adolescent Psychiatry*, 19, 10, 787-795.

Smith, P.K. (1995) Play, Ethology and Education : a Personal Account. In Pellegrini, A.D. (1995) The Future of Play Theory: A Multi-disciplinary enquiry into the contributions of Brian Sutton-Smith. Albany: State University of New York Press.

Snape, D. & Spencer, L. (2003). The foundations of qualitative research. In J. Ritchie and J. Lewis (eds) *Qualitative research practice: A guide for social science students and researchers* (p.1-23). London: Sage Publications.

Suess, G. J., Grossman, K. E., & Sroufe, L. A. (1992). Effects of infant attachment to mother and father on quality of adaptation in preschool: From dyadic to individual organization of self. *International Journal of Behavioural Development*, 15, 43 – 65.

Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches.* California: Sage Publications.

Terry, R., & Coie, J. D. (1991). A comparison of methods for defining sociometric status among children. *Developmental Psychology*, *27*,5, 867.

The British Psychological Society (2009) *Code of Ethics and Conduct: Guidance published by the Ethics Committee of the British Psychological Society*. Leicester: The British Psychological Society.

Topping, K. (1987). Peer tutored paired reading: Outcome data from ten projects. *Educational Psychology*, *7*, 2, 133-145.

Topping, K. J. (2005). Trends in peer learning. *Educational psychology*, *25*, 6, 631-645.

Trawick-Smith, J. (1992). A descriptive study of persuasive preschool children: How they get others to do what they want. *Early Childhood Research Quarterly*,*7*, 1, 95-114.

Vaughn, B.E., Colvin, T.N., Azria, M.R., Caya, L. & Krzysik, L. (2001) Dyadic analyses of friendship in a sample of preschool children attending Headstart: Correspondence between measures and implications for social competence. *Child Development*, 72, 3, 862-878.

Vaughn, B. E., Vollenweider, M., Bost, K. K., Azria-Evans, M. R., & Snider, J. B. (2003). Negative interactions and social competence for preschool children in two samples: Reconsidering the interpretation of aggressive behavior for young children. *Merrill-Palmer Quarterly*, 49, 3, 245-278.

Vitiello, V. E., Booren, L. M., Downer, J. T., & Williford, A. P. (2012). Variation in children's classroom engagement throughout a day in preschool: Relations to classroom and child factors. Early Childhood Research Quarterly, 27, 210-220.

Vygotsky, L.S. (1978) *Mind in Society*. Cambridge, MA: Harvard University Press.

Waters, E., & Sroufe, L. A. (1983). Social competence as a developmental construct. *Developmental review*, *3* , 1, 79-97.

Waring, M. (2012). Finding your theoretical position. In Arthur, J., Hedges, L. V., Coe, R., & Waring, M. (Eds.). *Research methods and methodologies in education*. Sage Publications: London.

Webster-Stratton, C., & Lindsay-Woolley, D. (1999). Social competence conduct problems in young children: Issues in assessment. *Journal of Clinical Child Psychology*, 28, 25-43.

Webster-Stratton, C., & Reid, J. (2004). Strengthening Social and Emotional Competence in Young Children – The Foundation for Early School Readiness and Success. *Infants and Young Children,* 17, 2, 96–113.

White, M., & Cameron, R. J. (1987). Portage early education programme: a practical manual. NFER-Nelson.

Wichmann, C., Coplan, R. J., & Daniels, T. (2004). The social cognitions of socially withdrawn children. *Social Development*, *13*, 3, 377-392.

Williams, S.T., Mastergeorge, A.M., Ontai, L.L., (2010). Caregiver involvement in infant peer interactions: Scaffolding in a social context. *Early Childhood Research Quarterly, 25, 2, 251–266.*

Wu, X., Hart, C. H., Draper, T., & Olsen, J. A. (2001). Peer and teacher sociometrics for preschool children: Cross-informant concordance, temporal stability, and reliability. *Merrill-Palmer Quarterly*, *47*, 3, 416-443.

Yeates, K. O., & Selman, R. L. (1989). Social competence in the schools: Toward an integrative developmental model for intervention. *Developmental Review*, *9*, 1, 64-100.

Yin, R. K. (1998). The abridged version of case study research: Design and Methods. In Bickman, L., Rog, D. J. (Eds) Handbook of applied social research methods. California: Sage Publications.

Yin, R. K. (2003). Case Study Research: Design and Methods (3rd Ed.). London: Sage Publications.

Yin, R. K (2009). Case Study Research: Design and Methods (4th Ed). London: Sage Publications

## 7. Appendices

Appendix A – Outline of initial training ..... 231
Appendix B – Play Bank Guide ..... 232
Appendix C – The Penn Interactive Peer Play Scales (Fantuzzo et al. 1998) ..... 243
Appendix D – Semi-structured group interview schedule from the initial study ..... 247
Appendix E – Revised semi-structured group interview schedule for the current study ..... 248
Appendix F – Play Checklist ..... 249
Appendix G – Participant information sheet and consent form – Child ..... 250
Appendix H – Participant information sheet and consent form – Play Supporter ..... 255
Appendix I – Opt-out consent for sociometric activity ..... 259
Appendix J – The Pre-school Observation Code (Bramlett & Barnett, 1993) ..... 261
Appendix K – State categories for the Pre-school Observation Code ..... 262
Appendix L – Event categories for the Pre-school Obsevration Code ..... 265
Appendix M – Nvivo screenshot ..... 268
Appendix N – Manual colour coding ..... 269
Appendix O – Ethical approval conformation email ..... 270
Appendix P - Time 1 Sociogram of Positive Peer Nominations ..... 271
Appendix Q – Time 1 Sociogram of Negative Peer Nominations ..... 272
Appendix R - Time 2 Sociogram of Positive Peer Nominations ..... 273
Appendix S – Time 2 Sociogram of Negative Peer Nominations ..... 274
Appendix T – Time 3 Sociogram of Positive peer Nominations ..... 275
Appendix U – Time 3 Sociogram of Negative Peer Nominations ..... 276
Appendix V – Comparison of time spent in classroom activities ..... 277

*Appendix A – Outline of initial training*

# Play Bank Project sessions

| Session: | Objective: | Activities: | Time: |
|---|---|---|---|
| **1.** | - Introduction to and overview of the project.<br><br>- Adult volunteers' role and discussion around project.<br><br>- Scope out the levels for each volunteer i.e. qualifications, skills and courses. | - Go through the project based on the Fantuzzo paper.<br><br>- Go through the outline of the involvement of the adult volunteers (Handout 1).<br><br>- Question and answer session about the project. | 15mins<br><br>15mins<br><br>30-45mins |
| **2.** | - The stages of play development.<br><br>- Types of play.<br><br>-The importance and benefits of play.<br><br>-Praise/feedback for the children. | -Go through the developmental stages of play development (Handout 2).<br><br>-Ask them about the 'types' of play that they are familiar with and then go through the types of play (Handout 3).<br><br>- Ask them to think about the benefits of play and the developmental areas that it impacts upon (Handout 4).<br><br>-Discuss praise (Handout 5) and the importance of it.Get the group to create their own bank of praise phrases for the sessions. | 10mins<br><br>15-20mins<br><br>30mins<br><br>30mins |
| **3.** | -Go through the Play checklist.<br>- Give them a chance to try out the checklist in the classroom.<br>-Feedback as a group about the checklist and discuss any issues | -Discussion about the Play checklist.<br><br>-In-class observation of children using the Play checklist. | 15mins<br><br>30mins<br><br>1hour |

| | | | |
|---|---|---|---|
| | raised about recording and observing. | -Discussion as a group about the checklist and other issues around the project. | |

*Appendix B – Play Bank Guide*

# Play Bank

# Teacher Guide

Katie Pierce
Trainee Educational Psychologist
The University of Manchester
April 2013

# Contents


| | |
|---|---|
| Introduction to Play Bank | 3 |
| Play Bank Procedure | 4 |
| Example Scripts | 6 |
| Effective Praise | 8 |
| Ways to Encourage Interaction | 9 |
| Information for Parents | 11 |

# Introduction to Play Bank

Play Bank aims to improve peer interaction and social play through the pairing of a target child with a play buddy. The intervention usually involves 12 children, divided into the following pairs:

**6 Target Children** '**Play Partners'** – children identified by teachers through observation and the Early Years Foundation Stage profile, as showing less interactive play than their peers.

**6 Socially skilled peers 'Play Buddies'** – children identified by teachers through observation and the Early Years Foundation Stage profile as being competent in play with high levels of interactive play

The target children, 'Play Partners' are paired with 'Play Buddies' and together they take part in play sessions two/three times a week in a designated area of the classroom. The rationale is that the Play Partners learn how to interact through play, from a peer who is just beyond their Zone of Proximal Development. Play Bank is based on research carried out in the USA on 'Resilient Peer Treatment' by John Fantuzzo at the University of Pennsylvania.

## Role of the Play Supporter

The play sessions are facilitated by a Play Supporter who mediates the play by coaching the Play Buddy to encourage interactive play. At the beginning of the session, the Play Supporter spends a few minutes with the Play Buddy to prepare them for the session and orient the child towards activities which he/she normally engages in and which promote positive interaction. During the play sessions, the Play Supporter observes the play from outside the play corner and observes the positive interactive behaviours which take place. At the end of the play session the Play Supporter makes positive reinforcing comments about the interactive play to both children.

***Note:*** *For the purposes of identifying the children, we call the target children 'Play Partners' and the more socially skilled children 'Play Buddies', however when talking to the children it is not necessary to differentiate between the two so we call them both Play Buddies.*

# Play Bank Procedure

## Introducing the Project

It is beneficial to introduce Play Bank in front of the whole group so that all children have an idea of what is happening during the project. Whilst the sessions are taking place, you will need to ensure other children don't try to interrupt the sessions, so explaining the project to the whole group can help to prepare the children that the chosen play corner will be out of bounds during the short play sessions. Once you have identified the 12 children who are taking part, you can get them together in a small group to explain the project.

## Introducing the Pairs

In a small group, explain the play sessions to the children and introduce them to their play buddies. Tell them who their Play Supporter will be and explain the role of the Play Supporter, emphasizing that the Play Supporter will be just keeping an eye out for them during their play sessions.

## Setting up the Play Corner

It is important to choose an area of the classroom which is separate from the rest of the room in some way, in order to facilitate the Play Supporter in diverting other children away from the play session. Small fences and play dividers are ideal, however you can also section off the area with bookcases and tables etc. The home corner is an ideal place to hold the sessions and encourage interactive play and you may also want to choose some additional toys from the nursery that you think the children will enjoy and will promote interaction. Some examples of toys include: dressing up clothes, items from the home corner and

role play corner, jigsaws/form boards, toy telephone, construction materials, puppets, dolls.

## Coaching the Play Buddy

When starting the session, find the Play Buddy first, in order to spend a few minutes coaching them. Show the Play Buddy the play corner and the toys they have available to play with. Remind them who their partner is and that it is their special job to be friendly and help their partner to play with them – see script for ideas. Help them to think of games they might play together and remind them of positive interactive games you may have seen them play previously. Once you are happy that the Play Buddy understands and is happy to go ahead you can bring in the Play Partner.

## Starting the Session

With both children together, explain the session briefly to them again and show them the toys together and ask them if they have any ideas about what they'd like to play with. You will be mostly repeating what you've already said to the Play Buddy but just in the presence of the Play Partner. Remind them that you will not be playing with them, just keeping an eye on them – see script for ideas.

## The Play Session

The children should be left to play for 10 minutes while you stay in the area and observe the play. It is important not to seem as if you standing over the children and so it is a good idea to seem to be busy making notes. It can help to orient your body slightly away from the children in order to seem less direct. Keep in mind that you are looking for positive behaviours that you will be able to praise both children for afterwards. You may want to make some notes about what the higher ability child did to help you coach them next session.

## Praise

At the end of the session, praise each of the children for the positive behaviour you have seen. If they have been interactive and played together, praise specific

behaviours that each child has done which have shown them interacting positively, as these are the behaviours we are trying to reinforce. See page 8 for ideas about praise. If the children have not shown any interactive behaviour, it is still important to finish positively so praise the children for taking part in the session and for being cooperative with you etc. Remind them that next time you would like them to play a game / do an activity together.

# Example Scripts

## Coaching the Play Buddy

It's time for your special play time with (play partner). Can you remember what (teacher) told you about your special job? Yes that's right / Ok I'll tell you - you're going to show (play partner) how fun it can be to play together. I know how good you are at making up games and playing with other children so we want you to help (play partner) to join in your games. Have you got any ideas of games you might ask him/her to play with you? (teacher) said that yesterday you were playing superheroes with your friend and you played so happily together and had lots of fun, why don't you play that with (play partner)?

## Starting the sessions with the pair

"Hi … and …., remember (teacher) telling you that you're going to be having some special play time together? Today you get to play together in the home corner / small world / dressing up corner. How exciting, just the two of you! I want you to show me how well you can play together, what game are you going to play?"

- Children may generate some ideas, if you think they could be more interactive, suggest changing the game slightly. For example if one child says they want to build in construction, suggest that they do one brick each and take turns.

- If the children can't think of anything to play, give them some ideas from the suggestions on the next page.

## Explaining your role

"I'm going to be sitting just here and keeping an eye on the two of you while you play. I won't be playing with you today because it's your special time to play just the two of you and I have another important job to do. Remember to play a game together and have fun!"

# Effective Praise

Praise is an effective way of encouraging desirable behaviours which you have chosen to target for a particular child. When a child receives specific praise about exactly what they have done, it reinforces the positive behaviour and encourages the children to do more of the behaviour in future.

Some tips:

- Establish eye contact, move close, and smile at the child.
- Pinpoint what it is you like about the behaviour and be specific in your praise.
- Praise with sincerity and enthusiasm, and in a variety of ways. Make a big deal out of it.
- When a desired behaviour occurs, praise it immediately.
- Combine verbal praise with physical contact, e.g. pat on the head or shoulder.
- Don't wait for behaviour to be perfect before praising.
- Don't be tempted to combine the praise with any negatives.
- Don't compare the two children

From Carolyn Webster Stratton – The Incredible Years

## Examples of interactive behaviour to be praised

"You asked your friend to play with the bricks with you, that was very friendly"

"You shared the digging tools in the sand so that you could both dig a hole together. That was very kind"

"You watched what your friend was doing first and then you had a go too, that was very smart"

Try to **avoid** phrases like:

"You played nicely today."

"You were very good today."

Instead, the praise needs to be specific to the interactive behaviour that you would like to see occur again.

# Ways to Encourage Interactive Play

If the children are finding it difficult to interact after the first couple of weeks, it may be necessary to give some prompts. At first try and prompt the Play Buddy to include the other child in their play. If this doesn't work, it might be easier to encourage the Play Buddy to join the play of the Play Partner as they may be more flexible. Try not to spend too much time with the children, the aim is to encourage interaction and then step back so that the children don't rely on you to play together. Joining in the play and modelling good interaction should be used if all other attempts to get the children to interact are unsuccessful.

**Help each child pay attention to what the other child is doing**.

Say things like, "Look! Did you see that? Wow! … just made the biggest tower!" The more drama you put into your voice, the easier it will be for both children to attend.

**Try to draw the Play Partner into the activity of the Play Buddy.**

Comment on the Play Buddy's play to try and bring the other child into the play. Use an excited tone to draw the other child into the play. For example if the Play Buddy is playing with toy cars, say "What a fast car! Oh no, look it's crashed!" Hand a toy car to the Play Partner and sit back in your chair to allow them to interact.

**Get both children involved in problem solving.**

Encourage the Play Partner to help the Play Buddy:

"Oh no! The car is missing a wheel! What should …. do? Can you help?"

"Help! Help! The door to the oven is stuck! … can't get the cake out, it's going to burn! How can you help her?"

**Get involved in the play and create opportunities for the children to work together.**

For example, if you are the bad doggy that is trying to mess up their house, they might need to build barriers together to keep you out. Or you might be the patient who needs some treatment and they are Doctor and Nurse.

## Examples of Interactive Play

Dressing up as characters and acting out roles e.g. Doctors and Nurses, Mummies and Daddies, Fire-fighters etc.

Building something together in Construction

Making a phone call from one child to another – calling the Doctor, a superhero, the fire brigade.

Baking a cake together

Having a tea party

Playing families in the home corner

Doing a jigsaw together

Playing Shop – Shopkeeper and Customer

Going on the bus

Playing with puppets

# Play Bank

## Information for Parents

Learning to play with others and develop friendships is an important part of children's development. Like all skills, some children develop social skills more easily than others. Not all children develop friendships and social skills straight away and this may be as a result of shyness or lack of experience around other children. Some children need a little extra help in the early years to learn how to interact socially and play with others.

Play Bank is a play based intervention which aims to help pre-school children learn the necessary skills to interact and play with other children. Research shows that children learn best through observing skills being modelled by others and through practicing those skills. Play Bank involves pairing children with Play Buddies who they can learn new skills from and develop relationships with. The pair of children take part in play sessions in which they have their own time to interact and play, under the supervision of a Play Supporter who is usually a teaching assistant in school.

Before the session, the Play Supporter helps the children to think of ways they can play together. During the session, the Play Supporter steps back and allows the children to play together naturally in order to increase the child-to-child interaction. After the session, the Play Supporter praises the children for the positive way in which they've interacted and played together. Children take part in the play sessions 2-3 times a week and the intervention usually lasts around 6 weeks.

For further information about Play Bank please ask your child's class teacher.

*Appendix C – The Penn Interactive Peer Play Scales (Fantuzzo et al. 1998)*

**PENN INTERACTIVE PEER PLAY SCALE**

**Teacher Report**

**In the past few months, indicate how much you have observed the following behaviors in this child during free play by filling in the appropriate circle.**

| | NEVER | SELDOM | OFTEN | ALWAYS |
|---|---|---|---|---|
| 1. Helps other children | o | o | o | o |
| 2. Starts fights & arguments | o | o | o | o |
| 3. Is rejected by others | o | o | o | o |
| 4. Does not take turns | o | o | o | o |
| 5. Hovers outside play group | o | o | o | o |
| 6. Shares toys with other children | o | o | o | o |
| 7. Withdraws | o | o | o | o |
| 8. Demands to be in charge | o | o | o | o |
| 9. Wanders aimlessly | o | o | o | o |
| 10. Rejects the play ideas of others | o | o | o | o |
| 11. Is ignored by others | o | o | o | o |
| 12. Tattles | o | o | o | o |
| 13. Helps settle peer conflicts | o | o | o | o |
| 14. Destroys others' things | o | o | o | o |
| 15. Disagrees without fighting | o | o | o | o |

NEVER SELDOM OFTEN ALWAYS



Continue on the other side

| | NEVER | SELDOM | OFTEN | ALWAYS |
|---|---|---|---|---|
| 16. Refuses to play when invited | O | O | O | O |
| 17. Needs help to start playing | O | O | O | O |
| 18. Verbally offends others (name calling) | O | O | O | O |
| 19. Directs others' action politely | O | O | O | O |
| 20. Cries, whines, shows temper | O | O | O | O |
| 21. Encourages others to join play | O | O | O | O |
| 22. Grabs others' things | O | O | O | O |
| 23. Comforts others who are hurt or sad | O | O | O | O |
| 24. Confused in play | O | O | O | O |
| 25. Verbalizes stories during play | O | O | O | O |
| 26. Needs teachers' direction | O | O | O | O |
| 27. Disrupts play of others | O | O | O | O |
| 28. Seems unhappy | O | O | O | O |
| 29. Shows positive emotions during play (e.g. smiles, laughs) | O | O | O | O |
| 30. Is physically aggressive | O | O | O | O |
| 31. Shows creativity in making up play stories and activities | O | O | O | O |
| 32. Disrupts class during transitions from one activity to another | O | O | O | O |

NEVER SELDOM OFTEN ALWAYS

## PENN INTERACTIVE PEER PLAY SCALE

### Parent Report

**In the past two months, indicate how much you have observed the following behaviors in this child during play at home or in the neighborhood by filling in the appropriate circle.**

| | NEVER | SELDOM | OFTEN | ALWAYS |
|---|---|---|---|---|
| 1. Helps other children | O | O | O | O |
| 2. Starts fights & arguments | O | O | O | O |
| 3. Is rejected by others | O | O | O | O |
| 4. Does not take turns | O | O | O | O |
| 5. Hovers outside play group | O | O | O | O |
| 6. Shares toys with other children | O | O | O | O |
| 7. Withdraws | O | O | O | O |
| 8. Demands to be in charge | O | O | O | O |
| 9. Wanders aimlessly | O | O | O | O |
| 10. Rejects the play ideas of others | O | O | O | O |
| 11. Is ignored by others | O | O | O | O |
| 12. Tattles | O | O | O | O |
| 13. Helps settle peer conflicts | O | O | O | O |
| 14. Destroys others' things | O | O | O | O |
| 15. Disagrees without fighting | O | O | O | O |

NEVER SELDOM OFTEN ALWAYS



Continue on the other side

| | NEVER | SELDOM | OFTEN | ALWAYS |
|---|---|---|---|---|
| 16. Refuses to play when invited | O | O | O | O |
| 17. Needs help to start playing | O | O | O | O |
| 18. Verbally offends others (name calling) | O | O | O | O |
| 19. Directs others' action politely | O | O | O | O |
| 20. Cries, whines, shows temper | O | O | O | O |
| 21. Encourages others to join play | O | O | O | O |
| 22. Grabs other's things | O | O | O | O |
| 23. Comforts others who are hurt or sad | O | O | O | O |
| 24. Confused in play | O | O | O | O |
| 25. Verbalizes stories during play | O | O | O | O |
| 26. Needs parent's direction | O | O | O | O |
| 27. Disrupts the play of others | O | O | O | O |
| 28. Seems unhappy | O | O | O | O |
| 29. Shows positive emotions during play (e.g. smiles, laughs) | O | O | O | O |
| 30. Is physically aggressive | O | O | O | O |
| 31. Shows creativity in making up play stories and activities | O | O | O | O |
| 32. Is disruptive during transitions (moving from one activity to another) | O | O | O | O |

| | NEVER | SELDOM | OFTEN | ALWAYS |
|---|---|---|---|---|

## *Appendix D – Semi-structured group interview schedule from the initial study*

Group interview with Play Supporters

The purpose of this interview is to help us to evaluate the Play Bank project so I am interested in finding out about your experiences of delivering the Play Bank sessions.

1. How did you find running the play sessions?

Prompts

- Identification of children
- Play materials available
- Time – length of sessions, release from normal duties for project
- Practical issues – effect of other children in classroom not involved, engagement of children involved
- Completing the observation schedules
- Confidence in mediating the play
- Effectiveness of 'coaching' prior to sessions
- Play Buddies' understanding of their role
- Training received

2. How effective do you think the project has been in improving the interactive play of the target children?

Prompts

- Examples of specific children's progress
- Examples of pro-social behaviour
- Children's reaction to the praise

3. Did you notice any other effects of the intervention?

4. How do you think the project could be improved in the future?

*Appendix E – Revised semi-structured group interview schedule for the current study*

The purpose of this interview is to help us to evaluate the Play Bank project so I am interested in finding out about your experiences of delivering the Play Bank sessions.

1. How did you find running the play sessions?

Prompts

- Identification of children, selecting the pairs
- Play materials available
- Time – length of sessions, release from normal duties for project
- Ease of setting up the intervention, preparation needed
- Taking notes during the session
- Practical issues – effect of other children in classroom not involved, space, impact on other activities, i.e staff, timetable
- Engagement of children involved and how to manage
- Confidence in mediating the play and coaching the Play Buddy
- Play Buddies' understanding of their role

2. What effects have you noticed in the target children throughout the intervention?

Prompts

- Focus on each pair
- Nature of their play/interaction at the beginning
- Changes seen in the nature of their play/interaction throughout
- Factors which influenced those changes – skills of Play Buddy or skills of target child?
- Instances where the session worked well - what worked and why (solution focused)
- Specific examples of pro-social behaviour
- Children's reaction to the praise
- Barriers to effective interaction between the pairs
- Effectiveness of 'coaching' prior to sessions

3. Did you notice any other effects of the intervention?

4. How do you think the project could be improved in the future?

*Appendix F – Play Checklist*

| Play Behaviours | Tally | Examples of observed behaviour |
|---|---|---|
| Plays happily alongside Play Buddy | | |
| Shows interest in Play Buddy's toy – stops to watch what they're doing | | |
| Imitates play buddy | | |
| Uses gestures, body language to show interest, i.e makes eye contact, nods, smiles, points | | |
| Responds to interaction from buddy | | |
| Happy to follow play buddy in change of play / toy | | |
| Cooperates with other child when directed | | |
| Comments on other child's play | | |
| Initiates play | | |
| Takes turns and shares | | |
| Takes part in task requiring shared attention / working together | | |

*Appendix G – Participant information sheet and consent form – Child*

MANCHESTER 1824

The University of Manchester

***An Evaluation of the Effectiveness of Play Bank – a peer-mediated intervention to develop the interactive play of Foundation Stage children***

**Participant Information Sheet – Child and Parent**

As you are aware, your child will be taking part in Play Bank as part of their curriculum at Local Primary School. As part of this he/she is being invited to take part in a research study for my Doctorate in Educational and Child Psychology. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please ask if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

**Who will conduct the research?**

*Katie Pierce, Trainee Educational Psychologist and Local Primary School, Local Street, Local, LL2 LLL.*

**What is the aim of the research?**

*The aim of the research is to evaluate the Play Bank project in order to help teachers in school evaluate the effectiveness of the support being given to children as part of the curriculum. We are hoping to find out whether taking part in Play Bank has any effect on children's interactive play skills and whether this also improves their general social skills in the classroom.*

**Why has my child been chosen?**

*Your child has been selected by their teacher to take part in Play Bank as part of their curriculum, and all children taking part in the project have been invited to take part in the evaluation process.*

**What would my child be asked to do if he/she took part?**

*As your child is already taking part in Play Bank, he/she does not have to do anything extra in order to take part in my research. The research involves school collecting data about your child on my behalf in the following 4 ways.*

*1. Your child's teachers will fill in a questionnaire about your child before the Play Bank project starts, after the Play Bank project finishes and again after 6 months. The aim of the*

*questionnaire is to find out about the way your child normally plays in the classroom and then to see whether taking part in Play Bank has any effect on the way your child plays with his/her peers.*

*2. The researcher will carry out observations of your child's free play in the classroom in order to find out how much time your child spends interacting with other children. The observations will be carried out before the intervention, after the intervention and again 6 months later in order to find out if the Play Bank intervention has any effect on your child's interactive play skills.*

*3. Your child's class teacher will carry out an activity with the whole class to find out about which children like to play with each other. This activity will also be carried out before the intervention, after the intervention and again 6 months later in order to find out if the Play Bank intervention has any effect on the choices children make about who they like to play with.*

*4. The Play Supporters will take part in an interview at the end of the project in which they will be asked questions about how the project went. The focus of the interview will be about the running of the project to try and find out ways in which we might improve the project in future. It is not possible to predict what the Play Supporters will talk about during the interview but it is anticipated that they may mention some of the children as examples of how well the project worked.*

**What would I be asked to do if my child takes part?**

*You will be asked to complete the same questionnaire as your child's teachers which asks about how normally plays with other children. The questionnaire should take 5 -10 minutes to complete and you will be asked to complete this before the Play Bank project starts, after the project finishes and again 6 months later. The aim of the questionnaire is to find out about the way your child normally plays in the classroom and then to see whether taking part in Play Bank has any effect on the way your child plays with his/her peers.*

**What happens to the data collected?**

*All of the data collected about your child will be anonymised so that your child cannot be identified with any results of the research. All data will be secured in a locked filing cabinet by the researcher.*

*Once the questionnaires are completed by yourself and the class teachers, they will be given to me and I will analyse the data in order to evaluate the effect of the project. The questionnaires will be anonymised by the class teacher before being passed to me as your child's name will be replaced with an ID number.*

*The data gathered during the observations will also be anonymised by replacing your child's name with an ID number.*

*The interview will be audio recorded and transcribed by myself. All names will be anonymised in the transcription. The audio recording will be kept in a secure filing cabinet until after the research has been written up and then it will be destroyed.*

*The data gathered will be analysed by the researcher and will be used in the write up of the research to determine whether Play Bank is an effective intervention for improving the play skills of pre-school children.*

**How is confidentiality maintained?**

*Once I have collected the questionnaires and analysed the data it will be used in my research report but the data will not reveal the identity of the school, its teachers or any of the children, therefore your child will remain completely anonymous.*

*I will store the questionnaires in a secure filing cabinet during the research project.*

**What happens if I do not want my child to take part or if I change my mind?**

*It is up to you to decide whether or not your child takes part. If you do decide you wish your child to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide that you wish your child to take part you are still free to withdraw your child at any time without giving a reason.*

**What is the duration of the research?**

*The study will last approximately 8 months in which the data will be collected about your child, before Play Bank starts, during each Play Bank session and after Play Bank finishes.*

**Where will the research be conducted?**

*At Local Primary School, Local Street, Local, LL2 LLL*

**Will the outcomes of the research be published?**

*It is not anticipated that the research will be published, however if this is the case we will gain your consent prior to doing so. It will be submitted to the University of Manchester as part of my Doctorate in Educational and Child Psychology.*

**Contact for further information**

*If you have any further questions about the research study please do not hesitate to contact me by email on:*

*Katherine.pierce@postgrad.manchester.ac.uk*

*You may also wish to contact my Supervisor at the University, Dr Catherine Kelly:*

*Catherine.kelly@manchester.ac.uk*

*Additionally, if you would like to speak to a member of staff at Local Primary School about the Play Bank project, the contact person is Teacher, SENCo and she can be reached via the school secretary on Tel no. (0123) 456789*

**What if something goes wrong?**

*If you would like to talk to someone for further advice after the research please feel free to contact any of the above listed people.*

*If there are any issues regarding this research that you would prefer not to discuss with members of the research team, please contact the Research Practice and Governance Co-ordinator by either writing to 'The Research Practice and Governance Co-ordinator, Research Office, Christie Building, The University of Manchester, Oxford Road, Manchester M13 9PL', by emailing: Research-Governance@manchester.ac.uk, or by telephoning 0161 275 7583 or 275 8093*

MANCHESTER 1824

The University of Manchester

***An Evaluation of the Effectiveness of Play Bank – a peer-mediated intervention to develop the interactive play of Foundation Stage children***

## CHILD CONSENT FORM

If you are happy to participate please complete and sign the consent form below

1. I confirm that I have read the attached information sheet on the above study and have had the opportunity to consider the information and ask questions and had these answered satisfactorily ☐

2. I understand that my child's participation in the study is voluntary and that I am free to withdraw my child at any time without giving a reason. ☐

3. I agree to the use of anonymous quotes ☐

.4. I agree that any data collected may be published in anonymous form in academic books or journals. ☐

5. I agree for my child to take part in the above project ☐

.

Name of Child …….

Name of Parent giving consent ……

Signature of Parent giving consent ……..

Date ……..

*Appendix H – Participant information sheet and consent form – Play Supporter*


***An Evaluation of the Effectiveness of Play Bank – a peer-mediated intervention to develop the interactive play of Foundation Stage children***

**Participant Information Sheet – Play Supporter**

As you are assisting with the delivery of Play Bank as a Play Supporter you are being invited to take part in a research study for my Doctorate in Educational and Child Psychology. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please ask if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

**Who will conduct the research?**

*Katie Pierce, Trainee Educational Psychologist.*

**What is the aim of the research?**

*The aim of the research is to evaluate the Play Bank project. We are hoping to find out whether taking part in Play Bank has any effect on children's interactive play skills and whether this also improves their general social skills in the classroom.*

**Why have I been chosen?**

*As you are delivering the Play Bank project, you have been selected to take part in the evaluation of this project as you will have first hand knowledge about how the project went.*

**What would I be asked to do if I took part?**

*I would like you to take part in a short group interview (1 hour maximum) in which I will ask you some questions about how you felt the project went as a whole and what school might do to improve it if they carried it out again. This interview will be audio recorded and transcribed and then analysed by myself.*

**What happens to the data collected?**

*Once the data has been transcribed, a summary of the main themes will be sent to you for you to verify that they accurately reflect your views. Your data will be used in my thesis to help*

*evaluate the effectiveness of the intervention. I may wish to include quotes from the interview to support the results of the study and I will inform you which quotes I would like to use. If you do not wish for me to use any particular quotes then you have the right to request this and I will not use them.*

**How is confidentiality maintained?**

*The audio digital recording and the transcription will be stored on an encrypted pen drive. Once the research has been written up and submitted and marked by my University the audio recording will be destroyed.*

*Any quotes used from the audio recording will be anonymised. In the write-up of the research the identity of the school, school staff and children will all be protected so your information will remain anonymous.*

**What happens if I do not want to take part or if I change my mind?**

*It is up to you to decide whether or not you want to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time without giving a reason.*

**What is the duration of the research?**

*The research study will last approximately 8 months altogether. The Play Bank Project will last 6 weeks. The group interview will be conducted approximately two weeks after Play Bank finishes and will last 1/2 hour to 1 hour maximum)*

**Where will the research be conducted?**

*Local Primary School, Local Lane, Local, LL1 LLL*

**Will the outcomes of the research be published?**

*It is not anticipated that the research will be published, however if this is the case we will gain your consent prior to doing so. It will be submitted to the University of Manchester as part of my Doctorate in Educational and Child Psychology.*

**Contact for further information**

*If you have any further questions please do not hesitate to contact me by email on:*

*Katherine.pierce@postgrad.manchester.ac.uk*

*You may also wish to contact my Supervisor at the University, Dr Catherine Kelly:*

*catherine.kelly@manchester.ac.uk*

**What if something goes wrong?**

*If you would like to talk to someone for further advice after the research please feel free to contact any of the above listed people.*

*If there are any issues regarding this research that you would prefer not to discuss with members of the research team, please contact the Research Practice and Governance Co-ordinator by either writing to 'The Research Practice and Governance Co-ordinator, Research Office, Christie Building, The University of Manchester, Oxford Road, Manchester M13 9PL', by emailing: Research-Governance@manchester.ac.uk, or by telephoning 0161 275 7583 or 275 8093*

MANCHESTER 1824

The University of Manchester

***An Evaluation of the Effectiveness of Play Bank – a peer-mediated intervention to develop the interactive play of Foundation Stage children***

## PLAY SUPPORTER CONSENT FORM

If you are happy to participate please complete and sign the consent form below

1. I confirm that I have read the attached information sheet on the above study and have had the opportunity to consider the information and ask questions and had these answered satisfactorily. ☐

2. I understand that my participation in the study is voluntary and that I am free to withdraw at any time without giving a reason. ☐

3. I understand that the interviews will be audio-recorded ☐

4. I agree to the use of anonymous quotes ☐

5. I agree that any data collected may be published in anonymous form in academic books or journals ☐

6. I agree to take part in the above project. ☐

Name of Participant …….

Signature of Participant giving consent ……..

Date ……..

*Appendix I – Opt-out consent for sociometric activity*

***An Evaluation of the Effectiveness of Play Bank – a peer-mediated intervention to develop the interactive play of Foundation Stage children***

**Participant Information Sheet**

As part of a research project which your child's school is taking part in, your child is being asked to take part in an activity which looks at children's preferences for play mates. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please ask if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish your child to take part.

**If you are happy for your child to take part in the research study you do not need to do anything further. If you do not wish your child to take part, please contact your child's class teacher to opt out of the research study.**

**Who will conduct the research?**

*Katie Pierce, Trainee Educational Psychologist and Local Primary School, Local Street, Local, LL2 LLL.*

**What is the aim of the research?**

*The aim of the research is to evaluate the Play Bank project in order to help teachers in school evaluate the effectiveness of the support being given to children as part of the curriculum. We are hoping to find out whether taking part in Play Bank has any effect on children's interactive play skills and whether this also improves their general social skills in the classroom. The sociometric rating activity which your child is being asked to take part in will help us to understand the social status of the children taking part in the Play Bank intervention.*

**Why has my child been chosen?**

*Your child has been selected by their teacher to take part in the sociometric rating activity as a classmate of the children involved in the Play Bank project.*

**What would my child be asked to do if he/she took part?**

*Your child will be shown pictures of their classmates and asked to rate three children who they most like to play with and three children who they least like to play with.*

**What happens to the data collected?**

*Your child will be asked to post the photographs into a specially made postbox and following this, your child's choices will be anonymised so that the choices your child makes cannot be connected directly to your child.*

**How is confidentiality maintained?**

*Your child's teacher will carry out the sociometric rating activity with your child and will anonymise your child's choices before passing on the results to the researcher; therefore the researcher will not be aware of the choices your child makes.*

**What happens if I do not want my child to take part or if I change my mind?**

*It is up to you to decide whether or not your child takes part. If you decide that you wish your child to take part you are still free to withdraw your child at any time without giving a reason.*

**What is the duration of the research?**

*The duration of the research is approximately 8 months. The task that your child is being asked to take part in will take 5 minutes and they will be asked to complete the task at three different intervals throughout the research project.*

**Where will the research be conducted?**

*At Local Primary School, Local Street, Local, LL2 LLL*

**Will the outcomes of the research be published?**

*It is not anticipated that the research will be published, however if this is the case we will gain your consent prior to doing so. It will be submitted to the University of Manchester as part of my Doctorate in Educational and Child Psychology.*

**Contact for further information**

*If you have any further questions about the research study please do not hesitate to contact me by email on: Katherine.pierce@postgrad.manchester.ac.uk*

*You may also wish to contact my Supervisor at the University, Dr Catherine Kelly:*

*Catherine.kelly@manchester.ac.uk*

*Additionally, if you would like to speak to a member of staff at Local Primary School about the Play Bank project, the contact person is Teacher, SENCo and she can be reached via the school secretary on Tel no. (0123) 456789*

**What if something goes wrong?**

*If you would like to talk to someone for further advice after the research please feel free to contact any of the above listed people. If there are any issues regarding this research that you would prefer not to discuss with members of the research team, please contact the Research Practice and Governance Co-ordinator by either writing to 'The Research Practice and Governance Co-ordinator, Research Office, Christie Building, The University of Manchester, Oxford Road, Manchester M13 9PL', by emailing: Research-Governance@manchester.ac.uk, or by telephoning 0161 275 7583 or 275 809*

*Appendix J – The Pre-school Observation Code (Bramlett & Barnett, 1993)*

| States | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Play | | | | | | | | | | | | | | | | | | | | | |
| NonP | | | | | | | | | | | | | | | | | | | | | |
| UB | | | | | | | | | | | | | | | | | | | | | |
| DisB | | | | | | | | | | | | | | | | | | | | | |
| OtB | | | | | | | | | | | | | | | | | | | | | |
| SIP | | | | | | | | | | | | | | | | | | | | | |
| TMI | | | | | | | | | | | | | | | | | | | | | |
| PreAc | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| Events | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | Total |
| AC | | | | | | | | | | | | | | | | | | | | | |
| DisB | | | | | | | | | | | | | | | | | | | | | |
| NVI | | | | | | | | | | | | | | | | | | | | | |
| PMI | | | | | | | | | | | | | | | | | | | | | |
| NMI | | | | | | | | | | | | | | | | | | | | | |
| CAT | | | | | | | | | | | | | | | | | | | | | |
| PVI | | | | | | | | | | | | | | | | | | | | | |

Play = play engagement
NonP = nonpurposeful play
UB = unoccupied behavior
DisB = disruptive behavior
~~SSt = self-stimulating behaviour~~
OtB = other behavior
SIP = social interaction with peer
TMI = teacher monitoring/interacting

AC = activity change
NVI = negative verbal interaction
PMI= positive motor interaction
NMI = negative motor interaction
DisB = disruptive behaviour
CAT = child approaches teacher
~~CC = child compliance~~
~~TC-A = teacher commands – Alpha~~
~~TC-B = teacher commands – Beta~~
~~CC = child compliance~~
~~TA = teacher approval~~
~~TD = teacher disapproval~~

AC = activity change
NVI = negative verbal interaction
PMI= positive motor interaction
NMI = negative motor interaction

CAT = child approaches teacher
CC = child compliance

*Appendix K – State categories for the Pre-school Observation Code*

| Behaviour Categories - States | Definition |
|---|---|
| Play Engagement (Play) | The child is engaged with play materials or toys. The child must be in physical contact with the materials or have their face oriented towards them. Also includes the child engaging in a game/activity with other children.<br><br>Can be scored in conjunction with Teacher Monitoring/Interacting and Social Interaction with Peer. |
| Pre-academic Engagement (PreAc) | The child is engaged with activities designed for children to learn academic skills such as linguistic concepts, numbers, colours, shapes sizes. Can be scored when the child is engaged in a group or an individual activity.<br><br>Can be scored in conjunction with Teacher Monitoring/Interacting and Social Interaction with Peer. |

| | |
|---|---|
| Non-purposeful Play (NonP) | The child is engaged in play behaviours where a specific goal or purpose is not apparent. Includes play behaviour in which the child is using the play materials for purposes other than their intended use.<br><br>Can be scored in conjunction with Teacher Monitoring/Interacting and Social Interaction with Peer. |
| Unoccupied behaviour (UB) | The child is not engaged with an activity and is wandering around the room, looking out the window, watching other children playing but not participating.<br><br>Can be scored in conjunction with Teacher Monitoring/Interacting and Social Interaction with Peer. |
| Disruptive behaviour (DisB) | The child is exhibiting a disruptive behaviour such as stamping feet, rolling on floor, crying, screaming, yelling, throwing objects, standing on a table/chair and physically fighting with a peer. |
| Other Behaviours (OtB) | The child is engaging in a behaviour not specified in the code definitions. Examples may include activities such as washing hands, going to the toilet, eating snack, helping the teacher, putting on coat.<br>Behaviour is specified underneath the coding table. |
| Social Interaction with Peer (SIP) | The child is interacting or playing with a peer at the onset of the interval. This category can be scored in conjunction with Play when the child is engaged in a joint play task with a peer where interaction is occurring at the onset of the interval.<br>Can be scored with any other state behaviour. |
| Teacher Monitoring/Interacting (T-MI) | The teacher is within close proximity (within 6 feet) of the child and is looking at the child or the child's activities. Also scored when the |

| | |
|---|---|
| | teacher is providing verbal or physical guidance to the child such as prompting, modelling or guidance which includes hand-over-hand guidance, individual instruction or prompting. General conversation between the child and adults is also scored.<br>Can be scored with any other state behaviour. |

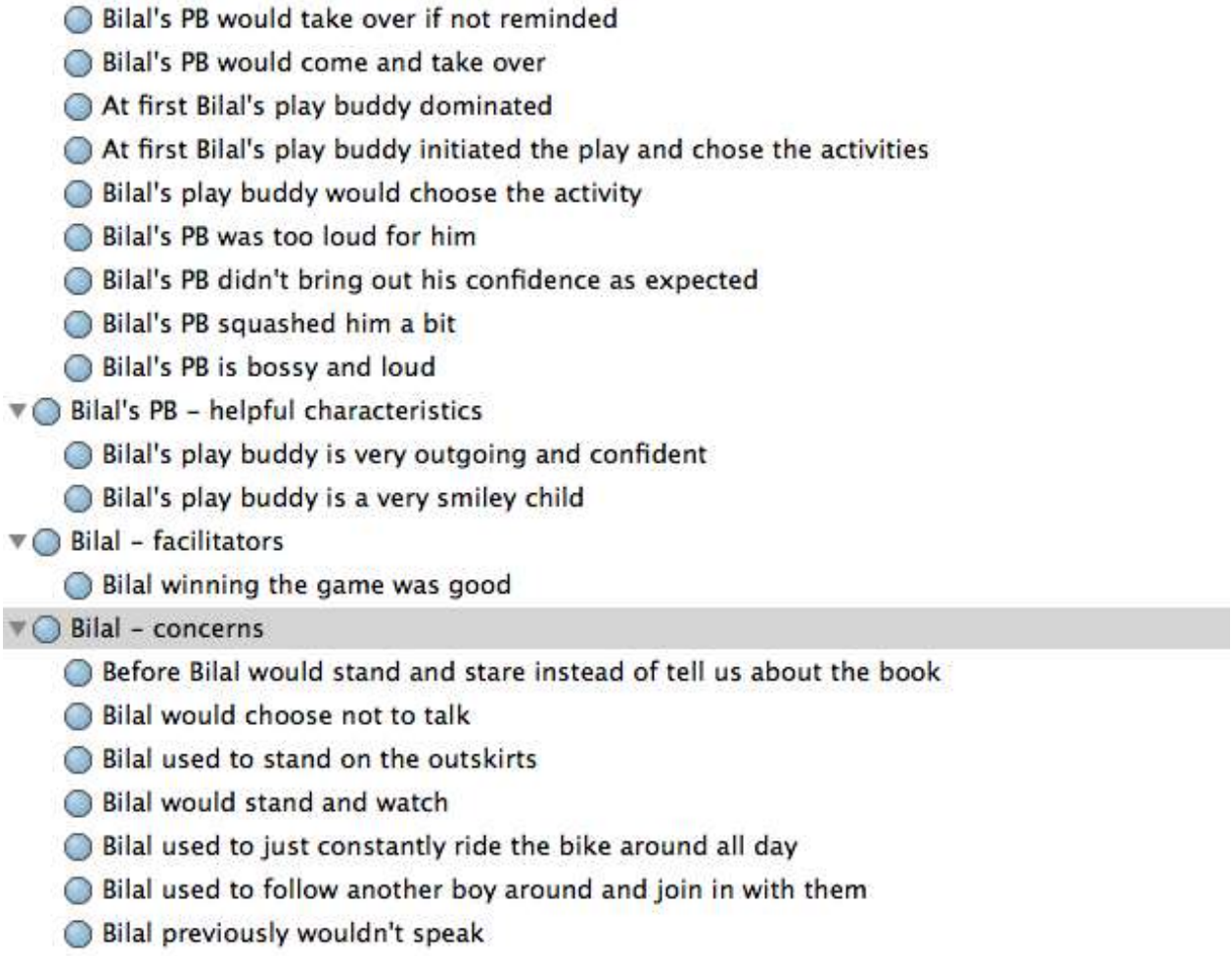
*Appendix L – Event categories for the Pre-school Obsevration Code*

| Event Category | Definition |
|---|---|
| Activity Change (AC) | When the child moves from one activity to another. If the child finished the task before changing to another circle the vertical mark made. E.g. if the child completed a puzzle and picked up another one, a mark would be made and then circled. Some activities are difficult to determine if the child completes them, such as play doh or blocks. In these instances the observer should determine whether the child has made an adequate attempt with the activity before moving on.<br><br>NB as this was not an area of focus for the current research, the researcher simply coded when there was an activity change without specifying if the activity was finished. |
| Disruptive behaviours (DisB) | Same definition as with State behaviours, however each instance of the behaviour is scored as an event within the 30 second interval. |
| Negative Verbal Interactions (NVI) | When the child makes negative statements towards a peer or adult. Includes verbally |

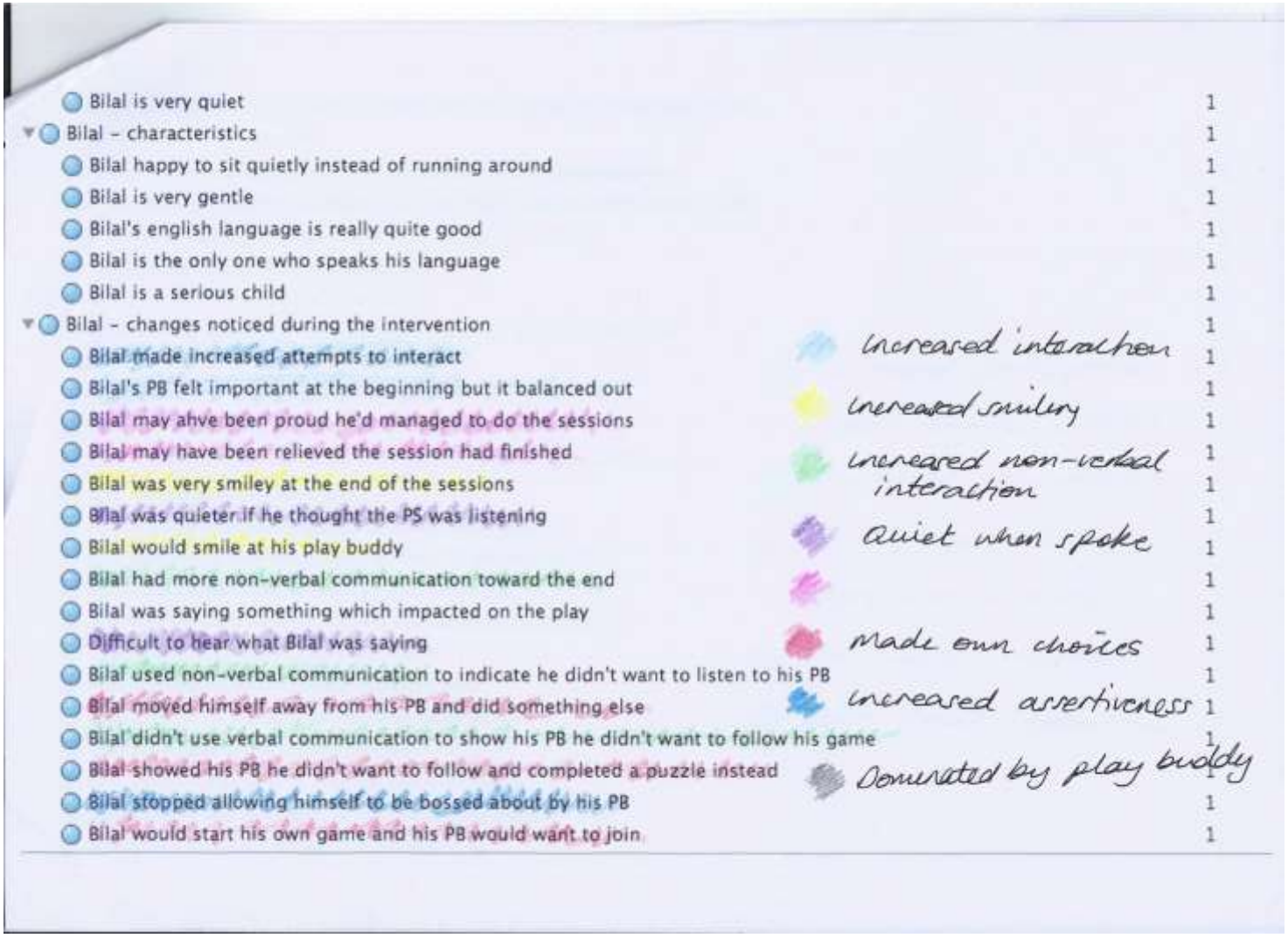
| | |
|---|---|
| | aggressive or abusive remarks or verbal refusals of teacher commands.<br><br>NB the researcher extended this definition to include verbal interactions which were not necessarily aggressive or abusive but comments that were negative towards or were rejecting of other children's attempts to play or interact. |
| Positive Verbal Interactions (PVI) | This category was added by the researcher as it was a focus of the observation. A positive verbal interaction was coded as any verbal interaction with another child which was for the purpose of social interaction. This therefore included neutral interactions for the purpose of making contact with and initiating conversation with another child. |
| Positive motor interaction (PMI) | Behaviours emitted by the child towards another child or adult which are positive in nature. Includes positive behaviours directed towards a toy or play material that is being touched by another child. This would include touching with hands, hugging, holding hands kissing, waving or cooperative responses such as sharing a toy or materials. The researcher expanded this category to include non-verbal body language for the purpose of interaction such as smiling, positive facial expressions, eye contact, and gestures. |
| Negative motor interactions (NMI) | |

| | |
|---|---|
| | Behaviours usually associated with aggressive acts such as hitting, kicking, biting, punching, inching and scratching. Also includes taking toys/materials away from a peer or destroying/damaging the materials of a peer. |
| Child Approaches Teacher (CAT) | When the child approaches the teacher or another adult. This may be in the form of a verbal approach such as initiating conversation or to ask for permission to perform some action. Category is only scored for each new approach to the teacher. |

*Appendix M – Nvivo screenshot*



*Appendix N – Manual colour coding*



*Appendix O – Ethical approval confirmation email*

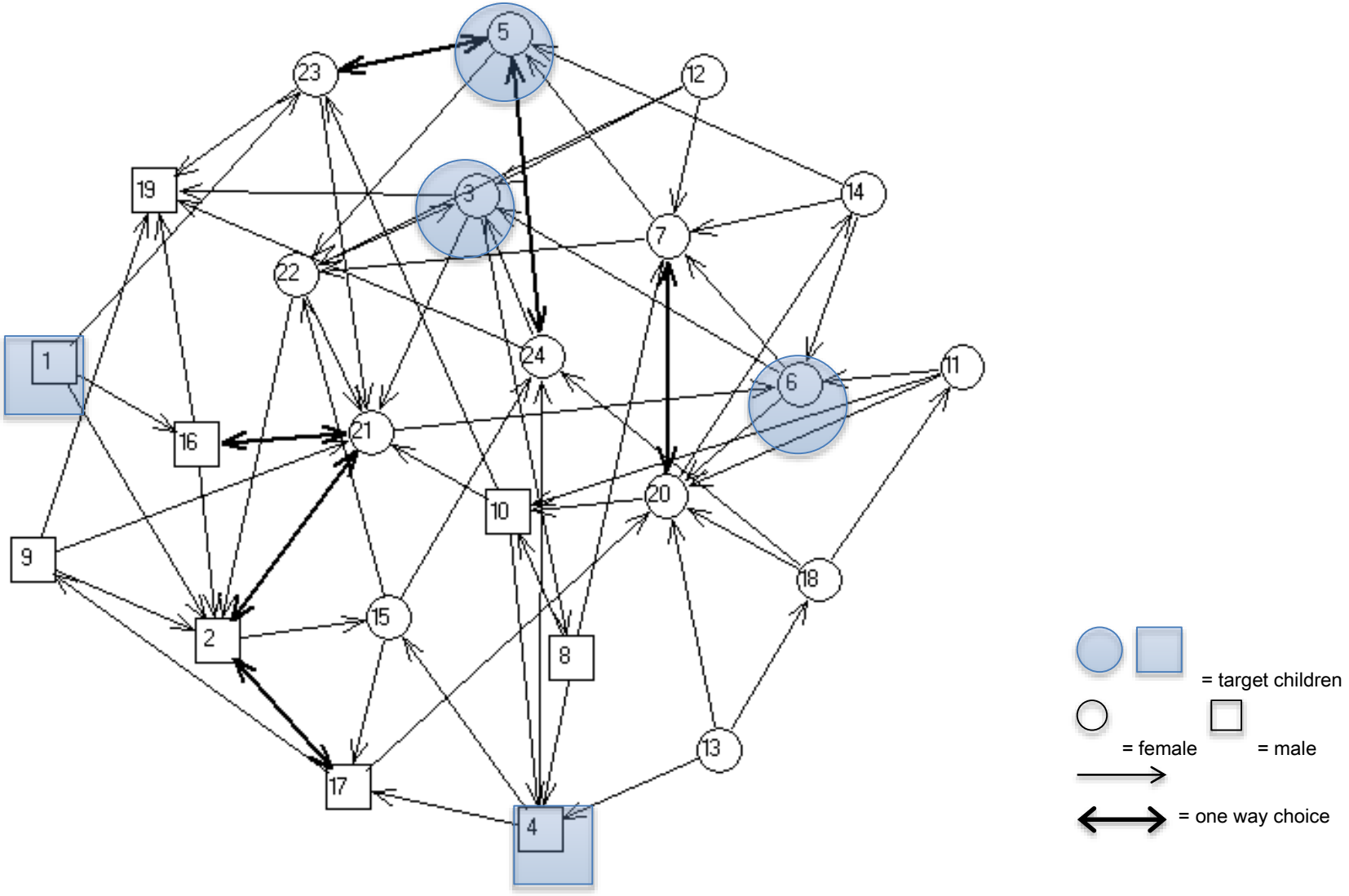
**From:** Ethics Education
**Sent:** 10 May 2013 13:53
**To:** Katie PIERCE
**Cc:** Catherine Kelly; Deborah Kubiena
**Subject:** Ethics Approval Application - CONFIRMATION after Panel

Dear Katie
I am pleased to confirm that your ethics application has now been approved by the School Research Integrity Committee (RIC) against a pre-approved UREC template.
If anything untoward happens during your research then please ensure you make your supervisor aware who can then raise it with the RIC on your behalf
**This approval is only for the Ethical Approval Application, you are still required to have received approval from your Panel before carrying out any research.**
Regards
Gail

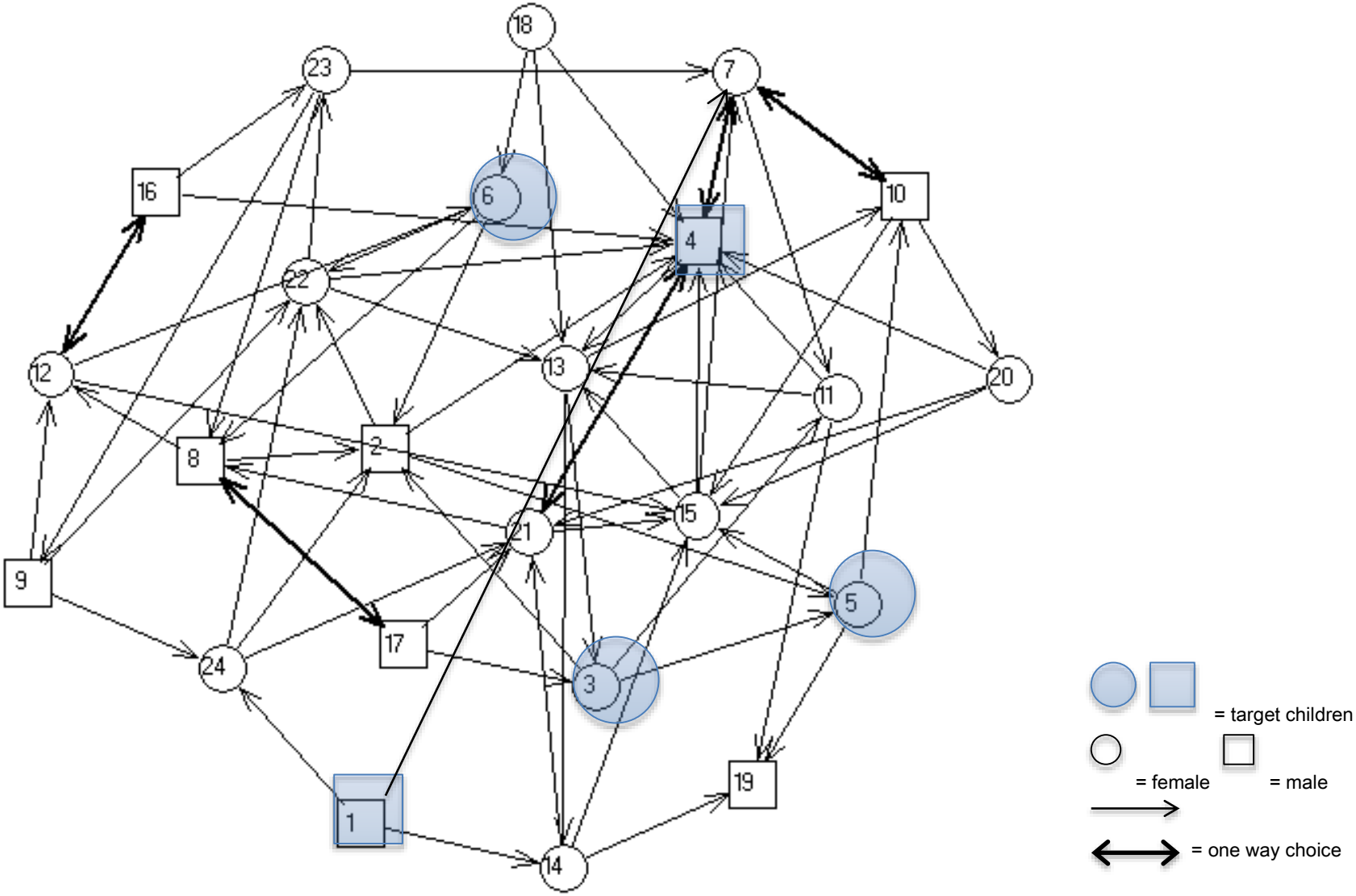
**Gail Divall | PGT & Quality Assurance Administrator** |Room B3.8 | School of Education |Ellen Wilkinson Building | The University of Manchester | Oxford Road | Manchester | M13 9PL
Tel: +44(0)161 275 3390 | School Website| School PGT Intranet

Working Week: Tues - Fri

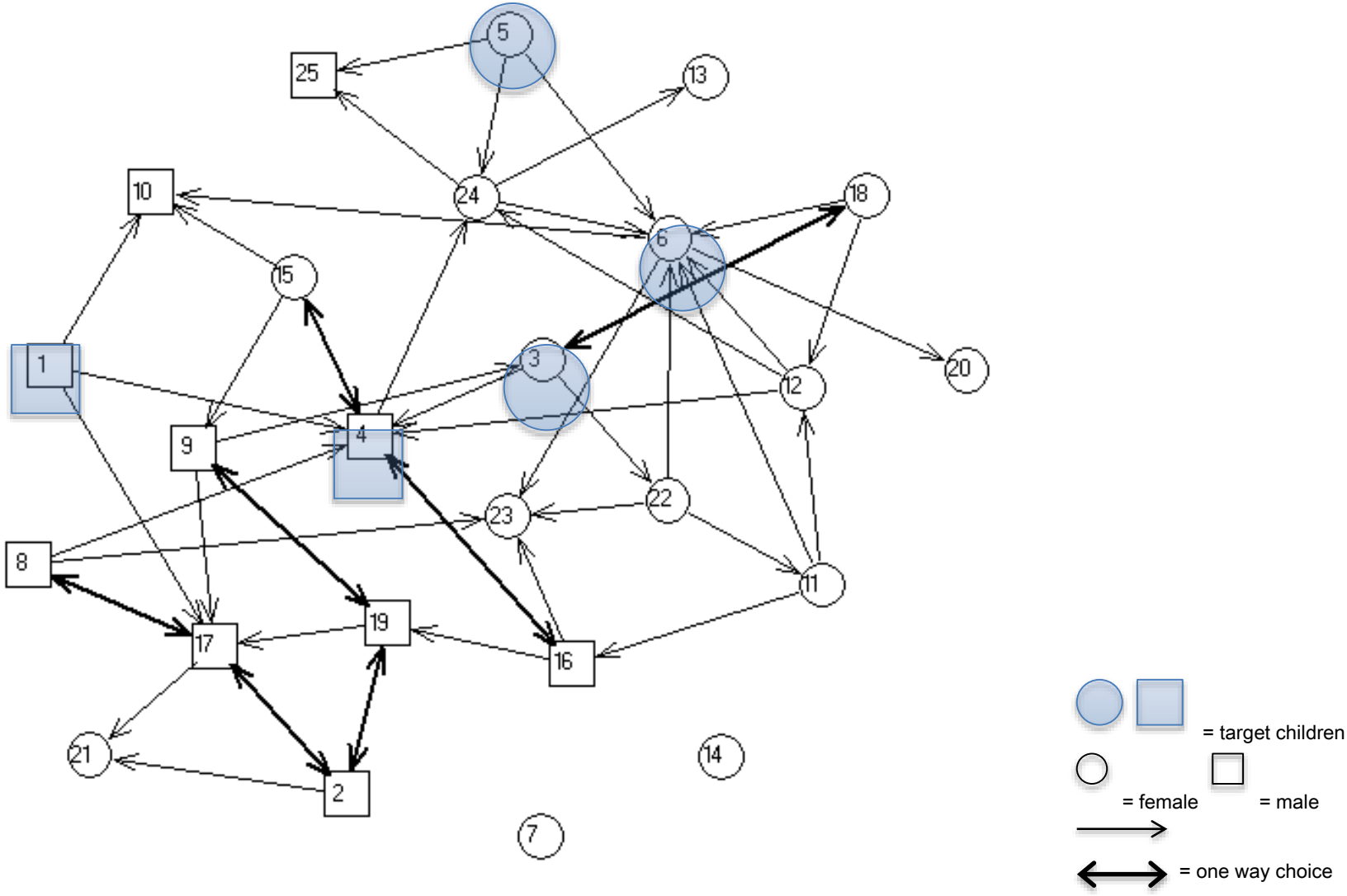
*Appendix P - Time 1 Sociogram of Positive Peer Nominations*



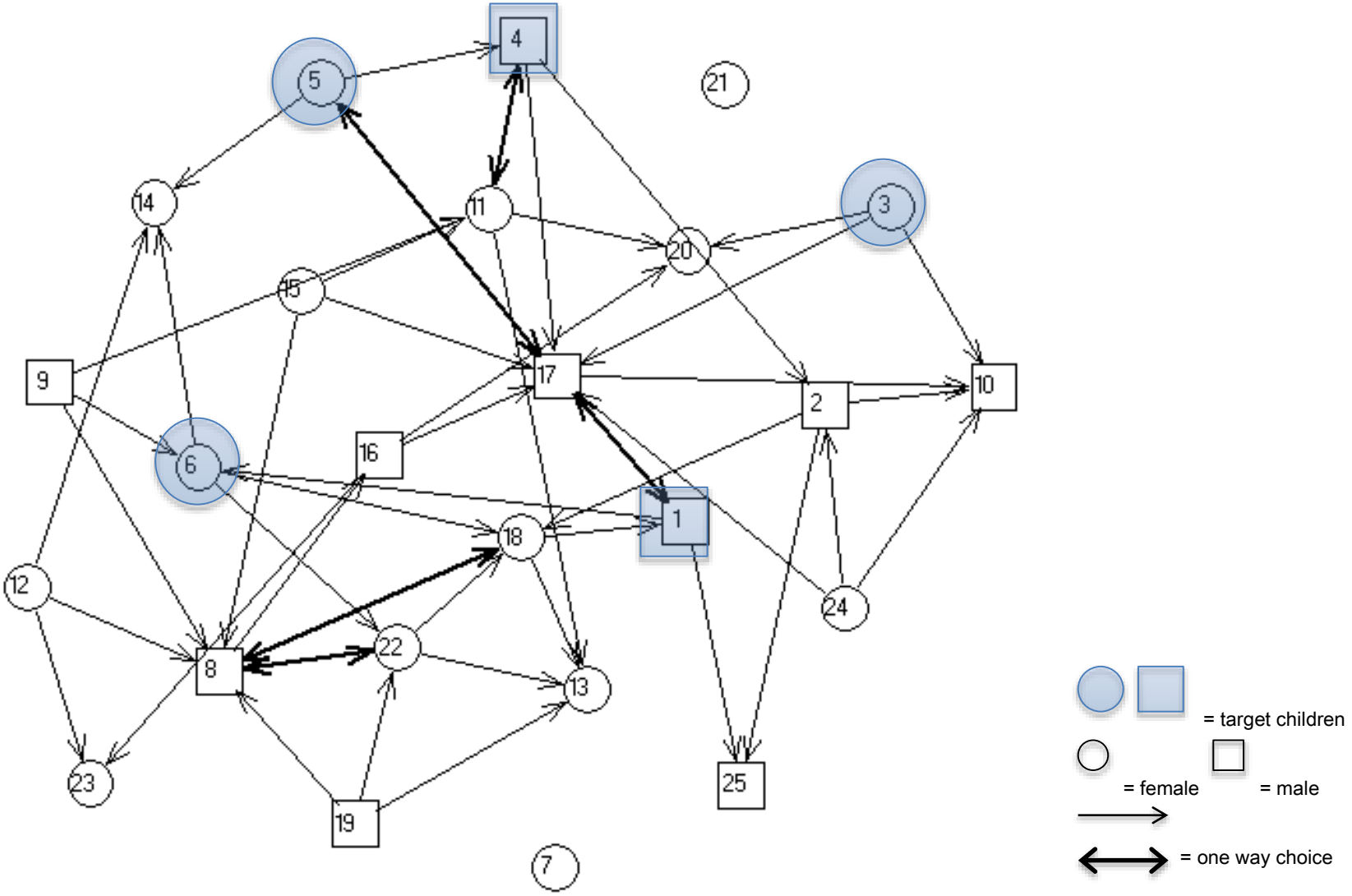
*Appendix Q – Time 1 Sociogram of Negative Peer Nominations*



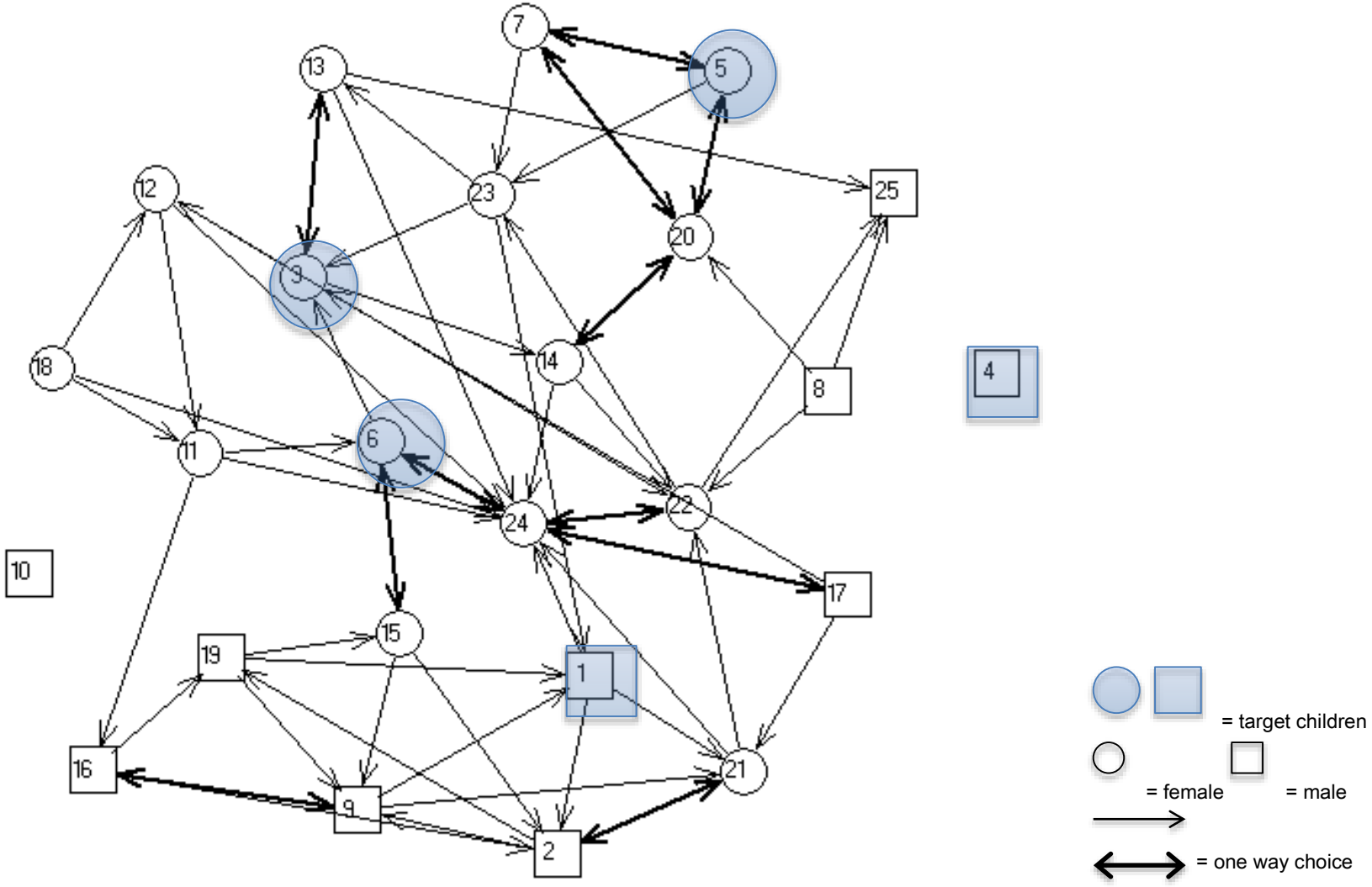
*Appendix R - Time 2 Sociogram of Positive Peer Nominations*



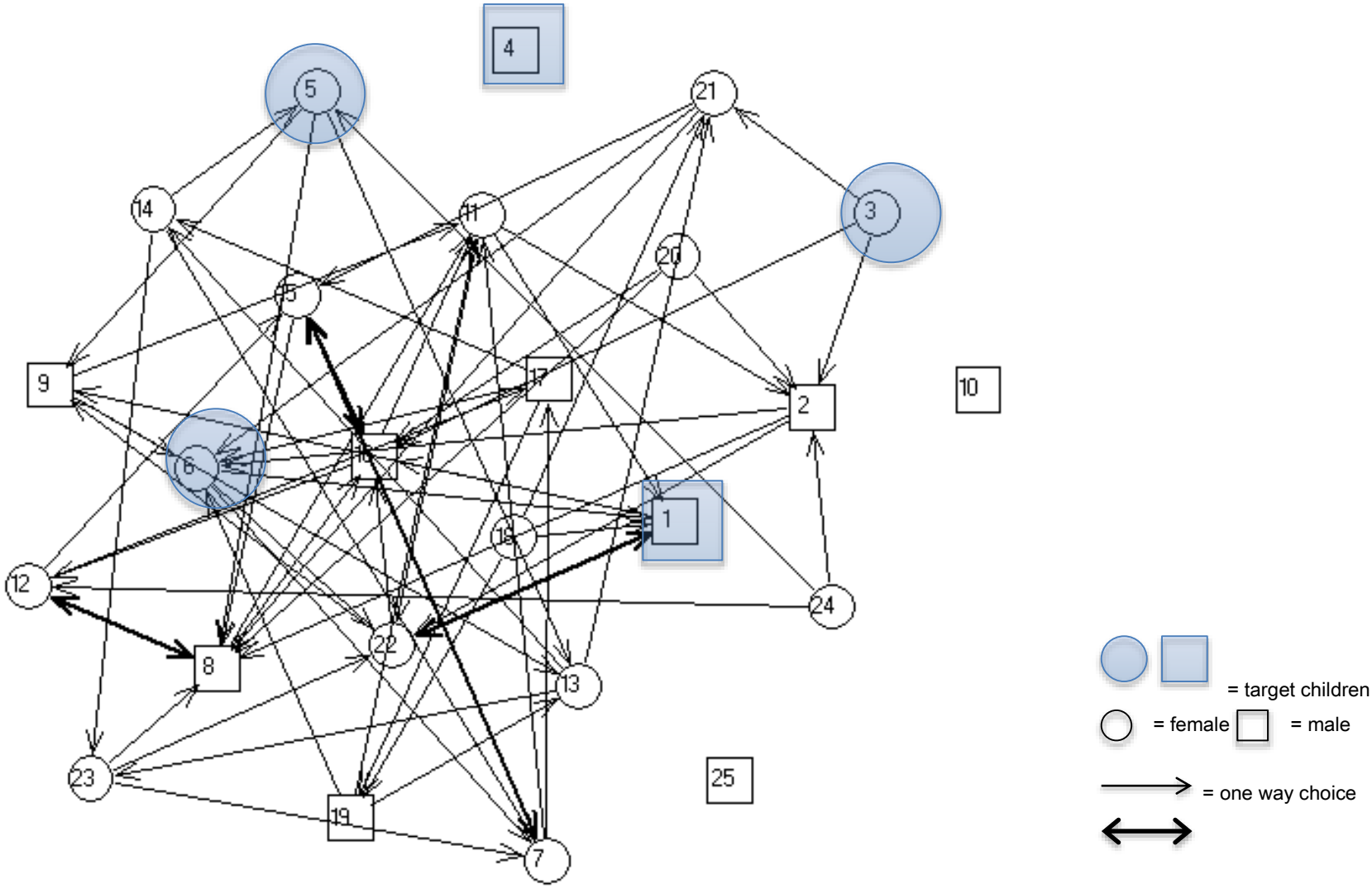
*Appendix S – Time 2 Sociogram of Negative Peer Nominations*



*Appendix T – Time 3 Sociogram of Positive peer Nominations*



*Appendix U – Time 3 Sociogram of Negative Peer Nominations*



*Appendix V – Comparison of time spent in classroom activities*

Percentage of time spent in play

| | Time 1 | Time 2 | Time 3 | Average |
|---|---|---|---|---|
| Asad | 58.3% | 58.3% | 60% | 58.9% |
| Bilal | 68.3% | 10% | - | 39.1% |
| Sarah | 23.3% | 41.7% | 0 | 32.5% |
| Samina | 3.3% | 0 | 30% | 11.1% |
| Leila | 33.3% | 0 | 40% | 24.4% |

Percentage of time spent in social interaction with peers

| | Time 1 | Time 2 | Time 3 | Average |
|---|---|---|---|---|
| Asad | 11.7% | 15% | 5% | 10.8% |
| Bilal | 1.7% | 11.7% | - | 6.7% |
| Sarah | 11.7% | 6.7% | 11.7% | 10% |
| Samina | 15% | 5% | 16.7% | 12.2% |
| Leila | 18.3% | 16.7% | 40% | 25% |

Percentage of time spent in pre-academics

| | Time 1 | Time 2 | Time 3 | Average |
|---|---|---|---|---|
| Asad | 0 | 16.7% | 1.7% | 6.1% |
| Bilal | 1.7% | 6.7% | - | 40.7% |
| Sarah | 52% | 0 | 70% | 4.2% |
| Samina | 26.7% | 58.3% | 48.3% | 44.4% |
| Leila | 43.3% | 81.7% | 0% | 41.7% |

Percentage of time teacher monitoring/interacting

| | Time 1 | Time 2 | Time 3 | Average |
|---|---|---|---|---|
| Asad | 0 | 1.7% | 0 | 0.6% |
| Bilal | 1.7% | 1.7% | - | 1.7% |
| Sarah | 0% | 1.7% | 0% | 0.6% |
| Samina | 16.7% | 20% | 13% | 16.6% |
| Leila | 5% | 8.3% | 8% | 7.1% |