VOLUME ONE:

An Evaluation of an Attachment Based, Early-Years Training Package: A Multiple Case Study.

By

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An Evaluation of an Attachment Based, Early-Years Training Package: A Multiple Case Study.

Abstract

Attachment theory has become widely regarded as the most important and supported framework for understanding social and emotional development (Goldberg, 2000). Evidence suggests that attachment based interventions in early year's settings will allow for a greater understanding, sensitive response and more effective use of practitioner's skills when working with children (Kennedy and Kennedy, 2004).

This thesis was produced as part of the written requirements for the new full-time Doctoral training in Educational Psychology. Volume one contains four chapters: Chapter one introduces the research study and literature review, providing information on the brokering and relevance of the research area. Chapter two discusses and presents existing attachment based interventions with parents, schools and early year's settings. Chapter three reports findings from an evaluation an early year's intervention, based on attachment principles - 'Building Strong Foundations'. A multiple case study design was adopted. Three settings, where the intervention had been received, were evaluated to provide literal replication, and an additional setting, which had not received the intervention, acted as a comparison, and provided theoretical replication (Yin, 2009). Key positive outcomes and rival explanations are discussed, along with implications and future directions. Chapter four provides some final reflections and conclusions, including limitations in design and methods of the study. The impact which this study makes to the profession of educational psychology is also discussed.

Dedication

To my wonderful husband Scott,

for your support, sacrifice, love and always believing in me – I couldn't have done this without you!

To my very lovely and beautiful little girl, Lily-Grace

for your sacrifice, good nature and for making me smile everyday! You have given me perspective and have been my motivation - thank you x

Mum and Dad

Thank you for your encouragement, prayers and for your amazing support both as parents and grandparents!

Lamentations 3: 22-23

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CHAPTER ONE:

VOLUME ONE: INTRODUCTION AND OVERVIEW

Volume one: Introduction and Overview

1. Introduction.

This research was written in order to meet requirements of the new doctoral training route for educational psychologists in England and Wales, which replaced the one year Masters training in 2006. As one of the twelve students in the second cohort of the Doctoral course, at The University of Birmingham, I was required to secure work as a Trainee Educational Psychologist (TEP), employed by a Local Authority (LA) during Years two and three.

I have been employed by a metropolitan borough in the West Midlands and this research was commissioned by a Senior Specialist Educational Psychologist, for early years, within this borough. The study of this thesis involves an evaluation of an early years intervention, with an attachment based framework. This intervention was designed by educational psychologists and early year's workers to be delivered to early years settings, to improve practitioner awareness and practice through reflective practice. I had no input in the design of this intervention, as it had already been written when I started my role as a TEP; however it was in its early stages in terms of delivery, with only one setting having received the training at the point of starting my TEP role.

2. **Overview of volumes.**

Chapter one - Volume one: Introduction and Overview. This chapter provides an introduction to the context of this research, identifying how and why the evaluation was commissioned and chosen. The audience for volume one is also discussed.

Chapter two - A Review of the Application of the Attachment Framework and Interventions with Parents, Schools and Early Years' Settings. This chapter outlines a review of the literature surrounding attachment theory, including the literature search method used, and key terminology included in the enquiry. A brief history of attachment theory, and an introduction of some key terminology and concepts is also introduced and a critical evaluation of the framework is provided. In addition, a short explanation and critique of studies on which attachment theory has been based are presented, and limitations in the methodology and evaluations of the studies described. Finally this chapter provides a conclusion and summary which outlines the aim of my research project.

Chapter three - An Evaluation of an Attachment Based, Early-Years Training Package: A Multiple Case Study. This chapter incorporates the research project, outlining the research brief and methodology, which is a multiple case study. The data collection tools, including a semi-structured interview, vignette scenarios and an observation schedule (ECERS-R) are described. The data analysis strategy (*Relying on theoretical propositions and using both quantitative and qualitative data)* is outlined, and the analysis technique *(template approach)* and procedures are also described. Rival explanations for possible outcomes of the evaluation are identified and are explored further in the discussion of this chapter.

Chapter four - Volume one: Reflections and conclusions. This chapter outlines some final reflections and conclusions, including limitations in design and methods of the study. Finally this chapter discusses the impact which this study makes to the profession of educational psychology.

3. Choice and brokering of research area.

As previously outlined this study was commissioned by a Senior Specialist EP within the service where I work, and was agreed and supported by the Principal Educational Psychologist. It was deemed necessary to evaluate the Building Strong Foundations project because of its infancy as an intervention, and because of the need to establish its evidence base and areas for improvement. I was happy to undertake this research as it reflected a personal interest in the early years and reflected a national initiative - the 10 year Childcare Strategy (DfES, 2004), the introduction of the Early Years Foundation Stage (EYFS, DCSF, 2008) curriculum, and the Childcare Act (2006), which places a responsibility on childcare providers for the professional development of staff working with young children through training.

Although this evaluation was offered as an area for my project, the choice of research questions, methods and the brokering of the study were left to me, under university stipulations. My initial approach consisted of a detailed literature review, which is the second chapter presented in this volume. I explored the efficacy of attachment based interventions and how they had been evaluated. It became clear that very few published,

attachment based interventions had been evaluated in the early years and as such the evidence base for the application of this theory in such settings was limited.

After completing this initial review of the literature, and writing the systematic review, an initial meeting was arranged with stakeholders of the Building Strong Foundations project to determine what outcomes they would like measured in this evaluation; and to find out more information on the availability of settings and to share some findings from my literature search. Initially it was considered that a large scale evaluation would take place in all settings that had received the training by the time I was due to start my study. However, during the meeting, concerns were raised about how quickly this training could be delivered to settings, and it transpired that very few settings may have received the intervention by the time I was due to carry out data collection. In addition I fed back findings from my literature search, that sample size and its effect on generalisability seemed to be an issue in educational research and evaluation, and that randomised studies would not be possible for this evaluation. It was discussed that most interventions, reported in the literature, which had been evaluated overlooked the use of a case study design.

It was at this point that it was agreed that a more in depth case study approach would be most suitable for this evaluation. The problem of generalisation, due to a small sample size, can be overcome with a case study design because case studies rely on analytical generalisation, where the investigator sets out to generalise their results to some broader theory not to a larger population (Yin, 2009). Case study designs also present evaluation data in a more publicly accessible form than other kinds of research reported, and are capable of serving multiple audiences, including non academics (Cohen et al, 2007).

As the findings of this research were to be disseminated to both academic and non-academic professionals (including early years staff and nursery managers), a case study design was deemed an appropriate methodology for this evaluation.

4. Audience for volume one.

University guidance stipulated that both the literature review and research study of volume one should be written up to journal specification for publications of students' choice (with the exception of the word limit and taking into account university requirements for thesis presentation). Both chapters are written in concordance with the *International Journal of Early Years Education.* This Journal was chosen because it accepts articles from researchers and practitioners which debate the theories, research, policy and practice which sustain effective early years education world-wide. The journal has carried reports and research articles which evaluate and highlight innovative practice throughout the international community, and I therefore feel that my evaluation would be well placed within this journal.

The findings of the literature review and research study have been presented in different formats for a number of different audiences. Oral feedback and a copy of the research report was provided for stakeholders of the Building Strong Foundations project, and a summary of the research findings was produced, in letter format for the settings who took part in the study (see Appendix 1) and the managers from settings were invited to attend the next Building Strong Foundations meeting, where I was to present my findings.

A combination of the findings of the research and the literature review were presented to Inclusion Support, during a psychologists meeting and during an Area Team meeting, and to all those involved in the Building Strong Foundations project (including trainers and stakeholders and managers from settings which had participated in the study) during a project group meeting (see Appendix 2: Public Domain Briefing).

List of references:

Childcare Act (2006). London: TSO

Cohen, L., Manion, L., & Morrison, K. (2007). **Research Methods in Education**. 6th Ed. London: Routledge Falmer.

Department for Children, Schools and Families (2008). **Statutory Framework for the Early Years Foundation Stage. Setting the standards for learning, development and care for children from birth to five**. Rev. Ed London: DCSF.

Department for Education and Skills (2004). **Ten Year Childcare Strategy, Choice for parents, the best start for children** London: DfES.

Yin, K. Y (2009). **Case Study Research: Design and Methods.** 4th Ed. Thousand Oaks CA. Sage.

Appendix 1:   Letter to managers of settings involved in project.

05/05/2010

Dear (name of manager)

Please accept my thanks for the supportive role you played allowing your setting and staff to participate in the evaluation of the Building Strong Foundations project. Please extend my thanks and appreciation to the four members of staff who took time to participate in the interviews.

Below is a brief outline of some of my findings.

The key positive outcome of The Building Strong Foundations projects are...

- Improved practitioner understanding of behaviour being communication or having a meaning;
- Increased practitioner confidence and improvement in practice when dealing with challenging behaviour;
- The observable nurturing environment of intervention settings;
- Increased practitioner understanding of an ideal nurturing environment;
- Increased understanding of concepts 'containment' and 'attunement'
- Increased practitioner awareness of the need to reflect on feelings and practice.

I intend to feedback the outcomes of this presentation in more detail on 8th June 2010 at 1.30pm, at I****** S******, C***** Rd, W*** B******. This will be a short presentation lasting approximately twenty minutes. You or another member of staff is welcome to attend. If you have any further details or questions please feel free to contact me on the number below.

Thank you again for giving up your time.

Yours sincerely,

Marie Fitzer

Trainee Educational Psychologist – 0845 *** ****

Appendix 2:   Public Domain Briefing.

Slide 1

An evaluation of an attachment based, early-years training package: A multiple case study

Marie Fitzer

Background:
My research project has looked at evaluating the BSF project, which is an early years intervention currently being rolled out in ********, in nurseries and Children's Centres.

•So why concentrate on the early years… why the need for interventions and training in such settings?

Firstly, the demand for such settings has increased. Since 2003 the number of children attending full time day care has increased by 34%. Between 2003 and 2008, the number of children attending nursery schools has increased by 13%.
In addition The Childcare Act (HMSO, 2006) places a duty on providers to ensure that the adults looking after children have appropriate qualifications, training, skills and knowledge. This refers to qualifications at all levels, to induction training, and to continuing professional development.

Slide 2

The efficacy of early years interventions

- Fukkink and Lont (2007) - direct causal link between professional training and improvement of caregiver competencies.
- **The Solihull Approach (Douglas, 1999, 2004)**
- Evaluation (Douglas and Ginty, 2001, Whitehead and Douglas, 2005)
- Positive findings BUT... Also found an inconsistency in the utilisation of the approach, in that it had become embedded in some health visitor's practice, but not others.

How effective are EY interventions?
Findings from quasi-experimental studies, published between 1980 and 2005, into the effects of specialised training on caregiver competencies.
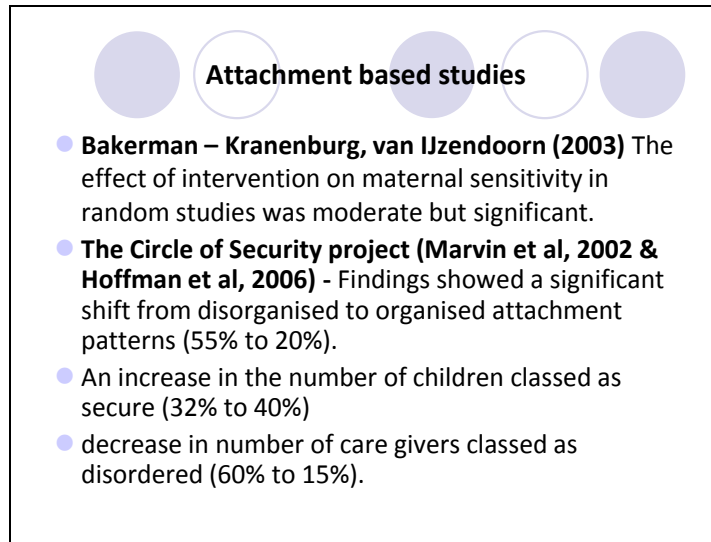
Positive outcomes were found in the knowledge, attitude and skills. Attitude had most gains. However, no significant effects of training at the child level.

Theoretical framework for practitioners, working with preschool children.
Covers concepts similar to BSF, such as containment, reciprocity and behaviour management from psychodynamic, developmental and behavioural models.

Increased the consistency of practice among health visitors. Increased job satisfaction and enhanced their confidence in their skills. Increased understanding of how and why children's difficulties develop. Greater understanding of the role, and importance of containment and reciprocity. Improvements in working in partnership with parents and groups.

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Attachment based studies

- **Bakerman – Kranenburg, van IJzendoorn (2003)** The effect of intervention on maternal sensitivity in random studies was moderate but significant.
- **The Circle of Security project (Marvin et al, 2002 & Hoffman et al, 2006) -** Findings showed a significant shift from disorganised to organised attachment patterns (55% to 20%).
- An increase in the number of children classed as secure (32% to 40%)
- decrease in number of care givers classed as disordered (60% to 15%).

Attachment theory has become widely regarded as the most important and supported framework for understanding social and emotional development (Goldberg, 2000).
The majority of attachment interventions have been carried out with parents of young children and focus on care giving and caregiver sensitivity and the determinants of the child's attachment.

A few examples!
Findings regarding sensitivity were based on the analyses of 81 studies involving 7,636 families.
Meta -analyses investigating sensitivity and attachment interventions in early childhood.
Interventions that focused on sensitivity were more effective than those that focused on both sensitivity and support.

2. Designed for caregivers, to help move children from disorganised to more secure attachments.

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Reactive interventions in schools/nurseries

- The development of relationships beyond the family environment, which provide emotional support and protection, has also been considered to be an important aspect of a child's development (Kennedy & Kennedy, 2004).
- Geddes (2005) – unique and appropriate teaching strategies and task management should be used in response to children with different attachment styles

Relationships beyond the home are important – so nursery and school staff need to be aware of AT principles.

Need to be aware of and understanding the learning profile and how to respond to children with different attachment classifications.

Geddes (2005)
Although this offers a useful framework and understanding of how to respond appropriately to children with differing attachments, Geddes findings lack clarity and the subjective nature of her work make the reliability of her research questionable.

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Preventative Interventions

- **Nurture groups -** the evidence base and value is becoming established.
- **Tomlinson, et al. (2008) -** CAMHS intervention aimed at training nursery staff in basic attachment concepts and discusses how they could be applied in practice.
- All participants reported that they learned some new ideas and took away ideas for their own personal and professional use.
- Tomlinson et al (2008) suggest that nursery staff found attachment concepts useful and applicable

Based on Bowlby's theory that impaired early experience will lead to poor development for a child. The evidence base for nurture groups has thus far been limited but as more researchers begin to evaluate their effectiveness.

2. When conducting this literature search this appeared to be the only published attachment based intervention in nurseries.
The intervention was evaluated using self-report questionnaires, with a 5 point Likert scale.

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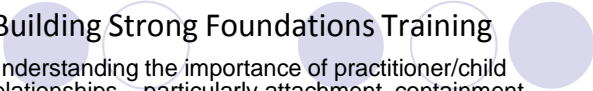
Conclusions
- A range of interventions based on Attachment Theory have been developed.
- Some evidence of their effectiveness through evaluation, and other evaluations are still developing.
- Main focus has been interventions with caregivers, looking to enhance maternal sensitivity as a way to improve the security within a child.
- Early intervention work into educational and early year's settings is limited and not evaluated.
- Attachment based interventions in these settings, would seem to be central, considering the length of time that some children spend in these surroundings.

Sharing knowledge of attachment theory with early year's practitioners and raising their awareness of such principles seems to be a positive way forward for the applicability of this theory.
Raising awareness through preventative interventions, which are evaluated to provide a strong evidence base, will allow for a greater understanding, sensitive response and more effective use of practitioners skills when working with children.

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Building Strong Foundations Training
- Understanding the importance of practitioner/child relationships – particularly attachment, containment, attunement and bonding in early childhood development.
- Understanding how their role supports and enables children's early communication, emotional and social development.
- Having an awareness of how to help children recognise, understand and mange their emotions.
- Understand the importance of a nurturing environment.
- Getting in tune with their own feelings and those of others.
- Developing an understanding of children's behaviour as communication.
- In addition, each week participants are given a weekly reflective homework task to develop thinking and awareness further.

Training for early year's practitioners, this focuses on the emotional and social development and early communication of babies and young children.

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Research strategy: Case study

- **Explanatory:** It is theory testing through evaluation. I have an idea about what I will find out; therefore knowledge driven theory.
- **Summative:** This evaluation will look at what the training has achieved and what are the outcomes.
- A multiple case study design. The evidence from multiple case studies is more compelling and the study is regarded as more robust.
- **Replication Logic**
- Literal replication: With three early years' settings where the intervention has taken place. Hoping to predict similar results.
- Theoretical replication: predicts contrasting results with one setting where the intervention has not been carried out (comparison setting).
- Embedded Units: Main unit = setting; Practitioner's awareness; Practice of staff in settings

Theory:
This study aims to show that communicating knowledge of attachment principles and how to apply such principles in early year's settings will have a positive impact on early year staff's practice and understanding, which will lead to a more nurturing environment for children and more reflective practice by practitioners.

Most interventions which have been evaluated overlook the use of a case study design. A multiple case study evaluating an intervention in a child, class, school or community would provide a unique example and observation of effects in a real context (Sturman, 1999).

The problem of generalisation, due to a small sample size, is overcome with a case study design because they rely on analytical generalisation, where the investigator sets out to generalise their results to some broader theory not to a larger population (Yin, 2009).

Case study designs also present evaluation data in a more publicly accessible form than other kinds of research reported and are capable of serving multiple audiences, including non academics (Cohen et al, 2007). They allow readers to judge the implications of a study for themselves.

Research Questions, propositions and data collection methods

Research Question:

- How applicable are attachment principles in early years settings and how effective are interventions in these settings in changing practitioner behaviour and understanding.

- See handout for propositions and data collection methods.

Approaches to data analysis:

- Analytic strategy:
- Relying on theoretical propositions and using both quantitative and qualitative data.
- Analytical technique:
- A template approach (Robson, 2002), with key codes determined prior to the analysis, based on propositions.
- **Ethical considerations:**
- **Identification of rival explanations** - See handout.

The strategy used in this project was to rely on the theoretical propositions to guide my case study analysis, because they shaped my data collection and helped focus my attention on certain data, whilst ignoring other data.

According to Yin (2009) propositions stemming from 'how' and 'why' questions (as in this research design), can be extremely useful in guiding case study analysis.
Quantitative data was also used, to help explain the outcomes of the evaluation by providing evidence of change within the setting, the main unit of analysis, and the embedded units (staff's understanding and practice).

Observations of staff within the early year's settings.

Although primarily my observations are of staff, obviously children will be implicated and observed, so the issue of confidentiality needs to be addressed.

Own role as a researcher and employee of the local authority, and the possibility of a conflict of interest.

Attempts to ascertain other influences that may have affected the outcome of the study were also identified during data analysis. This was to ensure further internal consistency and to allow an in depth analysis of the outcomes, by either accepting or rejecting such rival explanations and thus placing more confidence in the interpretation of the findings.

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RESULTS

Practitioners will utilise concepts such as attachment, attunement, containment and bonding and will make reference directly or indirectly to these terms when describing their relationships and interactions with children.

- **Intervention settings..**
- all used indirect references to 'attachment and bonding'. In direct references to 'attunement and 'containment' were higher. The frequency of responses was higher from the vignettes compared to SSI.
- all made direct references to 'attachment', and setting 3 made a direct reference to bonding
- A general discourse around attachment was evident in settings 1 and 3 based on analysis from the interviews and vignette responses.
- **Comparison settings…**
- Used indirect references to 'attachment' and 'bonding', with equal frequency to intervention settings.
- Used indirect references to 'attunement' and 'containment', with a lower frequency compared to intervention settings. The frequency of responses was higher from the vignettes compared to the SSI.
- Made direct references to bonding, but not to attachment
- No examples of a general discourse around attachment were evident.

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Participants will emphasis and rate their role as highly influencing children's social and emotional development and communication

	S1	S2	S3	CS
Social	9.5	9.5	9.5	9.5
Emo	9.75	10	9	8.75
Com	9.75	10	9.25	8.5
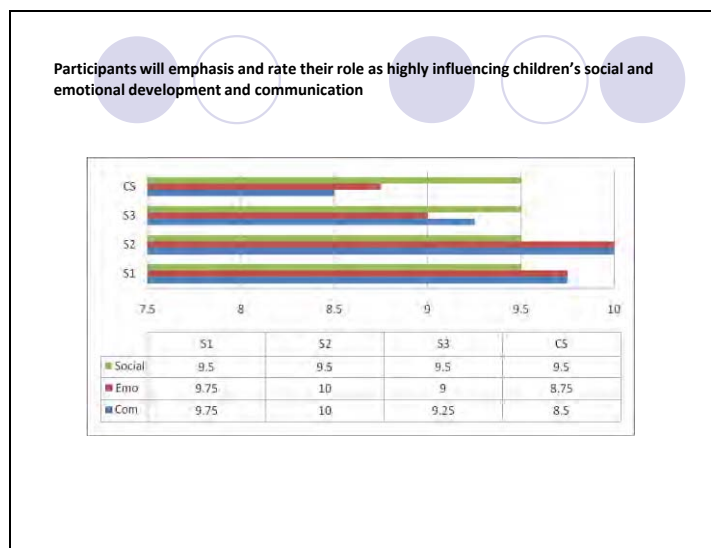
The mean Likert scale responses was noticeably high for all settings when rating how influential their role is in supporting children's social, emotional and communication development, indicating that all settings understood the importance of their role as influencing these areas of development in children.

The mean scores for intervention settings was slightly higher compared to the comparison setting for emotional and communication development, however the difference in mean scores are so small it is difficult to conclude that any variations are due to the intervention.

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Given a situation where a child is displaying challenging and/or emotional behaviour, practitioners will report feeling more confident dealing with this, following the intervention.

- Descriptive statistics suggest that the intervention has improved practitioner's confidence in helping children to understand, recognise and manage their emotions.
- The mean score was 7.8 in response to vignette one (SD=2.49) and 6.9 in response to vignette two (SD=2.84).
- Total modal response for both vignettes was '8'.

One practitioner in setting 2 gave a response of '1' to both vignette scenarios, lowering the total mean score. However, no comparison on this measure, so unable to compare.

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The setting will have an observable nurturing environment.

Evidence of a more observable nurturing environment in intervention settings, when compared to the comparison setting.

The comparison setting scored noticeably lower on all seven subscales, The lowest score achieved by an intervention setting was 4, compared to the comparison setting where the lowest score was 1 and the highest score 4.

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Interventions settings:
Example 1: in setting 2 when a toddler was distressed because another child has taken his toy, the staff member picked him up immediately and distracted him with another toy.
Example 2: in setting 1, when a baby was distressed because she was tired, the staff member picked her out of the cot and stroked her head until she fell asleep.

Comparison setting
Example 1: A child aged approx two years was upset upon his mum leaving him. The child was asked 'aren't you happy today Jack?', but no physical contact was offered. The child was given breakfast and was asked 'do you want to come and sit with me', but no contact was initiated.
Example 2: A baby aged approximately 7 months old, was trying to get out of a chair (lifting his bottom, waving arms). Although seen by the practitioner she did not respond. The baby began to get frustrated and started crying. The practitioner picked her up and put her on the play mat. The baby cried again. The practitioner asked 'do you want picking up', but she didn't pick her up.

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Practitioners will describe an ideal nurturing environment as a setting that values/respects the child, where staff act as a secure base, where learning is developmentally understood, and where the importance of transition is understood.

Frequency of responses per setting, for each term relating to a nurturing environment
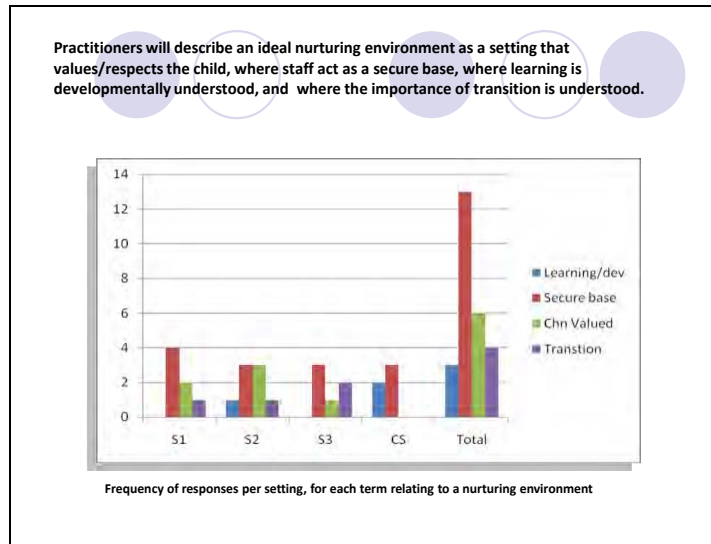
All but two practitioners were able to talk about a nurturing environment using some of the stipulated terms, however two practitioners (one from setting 2 and one from the comparison setting) were unable to describe a nurturing environment using these descriptions.

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Practitioners will make a connection to children's feelings when describing differing types of behaviour and will talk about behaviour as having a meaning/reason and acting as a form of communication

Most pronounced effect!

Intervention settings-evidence from all practitioners but one, that behaviour is viewed as having a meaning or being a form of communication

- All practitioners made a connection with children's feelings, but the frequency was very low.
- reported improvement in practice made by practitioners specifically in relating and dealing with children's behaviour and feelings

Comparison setting - No evidence from SSI's.

- Vignette evidence = all practitioners discussed the children's behaviour as having a meaning or being a form of communication, and but one practitioner made a connection to children's feelings
- however the frequency to which practitioners talked about behaviour in this way slightly lower compared to intervention settings

A further outcome is the reported improvement in practice made by practitioners specifically in relating and dealing with children's behaviour and feelings.
Although no contrast can be made to the comparison setting for this outcome, it shows good evidence in support of the intervention improving practitioners understanding and practice.
 All but one practitioner interviewed in the intervention settings reported that their practice had improved following the training, with the majority of practitioners recorded as stating this at least twice throughout the interview process.

During the SSI, there was no evidence from any practitioner, that behaviour is viewed as having a meaning or being a form of communication or during the SSI, there was no evidence that any practitioners made a connection with children's feelings.

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Staff will report engaging in more reflective practice and reflecting on their own feelings to a greater extent.

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Conclusions

- The key positive outcomes…
- Improved practitioner understanding of behaviour being communication;
- Increased confidence and improvement in practice when dealing with challenging behaviour;
- The observable nurturing environment of intervention settings; increased understanding of an ideal nurturing environment;
- Increased understanding of concepts 'containment' and 'attunement'
- Increased practitioner awareness of the need to reflect on feelings and practice.

•Proposition one could not be fully supported, as the training had a limited effect on increasing staff understanding of the terms attachment and bonding. All practitioners indirectly used these terms, with a relatively low frequency. More positive effects were found for increasing understanding of containment and attunement can perhaps be explained by the one reflective homework task.

•Intervention was effective in increasing practitioner confidence, when helping children to manage and recognise their emotions.

•Small intervention effect was found for increased confidence when working with parents as a result of this training. This was amplified for setting 3.

•All practitioners in intervention settings reported an improvement in their practice

•All intervention settings had a more observable nurturing environment compared to the comparison setting. The comparison setting scored considerably lower on all seven subscales of the ECERS-R schedule. Particularly pronounced for scales measuring the general supervision of children, discipline, staff child interactions, interactions among children and staff interaction and cooperation.

•The key finding and most pronounced effect at a practitioner level is the increased understanding and awareness that a child is communicating through their behaviour

The BSF training appears to have been less effective in helping practitioners be more in tune with children's feelings.

•Practitioners in the comparison setting only described behaviour as communication and related behaviour to children's feelings in response vignette scenario, but not the semi-structured interview, albeit with a lower frequency than interventions settings.

•Practitioners in the intervention settings reported considering reflective practice, and reflecting on their own feelings more. However, although these results appear positive, only one example of practitioners engaging in formal reflective practice was found in setting 3.

•All participants rated their role as important in influencing social, emotional and communication development in children, but the difference between the comparison and interventions settings, suggests that positive results were not due to the training.

Explanations:
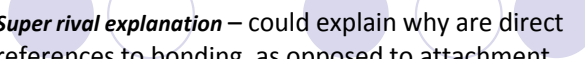
- *Direct explanation* = BSF intervention accounts for effects.
- *Political Explanation…*

Attachment and bonding = concepts that have been introduced previously to practitioners in their initial training and through the new EYFS curriculum (DCSF, 2008), which makes direct reference to children forming secure attachments.

Therefore, the difference between intervention and comparison settings is likely to be similar.

If direct rival is accepted, then this study provides further support for attachment based interventions, specifically in early years. However, as all propositions could not be full accepted, alternative explanations need to be considered as part explanations for some outcomes.

However, a greater use of these terms compared to containment and attunement may have been expected, if they are better known. This can be explained by the reflective practice task which focused on containment and attunement (discussed in section 6.1). Concepts such as containment and attunement may be less well known to practitioners, through political initiatives and frameworks, which is why a greater difference in frequencies is seen between the intervention and comparison settings.

> • *Super rival explanation* – could explain why are direct references to bonding, as opposed to attachment were made by the comparison setting
> • Bonding may be a more commonly used term outside of this intervention and more frequently used by both early year's workers and lay people when talking about a close relationship. Attachment may be a concept, which would only be directly referred to if further development and training on the early years or child development had been experienced.

One super rival explanation is that bonding may be a more commonly used term outside of this intervention and more frequently used by both early years' workers and lay people when talking about a close relationship.

Attachment may be a concept, which would only be directly referred to if further development and training on the early years or child development had been experienced. Therefore, the BSF training may have served to reinforce and further support understanding for this concept, and any direct and general references to attachment (as seen by intervention settings) may be attributable to this intervention.

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As setting 3, reported the most improvements in confidence when working with parents, it is likely that training such as 'Triple P' parenting programme, previously delivered to setting 3 but none of the other settings, may account for the positive effects, as opposed to the BSF training.

In addition setting 3 received training in reflective teams - likely to account for the reported engagement in formal reflective practice in this setting compared to other settings, and further adds weight to the finding that additional support needs to be offered to settings to embed ideas in practice, such as reflective team support, mentoring, group consultation and supervision.

However, with regards to the other for mentioned findings this may not be the case. The only consistent training which was received by two of the intervention settings and the comparison setting was 'behaviour training'. Setting one did not receive the behaviour training but a more observable nurturing environment, and improvements in understanding behaviour as communication were still seen in this setting.

If behaviour training has accounted for positive effects, similar frequencies relating to these propositions would be seen across all settings, which was not the case. This suggests that previous training could not fully account for positive effects for these variables. It seems likely that the BSF training has helped support practitioners understanding of an ideal nurturing environment and behaviour as communication.

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Implementation explanation:
- May account for some positive effects - confidence and improvements in practice; the observable nurturing environment; increased practitioner sensitivity; and improved awareness of behaviour as communication.
- Process of implementing the training accounts for positive effects rather than the content.
- The most pronounced effect of the training, being the increasing practitioner understanding of behaviour as communication, may be accounted by one of the reflective homework tasks.
- This task may have allowed practitioners to engage in self-critical enquiry, supporting them to reflect on their practice and focus their thinking and understanding in this area.
- Although an implementation explanation can only be partly accepted, as findings suggest that practitioners also gained knowledge surrounding the content of the course.
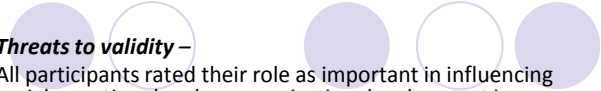
This may help staff move through individual processes of change, thus helping individuals to own the problem and feel responsible and accountable for solving it, therefore empowering people to develop their own individual practice.

Reflective practice task set during the BSF training focused on this...

'Notice a time when a child may be trying to communicate through their behaviour'. Identify the communication/feeling behind the behaviour' (BSF intervention, session 5)

For example, small differences between intervention settings and the comparison setting, in their descriptions of an ideal nurturing environment suggest content did account for some outcomes.

A small trend was found towards intervention settings mentioning the importance of recognising and valuing a child, and the importance of transition. This is consistent with findings from the ECERS-R-R subscale 'greetings and departing', where the intervention settings scored much higher than the comparison setting. This may be because the training emphasised these elements (along with providing a secure base) compared to understanding that a child's learning is developmentally understood.

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- *Threats to validity* –
- All participants rated their role as important in influencing social, emotional and communication development in children - difference in intervention v comparison are so small, any positive results are likely to be due to chance.
- High scores = result of the Likert scale question format, where participants may have falsified their responses in order to please the researcher.
- ECERS-R scores may have been biased by investigator bias and limitations in the sampling method.
- Improvements seen for reflecting on feelings and reflective practice could be explained by a design limitation of the question, which elicited this response in the semi-structured interview. Often the prompt was needed to be used, which directly asked whether participants had engaged in reflective practice.

As I was the only investigator at the time completing the ECERS-R observations, my subjective interpretation may have been biased because I wasn't blind to the aims and objectives of the study.
This direct and leading question is likely to have biased the results (Robson, 2002) because practitioners may have wished to please me as the researcher, by answering the question positively, or wished to show themselves in a good light (social desirability bias).

Conclusions

- <u>Best explanation for outcomes = BSF intervention + political and super rival explanation.</u>
- Previous knowledge of some concepts and terms and the implementation of the EYFS curriculum, and an emphasis politically on the early year's may have made practitioners more aware of concepts such as attachment and bonding and the need to provide a nurturing environment, which is why effects between intervention and comparison settings for these propositions were not so well pronounced**.**

- Investigator bias and threats to validity are likely to have perpetuated the effects of outcomes, such as the ECERS-R scores and reported use of engagement in informal reflective practice**.**

A direct rival explanation = only accepted as influencing reported formal reflective practice and improved working in parents in setting 3, but cannot account for other outcomes. Comingled explanation is also rejected because no previous interventions have been carried out in setting 1.

Although an implementation explanation is likely to account to a small degree for increased understanding and confidence, and improvement in practice and confidence when dealing with behaviour by staff in intervention settings, evidence of knowledge gained from the content of the training suggests that this does not fully account for results

This study does in part add weight to the use of attachment based interventions in early year's settings and suggests that it is not just the implementation but the content, which makes using this attachment framework in training effective

Recommendations and Future Developments

- Training in the early years does
- Further support and development is needed following initial training in order to embed ideas in practice - specifically the case for reflective practice, which practitioners reported to do informally but not formally.
- One year follow up
- evaluating whether the use of support groups, mentoring and supervision, following the training, improve outcomes and embed concepts in practice compared to if initial training is just offered, is a possible further development.
- BSF intervention could be offered more widely programme

Training is important for ongoing professional development of early year's practitioners
It seems that support groups, access to engagement in group consultations, as in Lowehoff's (2004) study, and advanced or refresher courses may be needed to embed such concepts in practice.

CHAPTER TWO:

A REVIEW OF THE APPLICATION OF THE ATTACHMENT FRAMEWORK AND

INTERVENTIONS WITH PARENTS, SCHOOLS AND EARLY YEAR'S SETTINGS.

Abstract

Attachment theory has become widely regarded as the most important and supported framework for understanding social and emotional development (Goldberg, 2000). The number of parents choosing to use formal childcare facilities, such as nurseries, children's centres, childminders and playgroups is steadily increasing (DfES, 2002) and therefore the importance of this theory needs to be shared with those working with young children, and preventative interventions implemented into early year's settings.

This paper outlines the history and principles of attachment theory and offers a critical examination of the framework. Evaluated interventions, based on this theory are presented and discussed, including those with parents, schools and early year's settings.

This paper concludes that there is a lack of reported evaluations of attachment interventions into nurseries and early year's settings. Evidence suggests that attachment based interventions in these settings will allow for a greater understanding, sensitive response and more effective use of practitioner's skills when working with children (Kennedy and Kennedy, 2004). Interventions into early year's setting therefore need to be evaluated to provide a strong evidence base for the theory.

A Review of the Application of the Attachment Framework and Interventions with Parents, Schools and Early Years' Settings.

1. **Introduction.**

Attachment theory has become widely regarded as the most important and supported framework for understanding social and emotional development (Goldberg, 2000). It has provided a theory on which to build our understanding regarding the central role of the parent-child relationship and its affect on psychological development. The strength of attachment theory has spread far beyond influencing parenting, also having a direct impact on childcare policy and practice, with the need for sensitivity and responsiveness in the infant – caregiver relationship now strongly emphasised (Rutter & O'Connor, 1999). Attachment principles are also now central to the work of social workers, child and adolescent mental health teams and some educational psychologists (Slater, 2007). The increasing awareness of attachment issues is evidenced by recent citations in government publications such as Care Matters: Time for Change (DfES, 2007) and National Children's Bureau booklet for school – 'Understanding Why' (NCB, 2007) and the introduction of 'Social Emotional Aspects of Development – Guidance for practitioners working in the early years foundation stage' (DCSF, 2008).

The number of parents choosing to use formal childcare facilities, such as nurseries, children's centres, childminders and playgroups is steadily increasing. There were 13,800 full day care providers operating in 2008, a 77 per cent increase since 2001 and a two per cent increase since 2007 (DCSF, 2009). In addition according to the National Statistics (2009)

the proportion of three and four-year-olds enrolled in early year's education in all schools in the UK has risen from 21 per cent in 1970/71 to 64 per cent in 2007/08. 35 per cent of three and four-year-olds were placed with other non-school settings offering early years education such as playgroups, either instead of, or alongside, their school place in 2007/8.

The significance of attachment theory is ever more relevant and significant, and there is a strong body of evidence which suggests that there is a need for effective early year's programmes (NCB, 2007, Childcare Act, HMSO, 2006). The importance of attachment theory needs to be shared with early year's practitioners and those working with young children. Raising awareness through preventative interventions, which are evaluated to provide a strong evidence base, will allow for a greater understanding, sensitive response and more effective use of practitioner's skills when working with children.

This literature review begins with an overview of the structure of the paper.

- **Section 1** outlines the literature search method used and key terminology that was included in the enquiry.

- **Section 2** offers a brief history of attachment theory and introduces some key terminology and concepts.

- **Section 3** offers a critical evaluation of some of the major criticisms and limitations of the framework.

- **Section 4** provides a short explanation and critique of studies based on attachment theory. Both evidence based interventions and those which have limited reliability will be discussed.

- **Section 5** outlines limitations in the methodology and evaluations of the studies described in section 4.

- **Section 6** provides a conclusion and summary to the paper and outlines the aim of my research project, which is presented in chapter 3 of this volume.

1.1: *Literature search method.*

The first approach to identifying research articles for the current review involved using the University of Birmingham eLibrary service and searching under the bibliographic databases "Applied Social Sciences" (1987 to date), "ERIC" (1966 to date), and "Education" (1965 to date) and "Psychology" (1969 to date). Electronic searches for articles containing the following keywords: 'attachment', and 'intervention or application' was conducted on 14th January 2009. These searches yielded 529 published works. As these initial searches produced too many results to read through, the same words were selected to be searched for in the title, using the same databases. This search yielded 42 published works. Many were relevant, but studies which focused on interventions surrounding domestic violence, social work practices, inmates, divorce, sexual abuse and autism were omitted.

The aims of this review involves focussing on attachment based intervention or the application of the attachment framework into schools and early year's settings, as well as parental and caregiver interventions. A further search was therefore conducted containing the words "attachment" and "intervention" or "application" and "school". This search yielded 53 published works. Some articles did not relate to attachment based interventions, so a further search using the keywords "attachment intervention" or "attachment

application" and "nurser*" or "pre-school" (with and without hyphen) or "children centres" or "kindergarten" or "early year*" was conducted. This search yielded 0 published works.

A final search containing the keywords "attachment" and "nurser*" and "intervention" produced 2 published works. Additional searches using reference lists of obtained articles were also conducted. Government legislation and guidance were searched for using the DCSF website.   In total more than 75 articles and papers from a range of different journals were identified and examined in further detail to determine their relevance to the questions being considered.

Following the electronic searches, two things became apparent. Firstly, the majority of published interventions focused on supporting parents and caregivers with their infants. Secondly, that the searches had identified only one attachment based intervention into nurseries or early year's settings.

2:   Analysis of Attachment Theory.

Considering the efficacy of interventions based on attachment theory is only valuable if the theory behind such interventions is seen to have merit. Cassidy and Shaffer's, *Handbook of Attachment: Theory, research and clinical applications* (1999) provides support for this framework, and many clinical and educational interventions have been based on attachment principles. There are, however, still some major critics of the theory. Slater (2007) suggests that educational psychologists remain sceptical about the framework and its relevance, and some criticise the theory because of its deterministic nature and mother

blaming philosophy. The next sections will outline a brief history behind attachment theory

and offer a critical evaluation.

2.1:   *History of Attachment Theory.*

Bowlby, a child psychiatrist, developed attachment theory in response to the lack of

an adequate theory explaining the adverse effects of maternal deprivation on personality

development (Bretherton, 1992). The widely held theories at the time were secondary drive

theory, which postulated that the reason an infant develops close ties to his mother is

because she is the source of food; and the Kleinian idea of primitive object relation, which

suggested because the mother's breast is the first object seen by the baby, an emphasis is

placed on food and orality. According to Bowlby (1988), none of these ideas matched his

experiences of children. To establish an alternative theory Bowlby looked at the ties

between mother and child. Bowlby (1988), reports that he was influenced by work of Lorenz

(1931; 1935) and his work on instinctive behaviour, which suggests that in some species a tie

to a mother occurs without the motivation of food (Bowlby, 1988). Bowlby argued that

mother – child attachments are based on the desire for proximity, a biological instinct

designed to ensure survival of the infant. This led to the arrival of the terminology of

attachment behaviour (Bowlby 1988). Bowlby (1988) defines attachment behaviour as:

> *'...any behaviour that results in a person seeking attaining or maintaining proximity
> to some other identified individual who is conceived as better able to cope with the
> world' (p. 29).*

Bowlby's *Attachment and Loss* trilogy *(1969, 1973, 1980)* served to develop attachment

theory further and highlighted the importance of continuity and sensitive responsiveness in

the care giving relationship. It also proposed how early influences may affect later

relationships, which individuals form as adults (Bretherton, 1992). An outline of attachment

principles, based on Bowlby's theories, is presented in table one below.

Table 1: Attachment Principles:

Attachment Principles
Desire for a secure base…
Attachment relationships are based on a desire for proximity and safety. Individuals are biologically driven to form attachments with others.
The process of forming attachments is influenced by learning experiences.
Positive learning experiences occur in an environment that emphasises emotional growth and offers a range of experiences in a surrounding that provides security, clear boundaries and predictable routines.
All behaviour has a meaning…
Attachment needs often underlie behaviour. The attachment system is activated when the child is stressed or distressed or when there are threats in the environment. In these situations children display attachment behaviour: they seek proximity to or contact with the caregiver and resume play after being comforted.
Attachment behaviour patterns reflect a child's anticipations about caregiver reactions when they are distressed and require comfort, and these guide a child's strategies for managing stress and thus affecting their emotions and behaviour.
A sensitive caregiver understands the child's emotions and communicates this understanding by containing a child and diminishing the child's stress and anxiety.
Attachment is for life…
Individuals form different kinds of attachments depending on the expectations and beliefs they have about their relationships. These expectations and beliefs constitute internal working models, which are used to guide relationship behaviours.
Internal working models are relatively stable even though they can be influenced by experience.
Continuity and sensitivity in care giving relationships…
Individual differences in attachment can contribute positively or negatively to mental health and to quality of relationships with others.
The quality and continuity of caregiver relationships, is essential. Attunement between an infant and a caregiver must be achieved to create a healthy relationship. Healthy attachment is simply the development of that attuned relationship.
A sensitive and consistent care giving relationship can positively affect a child's social, emotional and communication development.

(Based on Bretherton, 1992; Bee and Boyd, 2007; Slater, 2007)

2.2   Quality of attachments.

Bowlby (1969) developed the concept of the 'internal working model' (IWM), which provides a system for the organisation of attachment behaviour. Bowlby claimed that such a system involved the following; a cognitive component; mental representations of the attachment figure (for example, will they be available and reliable); the self and the environment (Bee and Boyd 2007; Slater, 2007). Bowlby stated that such representations are subconscious and begin forming late in the child's first year of life, becoming further established until the age of 5 (Bee and Boyd, 2007). These representations formed in our IWMs influence relationships beyond childhood. Bowlby suggested that children with insecure attachments have different IWMs of their relationships with parents and other adults (Bee and Boyd, 2007).

Bowlby's work was further developed by Mary Ainsworth who described variations in attachment relationships in her 'Strange Situation' (1978), which was designed to observe the development of the infant – mother attachment. The Strange Situation consisted of a series of episodes carried out in a clinic with a child aged between 12 and 18 months. Observations of the child's behaviour were observed when the infant was reunited with its mother after a brief separation (Bretherton, 1992). Ainsworth (1978) used this procedure to propose three attachment categories in infants: secure attachment (b); insecure/avoidant (a) and insecure – ambivalent (c). Later a fourth category was proposed by Main and Solomon (1990) disorganised – disorientated (D) (Bee and Boyd, 2007). Categories of secure and insecure attachments, found in Ainsworth's Strange Situation are presented in table 2.

Table 2: Categories and descriptors of secure and insecure attachment behaviours.

Category	Behaviour
Secure attachment (b)	More positive in behaviour towards Mother. More harmonious and cooperative interaction with mother. Uses Mother as a secure base from which to explore. During SS will seek proximity to Mother. The infant is quickly soothed when Mother leaves although will resist premature release. Will return to play and exploration after a few minutes. On Mother's reunion infant greets her positively or is easily soothed if upset.
Insecure – avoidant (a)	These infants tend to engage in a high level of exploration and will resist contact with mother, especially on reunion after separation. When picked up the infant shows little or no tendency to cling or resist mother efforts for contact. Show little preference for mother over strangers.
Insecure – ambivalent/ resistant (c)	Infant shows little exploration and is wary of strangers. When the Mother leaves they show immediate and intense distress, but are not soothed by Mother on her return and may show anger towards her. Child seeks and avoids contact at times and resists comfort from strangers.
Disorganised/ disorientated (d)	No strategy for relating to the caregiver. Dazed and confused behaviour. Infants may show contradictory behaviour such as very strong attachment behaviour followed by avoidance.

Based on Bee and Boyd (2007, p.312)

Ainsworth concluded that secure attachment was significantly correlated with maternal sensitivity. Securely attached babies and infants tended to have sensitive mothers, where as insecure babies and infants had mothers that were less sensitive to their needs (Bretherton, 1992).

The Strange Situation has been strongly criticised however, primarily because of concerns in ethics, with regards to leaving a child both with a stranger and alone in a strange

environment. Woodhead & Faulkner (2008) argue that this procedure does not adhere to

the BPS code of ethics because it involves deception, withdrawal of consent and harm:

> *'...deception, in terms of infant's inability to comprehend that their security is not actually at risk...second, withdrawal of consent is clearly signalled by their distress during the earliest episodes of separation...third, the procedure involves inflicting pain in that children are intentionally placed in a situation that is anticipated will cause them distress' (James and Christensen, 2007 p. 19)*

Despite such concerns, this procedure continues to be used today and is defended on

grounds that the parent has given consent and is free to end the assessment at any time.

3: A Critical examination of Attachment Theory.

A growing number of educational interventions are based on attachment theory, and

the body of research that underpins it. It is therefore important to assess both its limitations

and strengths as a theoretical framework, in order to fully embrace the effectiveness of its

application and have confidence in the success of the interventions which are born out of it.

The next sections will highlight some of the debates which both the theory and its advocates

have engaged in.

3:1: Criticisms of Attachment Theory: Psychoanalysis.

Bowlby's original ideas were rejected by his psychoanalytical colleagues (Goldberg,

2000); even though in the first volume of the attachment trilogy (1969) Bowlby states that

his influence had been psychoanalysis, because of its influence on early relationships and the

pathogenic potential of loss (Bowlby, 1969, p. xvii). Bowlby became isolated in the

psychoanalytical communities because he was seen as having dismissed some important

aspects of psychoanalytical theory including drives, the oedipal unconscious processes,

fantasy, secondary drive – dependency theory and richness of human emotions, and

replacing this with an evolutionary philosophy which was reductionist in nature (Slater,

2007). At the time however, psychoanalytical theory in itself did not provide a good theory

of abnormal development (Cortina and Marrone, 2003), which suggested maternal over-

gratification to be a danger in infancy which could lead to abnormal development.

Therefore, and as Bowlby suggested himself in his later writings, attachment theory

effectively expanded psychoanalytical thought and accommodated its phenomena with his

framework:

> *'...the resulting conceptual framework is designed to accommodate all those
> phenomena to which Freud called attention - for example love relations, separation
> anxiety, mourning, defence, guilt, depression trauma, emotional detachment,
> sensitive periods in early life – and so to offer an alternative to the traditional
> metapsychology of psychoanalysis and to add yet another to the clinical theory now
> extant' (Bowlby, 1988, p.2)*

Attachment theory also differed from the psychoanalytical theories in its explanation

of early infant care giving relationships. Bowlby (1958) criticised psychoanalysis for

emphasising the role of the care giver in reducing physiological arousal, and proposed that

attachment behaviour was made up of a number of component instinctual responses, that

had the function of binding the infant and the mother and focused on protection and

psychological containment and security as the central role for the caregiver. This was

innovative and original in a theory at the time (Goldberg, 2000) and although his thinking developed independently, this made Bowlby's work more compatible with psycho-analytical object-relations theories (Fairbain, 1952; Winnicott, 1965). Furthermore, the influence of attachment theory can be thanked for the major shift from drive theories to relational theories in psychoanalysis (Greenberg and Mitchell, 1983).

Psychoanalysis should not be criticised completely however, especially considering it framed Bowlby's initially thinking, and its focus on early life and emphasis on the central role of mental mechanisms has been influential (Rutter, 1997). However it appears that its initial criticisms of attachment principles were unfounded and as Rutter (1997) concludes:

'…although it is important not to throw out the baby with the bathwater, there is an awful lot of psychoanalytical thinking that needs to go down the plughole '(p.31)

3.2: Criticisms of Attachment Theory: deterministic nature.

The view that early experience in infancy has a powerful effect on later life has led to disapproval of attachment theory as deterministic, since it suggests that an adverse start in life results in poor life outcomes and has a profound effect on adult personality and behaviour (Slater, 2007). However, recent studies of children brought up with adverse early years experience suggest that they can form attachments, even though a number of them are insecure and atypical (Goldberg, 2000). A study by Chisholm et al (1995) compared Romanian orphans, adopted before the age of four months old; those who had spent at least eight months in an orphanage; and a control group of Canadian children. They found that the orphanage group were rated as less secure in their attachments compared to the other

groups, and were more likely to have behavioural problems and developmental delay. This suggests that forming an early attachment is desirable, although the critical time for when this attachment needs to be formed is uncertain (Goldberg, 2000).

Although this presents a negative depiction concerning early experience and its later effect on development and behaviour, such findings also provide a useful framework for identifying risk and resiliency factors, in children who may have experienced difficult early years, and are therefore vulnerable to later behaviour and development problems. Replacing the notion of determinism with an emphasis on risk and resiliency, which Bowlby later did (Rutter and O'Connor, 1999), may allow attachment based, preventive interventions to concentrate on identifying risk factors, and increasing protective factors and resiliency in children who are vulnerable.

3.3: Criticisms of Attachment Theory: mother blaming.

The emphasis on the role of the mother as the primary attachment figure and therefore responsible for any successes and failures of the child, is a further and fundamental criticism of attachment theory (Goldberg, 2000). However, although Bowlby did emphasise the role of and the importance of a consistent caregiver in early infancy he asserted that this did not need to be the mother (Bretherton, 1992). Despite this, Bowlby's theory left some mothers feeling guilty, especially ones who left their children in day care and nurseries (Goldberg, 2000). In response to this, the National Institute of Child Health and Human development (NICHD) funded a longitudinal study into day care settings and found no overall effects on attachment security (Slater, 2007).

It appears that Bowlby's theories may have been misunderstood or used to reflect popular attitudes at the time (Goldberg, 2000). The last two Labour governments have increased nursery places, advocating good quality childcare as protective and compensatory for children, and actively encourage participation in the labour market for mothers (Elfer, 2007). The rapid expansion of Children's Centres (HM Treasury, 2004) reinforces the government commitment and philosophy. Furthermore, the influence of wider systems and the sociocultural -historical influence may also affect outcomes for the child, not just the primary attachment figure in a child's life.

3.4:   Criticism of Attachment Theory: socio-cultural influence of attachment.

Bronfenbrenner's ecological perspective (figure one), contributes an important and alternative idea of child development and can be useful in understanding the impact of environments on a child's social and emotional wellbeing. Bronfenbrenner (1979) describes ecology as mutual accommodation between a child and the environment and larger systems. He defines the environment as a child's immediate setting, for example school and home. Individuals are affected by their immediate settings and larger systems. Systems nearest the child are smaller but have more influence over a child's development. Bronfenbrenner's approach emphasises studying relations among the multiple settings and stresses the importance of examining how children and their families make transitions among their different ecological systems. Rogoff (2003) however asserts that separation into these nested systems constrains ideas of the relations between individual and cultural processes and therefore the model needs extending to consider sociocultural historical influences.
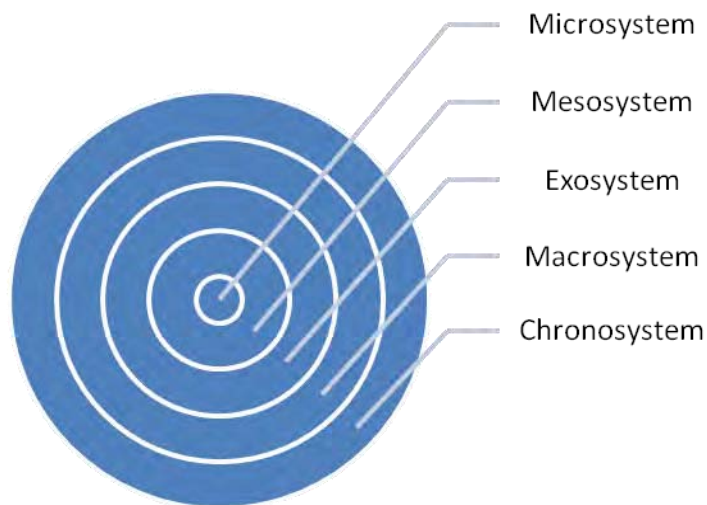
Figure 1: Bronfenbrenner's model of ecological systems (1979)

The sociocultural-historical approach proposed by Vygotsky assumes that individual development must be understood in, and cannot be separated from its social and cultural historical context (Rogoff, 2003). According to Vygotsky, individuals are influenced by the kinds of activities in which they engage and the kind of institutions of which they are apart. Rogoff (1990) extends this view to suggest that people contribute to the creation of cultural processes, thus they mutually constitute. Bowlby's theory which suggests that representations formed in our IWMs influence relationships beyond childhood is therefore a limited view which fails to take account of ecological and historical factors.

3.5:   Criticisms of Attachment Theory: stability and instability of attachment.

The work of Bowlby suggested that developmental changes were restricted to the first few years of life and led to an assumption that attachment patterns could not change (Bee and Boyd, 2007). This resulted in a distinct gap between the theory of attachment as a

lifelong concept and the actual understanding of what happens to attachment beyond the

formative years (Goldberg, 2000).

Recent evidence regarding stability of attachment has not reached consistent

conclusions (Hooper, 2007). When the child's family environment or life circumstances are

consistent the attachment usually remains constant (Bee and Boyd, 2007). Hamilton (1995)

found that 16 of 18 adolescents who had been rated as insecurely attached at 12 months of

age were still rated the same at 17. Waters, et al. (2000) suggests that attachment style and

internal working models can be continuous and discontinuous. For some people,

attachment style can remain consistent throughout childhood and adulthood, where as for

others they can be revised depending on experience.

The concept of attachments remaining stable is somewhat limiting. Interventions and

strategies promoting more responsiveness and sensitivity from caregivers would therefore

be futile, based on this assumption. Crittenden (2000) has however developed a model

which offers theoretical expansion through consideration of culture, maturation and

developmental context. The Dynamic Maturational Model (Crittenden, 2000) offers an

explanation as to how experience can lead to both change and continuity in an attachment

classification. Crittenden suggests that maturation transpires when sophisticated cognitive

functioning occurs; when the variation on attachment strategies increases, and as individual

experiences are influenced by different contexts. This model specifically focuses on

neurological change at two different stages. Firstly from infancy to pre-school age, when

infants begin to falsify and omit and distort information during processing, and from school

age to adolescence where adolescents adapt to more complex demands of their social

environments.

Goldberg (2000) suggests that the stability of attachment classification over the

lifespan is an area that is now recognised as under researched. Crittenden (2000) asserts

that research that has focused on white, middle class, non –risk western populations has

contributed to the view of stability of attachment. The Dynamic Maturation model offers an

explanation as to why and how attachment classifications may change or indeed remain

stable, and allows for the possibility of interventions to aid this maturation process.

4:   Implications and applications of Attachment Theory.

Originally the most immediate impact of attachment theory was on patterns of

residential care for children. Hospitals changed their policies to allow longer visiting hours on

children's wards and in residential homes an emphasis on consistency in staff and sensitive

care giving was adopted (Rutter, 1997). The attachment framework has also been helpful to

appreciate the difficulties that children face when having different parents in infancy and the

effects of loss for a child when having experienced parental divorce and family breakdown

(Rutter, 1997). Attachment concepts have also been valuable in helping clinicians

understand the role of relationship difficulties in a wide range of disorders, especially

conduct disorders (Fonagy, 2001).

Understanding attachment theory and its implications has led to and helped shape

interventions. The following sections describe and review the main findings surrounding the

effectiveness of a number of interventions, which are based on attachment theory. Both

preventative and reactive studies will be reviewed. The majority of attachment interventions

have been carried out with parents of young children and focus on care giving and caregiver

sensitivity, and the determinants of the child's attachment. Some studies include direct

work with children, either individually or with a caregiver, which has a limited evidence base.

The final sections will review the effectiveness of both reactive and preventative

interventions in early year's settings and schools.

4.1:   Interventions based on changing maternal sensitivity.

The objective of these interventions is to primarily change the responsiveness and

sensitivity of the mother, but many of the interventions require the presence of the child to

assess a change in the child's emotions or behaviour in order to evaluate the efficacy of the

intervention. Some of the studies found, when searching the literature are presented below.

A further table highlighting the findings of other studies is presented in appendix 1.

Bakermans – Kranenburg et al (2003) conducted a meta -analyses investigating

sensitivity and attachment interventions in early childhood. Findings regarding sensitivity

were based on the analyses of 81 studies involving 7,636 families. A core set of 51

randomised control group studies was established involving 6,282 mothers and their

children. The effect of intervention on maternal sensitivity in random studies was moderate

but significant (d=0.33), while the effect of the non-random studies was larger (d=0.61).

Interventions that focused on sensitivity were more effective than those that focused on

both sensitivity and support.

Other findings concluded that interventions with video feedback were more effective than without and interventions with fewer sessions (between 5 and 16) were more effective than for interventions with more than 16 sessions. Interventions which started after the child was six months old were also most effective than starting them pre-natal or before six months.

Interventions which measured attachment security as an outcome were also analysed. Twenty nine studies, involving 1,503 participants were analysed. The effect size for attachment security was small but significant (d=9.19). In the discussion of their analysis Bakermans – Kranenburg et al. (2003) report that the meta -analysis was based on three way attachment classifications (ABC), but did not address attachment disorganisation. They also suggest that there may be a sleeper effect on attachment security, in that changes in maternal sensitivity may not have had time to affect the attachment security. Also from the descriptions of samples it appears that only a small number of studies of adopted children were included and the majority of studies tended to be of at risk or clinical populations (Prior and Glaser, 2006). Furthermore, this purely positivist meta analysis can be criticised for oversimplifying results by concentrating on overall effects and neglecting the interaction of intervening variables (Wood 1995, cited in Cohen et al 2007).

A longitudinal study by Van den Boom (1994, 1995) is highlighted by Bakermans – Kranenburg et al. (2003) as an intervention shown to have positive results. The foci for intervention in this study were mothers from low socio-economic backgrounds in the Netherlands, who had just given birth to their first babies. The infants were selected for irritability by administering a neonatal behavioural scale. Mothers and their infants were

randomly assigned to either the control or intervention condition and half of the control and

intervention groups were subject to a pre – treatment assessment. The intervention was

over three sessions and lasted two hours and focused on responsiveness to infant cues.

They took place at three weekly intervals when the child was 6- 9 months old. Findings show

that the intervention produced significant improvements in maternal stimulation and

responsiveness, in child sociability and cognitive sophistication during exploration and in the

quality of attachment, with 78% of control infants classified as insecure compared with 38%

on intervention infants.

In a longitudinal follow up, at 18 months a significant association was found between

the treatment group and attachment classification, with 72% of infants being classed as

secure compared to 26% in the control group. Benefits of intervention were also seen at 24

months. Van den Boom (1995) describes that intervention mothers were:

> '…*more responsive to positive and negative child interactions, displayed more*
> *sharing of interest/objects with child, used balanced discipline and commands,*
> *allowed children autonomy and issued little direct instruction'*(p. 1811).

In addition, intervention children showed more orientation towards their mothers, were

more cooperative and engaged and copied the mother's language more. However no lasting

effects on cognition or sophistication of play were found. In the third year, positive effects

were still found. Intervention mothers offered children guidance with interaction, and peers

and husbands of intervention mothers were also reported to be more responsive.

Furthermore, intervention children had less problem behaviours, were more secure in

relationship with their mothers and had better relationships with peers.

The effectiveness of this intervention is clear, but the generalisation of the results can be questioned. As Van den Boom points out, the original study and intervention (1994) was tailored to the problems of having an irritable baby, therefore the generalisation of the results may not be valid to the problems of other risk populations. Also a host of assessments were used at different times including the Maternal Sensitivity Scales (Ainsworth et al 1971) at 18 months, the Bayley Scales of Infant Development at 24 months, and the Child Behaviour Checklist at 42 months, which lay claim to significant improvements in maternal stimulation and responsiveness, yet they neglect to ask mothers themselves, through a more flexible measure, about their sensitivity and children's behaviour. In addition many of the assessment measures are completed by the mothers, which highlight the positivist assumption that research can be value free and that science will separate facts from values (Cohen et al, 2007). Van de Boom assumes that mothers can fill in such measures without their personal values or feelings being of influence. In addition children's attachment classifications were assessed using Ainsworth's Strange Situation procedure. Many of these assessments are based on subjective opinion and lack reliability. A further critique of such assessment methods is presented in section 5.

The following studies were not included in Bakermans – Kranenburg et al's. (2003) meta-analyses because they either concern the parents of older pre-school children or were conducted after 2003.

In a longitudinal study, Stams et al. (2001) examined the effects of an early attachment based intervention on children's social development, personality development and incidence of behaviour problems at age 7. The intervention, based on Van den Boom,

(1994) was carried out at the age of 6-9 months with children from mixed families (adoptive families with biological children, and a first adopted child, *n=35*). A further intervention was carried out at 6 months with adoptive families (those without biological children *N= 90*). A two group design was used with the mixed families (intervention and control group); whilst a four group design was used for adoptive families, which consisted of two treatment groups (book + video and book only); control and post-test only group.

Findings from the study found that for mixed families there were no intervention effects at age 12 and 18 months. By age 7, however positive intervention effects were seen in ego – resiliency and optimal ego – control in girls and on internalising behaviour problems in boys and girls. In the adopted families there was success in changing maternal sensitivity, security of attachment, and infant exploratory competence in early childhood. At age 7 however, there were no lasting effects and maternal sensitivity actually decreased. Limitations of the study include the subjective nature of various assessment measures which were used including the Q-sort to measure children's school behaviour and the Child Behaviour Checklist (CBCL). Socio-metric status was measured by peer ratings. Also there were many more participants in the adopted family group compared to families and all participants were white, making the finding hard to generalise.

The Circle of Security project (Marvin et al, 2002 & Hoffman et al, 2006) is an attachment based intervention designed for caregivers (parents and guardians) to help move children from disorganised to more secure attachments. Circle of security is depicted as a circle around a secure base which the child moves away from in order to explore, and then back to the safe haven provided by the caregiver when feeling threatened.

The intervention created an individualised treatment plan for each caregiver and child, based on identification of child attachment; identification of caregiver; developmental history and creation of linchpin issue (most problematic pattern of attachment – care giving interaction). The objective of this plan was to make the parents aware of how to respond to certain signals and behaviours which the infant presented.

Most children in the intervention were aged between 11- 58 months (m = 32 months). The assessment comprised the pre-school version of the strange situation; observation of caregiver; Circle of Security interview with caregiver, and a caregiver completed questionnaire regarding child's behaviour problems. Findings showed a significant shift from disorganised to organised attachment patterns (55% to 20%). An increase in the number of children classed as secure (32% to 40%) and a decrease in number of care givers classed as disordered (60% to 15%).

The study claims good inter-rater reliability and a high response rate from the target population. However, the study lacked a control group with randomised assignment and a one year follow up is still needed. Furthermore, the sample size was small and more secure children needed to be included in the sample. The fact that all participants were of White ethnicity is a further limitation of this study, because outcomes may be different for different cultures. In addition, the identification of caregiver history and internal working models being based on subjective experiences is a further limitation, because such experiences rely on memory for the retrieval of information, which can be unreliable because memories may have become fallible and selective over time.

The above studies show the efficacy of interventions which focus on increasing

parental responsiveness and sensitivity to improve the security of attachment. Bakermans-

Kranenburg et al. (2003) meta-analysis suggests that the most effective interventions

involved 5-16 sessions, with a clear behavioural focus on improving parental sensitivity.

Interventions which begin when the child is between 6- 12 months have the most efficacy

and long term results. These studies demonstrate how attachment theory can be used to

emphasise the need for consistent, responsive and sensitive care giving by parents, and

emphasise the need for ongoing support and guidance in helping all caregivers, from parents

to teachers, understand children's behaviour, and change their practice and response

accordingly.

4.2:   Reactive interventions in schools/early years settings.

The development of relationships beyond the family environment, which provide

emotional support and protection, has also been considered to be an important aspect of a

child's development (Kennedy & Kennedy, 2004). Howes (1999) suggests that children will

form attachments outside the home environment when they are in provision of physical and

emotional care, and when an individual has a consistent presence and an emotional

investment in the child. The relationships children develop with early year's workers and

teachers are therefore similar to those with the primary attachment figure (Kennedy and

Kennedy, 2004), and as Bronfenbrenner's (1979) demonstrates, different systems in which

children and families interact will influence the development of a child.

4.2.1: Differentiation and individual learning profiles.

Kennedy and Kennedy (2004) suggest that professionals need to respond differently to children, based on their attachment style and understand the reason for some children's behaviour. Practitioners need to consider the IWM of the children, and have knowledge of relationship histories in order to tailor strategies that are compatible with the child's needs. Although clearly this is difficult to do, Leiberman and Zeanah (1999) suggest that strategies and interventions should be unique to the requirements of the child, developmentally appropriate and not reliant on emotional pressure. If this does not occur, strategies and practitioner behaviour may serve to reinforce the insecure attachments and maladaptive behaviours of the child.

Practitioners within early year's settings and schools therefore need to be aware of and understand how to respond to children with different attachment classifications. Bomber (2007) suggests that practical attachment- based frameworks and interventions should be put into schools to support children with attachment difficulties. Although reactive, these interventions could facilitate growth in the child's holistic development, which in turn may have a positive impact on their learning and success in education (Bomber, 2007).

The concept of differentiation is an important consideration in educational setting and is considered to be good practice in teaching. Differentiation with regards to learning, development, emotional level and language may support children with insecure attachments (Bomber, 2007). For such children, learning should be promoted by planning activities that are both challenging and achievable. This can be done by actively facilitating supportive

scaffolding by engaging the child's interest; simplifying the task; solving problems and modelling enthusiasm.

Geddes (2003) focuses on the triangular relationship between the teacher, pupil and task, and the potential these relationships have for changing the child's IWM and increasing their resilience. Geddes (1999, cited by Geddes, 2005) analysed cases from a child guidance archive and made links between early relationships and the learning profiles of children with different attachment classifications. Geddes (2005) states that unique and appropriate teaching strategies and task management should be used in response to children with different attachment styles (table 3).

Although this offers a useful framework and understanding of how to respond appropriately to children with differing attachments, the practicalities of responding individually to every child's attachment classification in the classroom may be challenging for teachers and early years' professionals. Furthermore, Geddes findings lack clarity and the subjective nature of her work makes the reliability of her research questionable. Geddes (2003, 2005) draws on findings from her unpublished thesis but does not describe her findings in replicable detail, only stating that she examined a sample of cases from child guidance archive files, and therefore not providing enough detail to allow her methods to be repeated by others.

Table 3: The learning profile and teacher response to children with different attachment classifications:

Attachment classification	Learning profile	Teacher response
Insecure – avoidant (a)	• Does not expect or seek out help/support from adult • Does not seek proximity to teacher • Does not display anxiety • Preoccupied with task and has a desire to be independent • Task is the emotional safety barrier • Likely to be underachieving, limited with language and creativity	• Use task as a way to interact with and engage the child with a non rejecting adult – increase resiliency • Let the child have the choice of task where possible. • Where possible make teaching content based • Provide tasks which enable exploration of emotional experience.
Insecure – ambivalent/ resistant (c)	• High levels of anxiety • Preoccupation and dependence with teacher • Unable to attend to task • Underachieving • Good language skills	• Provide an achievable task for child. • Scaffold and work together on the task rather than merging with them • Encourage independence and autonomy
Disorganised/ disorientated (d)	• Intense anxiety • Lack of trust in adults • Task may seem like a challenge and trigger feeling of rejection • Unable to express their feelings, which often results in unpredictable outbursts of anger • Likely to underachieving and immature	• Provide containment for the child to reduce anxiety by providing a safe place, predictable routines and responses • Concrete and rhythmic activities which engage the left brain function can be soothing and will allow the child to feel contained whilst learning. • Engage child with an appropriately differentiated task

4.2.2: Providing an additional attachment figure.

In addition to understanding the learning profile of children with attachment difficulties, providing a key adult within an educational setting as an additional attachment figure is a further way to support such children. Golding et al (2006) suggests that if children are to recover, they need to experience the benefits of long term sensitive care giving. The role of this key adult in school would be to develop a relationship with the child, offering the possibility of relative dependency, in order to become self regulating, allowing the child the possibility for 'second chance learning' (Gerhardt, 2004). The primary role of an additional attachment figure would be to attune to the child, provide emotional containment, communicate empathy and hope, be aware of specific trigger times and advocate for the child, helping the provision to be more inclusive (Bomber, 2007).

The role of the additional attachment figures could also be used to recreate early attachment experiences, which facilitate a child's social and emotional development, as well as allowing time and space for self-expression (Woolf, 2008). This has often been done by the use of therapeutic play. The *'Better Play Times'* training (Woolf, 2008) offers a way to provide therapeutic play sessions in schools, by training teachers and learning support assistants in such techniques. Based on ideas of attachment theory and principles of nurture groups, this training recognises the importance of good quality play experiences for the development of a child's learning, in line with a caregiver who provides a safe base from which to explore.

Woolf (2008) implemented this training within a special school for children with emotional, social and behavioural difficulties. Five staff members were trained and used

play therapy with children from reception to year 6. Staff members felt the project was rewarding, challenging and interesting. Quantitative data from questionnaires with staff indicate improvements in the children's behaviour, communication and self esteem. In addition the staff reported feeling more confident in being able to deal with children with social and emotional behavioural difficulties, and stated that they had a better understanding of the purpose of the children's behaviour. However, such outcomes are only based on staff perception, rather than being a direct measure, which could determine a cause and effect relationship.

Qualitative data was also included to establish the efficacy of this training. The use of visual representations and open-ended qualitative questionnaires were used with the children. Visual representations took the form of free drawing by the children, adding themselves and staff to a scene and a pre drawn picture with different facial expressions. Three quarters of children placed themselves and staff members closer together and all pictures changed to some degree, with children able to identify their strengths more positively.

Woolf (2008) suggests that offering staff a new understanding of child development through teaching attachment principles added a further understanding to the function of play and how a child's past may influence their present behaviour. The qualitative element to evaluating this training leads the results open to interpretation however, as the use of visual representations and interpretation of children's drawings, could be criticised because of the subjection to confirmatory bias through the way in which such drawings can be interpreted and reported by the researcher.

An additional attachment figure in school can also be useful in providing children with a safe place to talk and share their difficulties (Bomber, 2007). The adult could facilitate how to deal with conflicts in friendships and support the child in understanding appropriate social skills. However, such interventions may be problematic during transitions, when the child would presumably have to deal with loss of the additional attachment figure.

4.2.3:   *The use of counselling skills.*

Doucette (2004) designed and carried out an intervention known as 'Walk and Talk', which utilises counselling skills, grounded and guided by principles of attachment (Talk) with mild aerobic exercise (Walk). The objective of this intervention was to help adolescents with challenging behaviour feel better, explore alternative behavioural choices and learn new coping strategies and life skills. This intervention was carried out over eight weeks with eight students, aged 9 – 13 years, from a middle school in Alberta, Canada. Pre and post interviews with the adolescents were used as baseline data. In both interviews children were asked to draw pictures and identify their strengths and weaknesses. Drawings were analysed by an art therapist. Children's drawings and self – report measures indicated that they had benefited from the intervention and adults reported higher levels of self-efficacy and well being in the pupils.

The efficacy of such results needs to be considered however. Firstly the outcome of the intervention was primarily based on the children's subjective assessments of their own strengths and weaknesses, which can be subject to bias, because of the desire for participants to portray themselves in a more positive light. This concept, known as "faking good", threatens the validity of findings. The use of semi structured interviews, as used by

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Doucette (2004) is subject to critique. Cohen et al (2007) suggest that salient topics can be omitted because of the flexibility in sequencing and wording, which can lead to different responses; thus reducing the ability to compare answers. The effect of the interviewer's prior relationships with the interviewee needs to be considered. The fact that Doucette (2004) acted as both the counsellor and researcher in her study may have influenced respondent answers to both the pre and post interviews and questions the reliability of participant responses. In addition, only the short term effects of the intervention were evaluated. A one year follow up evaluation would have provided stronger efficacy for such an intervention.

4.3:   Preventative interventions in early years and educational settings.

Kennedy and Kennedy (2004), highlight that there is little literature on educational based attachment interventions. When searching the literature into this area, it became apparent that most interventions were clinic based and most educational interventions were reactive rather than preventative. This section will describe the few preventative interventions in educational setting which were highlighted through the literature search.

The Gate House project, based in Australia (Patton, et al. 2003), draws on both health and educational research, to undertake preventative school health promotion interventions in secondary schools. This project draws on the attachment principles that secure emotional connections provide a base for psychological and social development, and that emotional behavioural problems are more likely to arise when social and interpersonal bonds are threatened or insecure.

To measure the social climate of schools, questionnaires were administered to year 8

children. Strategies (whole school, group and individual) were then put in place depending

on the outcome of these questionnaires. Patton et al. (2003) evaluated the effectiveness of

this project via a longitudinal study. They gave year 8 pupils the same questionnaire in 1997,

1999 and 2001, to identify whether there had been a change in school climate/ ethos. They

matched intervention schools (n=12) with controls (n =14). Results from the evaluation

suggest substantial and sustained change in the behavioural profile of students in

intervention schools.

Although Patton et al (2003) claim good results, the efficacy of this project is hard to

judge. The results of the longitudinal evaluation are not described in detail, with neither the

questionnaire design nor the descriptive statistics displayed or explained. Also those

outcomes reported were only described in terms of health outcomes and not educational

successes, and although this project primarily drew on attachment principles, strategies

implemented were not solely based on attachment theory, but also drew heavily on a social

learning paradigm. This makes it difficult to evaluate the efficacy of this intervention in

terms its application of attachment principles. Design implications such as the effect of

clustering on the effective sample size and study power also make the reliability of this

evaluation questionable.

One major intervention based on attachment theory is the implementation of

nurture groups in the UK. The conceptual framework is based on Bowlby's theory that

impaired early experience will lead to poor development for a child. The nurture groups

provide the opportunity to re-experience early nurturing in a warm and safe environment,

which promotes positive self regard, trust and consistency from adults (Colwell and O'Connor, 2003). The evidence base for nurture groups has thus far been limited, but as more researchers begin to evaluate their effectiveness, the evidence base and value is becoming established.

Colwell and O'Connor (2003) sought to determine a reason for the effectiveness of nurture groups by looking at the enhancement of self-esteem among children, through observations of teacher behaviour and communication in both nurture groups and normal classrooms. Observations occurred in four schools in both nurture groups and year 1 classes. Eleven teacher behaviours were identified for observation and these categories were fitted into a self –esteem framework, to give nine categories of self-esteem. Findings indicate that the majority (86.4%) of statements made by nurture group teachers reflect behaviour that may enhance self-esteem compared to mainstream teachers (50.7%). These results suggest that teachers which take on board nurture group principles, based on attachment principles, facilitate development and learning by keeping pupils interested and oriented to learning task and by maintaining a caring and understanding attitude and highlights the importance of teachers as significant others in a child's life.

This study does highlight the success of nurture groups and attachment principles, but the researchers themselves highlight weaknesses in their study which could affect the generalisability. Firstly, as only one observer was used the study inter-rater reliability is low since no direct measure was obtained, the study cannot be certain that the nurture group actually raised self – esteem. The quasi-experimental design of Colwell and O'Connor's (2003) study attempts to employ a true experimental design in the field, but without

randomised assignment of a control. The one group, pre and post test experimental design

and the post test non-equivalent group design employed by Colwell and O'Connor would be

criticised by truly positivist researchers because extraneous variables outside the

researchers control could invalidate the research efforts and theory (Cohen et al, 2007).

According to Cohen et al (2007) the lack of a pre-test and random allocation of controls

renders studies such as Colwell's and O'Connor's methodologically flawed.

Tomlinson, et al. (2008) describes a preventative intervention based in nurseries in

the UK. When conducting this literature search this appeared to be the only evaluated and

published attachment based intervention in nurseries. This CAMHS intervention aimed at

training nursery staff in basic attachment concepts and discusses how they could be applied

in practice. This training was conducted with 24 practitioners in a variety of nurseries. The

intervention was evaluated using self-report questionnaires, with a 5 point Likert scale. All

participants reported that they learned some new ideas and took away ideas for their own

personal and professional use. Tomlinson et al. (2008) suggest that nursery staff found

attachment concepts useful and applicable. However, the evaluation appeared to focus

primarily on evaluating the training rather than the outcome of the training for children and

staff and the use of self completed questionnaires can be criticised because of the inability

to check for honesty or seriousness of responses given by participants. In addition the five

point Likert scale may have allowed participants to refrain from making a decision about

their opinion of a particular question. Robson (2002) suggests that there is disagreement on

the wisdom of including a middle alternative because typically twenty percent of

respondents use the middle category.

5:   The reliability and validity of interventions based on attachment theory.

Many of the studies and interventions described use various ways to assess attachment, maternal sensitivity and child behaviour based on internal working models. This is especially true of interventions with caregivers. However, even interventions into educational settings are influenced by past assessment methods and classifications. For example, Geddes (2003 & 2005) uses the classifications based on The Strange Situation procedure (Ainsworth, 1978) as a basis for describing the different learning profiles of children and provides strategies to support such learning profiles within the classroom. In addition, one component of Tomlinson et al's (2008) training focuses on describing coping strategies of the insecure-avoidant and insecure-ambivalent attachments. To judge the validity of research and interventions an evaluation of the procedures and assessment methods needs to be considered. Table 4, displays the main assessment methods used in studies and lists reliability and validity of such measures

Table 4: Assessment and measures used in attachment studies:

Assessment/ measure	Clinical usefulness	Critic	Reliability and Validity
The strange situation (Ainsworth (1978)	Widely used and well respected Requires training Only used with children aged 9 – 20 months	Firstly it is dependent on brief separations and reunions having the same meaning for all children (Rutter, 1997). This may have cultural implications in countries such as Japan where infants are rarely separated from their mothers.	Good inter rater reliability Discriminant function analysis (Ainsworth et al, 1978) suggest A, B & C patterns are distinct, which indicates that a categorical approach to attachment classification is valid
Pre-school SS (Cassidy, Marvin and Macarthur 1987)	More useful system of assessing pre-school children	Children of this age have the cognitive capacity to maintain relationships when the other person is not present and separations do not provide the same source of stress for them (Rutter, 1997)	Inter rater reliability = 84% agreement (Brinter, Marvin & Pianta (2005) Teti (1999), in Prior and Glaser (2006) report that construct validity is fragmented at best.
Q sort methodology Waters & Deane	Can be used in a wide range of settings improving ecological validity. Parental ratings of their children	Yields description of the child's secure base behaviour and a single score for security along a continuum from secure to insecure, but it does not yield any info about type of insecure attachment so does not include disorganised.	Good inter-rater reliability Poor concurrent and predictive validity

(1985)	may give useful information especially into how the parent sees the relationship.	Relies on likelihood of stressful experiences, leading to more proximity seeking during observation but this cannot be assured.	(Prior and Glaser, 2006)
Child attachment Interview (CAI) Target, Fonagy & Shmueli –Goetz (2003)	Gives a representation of attachment security with each parent.	*'This instrument invites child to reflect on their relationships with their parents in a way which could challenge the child's defences and coping mechanisms'* (Glaser and Prior, 2006 pg 127)	Test – retest reliability is good (0.63) Discriminately validity is moderately good Good predictive validity between mothers state of mind as assessed by the AAI and their children's attachment status as assessed by CAI
Adult attachment interview (AAI) (George, Kaplan & Main, 1984)	Used with adults and gives a categorical classification across 5 categories.	Relies on recollection of memories which can be unreliable as memories can be constructed and become selective.	Test –retest = good to moderate Predictive and Discriminant validity = moderately good.

6: Conclusions.

6.1:   *Conclusions regarding interventions.*

A range of interventions based on attachment theory have been developed and there is some evidence of their effectiveness through evaluation. There are a number of weaknesses in the current research. Firstly, studies often focus on high –risk samples (Van de Boom, 1994, 1995; Stams et al. 2001; Woolf, 2008). Secondly, this research is limited because it focuses on secondary and tertiary preventative work, which aims to reduce already established social emotional and behavioural difficulties. Furthermore, although many interventions have been evaluated with randomised control trials, many educational interventions and some interventions aimed at enhancing maternal sensitivity (Hoffman et al. 2006) have not been evaluated in this way, because it is difficult and unnecessary in such research to undertake such positivist approaches (Robson, 2002). The effectiveness of other reactive interventions (Geddes, 2005; Bomber, 2007) has yet to be evaluated.

A major criticism of most of the studies described in this paper is the small sample sizes used (Patton et al, 2003; Doucette, 2004; Velderman et al, 2006; Tomlisnon et al, 2008; Woolf, 2008), making their findings of evaluations and interventions difficult to generalise beyond the groups studied. Whether positivist or interpretative in approach, small sample sizes limit the generalisability and reliability of findings, and question the power of the studies. Most interventions which have been evaluated overlook the use of a case study design. A case study design evaluating an intervention in a child, class, school or community would provide a unique example and observation of effects in a real context (Sturman, 1999). In addition the problem of generalisation, due to a small sample size, could be

overcome with a case study because generalisation takes the form of applying a single instance to the class of instances that it represents, or from features of the single case to a multiplicity of classes with the same features (Yin, 2009). Case study designs also present evaluation data in a more publicly accessible form than other kinds of research reported and are capable of serving multiple audiences, including non academics (Cohen et al, 2007). They allow readers to judge the implications of a study for themselves.

Currently, early intervention work into educational settings is limited and certainly the efficacy of such interventions is yet to be sufficiently supported by empirical evidence. However, early results are positive, especially those into the efficacy of nurture groups. Furthermore, there are limited preventative interventions into early year's settings, which are adequately evaluated. Attachment based interventions in these settings, would seem to be central, considering the length of time that some children spend in these surroundings. Sharing knowledge of attachment theory with early year's practitioners and raising their awareness of such principles seems to be a positive way forward for the application of this theory.

6.2   Summary.

There is persuasive research documenting the application of attachment based interventions strategies. Bakermans- Kranenburg et al's (2003) meta analysis suggests that interventions that focused on increasing maternal sensitivity were more effective, however the evidence base for the longitudinal effects on maternal sensitivity is inconclusive. There is limited reported applicability of attachment principles in educational settings and most

research which has looked at increasing staff/practitioner sensitivity and responsiveness has been reactive strategies or secondary and tertiary preventative interventions.

Preventative interventions are preferable to reactive interventions and current research has highlighted how attachment principles can be effective in early year's settings, by refining practitioner care giving behaviour and sensitivity. However, the lack of reported evaluations of early attachment interventions into early year's settings means that some questions remain unanswered. Specifically, how applicable are attachment principles in early years settings and how effective are interventions in these settings in changing practitioner behaviour and understanding. This will serve as the focus for my research project.

The aim of this research project is to evaluate the impact and outcomes of the 'Building Strong Foundations' project. This is an intervention delivered to early year's settings and aims to increase awareness of attachment principles, and the importance of creating a nurturing environment by increasing understanding and by developing reflective practice. The principles underpinning this intervention are consistent with the work of Bowlby and Ainsworth, presented in table 1, who highlighted the importance of developing secure attachments. These are reflected in the training by emphasising the importance of the practitioner relationship in supporting children's emotional, social and communication development; the need to contain and attune to a child's needs in order to develop a positive attachment relationship; the need to view behaviour as a form of communication; and the need to provide and understand the importance of providing a nurturing environment, in order to create a positive learning experience and secure base for the child. The evaluation will involve a multiple case study design. The theory of the project asserts

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that these case studies will show that communicating knowledge of attachment principles will have a positive impact on staff's practice and will lead to a more nurturing environment for children.

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Appendix 1: Other evaluated attachment based interventions.

Authors and Title	Description	Results/Successes	Criticisms
Effects of Attachment-Based Interventions on Maternal Sensitivity and Infant Attachment: Differential Susceptibility of Highly Reactive Infants	VIPP short term attachment based intervention with insecure mothers and their first born infants. Implemented between 7-10 months of infant age. 81 mothers who were categorised as having an insecure attachment experiences in their own childhood were randomly assigned to either a control (n=27) or one of two intervention group. Intervention 1: (n=28). 4 sessions, lasting approx 120 minutes. Focused on enhancing mother's sensitive responsiveness by providing them with video feedback about their own insensitive behaviours	Intervention mothers were more sensitive than control mothers Interventions were most successful for highly reactive children and their mothers. Both interventions were equally effective in enhancing maternal sensitivity, but failed to produce a significant effect on infant attachment security.	**Strengths.** Randomized control study Confirmed conclusions of Bakermans-Kranenburg et al. (2003) meta analysis that a moderate number of sessions and a behavioural focus increase efficacy of intervention. **Limitations.** Measures: Mothers attachment based on AAI. Questionable how reliable this is as a schedule as it relies on past memories.
Velderman, Bakermans-Kranenburg,	Intervention 2 (n=26) 4 sessions, lasting		Children Attachment categorised by

Juffer, van IJzendoorn (2006)	approximately 120 – 320 minutes. Aimed to enhance sensitivity and restructure mother's attachment representation. Video feedback plus discussions about attachment experiences		SSP (see critic in table 4) Maternal sensitivity based on play for 10 minutes by video observations. Difficult to gain a reliable and fair assessment in such a short session. Small sample size, so power of statistical analyses may be inadequate. Larger sample size may have resulted in a significant interaction effect instead of a trend for intervention effects on attachment security (p.272)
Attachment-Based Intervention for Enhancing Sensitive Discipline in Mothers of 1-3 year old Children at Risk of Externalising	VIPP – SD (Video feedback intervention to promote positive parenting and sensitive discipline. Examined whether child temperament, age, marital discord, daily hassles and lack of maternal well-being, moderates the effectiveness of intervention on either parenting or child outcomes.	Mothers in intervention group had more favourable attitudes towards sensitivity and towards sensitive discipline. Effectiveness was not related to child age or temperament or family characteristics.	**Limitations:** Of the 438 families selected only 246 families (56%) agreed to participate in the intervention study. This moderate response rate questions generalisability of study. Variables measured for screening and for pre and post test measures were

Behaviour Problems: A Randomized Controlled Trial.	Randomised control study. Control group, (n=117) or the intervention group (n=120). Families screened for their 1-3 year old children's relatively high scores on externalising behaviours.	The intervention mothers displayed more positive discipline over time	based on self-report questionnaires. Post test outliers were excluded from statistic analyses.
Van Zeijl, Mesman, Van Ijzendoorn, Bakermans – Kranenburg, Juffer, Stolke, Alink, Koot (2006)	Home based intervention, lasting six sessions, which focused on mirroring and discussing actual parent child interactions.	Intervention was effective in decreasing overactive behaviours in children of families with high levels of marital discord and family hassles.	Families were mainly from higher socio economic backgrounds and Caucasian. Not all constructs were measured at all times. Child temperament, for example was only assessed during the screening phase and parenting attitudes were only assessed at post-test (*Van Zeijl, Mesman et al. p.1003).*
Attachment Theory, Loss and Trauma: A case study.	Articles discusses application of attachment theory and theories of bereavement to the treatment of trauma with loss of a mother in a child aged 2 ½.	The authors state that over a 6 month period his symptoms improved significantly, with his tantrums disappearing and his mood becoming more positive.	Difficult to determine cause and effect of intervention as effects may have happened due to time elapsing since loss, rather then intervention.
Zelenko and Benham	Zelenko and Benham describe therapeutic work with this child, including supporting the child to develop a new attachment bond with his aunty; educating his aunty and grandmother on the		No or pre-post data to determine

(2002)	process of loss and grieving in a child; reorganising the child's life, raising his aunties awareness of heightened separation anxiety; and helping the child accept his mother's loss by encouraging his aunty to create a maternal presence in the child's life.	Aggressive behaviours stopped.	efficacy.
SAFE Secure Attachment Formation for Educators *Karl Heinz Brisch (2009)*	Intervention for pregnant mothers and their partners. 4 prenatal and 6 postnatal sessions. Goals of SAFE • Provide security for parents and child • Fostering secure attachments between parent and child • Preventing transmission of parental trauma to the baby Involves video based sensitivity training and unresolved trauma sessions. Participants also have access to 24 hour crisis hotline, to provide emotional security for parents. Evaluation: (Pilot Study). Prenatal evaluation = questionnaires, AAI, physiological measurements of parental stress (saliva cortisol) Postnatal period = Saliva cortisol, questionnaires,	Developments of infants secure attachment quality despite unresolved trauma of parents. Enhancement of parental sensitivity and emotional availability for their infants signals	Some measures are based on self reports and rely on past memories such as AAI. Evaluation has only been conducted on small scale pilot study.

	video analysis, strange situation.		
	School based intervention lasting 4-6 weeks (approx 30 minutes duration).	CBCL (Child Behaviour Checklist) assessment by educators	
B.A.S.E Babywatching in Kindergarten *Karl Heinz Brisch (2009*	Aim of intervention is to help children develop empathy, social skills and sensitivity and develop the self-reflective capacity of mentalizing. Programme 1. Involves groups of children watching an infant in interaction with their mother. Starting shortly after birth till approx. end of first year of life. Programme 2. = Instruction for Baby watching by educators. One educator leads the group, while another leads the watching. Pre and post evaluation, and comparison between control group and intervention group.	**Boys** in intervention group = Less aggressive and less oppositional behaviour. Improved alertness and more emotional reactivity Less social withdrawal, less anxious and depressed. **Girls:** Improved alertness and more emotional reactivity Less social withdrawal, less anxious and depressed. Fewer physical complaints.	Small pilot sample, a more rigorous evaluation needed.

	assessing Behaviour of the children (N=50, age M = 50 months)	CBCL assessment by parents. **Boys**: Less aggression and social withdrawal. Improved alertness and more emotional reactivity **Girls:** Improved alertness and more emotional reactivity Less social withdrawal and less sleeping problems Additional improvements for intervention children were noticeable generalisation of the mode of baby-watching during play with one another.	
'Right from the Start': randomized trial comparing an attachment group	Right from the Start (RFTS), an 8 session parent group to enhance caregiver skills in reading infant cues and responding sensitively.	No significant differences between infant attachment or maternal sensitivity improvements.	Small sample size and because the study involved a self-referred homogeneous sample, the generalisability is limited to mothers who self-refer to attachment

intervention to supportive home visiting. *Niccols (2008)*	Compared RFTS to 8 sessions of supportive home visiting. 76 (60%) of mothers originally contacted agreed to participate. 28 mothers assigned to home visiting and 48 to RFTS. 73% completed post test measures and 64 completed 6 month follow up measures. <u>Outcome measures:</u> Attachment Q-set. Maternal behaviour Q-sort.	<u>Secondary analysis: -</u> considered non attenders as a separate nonrandomised group, suggested a significant advantage for those mothers attending RFTS - 6 month follow up – larger improvements for infants whose mothers attended RFTS. RFTS mothers had larger maternal sensitivity scores pre-test/post-test.	interventions. No randomly assigned control group
Understanding Why' by *The* National Children's Bureau (2007).	This booklet aims to help teachers and others in educational settings, understand children's behaviour and consider how they can help the child achieve their full potential. It also seeks to help parents, carers and others with care responsibilities, recognise attachment needs and to work together with schools, to support the child or young person's successful learning. Also seeks to increase knowledge and awareness of the emotional and educational needs of children and young people, who have experienced a major loss or trauma early on in	No published results regarding success of booklet	Early preventative intervention.

their lives. The publication specifically examines the needs of adopted children and young people and those looked after by local authorities. It gives examples of common behaviours and feelings among this group of children and explains how children who have experienced inconsistency, neglect, or loss of their main caregiver, may suffer acute physical and emotional distress and attachment difficulties.

CHAPTER THREE:

**AN EVALUATION OF AN ATTACHMENT BASED, EARLY-YEARS TRAINING
PACKAGE: A MULTIPLE CASE STUDY**

Abstract

This paper reports on findings from an evaluation of an early year's intervention, based on attachment principles. The 'Building Strong Foundations' intervention, is training for early year's practitioners, focusing on the emotional and social development and early communication of babies and young children, and supporting the development of reflective practice. A multiple case study design was adopted. Three settings, where the intervention had been received, were evaluated to provide literal replication, and an additional setting, which had not received the intervention, acted as a comparison, and provided theoretical replication (Yin, 2009). Qualitative and quantitative data were collected through staff observations (Early Childhood Environment Rating Scale – Revised – ECERS-R); semi-structured interviews and vignette scenarios presented to practitioners (n=16).

The key positive outcomes of this evaluation were; improved practitioner understanding of behaviour being communication; increased confidence and improvement in practice when dealing with challenging behaviour; the observable nurturing environment of intervention settings; increased understanding of an ideal nurturing environment; increased understanding of concepts 'containment' and 'attunement' and an increased practitioner awareness of the need to reflect on feelings and practice.

Possible alternative rival explanations for the outcomes are discussed, concluding that the Building Strong Foundations intervention, political and super rival explanations, and some design bias, account for outcomes. Limitations and implications of the findings are considered, including the need for further support and development, following initial training in order to embed ideas in practice.

An Evaluation of an Attachment Based, Early-Years Training Package: A Multiple Case Study

1. Introduction.

Since 2003 the number of children attending full time day care has increased by 34%, and between 2003 and 2008, the number of children attending nursery schools has increased by 13%. In January 2009 the number of three and four year olds benefiting from some free early education was 1,178,800 children, which is an increase on the 2008 figure of 1,160,400 children (DCSF, 2009). Such statistics indicate an increasing demand for early year's provision at a younger age.

With an increasing number of children attending early years' provision, the government have placed a major emphasis on early year's policy, with a 10-year Childcare Strategy now in place (DfES, 2004) which includes Choice for Parents, The Best Start for Children, and the Childcare Act 2006 (DCSF, 2009). The Early Years Foundation Stage (EYFS) is a central part of the government's plan (DCSF, 2008) and sets out that all early years' providers are required to use the EYFS framework to ensure that whatever setting parents choose, that they can be confident their child will receive a quality experience that supports their development and learning. This includes the emotional wellbeing of children, with the EYFS framework emphasising the need for positive relationships between staff and children, that are close, warm and supportive, and where children are able to form secure attachments with a key person, who will respond sensitively to their feelings, ideas and behaviour.

In addition the Childcare Act (HMSO, 2006) places a duty on providers to ensure that the adults looking after children have appropriate qualifications, training, skills and knowledge. This refers to qualifications at all levels, from induction training, to continuing professional development. Regular appraisals are required to identify the training needs of staff and a programme of professional development put in place to meet these needs. Where practitioners require additional training in order to assess children's progress from birth onwards, it is the responsibility of the provider to ensure that practitioners receive the support they need. This highlights a duty on childcare providers and professionals working within early year's settings to provide and identify training needs for practitioners working with babies and young children.

1.1: *Aim and commissioning of research project.*

This study focuses on evaluating the impact and outcomes of the 'Building Strong Foundations' project. This is an intervention designed by educational psychologists and early year's workers and delivered to early year's settings, in the form of training, and by developing reflective practice. It aims to increase awareness of attachment principles and the importance of creating a nurturing environment within such settings. This research was developed from and in response to a meeting with stakeholders in this project, who wanted the impact of this intervention evaluated.

1.2:   *Description of intervention.*

The Building Strong Foundations (BSF) project is training for early year's practitioners, focusing on the emotional and social development and early communication of babies and young children. Its aims are to enable early year's practitioners to develop reflective practice through:

- Understanding the importance of practitioner/child relationships – particularly attachment, containment, attunement and bonding in early childhood development.

- Understanding how their role supports and enables children's early communication, emotional and social development.

- Having an awareness of how to help children recognise, understand and mange their emotions.

- Understand the importance of a nurturing environment.

- Getting in tune with their own feelings and those of others.

- Developing an understanding of children's behaviour as communication.

In addition, each week participants are given a weekly reflective homework task to develop thinking and awareness further. A more detailed description of the structure and content of the training can be found in Appendix 1.

2. **Literature review.**

2.1: *The efficacy of early year's interventions.*

Fukkink and Lont, (2007) integrated findings from quasi-experimental studies, published between 1980 and 2005, into the effects of specialised training on caregiver competencies (for example, professional knowledge, attitudes, and skills). Their findings support a direct causal link between professional training and improvement of caregiver competencies. A medium effect size was found (d=0.45) for specialised training on general caregiver competency. Positive outcomes were found in the knowledge, attitude and skills, with attitude having most gains (d=0.65). However, no significant effects of training on the child were found. Fukkint and Lont (2007) conclude that training does matter:

> '... and that specialised training improves the 'pedagogical competencies of caregivers in childcare, including their professional attitude, knowledge and skills' (p.305).

Rhodes and Hennessy (2000) offer evidence for the positive effects of training on caregiver behaviour. They evaluated a preschool training course on playgroup practice, which covered the needs of children, role of play, and function of playgroups. Caregivers who received the training (n=16) made significant gains in levels of caregiver sensitivity and higher levels of play compared to comparison caregivers (n=16). Intervention caregivers had more positive relationships with the children and demonstrated a significant reduction in levels of detachment. The comparison group of caregivers showed no change in ratings of sensitivity.

The Solihull Approach (Douglas, 1999, 2004) is a theoretical framework for

practitioners, working with preschool children and covers concepts similar such as

containment, reciprocity and behaviour management from psychodynamic, developmental

and behavioural models (Whitehead and Douglas, 2005). An evaluation of this approach by

Douglas and Ginty (2001), and Whitehead and Douglas (2005) found that it increased the

consistency of practice among health visitors; increased job satisfaction and enhanced their

confidence in their skills, when working with clients and other professionals. A broader

understanding of how and why children's difficulties develop, including focusing more on

emotions and understanding that behaviour within the home was often a result of a

situation rather than the cause was also reported. Furthermore, an increased understanding

of the role and importance of containment and reciprocity, and being more reflective about

their work was also stated. One major finding from this evaluation however, was an

inconsistency in the utilisation of the approach, in that it had become embedded in some

health visitor's practice, but not others:

> '...there was a sense that the current programme in Solihull was not sufficient. One
> suggestion for improvement was further training and increased support networks...
> and a mentoring scheme for people newly trained in the Solihull Approach'
> (Whitehead and Douglas, 2005, p. 22)

Milford et al (2006) evaluated the Solihull Approach in comparison with routine

health visitor practice and found that there was a significant difference favouring the

outcomes of the intervention group in relation to parent perception of problem severity,

parental distress, parent child dysfunctional interactions, child difficulty and overall parental

stress. Milford et al (2006) conclude that the Solihull Approach may be more effective than standard health visiting practice in addressing challenging behaviour in young children.

Lowenhoff (2004) developed a training package based on the Solihull Approach which aimed at building capacity in other professionals, such as health visitors, nursery nurses, school nurses, Sure Start workers and school counsellors, by increasing understanding and supporting the management of emotional and behavioural difficulties. All but two participants (n=40) rated the course very highly, especially with regards understanding children's behaviour. An additional component of this training however, which differed to the Solihull Approach, was that attendees had access and opportunities to engage in group consultation with representatives from the child and family consultation service. This may have served to enhance the outcomes of the evaluation and supports Whitehead and Douglas' (2005) findings, that initial training needs to be supported through supervision and mentoring. However, the limited reported description of the tools and analysis used to evaluate this study questions the reliability of the results and makes it impossible to generalise any findings.

2.2: The efficacy of interventions based on an attachment framework.

The interventions described in the previous section, all derive from a variety of models and theories, with the Solihull Approach managing to successfully combine and integrate concepts from behavioural models, psychodynamic and developmental frameworks, such as, attachment theory. Attachment theory (Bowlby, 1969, 1973, 1980) has become widely regarded as the most important and supported framework for understanding

social and emotional development (Goldberg, 2000). A growing number of educational and

parental interventions are based on attachment theory, and the body of research that

underpins it.

Bakermans – Kranenburg et al (2003) conducted a meta -analyses investigating the

effect of attachment interventions on maternal sensitivity and found that interventions that

focused on sensitivity were more effective than those that focused on both sensitivity and

support. Other findings concluded that interventions with video feedback were more

effective than without, and interventions with fewer sessions (between 5 and 16) were more

effective than interventions with more than 16 sessions.

In a longitudinal study, Van den Boom (1995) looked at the effects of an attachment

intervention on mothers from low socio-economic backgrounds in the Netherlands, who

were categorised at birth as having irritable babies. At 18 months, a significant association

was found between the treatment group and attachment classification, with 72% of infants

being classed as secure compared to 26% in the control group. Benefits of intervention were

also seen at 24 months. Van den Boom describes that intervention mothers were:

> '…*more responsive to positive and negative child interactions, displayed more
> sharing of interest/objects with child, used balanced discipline and commands,
> allowed children autonomy and issued little direct instruction*' (Van den Boom, 1995
> p. 1811).

In the third year positive effects were still found. Intervention mothers offered children

guidance with interaction, and peers and husbands of intervention mothers were also more

responsive. Intervention children had less problem behaviours, were more secure in

relationship with their mothers and had better relationships with peers.

Howes (1999) suggests that children will form attachments outside the home environment when they are in provision of physical and emotional care and when an individual has a consistent presence and an emotional investment in the child. The relationships that children develop with early year's workers and teachers are therefore similar to those with the primary attachment figure (Kennedy and Kennedy, 2004) and as Bronfenbrenner's ecological model (1979) demonstrate, different systems in which children and families interact will influence the development of a child.

Kennedy and Kennedy (2004) practitioners need to consider the internal working model of the children, and have knowledge of relationship histories in order to tailor strategies that are compatible with the child's needs. Kennedy and Kennedy (2004) highlight the fact that there is little literature on educational based attachment interventions. Most interventions are clinic based and most educational interventions appear to be reactive rather than preventative (Fitzer, 2010, part one).

One preventative attachment based intervention is that of nurture groups. Colwell and O'Connor (2003) sought to determine a reason for the effectiveness of nurture groups by looking at the enhancement of self-esteem among children, through observations of teacher behaviour and communication in both nurture groups and normal classrooms. Findings indicate that the majority (86.4%) of statements made by nurture group teachers reflect behaviour that may enhance self-esteem compared to mainstream teachers (50.7%). These results suggest that teachers who take on board nurture group principles, based on attachment principles, facilitate development and learning by keeping pupils interested and oriented to learning tasks, and by maintaining a caring and understanding attitude.

Tomlinson, et al. (2008) describe a preventative attachment based intervention based in nurseries in the UK. When conducting this literature search the above study appeared to be the only published evaluated intervention based on an attachment framework into nurseries and early year's settings. This CAMHS intervention aimed at training nursery staff in basic attachment concepts and discusses how they could be applied in practice. This training was conducted with 24 practitioners in a variety of nurseries. The intervention was evaluated using self-report questionnaires, with a 5 point Likert scale. All participants reported that they learned some new ideas and took away ideas for their own personal and professional use. Tomlinson, et al. (2008) suggests that nursery staff found attachment concepts useful and applicable. However, the evaluation appeared to focus primarily on evaluating the training rather than the outcome of the training for children and staff.

A range of interventions based on attachment theory have been developed, and there is some evidence of their effectiveness through evaluation. Early intervention work into educational settings appears to be limited and certainly the efficacy of such interventions is yet to be sufficiently supported. Furthermore, there are limited attachment based, preventative interventions into nurseries and early year's settings, which are adequately evaluated. Attachment based interventions in these settings, would seem to be central, considering the increasing demand for childcare in such provisions and the need for effective early year's programmes (NCB, 2007 and the Childcare Act, HMSO 2006). Therefore, the importance of attachment theory and its principles, as outlined in table 1, need to be shared with early year's practitioners and those working with young children. Such principles include, understanding the importance of the practitioner relationship in

supporting children's emotional, social and communication development; the need to contain and attune to a child's needs, in order to develop a positive attachment relationship; the need to view behaviour as a form of communication; and the importance of a nurturing environment in order to create a positive learning experience and secure base for the child.

3. Research Design.

3.1:   *Justification for study and research questions.*

Previous attachment interventions have looked at increasing practitioner sensitivity and responsiveness, and have mainly been reactive, or secondary and tertiary preventative interventions. Raising awareness through preventative primary interventions, which are evaluated to provide a strong evidence base, will allow for a greater understanding, sensitive response and more effective use of practitioner's skills when working with children. However, the lack of reported evaluations of early attachment interventions into nurseries and early year's settings means that some questions remain unanswered.

Yin (2009) states that defining research questions is probably the most important step to be taken and decided in a research study, and careful consideration of the type of questions asked is necessary in order to follow the most appropriate research strategy. As the nature of this project was to evaluate the impact of the Building Strong Foundations project, it was decided that 'how' questions would be most appropriate as they are more explanatory in nature.   From this perspective one key research question was posed:

1. How applicable are attachment principles in early years settings and how effective are interventions in these settings in changing practitioner behaviour and understanding.

3.2: Epistemology.

The philosophical stance of the current small scale study is pragmatic following a realist view of science that there is a reality which exists independently of our awareness of it, but acknowledging values in contrast to positivists, who claim activities, are value free (Robson, 2002).

As pragmatists believe there are fundamental differences between natural and social phenomena, it is acceptable to use mixed methods for different subject matter (Bhaskar, 1979), which allows for the use of both quantitative and qualitative data collection methods, as used within this current study.

3.3: Research strategy - case study methodology.

Robson (2002) defines case studies as a:

> *'...research strategy which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence' (p.*178).

The strengths and limitations of case study research are outlined in table 5. A case study design was used as the research strategy in this evaluation, as it was felt appropriate

for a number of reasons. Primarily, the evaluation was intended to be widespread and large in scale, possibly through the use of a survey design. However, due to the limited number of settings which had received the intervention by the time data collection was necessary for this study, a more in depth evaluation was decided upon.

Concurrently, whilst conducting the literature search it became apparent that little was known about the application of attachment interventions into early year's settings. Therefore the overall theory and research question, as stated above, was to investigate 'how' effective interventions, with attachment principles are in these settings. Yin (2009) states that 'how' questions are more likely to lead to case studies, as the preferred research methodology, because they deal with causal links and are explanatory as opposed to exploratory, which fits with the evaluative objective of this study. It was decided that a case study design as opposed to an alternative method, such as a survey would offer some insights into how the training had worked in different contexts, for example if the outcomes had differed depending on different settings.

Furthermore, a case study examines contemporary events in a real life context, and in addition to other research strategies, such as histories; a case study tends to include an observation of events and interviews with people involved. Sturman (1999) suggests that a case study design evaluating an intervention in a child, class, school or community would provide a unique example and observation of effects in a real context.

One limitation which was identified when carrying out the literature review for this research, was that many studies were unable to generalise their findings due to the small sample size used (Patton et al, 2003; Doucette, 2004; Tomlinson, 2008). This problem of

generalisation is overcome with a case study design, because case studies generalise to theoretical propositions, by expanding theory and not to populations (Yin, 2009). A case study was therefore considered appropriate for this evaluation because of the small number of settings available to participate.

Studies with larger sample sizes, which were able to be generalise to a wider population in the literature (Bakermans – Kranenburg, 2003; Van den Boom, 1994, 1995) were mainly randomised controlled trails. Such research stems from a positivist view that knowledge about the social world can be obtained objectively, stating that what we see and hear is straightforwardly perceived and recordable (Thomas, 2009). Although some may suggest that this is the gold standard in research, critics and researchers would suggest that such research is not value free and does not take into account the views or the unique experiences of the participants and practitioners involved. Thus, attachment based interventions had only an established evidence base within the positivist paradigm, with limited studies successfully managing to gain the views of participants and practitioners involved in the interventions. It was therefore felt that a case study would allow the views of participants to be collected through qualitative means, as well as additionally allowing for quantitative data collection, which allowed cross case comparisons to be made easily.

A multiple case study design was employed, in this study because multiple case studies are considered more compelling and therefore the overall study considered more robust (Yin, 2009). In addition findings from a multiple case study offer better support for initial propositions and allow for theoretical generalisation. A multiple case study, through the use of replication logic also allowed me to study conditions under which a particular set of outcomes is likely to be found, as well as conditions where outcomes are unlikely to be

found. Three settings were chosen for literal replication because the theory identified was straightforward and it was felt three settings would give an appropriate degree of certainty (Yin, 2009). Theoretical replication was provided by including a comparison setting. Only one comparison was included because the rival explanations identified, were not considered sufficiently strong that more than one setting was needed (Yin, 2009).

Table 5: Srenghts and Limitations of Case Study Research

Strengths	Limitations
Gets at the complexity of social phenomena: 'meaning in context' and generates detailed in depth knowledge of particular case.	Difficult to define to boundaries of the cases or units of analysis. - Clear research questions, which are not too numerous or with too minor elements need to be adopted in order to help define the units of analysis in a case study (Yin, 2009).
Distinctive place in evaluation research	Generates lots of rich data of different types, which can lead to a data overload
Use of multi-methods means that a phenomenon can be studied from different angles and allows triangulation.	Open to researcher bias – selective processes of data used and included in analysis – important to explain rationales for decisions and make researcher assumptions explicit (for example, with a case study protocol).
Allows for theoretical generalisation (developing theory), so the problem of a small sample size is overcome.	

(Based on Robson, 2002; Cohen et al, 2007; and Yin, 2009)

As the aim of this project was to evaluate how effective the Building Strong Foundations project had been with regards to the above research question, a case study design was selected because it allowed for effects of the BSF intervention to be examined in a real life context, as Sturman (1999) proposes, and enabled the examination of a specific theory, by examining the extent to which its propositions could or could not be accepted, thus providing theoretical generalisation.

Yin (2009) states that the five components of research design which are especially important to case studies are as follows:

1) research questions;

2) propositions;

3) units of analysis;

4) the logic linking the data to the propositions

5) the criteria for interpreting the findings.

A case study protocol (adapted from Brinkerhoff, 1983 and Yin, 2009) was used to structure the design of this project and to increase the reliability of the research (Yin, 2009). This can be seen in Appendix 2. This protocol was also particularly useful in this project because it helped to focus the evaluation objectives and design and to consider Brinkerhoff's (1983) thinking concerning the focussing stage of an evaluation. These considerations were incorporated within the protocol. The specific purpose and focus of the project design is presented in table 6.

Table 6. Purpose and focus of the research design.

Explanatory	This is an explanatory case study because it is theory testing through evaluation. I have an idea about what I will find out; therefore knowledge driven theory.
Summative:	This evaluation will look at what the training has achieved and what are the outcomes.
Multiple	A multiple case study design has been used. The evidence from multiple case studies is more compelling and the study is regarded as more robust.
Replication Logic	**Literal replication:** With three early years' settings where the intervention has taken place. Hoping to predict similar results. **Theoretical replication:** predicts contrasting results with one setting where the intervention has not been carried out (comparison setting).
Embedded Units	Main unit = setting Practitioner's awareness Practice of staff in settings

3.4: Theory.

This study aims to show that communicating knowledge of attachment principles and how to apply such principles in early year's settings will have a positive influence on the practice and understanding of early year's practitioners, which will lead to a more nurturing environment for children and more reflective practice by staff.

3.5: Theoretical propositions.

Theoretical propositions were stated in this study because the 'how' type of research question does not point to what should be studied (Yin, 2009). Propositions, however, direct attention to what should be studied and where to look for relevant evidence (Yin, 2009). The propositions were primarily adapted from the objectives of the project and are consistent with the attachment principles as outlined in table 1. This ensured that the

training could be evaluated according to the initial intended aims. The propositions were then used to shape the appropriate data collection of the study (see table 7).

The vignettes were used in conjunction with the semi structured interview and the observation; in order to address certain propositions and attachment principles, which I felt would more easily be elicited through responses to the vignettes. This was specifically the case for propositions 1, 3 and 5. It was felt that vignette scenarios would allow practitioners to be able to comment and make judgements about more observable behaviours and concepts, in conjunction with detailing their own practice and understanding in the semi structured interviews. For example, it was felt that attuning to, and containing a child maybe more observable, compared to observing attachment or bonding, and therefore more likely to be elicited and noticeable in response to the vignettes (see appendix 5 for further details).

Table 7: Theoretical propositions and data collection methods.

Proposition	Data Collection Method	Type of data
1. Practitioners will utilise concepts such as attachment, attunement, containment and bonding and will make reference directly or indirectly to these terms when describing their relationships and interactions with children.	Vignette Semi-structured interview (Q1)	Qualitative
2. Participants will emphasise and rate their role as highly influencing children's social and emotional development and communication	Likert scale on semi-structured interview (Q6)	Quantitative
3. Given a situation where a child is displaying challenging and/or emotional behaviour, practitioners will report feeling more confident dealing with this, following the intervention.	Scaling question after vignette	Quantitative
4. The nursery will have an observable nurturing environment.	Observation (ECERS-R Scale)	Quantitative
4.1 Practitioners will provide emotional support and act as a secure base for children who have become distressed by remaining calm and either engaging them in a task or comforting them physically.	Observation	Qualitative
4.2 Practitioners will describe an ideal nurturing environment as a setting that values/respects the child, where staff act as a secure base, where learning is developmentally understood, where the importance of transition is understood.	Semi-structured interview (Q2)	Qualitative
5. Practitioners will make a connection to children's feelings when describing differing types of behaviour and will talk about behaviour as having a meaning/reason and acting as a form of communication.	Vignette/semi structured (Q 3 & 4)	Qualitative
6. Staff will report engaging in more reflective practice and reflecting on their own feelings more.	Semi-structured interview (Q5)	Qualitative

3.6: Settings and participants.

Four early years settings were used in this study. Three settings where the training has been delivered (literal replication) and a comparison setting where the training had not taken place (theoretical replication).

Table 8: Characteristics of settings

Setting	Premises	No. of practitioners.	No of practitioners that received training.
Setting 1	Non domestic premises. 1 Privately run.	18	18
Setting 2	Non domestic premises. Privately run.	13	12
Setting 3	Non domestic premises. Surestart Children's Centre, run by metropolitan borough.	20	18
Comparison setting	Non domestic premises. Privately run.	15	n/a

Within each setting, four early year's practitioners volunteered to answer questions from the semi-structure interview and vignettes. Where possible participants were selected that cared and worked with different age groups within the setting (for example, from the baby room, toddler room and preschool room). A manager or deputy manager was always included as one of the participants also. An observation lasting between thirty minutes and

1 **Childcare providers on non-domestic premises** are people who care for individual children in premises that are not someone's home. These premises can range from converted houses to purpose built nurseries (www.osted.gov.uk, 2009).

one hour was conducted within each of the settings, (see section 3.7.3), with varying amounts of time being spent in each room, due to the structure of the different settings.

The settings available to use in this evaluation were restricted to those which had received the training; therefore convenience sampling was the strategy used to allocate participants and settings, which could be regarded as a weakness in this study. Robson (2002) describes convenience sampling as:

'...choosing the nearest and most convenient persons to act as respondents' (p.265).

At the point of starting this project only two settings had received the training, although approximately 20 had been allocated dates to receive the intervention. The comparison setting was selected from this latter group, as it was felt more ethical to use a setting which was waiting to receive the training.

Although it was difficult to control for variables between the settings (for example, years of experience of participants, number of children within the setting, gender), I was able to match nurseries according to recent OFSTED inspection reports. All settings, including the comparison were rated at their latest inspection report by OFSTED as 'good' for their overall effectiveness. Limitations in this sampling strategy are discussed in the concluding chapter.

3.7: *Data collection methods.*

3.7.1: *Multi-method approach:*

This case study utilises a multi-method approach to data collection, with both quantitative and qualitative data collected. Multi-methods were used because case studies rely on multiple sources of evidence, with data needing to converge in a triangulating fashion (Cohen et al, 2007). In addition a pragmatic epistemology lends itself to multiple methods of data collection because pragmatists believe that the methodological approach adopted in research should be that which works best for a particular research problem (Robson, 2002; Yin, 2009). As the case study in this evaluation was an embedded case study design, different types of data collection were needed for the main unit and embedded units. Multiple methods also allowed me to address the numerous propositions efficiently. I was able to explore and explain events at a higher level by using qualitative data, as well as using quantitative data to help provide outcome data for evaluation and make cross case comparisons easier.

Case study designs and the use of multi-methods can be criticised because they can be open to bias and allow for subjective interpretation of data (Cohen et al, 2007). The selective processes of methods may lead to researcher bias, therefore, appropriate steps were needed to be taken to ensure validity and reliability (see table 12). Furthermore, the qualitative data generated, especially in a multiple case study can be vast and therefore a plan was needed to consider how to successfully apply meaning to, and reduce the data overload possible in case studies.

Despite such limitations a multiple method approach to data collection was taken because it was felt that this approach guarded against bias. Using multiple methods allowed me to gather a wide range of evidence from different sources, which ensured construct validity in this study. Gaining qualitative data, including identifying rival explanations also allowed me to make inferences and provide theoretical triangulation as to why the outcomes occurred in one context compared to another, thus ensuring internal validity. In addition the standardised observations used in this study allowed me to generate numerical data and make cross comparisons.

3.7.2: Semi structured interview and vignette design.

Yin (2009) states that one of the most important sources of case study information is the interview, because participants can provide important insights into events and situations, as well as gaining their opinions and attitudes. A semi – structured interview was used in the current study as it allowed for the interviews to be open ended and follow a free-flowing, conversational manner, whilst still pursuing a certain set of questions derived from the study's propositions (Lee, 1999; Yin, 2009).

Two vignettes were also used to elicit participants' views. These were used in conjunction with the semi-structured interviews because the vignette design allowed a focus on practitioner judgment, in relation to a possible real life situation. Analysis of the responses provided an example of practitioner, self reported decisions on how to deal with the emotions and behaviour of the child described in the vignettes.

3.7.3:   Structure of semi structured interview and vignettes.

All data collection was carried out between October 2009 and February 2010,

including a pilot interview, to obtain feedback about data collection tools (appendix 7 and

7a). A description of the process is displayed in table 9. A detailed description of the

structure of the semi-structured interview can be found in appendix 4 and the vignette

designs in appendix 5. The interview and vignette schedules can be found in appendix 4a and

5a. Critical reflections on the reliability and validity of the data collection methods and the

research design will be discussed in more detail in the concluding chapter of this volume.

Table 9: Process and structure of semi-structured interviews and vignettes.

Process/Structure	Justification
Interviews were conducted within the setting in a private room.	To avoid interruptions
Vignette case scenarios were presented after the interview. Interviews and vignettes were presented after observation.	So participants did not become aware of evaluation aims, thus effects results.
All sessions (interview and vignettes) were planned to last approximately 15 – 20 minutes.	This was deemed the maximum amount of time for a practitioner to be withdrawn from the setting and for cover to be provided.
I conducted all interviews.	This was advantageous as I had no previous relationship with any of the settings and was therefore well placed to provide a non judgmental opinion.
At the start of the interview I discussed the aims and the purpose of my role, with a factual introductory question about how long they had worked at the setting, and their role within the setting.	To encourage the practitioners to talk and feel comfortable.
The conduct of the interview was explained to each participant.	To establish an appropriate calming atmosphere, so that each participant felt that they could talk freely and securely (Kvale, 1996).
I closed each session by giving a summary of responses.	To ensure practitioners had the opportunity to check that these were a fair representation of their views and to suggest adjustments, as appropriate (Cohen et al, 2007).
Semi structured interviews and vignette scenarios were digitally recorded.	Digitally recording was considered is useful because it captures and exact record of conversation. However it does not record visual aspects of the physical context, facial expressions or body language (Lee, 1999)
Field notes were taken	Banister et al (1994), however, suggests that these field notes can be unreliable because the researcher brings their own experience and memory of the interview to the analysis.
Interviews and vignette responses were not transcribed in full but instead an abridged transcript (see appendix 3) was produced for each participant	In order to ensure time efficiency and to enable data to be coded and allow for qualitative analysis.
An educational psychologist working within the same service compared the typed abridged transcript with what they heard on the digital recordings. The educational psychologist and I were in agreement about what we had heard on the recordings.	To ensure confirmability and credibility and to ensure reliability and concordance with current guidelines published by the British Psychological Society
The digital recordings were listened to several times	To ensure the transcribed responses contained all the information needed to understand them in context

3.7.4: ECERS-R schedule.

A structured observation of each setting was also conducted to provide data

triangulation and a further source of evidence. It was felt that an observation would

complement the semi-structured interviews and vignette data, as it would provide evidence

of observable behaviour and practice within the settings, rather than just relying on

practitioner's accounts and views. Robson (2002) suggests that:

> *'...what people do may differ from what they say they do and observation provides a*
> *reality check' (p.310).*

A structured observation was used as opposed to a narrative/unstructured

observation so that numerical data could be used to facilitate comparisons between settings

(Cohen et al, 2007). The observations were structured and scored by using the ECERS-R

(Early Childhood Environment Rating Scale - Revised). Details of the ECERS-R schedule can be

found in appendix 6. As the objective of the observations was to provide evidence of a

nurturing environment within the settings (proposition 4. and 4.1) and to observe

practitioners response to behaviour (proposition 5) it was felt that completing the whole

seven scales would be unnecessary, as some subscales would not be relevant (for example

'space for gross motor play'). Therefore seven subscales were selected by the manager of

the early year's team and myself, as being the most relevant to measure the above

propositions. These are displayed in the table 10 below:

Table 10: List of subscales used from the ECERS-R observation schedule.

Name of subscale	Main scale name
Greeting/departing	Personal Care Routines
Encouraging children to communicate	Language-Reasoning
General supervision of children	Interaction
Discipline	Interaction
Staff – child interactions	Interaction
Interactions among children	Interaction
Staff interaction and cooperation	Parents and staff

3.8:   Ethical considerations.

Ethical concerns encountered in educational research can be complex and frequently place researchers in moral predicaments. The key ethical challenges inherent in the project were explored and identified using the guidelines developed by the University of Birmingham's School of Education Research Ethics Protocol (Appendix 8), which is based on guidelines from the British Educational Research Association (BERA, 2004).

Written information about the project as well as a verbal overview was given. The written overview gave assurances about confidentiality and anonymity. Participants were asked to give written consent for their participation (appendix 9). Written consent was also gained from the setting's manager for the approval of the observation of staff within each setting (appendix 10).

3.9:   Approaches to data analysis.

3.9.1: Analytic strategy: Relying on theoretical propositions and using both quantitative and qualitative data.

According to Yin (2009) an analytical strategy will allow the evidence to be treated

fairly, making compelling conclusions and ruling out any alternative interpretations. The

strategy used in this project was to rely on the theoretical propositions to guide my case

study analysis, because they shaped my data collection and helped focus my attention on

certain data, whilst ignoring other data. According to Yin (2009) propositions stemming from

'how' and 'why' questions (as in this research design), can be extremely useful in guiding

case study analysis. Quantitative data was also used, to help explain the outcomes of the

evaluation by providing evidence of change within the setting, the main unit of analysis, and

the embedded units (staff understanding and practice).

3.9.2: Analytical technique for qualitative data.

A template approach to data analysis was used (Robson, 2002), with key codes

determined prior to the analysis, based on propositions, allowing for more than one code if

necessary, (for example, where a participant mentioned attunement, containment,

attachment or bonding, these were all given separate codes even though they related to one

proposition). These codes were used as a template for data analysis, with 'secondary level'

coding subsequently taking place. Here initial codes were divided into more discrete codes

or units of meaning, (Miles & Huberman, 2002), for example, creating three additional codes

out of one, or collapsing codes. I allowed additional codes to occur that I felt were important, even if they didn't relate to original propositions but contributed to outcomes of the evaluation (see figure 2). A copy of the definition of all codes, including their definition and how they relate to the original propositions can be found in appendix 11. The frequency of the number of times each code appeared for each separate participant and settings were then calculated for comparison.

An educational psychologist coded one of the interviews and the codes used were compared with those selected by myself when coding the same interview in order to give a measure of intercoder reliability (see Appendix 12). An intercoder reliability score of 71.4% was achieved, which Miles and Huberman (2002) suggest is difficult to achieve on an initial coding, where usually intercoder reliability does not exceed 70%. Any disagreements which occurred with the codes happened mainly for two reasons: firstly where an opportunity to allocate a code was missed and secondly where two possible codes could have been allocated.

1. Predetermined codes created based on propositions, allowing more than one code to relate to a proposition if necessary.

2. Interview and vignette recordings are listened to and key phrases/sentences transcribed.

3. Interviews listened to several days after original transcription to ensure internal consistency. (transcripts also listened to by an additional educational psychologist to ensure inter-rater reliability)

4. Interviews and vignettes coded separately. Codes are allocated to transcribed phrases/sentences.

5. Transcripts coded by an educational psychologist to ensure inter-rater reliability. Changes made to codes where necessary.

6. Secondary level coding applied. Coding made more discrete, new codes added (see appendix 11)

7. Interview and vignette recordings listened to again to check the context of transcribed text and to ensure codes accurately reflect meaning.

8. The frequency of codes occurring in interviews and vignettes, for each setting are calculated for comparison.

Figure 2: Coding Process Used to Carry Out Qualitative Analysis of Interviews and Vignettes

3.9.3: Analytical technique for quantitative data.

Each subscale on the ECERS-R schedule is scored between 1 and 7, with 1 being inadequate and 7 being excellent, therefore each setting could be awarded a total score from 1 to 7, for each subscale. The maximum total score across all seven subscales for each setting could therefore be 49. Total scores and individual subscale scores for each nursery were calculated for comparison. Previous ECERS-R scores conducted by the early year's team for each setting were compared with ECERS-R scores (apart from setting three, where data was not available) to ensure reliability of the observation. However, previous ECERS-R scores

conducted by the early year's team were carried out at different times for each setting, , making reliability comparisons difficult. For a comparison and more details see appendix 13.

The frequencies of the Likert scale response to question 6 in semi-structured interview were totalled for each setting. The scaling questions after both vignettes were also totalled and compared across the intervention settings. All quantitative data was analysed using descriptive statistics.

3.9.4: *Identification of rival explanations.*

Attempts to ascertain other influences that may have affected the outcome of the study were also identified during data analysis (table 11). This was to ensure further internal consistency and to allow an in depth analysis of the outcomes, by either accepting or rejecting such rival explanations and thus placing more confidence in the interpretation of the findings.

Table 11. Descriptions of identified rival explanations.

TYPE OF RIVAL	DESCRIPTION
Craft Rivals **1.Null explanation** **2.Threats to Validity** **3. Investigator bias**	The outcomes are the result of chance circumstances only The outcomes are a result of limitations in sample, reliability of data collection tools and reliability of analysis Outcomes are due to researcher bias and the 'experimenter effect'
Real Life Explanations: **1. Direct Rival explanation**	Interventions previously carried out in settings account for effects. Settings 2 and 3 and the comparison setting previously received Behaviour training prior to the Building Strong Foundations Training. Setting 1 received no prior training. Additionally, setting 3 received 'Triple P' parenting training and reflective team training.
2. Commingled Explanation	The BSF training and the other interventions in the early years settings account for the results.
3. Implementation explanation	The implementation of training, not the content accounted for results. The training may have provided space for practitioners to think through and respond to key aspects of their practice (self-critical inquiry); therefore the process rather than the content caused the outcomes.
4. Super rival explanation	Some concepts and terms may be used outside of this intervention and used more frequently by both early year's workers and lay people and therefore known to practitioners previous to intervention.
5. Political Explanation	The Ten Year Childcare Strategy (2004); Childcare Act (2006) and the government emphasis on early years through the recent implementation of EYFS curriculum which focuses on developing positive and nurturing relationships with children, and improving their emotional wellbeing may have served to improve practitioners understanding and practice in these areas.

* Table based on Yin (2009)

4. Threats to validity and reliability – steps taken.

Steps were taken when designing the study to ensure validity and reliability where possible. However, there are limitations to validity and reliability in this project and a critical discussion surrounding these issues can be found in the concluding chapter to this volume. Table 12 displays the steps taken to ensure validity and reliability.

Table 12: Steps taken to ensure validity and reliability:

	Step taken	Phase of research
Construct Validity	Multiple sources of evidence	Data collection
	Pilot of semi structured interviews and vignettes	Data collection
Internal Validity	Rival explanations identified.	Collection/Analysis/Composition
External Validity	Replication logic used.	Research design
Reliability	Case study protocol used	Data Collection
	Interviews listened to several days after original transcription.	Data Analysis
	Inter-coder reliability by listening to digital recordings and coding transcript.	Data Analysis
	Previous ECERS-R scores compared to my ECERS-R scores to ensure reliability.	Data Analysis

5.   Results: cross- case synthesis.

Cross-case analyses, of the calculated frequencies of responses for each developed

qualitative code, per participant are displayed in appendix 14, for semi structured interview

responses; and appendix 15, for vignette responses. Appendix 16 displays the total

combined responses for semi structured interviews and vignettes for each participant.

Although frequencies were calculated for each setting, the next sections discuss how results

apply to each proposition studied.

5.1: Practitioners will utilise concepts such as attachment, attunement, containment and

bonding and will make reference directly or indirectly to these terms when describing their

relationships and interactions with children.

The evidence to support this proposition was mixed. All settings (including the

comparison) made indirect references to attachment, attunement, containment and

bonding, although the comparison setting discussed terms containment and attunement

with a lower frequency compared to intervention settings. Direct references to terms

attachment were made by intervention settings and direct reference to bonding was made

by the comparison and setting 3. The number of direct references made to any one of these

concepts, compared to indirect references was considerably lower for all settings. Responses

elicited from the vignettes were higher for all settings compared to responses from the semi-

structured interviews. A general discourse around attachment was evident in intervention

settings.

Table 13: Results for proposition 1.

Intervention Setting	
1	Settings 1, 2, and 3 all used indirect references to 'attachment and bonding'
2	Setting 1, 2, and 3 all used indirect references to 'attunement and 'containment'. The frequency of responses was higher from the vignettes compared to SSI.
3	Settings 1, 2, and 3 all made direct references to 'attachment', and setting 3 made a direct reference to bonding
4.	A general discourse around attachment was evident in settings 1 and 3 based on analysis from the interviews and vignette responses.
Comparison Setting	
1.	Used indirect references to 'attachment' and 'bonding', with equal frequency to intervention settings.
2.	Used indirect references to 'attunement' and 'containment', with a lower frequency compared to intervention settings. The frequency of responses was higher from the vignettes compared to the SSI.
3.	Made direct references to bonding, but not to attachment
4.	No examples of a general discourse around attachment were evident.

5.2 Participants will emphasise and rate their role as highly influencing children's social and emotional development and communication.

The mean Likert scale responses was noticeably high for all settings when staff were rating how influential their role is in supporting children's social, emotional and communication development, indicating that they understood the importance of their role in influencing these areas of development in children. The mean scores for intervention settings was slightly higher compared to the comparison setting for emotional and

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communication development, however the difference in mean scores is so small it is difficult

to conclude that any variations are due to the intervention. The total mean scores were

equal across all settings for social development, indicating no intervention effects.

	S1	S2	S3	CS
Social	9.5	9.5	9.5	9.5
Emo	9.75	10	9	8.75
Com	9.75	10	9.25	8.5
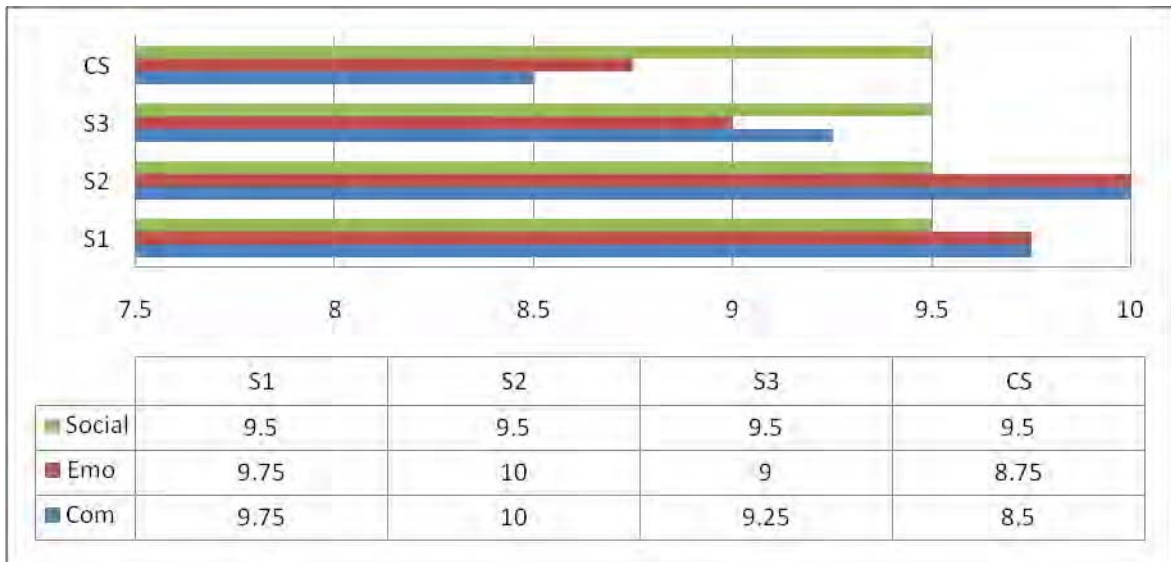
Figure 3: Total mean scores for Likert scale responses, per settings:

5.3: Given a situation where a child is displaying challenging and/or emotional behaviour, practitioners will report feeling <u>more confident</u> dealing with this, following the intervention.

Descriptive statistics suggest that the intervention has improved practitioners'

confidence in helping children to understand, recognise and manage their emotions. The

mean score was 7.8 in response to vignette one (SD=2.49) and 6.9 in response to vignette

two (SD=2.84). One practitioner in setting 2 gave an outlying score of '1' to both vignette

scenarios, lowering the total mean score. However the total modal response for both

vignettes was '8'.

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Figure 4: Quotes/ Excerpts from Interviewees relating to the how the training has helped practitioners recognise, understand and manage children's emotions.

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10 – 'I'd be very confident now. Before training I would have coped with it the best I could but this has refreshed me and made me think a little bit more of ways of dealing with it and considering the reasons why children are behaving the way they are because you do get into the routine and complacent really with all the other things that are going on' (participant 1, setting 3).

7 – 'easy to get aggravated and annoyed, you have to be careful not to show aggression or shout or anything that will up the ante, the training has helped me not to get myself stressed and calm myself down about it and respond sensitively. They are doing it for a reason and its normal... it's part of their development. Its communication, children do it in all different ways' (participant 3, setting 2)

8 – 'Feel a lot more confident, because the training it did make you think about your emotions as well which we didn't do, so it's not just the children's emotions but ours, as they rub off on the child.' (participant 4, setting 1)

9 –'I'm a lot more confident because it changes your whole perspective I think on behaviour, I think a lot of people would say 'no don't snatch', because obviously the child can't communicate and its putting yourself in their shoes, and thinking actually the child is probably just used to paying on their own that not just doing it to be nasty.' (participant 3, setting 1)

5.4:   *The setting will have an observable nurturing environment.*

	S1	S2	S3	CS
■ ECERS score	48	32	48	11
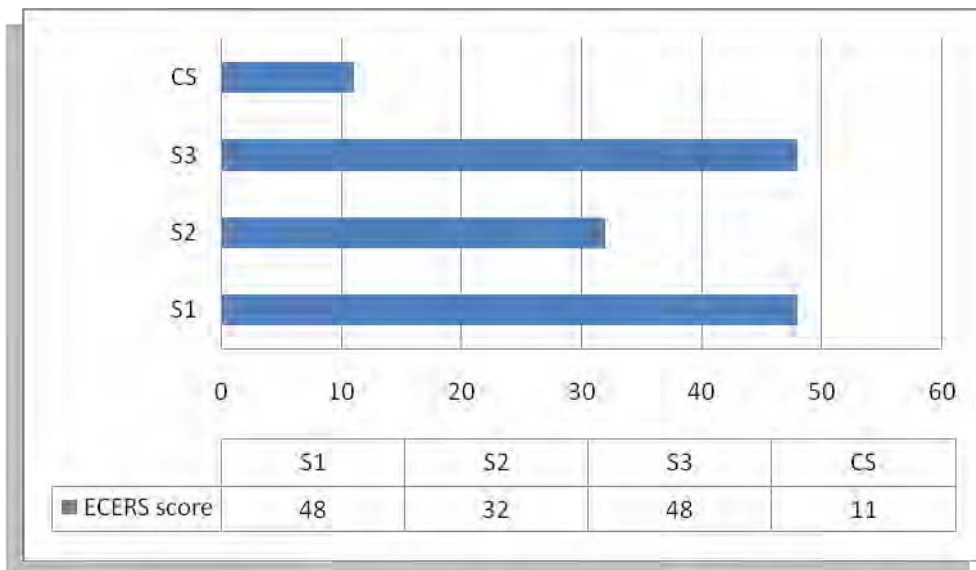
Figure 5: Total ECERS-R score for each setting:

The total ECERS-R score for each setting, presented in figure 5, indicates evidence of

a more observable nurturing environment in intervention settings when compared to the

comparison setting. The total scores for each of the seven subscales, is presented in figure 6,

demonstrates that the comparison setting scored noticeably lower on all seven subscales,

signifying that intervention settings were able to demonstrate and provide a more nurturing

environment in all areas observed compared to the comparison. The lowest score achieved

by an intervention setting was 4, compared to the comparison setting where the lowest

score was 1 and the highest score 4.

Figure 6: ECERS-R score for each seven subscales, per setting.

	Greeting/de parting	Encouraging children to communicate	General supervision of children	Discipline	Staff – child interactions	Interactions among children	Staff interaction and cooperation
S1	6	7	7	7	7	7	7
S2	6	4	4	4	6	4	4
S3	7	6	7	7	7	7	7
CS	4	2	1	1	1	1	1
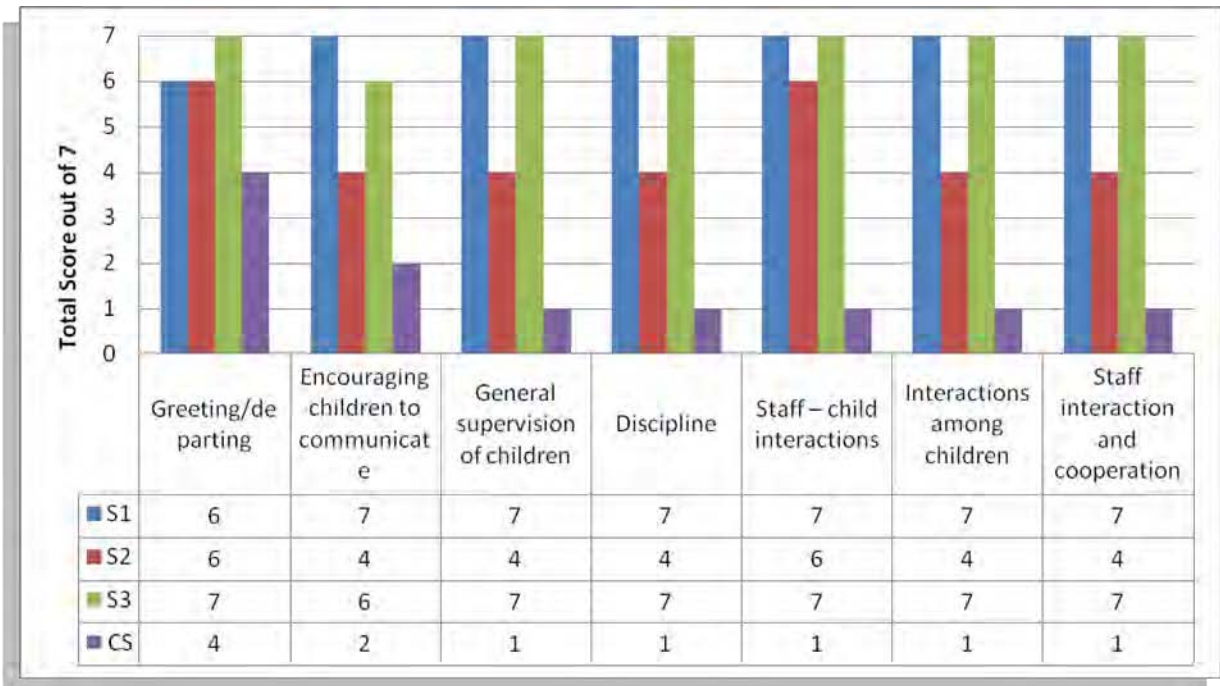
5.4.1:   Practitioners will provide emotional support and act as a secure base for children

who have become distressed by remaining calm and either engaging them in a task or

comforting them physically.

Intervention settings were more likely to provide a secure base for children, when
compared to the comparison setting (table 14). This is evidenced by the recorded notes
taken in the observation, alongside the ECERS-R schedule. These findings are consistent with
the ECERS-R subscale 'staff child interactions', that measured the sensitivity and
responsiveness of practitioners, and where the comparison setting scored considerably
lower than intervention settings.

Table 14: Support for proposition 4.1.

Intervention Settings 1	There was evidence in all settings that staff responded sympathetically to help children who were hurt, upset or angry. Example 1: in setting 2 when a toddler was distressed because another child has taken his toy, the staff member picked him up immediately and distracted him with another toy. Example 2: in setting 1, when a baby was distressed because she was tired, the staff member picked her out of the cot and stroked her head until she fell asleep. There was evidence in all settings that staff showed warmth through physical contact
2	
Comparison Setting 1.	Staff did respond sympathetically to children by engaging in eye contact and talking to children in a soft tone, but no evidence of physical contact when children are hurt, angry and upset. **Example 1:** A child aged approx two years was upset upon his mum leaving him. The child was asked 'aren't you happy today Jack?', but no physical contact was offered. The child was given breakfast and was asked 'do you want to come and sit with me', but no contact was initiated. **Example 2:** A baby aged approximately 7 months old, was trying to get out of a chair (lifting his bottom, waving arms). Although seen by the practitioner she did not respond. The baby began to get frustrated and started crying. The practitioner picked her up and put her on the play mat. The baby cried again. The practitioner asked 'do you want picking up', but she didn't pick her up. Only observed 2 out of 6 staff showing warmth through physical contact. Physical contact was used principally for control by other staff (for example, holding children by the hand to move them to another part of the nursery).
2.	

5.4.2:   Practitioners will describe an ideal nurturing environment as a setting that values/respects the child, where staff act as a secure base, where learning is developmentally understood, and where the importance of transition is understood.

Table 15 and figure 7 display the results for proposition 4.2 All but two of the practitioners were able to talk about a nurturing environment using some of the stipulated terms, however two practitioners (one from setting 2 and one from the comparison setting) were unable to describe a nurturing environment using these descriptions. Figure 7 displays the total frequencies for each term used per setting. It demonstrates that all settings discussed the importance of providing a secure base for children with the most frequency compared to other terms.

In addition, figure 7 shows that participants' from the intervention settings were more likely to describe a nurturing environment as a place where children are valued and recognised, and where transition is seen as important compared to the comparison setting, who did not mention either terms. However, the comparison setting were more likely to describe a nurturing environment as somewhere that a child's learning is developmentally understood.

Table 15: Support for proposition 4.2.

| Intervention Setting	
1	All participants in settings 1 and 3, and three out of the four participants in setting 2 were able to use some of the above terms to describe an ideal nurturing environment.
2	11/12 participants across settings 1, 2 and 3 described (either indirectly or directly) a nurturing environment as somewhere that needs to provide a secure base for children.
3	Four practitioners (one in setting 1, one in setting 2 and 2 in setting 3), mentioned the importance of transition.
4.	Six practitioners mentioned a nurturing environment as somewhere that values and respects a child.
5.	There was one example which related to a nurturing environment being somewhere that learning was developmentally understood
Comparison Setting	
1.	Three out of the four participants were able to use some of the above terms to describe an ideal nurturing environment.
2.	3/4 participants described (either indirectly or directly) a nurturing environment as somewhere that needs to provide a secure base for children.
3.	The importance of transition was not mentioned when describing a nurturing environment.
4.	No practitioners mentioned a nurturing environment as somewhere that values and respects a child.
5.	Two practitioners indicated that a nurturing environment would be somewhere where learning was developmentally understood
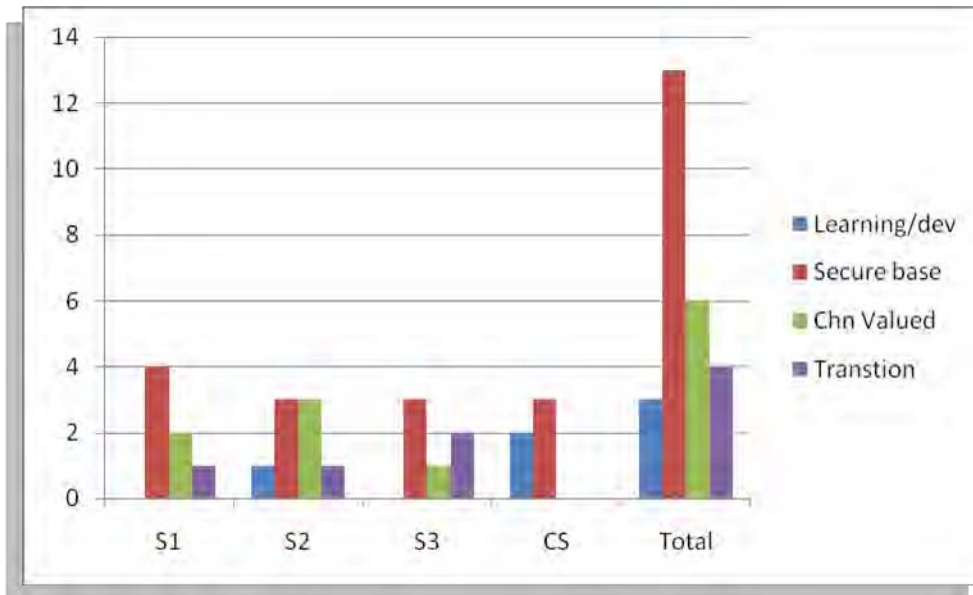
Figure 7: Frequency of responses per setting, for each term relating to a nurturing environment

5.5: **Practitioners will make a connection to children's feelings when describing differing types of behaviour and will talk about behaviour as having a meaning/reason and acting as a form of communication.**

Table 16, displays the evidence in support of proposition 5. Practitioners in intervention settings talked about behaviour as having a meaning, or being communication, noticeably more times compared to the comparison setting. Appendix 16 shows that the frequency to which participants talked about behaviour in this way was much higher than any other proposition frequencies, suggesting that this was perhaps the most pronounced effect of the BSF training on practitioners. Furthermore, during the semi structured interview no mention of behaviour in these terms was evidenced in the comparison setting; this was only evidenced in response to the vignettes.

Table 16: Results for proposition 5.

Intervention Settings	
1.	When discussing where they had dealt with challenging behaviour in practice, during the SSI, there was evidence from all practitioners but one, that behaviour is viewed as having a meaning or being a form of communication.
2.	When discussing where they had dealt with challenging behaviour in practice, during the SSI, there was evidence in all intervention settings that practitioners made a connection with children's feelings, but the frequency was very low.
3	In response to the vignette scenarios all practitioners discussed the children's behaviour as having a meaning or being a form of communication.
4.	In response to the vignette scenarios all but one practitioner made a connection to children's feelings when discussing their behaviour.
Comparison Setting	
1.	When discussing where they had dealt with challenging behaviour in practice, during the SSI, there was no evidence from any practitioner, that behaviour is viewed as having a meaning or being a form of communication.
2.	When discussing where they had dealt with challenging behaviour in practice, during the SSI, there was no evidence that any practitioners made a connection with children's feelings.
3.	In response to the vignette scenarios all practitioners discussed the children's behaviour as having a meaning or being a form of communication, however the frequency to which practitioners talked about behaviour in this way slightly lower compared to intervention settings
4.	In response to the vignette scenarios all but one practitioner made a connection to children's feelings when discussing their behaviour.

There was only a small difference in the intervention settings compared to the comparison setting when comparing how frequently practitioners made a connection to children's feelings. However, no connection to children's feelings was evidenced during the semi structured interview from practitioners in the comparison setting; this was only evident in response to the vignettes.

A further outcome is the reported improvement in practice made by practitioners specifically in relating and dealing with children's behaviour and feelings. Although there was no specific proposition relating to this outcome, a code was made in order to include this variable in the findings of this evaluation. Although no comparison can be made to the comparison setting for this outcome, it shows good evidence in support of the intervention improving practitioners understanding and practice. All but one practitioner interviewed in the intervention settings reported that their practice had improved following the training, with the majority of practitioners recorded as stating this at least twice throughout the interview process.

'Since doing the training it's made me look at each child in a different way, to try and understand where a particular behaviour is coming from, instead of just assuming there is something wrong or this childs not behaving... but prior to the training I would probably would have thought he don't like morning and wants to be difficult' (participant1, setting 1).

'I understand now that they do just want to have your attention, whereas before I didn't really get it and now I do, not concentrate on bad behaviour but the good' (participant 1, setting 2)

'before I would have think they are doing it for no reason, because they have got one on them but now since the training I can see why, hold on go back a bit see why there doing it' (participant3, setting 2)

'it's been easier for me to think about what's happened before and after... if a child has had a tantrum, to think and look at what has happened before and after and at the reciprocity as well, taking the feelings and bringing it back to them and calming it down. I think I've thought about that more recently'. (participant1, setting 3).

Figure 8: Quotes/ Excerpts from Interviewees relating to the how the training has improved their practice.

5.6: *Staff will report engaging in more reflective practice and reflecting on their own feelings to a greater extent.*

When compared to the comparison setting, intervention settings did report engaging in more reflective practice. However, overall frequencies were quite low and only one setting reported engaging in formal reflective practice sessions with colleagues. This indicates that more long term support would be needed to embed this in practice (see section 6 for further discussion). In addition, the low number of participants reporting that they reflect on their feelings in intervention settings 2 and 3 suggests that there is little evidence of intervention effects, relating to this variable.

Table 17: Results for proposition 6.

Intervention Settings	
1.	All but one participant in intervention settings reported engaging in either formal or informal reflective practice.
2.	6 out of 12 interviewees reported reflecting on their own feelings. No participants in setting 3 reported reflecting on their own feelings.
Comparison Setting	
1.	Only one participant in the comparison setting reported engaging in informal reflective practice.
2.	No interviewees reported reflecting on their own feelings.

'sometimes I think about what I could have done differently' or is that the best way I could have dealt with it?' (Participant 3, setting 1)

'We are more reflective, we have meeting after playgroup to reflect on the session and how the children have settled'. (participant 2, setting 2)

'A couple of times when I have dealt with a situation and you think about it you think well actually now I've done the training I could have dealt with it better, so I suppose I do reflect on my own practice'. (participant 3, setting 3)

'As soon as I have free time on a Thursday I think about what I can do next week to improve'.(participant 4, setting 3)

'Think more about feelings since training, as in our feelings as well as the children's cause if their upset then we are like 'well I don't know what's the matter', but we have to stay calm because our feelings, they can feel that' (participant 4, setting 1)

'Feel a lot more confident, because the training it did make you think about your emotions as well which we didn't do, so it's not just the children's emotions but ours, as they rub off on the child.' (participant 4, setting 1)

'Still difficult to think about my feelings… always thinking about children's feelings… has made me think before I act…'(participant 2, setting 1)

Figure 9: Quotes/ Excerpts from Interviewees relating to the how the training has improved their reflective practice and the ability to reflect on their own feelings.

5.7:   Improved working with parents.

An outcome which does not neatly fall under any research question is the improvement in parental working as a result of the intervention. This was not a stated aim of the project and therefore not included as a proposition. However, although frequencies were low, settings 2 and 3 reported some improvement when working with parents as a result of the training. Three out of four participants in setting 3 reported developments in parental working.

> *'But I think from the training I realised that on a daily basis more could be said and done on a daily basis with the parents' (participant 2, setting 2)*
>
> *'I think I am quite in tune with my feelings and it has made me more sensitive to tuning to children's needs and parenting styles... it has helped me to tune in with the whole family'. (participant 1, setting 3)*
>
> *'But the training helped me understand how to work with the parents.' (participant 3, setting 3)*
>
> *'I've looked at what other people have done in dealing with situations and thought you could have dealt with that differently, like parents for example, understanding parents needs and knowledge, because a lot of the time they don't understand they just see them as being naughty they don't see why the child's done' . (participant 3, setting 3)*

Figure 10: Quotes/ Excerpts from Interviewees relating to improved working with parents.

6. **Discussion.**

In this section I will consider the extent to which the results support the initial theory and research question, versus the extent to which rival explanations (table 11.) are justified.

6.1:   To what extent is the initial theory supported?

The initial theory of this project, which aimed to show that communicating knowledge of attachment principles and how to apply these in early year's settings, would lead to a positive impact on early year's staff's practice and understanding, and a more nurturing environment and reflective practice, can only be partially supported as not all propositions could be accepted.

Proposition one could not be fully supported, as the training had a limited effect on increasing staff understanding of the terms attachment and bonding. Attachment and bonding were used with equal frequency by intervention and comparison settings. All practitioners indirectly used these terms, with a relatively low frequency, when talking about a relationship with a child. The comparison settings made more direct references to bonding, as opposed to the intervention settings which used both terms. More positive effects were found for increasing understanding of containment and attunement, with intervention settings making more indirect and direct references to these terms compared to the comparison setting.

The greater frequency of indirect references to terms attunement and containment compared to attachment and bonding, can perhaps be explained by the one reflective

homework task which practitioners were required to undertake, in the training, which was

as follows:

> '...to observe an interaction between a child and an adult in your setting. What signs
> of attunement and containment do you notice between them?'

A similar reflective homework task was not given to improve practitioners'

understanding in relation to terms, attachment and bonding. It is likely that this homework

task, focused practitioner understanding and awareness of containment and attunement

more fully, which is why a greater number of responses were reported. This offers support

to this part of the training and the importance of reflective practice for staff in the early

years.

The intervention appeared to be effective in increasing practitioner confidence, when

helping children to manage and recognise their emotions. Additionally, a small intervention

effect was found for increased confidence when working with parents as a result of this

training. These findings are consistent with findings from the Solihull Approach (Douglas and

Ginty, 2001; Whitehead and Douglas, 2005) where health visitors reported an increase in

confidence in their skills, and when working with clients and other professionals, indicating

that attachment interventions with early years practitioners do help improve confidence.

These improvements were most amplified in setting 3. This may be explained by the fact it is

a Children's Centre and therefore has more opportunity for staff - parent interaction, and

work with families. This outcome may therefore be specific to practitioners working within

Children's Centres, where the likelihood of working with parents greater.

In addition, all practitioners in intervention settings reported an improvement in their practice, which is consistent with findings by Tomlinson et al. (2008), who also report that practitioners from nurseries, who attended attachment based training, were able to take away ideas to improve their practice.

The majority of participants from intervention settings were able to more adequately describe a nurturing environment compared to the comparison setting. Discrete differences in the descriptions of an ideal nurturing environment between intervention settings and the comparison indicate some knowledge gains. However, overall differences in frequencies (appendix 16) between intervention and comparison settings were so small it would be difficult to confidently conclude intervention effects.

The comparison setting scored considerably lower on all seven subscales of the ECERS-R schedule, indicating that intervention settings had a more nurturing environment. This was particularly pronounced for scales measuring the general supervision of children, discipline, staff child interactions, interactions among children and staff interaction and cooperation. The ECERS-R scores are supported by the recorded, narrative notes, which report that intervention settings were more likely to provide a secure base for children, as evidenced by practitioners responding more sympathetically and sensitively and showing warmth through physical contact.

These results are consistent with that of Rhodes and Hennessy (2000) who found that one positive effect of training on caregiver behaviour was increased practitioner sensitivity; and those findings by and Colwell and O'Connor (2003) that teachers trained in nurture principles were more likely to use statements which increased the self-esteem of

children. The findings by Bakermans –Kranenburg et al (2003) may go some way to explain such findings. Their meta analyses shows that attachment based interventions increased maternal sensitivity. As the relationship children develop with early years practitioners is similar to that of their parents (Kennedy and Kennedy, 2004), Bakermans –Kranenburg et al's (2003) findings could be generalised to early year's settings, in that, attachment based interventions in early years provisions are also likely to increase the sensitivity of practitioners, indicating support for such interventions.

The key finding and most pronounced effect at a practitioner level is the increased understanding and awareness that a child is communicating through their behaviour. This is consistent with evaluated findings of the Solihull Approach (Douglas, 1999, 2004), which covers some similar content to the BSF intervention. Findings from the Solihull Approach report that following the intervention, health visitors reported a greater understanding of why children's difficulties developed, and began to view children's behaviour as a result of a situation and not the cause (Douglas and Ginty, 2001; Whitehead and Douglas, 2005).

The BSF training appears to have been less effective in helping practitioners be more in tune with children's feelings however . Although overall, intervention settings did relate children's feelings to their behaviour, with more frequency compared to the comparison setting, the relatively small difference between settings suggests that the BSF intervention had a limited effect in this area.

Practitioners in the comparison setting only described behaviour as communication and related behaviour to children's feelings in response to the vignette scenario, but not the semi-structured interview, albeit with a lower frequency than interventions settings. This

suggests that practitioners in the comparison setting were only likely to talk about behaviour in these terms when prompted to do so, through the vignette scenario, but not when discussing their own practice and attitudes in the semi structured interviews. This suggests some intervention effect and is consistent with the ECERS-R subscale score, 'discipline', which measures staff expectations and response to behaviour. The comparison settings scored '1' in this subscale (lowest score), indicating that expectations for behaviour were sometimes inappropriate and that staff often acted and responded inconsistently to behaviour of children compared with the intervention settings who scored between 4 and 7 on this scale.

Practitioners in the intervention settings reported considering reflective practice, and reflecting on their own feelings more. However, although these results appear positive, only one example of practitioners engaging in formal reflective practice was found in setting 3. An explanation for this finding is that a change in practitioners' attitudes and thinking precedes their behavioural change (Fukkint and Lont, 2007). The semi -structured interview and vignettes may have elicited practitioner attitude and understanding, but more support and training may be needed in order to develop practice and behavioural change. These findings are consistent with those found by Fukkint and Lont (2007) that in response to professional training, attitude gains were the highest compared to knowledge and skill gains of caregivers. This is congruent with concerns and effects found when evaluating the Solihull Approach (Whitehead and Douglas, 2005). Their findings suggested that the intervention had not become fully embedded in practice and that further support and training would be needed to ensure this.

All participants rated their role as important in influencing social, emotional and

communication development in children, but the small difference between the comparison

and interventions settings, suggests that positive results were not due to the training.

6.2:   Rival Explanations.

If a direct explanation (BSF intervention accounts for effects) is accepted, than this

study provides further support for attachment based interventions, specifically in early

year's. However, as all propositions could not be full accepted, alternative explanations need

to be considered as part explanations for some outcomes. These are discussed below.

6.2.1: Political Explanation.

The finding that indirect references to attachment and bonding were equal across

settings may be accounted for by a political explanation (Table 11), which would argue that

attachment and bonding are likely to be concepts that have been introduced previously to

practitioners in their initial training and through the new EYFS curriculum (DCSF, 2008),

which makes direct reference to children forming secure attachments. This kind of

explanation would predict little difference between intervention and comparison settings.

However, if these terms are better known, it would be predicted that practitioners would

use them more often compared to terms containment and attunement, which was not seen.

This can be explained as an effect of the reflective practice task which focused on

containment and attunement (discussed in section 6.1). Concepts such as containment and

attunement may be less well known to practitioners, through political initiatives and

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frameworks, which is why a greater difference in frequencies is seen between the

intervention and comparison settings.

6.2.2: Super rival explanation.

The more direct references to bonding, as opposed to attachment made by the

comparison setting are a small but interesting finding. One super rival explanation is that

bonding may be a more commonly used term outside of this intervention and more

frequently used by both early years' workers and lay people when talking about a close

relationship. Attachment may be a concept, which would only be directly referred to if

further development and training on the early years or child development had been

experienced. Therefore, the BSF training may have served to reinforce and further support

understanding for this concept, and any direct and general references to attachment (as

seen by intervention settings) may be attributable to this intervention.

6.2.3: Direct rival and comingled explanation.

Improvements in parental working; increased awareness of behaviour being

communication; the more observable nurturing environments and engagement in reflective

practice are all outcomes which could be explained by a direct rival explanation, in that

previous training delivered to participants in settings could account for positive effects.

As setting 3, reported the most improvements in confidence when working with parents,

it is likely that training such as 'Triple P' parenting programme, previously delivered to

setting 3 but none of the other settings, may account for the positive effects, as opposed to the BSF training. In addition setting 3 had also additionally received training in reflective teams following the BSF training, which is likely to account for the reported engagement in formal reflective practice in this setting compared to other settings, and further adds weight to the finding that additional support needs to be offered to settings to embed ideas in practice, such as reflective team support, mentoring, group consultation and supervision.

However, with regards to the other aforementioned findings this may not be the case. The only consistent training which was received by two of the intervention settings and the comparison setting was 'behaviour training'. Setting 1 did not receive the behaviour training but a more observable nurturing environment, and improvements in understanding behaviour as communication were still seen in this setting. If behaviour training has accounted for positive effects, similar frequencies relating to these propositions would be seen across all settings, which was not the case. This suggests that previous training could not fully account for positive effects for these variables. It seems likely that the BSF training has helped support practitioners understanding of an ideal nurturing environment and behaviour as communication.

6.2.4: *Implementation explanation.*

An implementation explanation may account for some positive effects, such as; confidence and improvements in practice; the observable nurturing environment; increased practitioner sensitivity; and improved awareness of behaviour as communication. This is where the process of implementing the training accounts for positive effects rather than the

content. The training may have provided space for practitioners to think through and

respond to key aspects of their practice (self-critical inquiry) resulting in the above positive

findings. According to Elsey and Lathlean (2006) this may help staff move through individual

processes of change, thus helping individuals to own the problem and feel responsible and

accountable for solving it, therefore empowering people to develop their own individual

practice.

The most pronounced effect of the training, being the increasing practitioner

understanding of behaviour as communication, may be accounted for because one reflective

homework task set during the BSF training focused on this:

'...notice a time when a child may be trying to communicate through their behaviour.
Identify the communication/feeling behind the behaviour' (BSF intervention, session 5)

This task may have allowed practitioners to engage in self-critical enquiry, supporting

them to reflect on their practice and focus their thinking and understanding in this area. This

may have made practitioners more likely to discuss behaviour in these terms without the

necessary prompt of the vignette scenario, which was necessary in the comparison setting.

However, although an implementation explanation can be partly accepted, it cannot be fully

accepted as an explanation, as findings suggest that practitioners also gained knowledge

surrounding the content of the course. For example, small differences between intervention

settings and the comparison setting, in their descriptions of an ideal nurturing environment

suggest content did account for some outcomes. A small trend was found towards

intervention settings mentioning the importance of recognising and valuing a child, and the

importance of transition. This is consistent with findings from the ECERS-R subscale

'greetings and departing', where the intervention settings scored much higher than the comparison setting. This may be because the training emphasised these elements (along with providing a secure base) compared to understanding that a child's learning is developmentally understood.

This would not be seen if an implementation explanation accounted for all results. In addition the fact that practitioners discussed concepts such as containment and attunement, adds further evidence to outcomes also being attributable to content, as well as process.

6.2.5: Threats to validity.

It could be argued that the small effects seen in evidence of some propositions would support the idea that the results were due to chance alone. Firstly, this could be argued to be the case in relation to proposition 2, where a slightly lower mean score was seen for the comparison setting, when rating the importance of the practitioner role in supporting emotional and communication development in children; and secondly the slightly higher amount of times that intervention settings related children's feelings to their behaviour compared to the comparison setting (proposition 5). However, such results could also be explained as a result of limitations in the design of the semi-structured interview. Question 3, which was designed to elicit participants understanding of behaviour, specifically asks practitioners how they would/did respond, but not how children may be feeling. Asking the question in this way may have biased the responses of practitioners, influencing them to describe what need a child was communicating, but less about their actual feelings. In addition the high scores presented in response to proposition 2 may have been as a result of

the Likert scale question format, where participants may have falsified their responses in order to please the researcher (Cohen et al, 2007).

Robson's (2002) view that people say and do different things, and that observations are a good indicator of what people actually do, advocates that ECERS-R scores are valid and the most reliable data source. However, ECERS-R scores may have been biased to some extent by the investigator (investigator bias), and limitations in the sampling method used, may also account for positive effects. As I was the only investigator at the time completing the ECERS-R observations, it could be argued that my subjective interpretation may have been biased because I wasn't blind to the aims and objectives of the study. However, previous ECERS-R scores taken by the early year's teams go some way to support the findings in this study, specifically when previous ECERS-R observations were carried out a similar time to data collection in this study, as in setting 1.

The positive outcomes relating to proposition 6 (reflecting on feelings and reflective practice) could be also be explained by a design limitation of the question, which elicited this response in the semi-structured interview. Often when asking this question, the prompt was needed to be used, which directly asked whether participants had engaged in reflective practice. This direct and leading question is likely to have biased the results (Robson, 2002) because practitioners may have wished to please me as the researcher, by answering the question positively, or wished to show themselves in a good light (social desirability bias).

6.3:   Explanations and key findings.

The key positive outcomes of this evaluation are as follows; improved practitioner

understanding of behaviour being communication; increased confidence and improvement

in practice when dealing with challenging behaviour; the observable nurturing environment

of intervention settings; increased understanding of an ideal nurturing environment;

increased understanding of concepts 'containment' and 'attunement' and an increased

practitioner awareness of the need to reflect on feelings and practice.

If the results were to be accounted for solely by the Building Strong Foundations

intervention, one would expect to find similar patterns across all intervention settings. This is

the case to some extent but differences suggest that rival explanations may account for

some positive effects and differences. A direct rival explanation (previous interventions) is

only accepted in this study as influencing reported formal reflective practice and improved

working in parents in setting 3, but cannot account for other outcomes, and a comingled

explanation is also rejected because no previous interventions have been carried out in

setting 1. Although an implementation explanation is likely to account to a small degree for

increased understanding and confidence, and improvement in practice and confidence when

dealing with behaviour by staff in intervention settings, evidence of knowledge gained from

the content of the training suggests that this does not fully account for results.

Outcomes can perhaps be best explained by the BSF intervention and a political and

super rival explanation. Previous knowledge of some concepts and terms and the

implementation of the EYFS curriculum, and an emphasis politically on the early year's may

have made practitioners more aware of concepts such as attachment and bonding and the

need to provide a nurturing environment, which is why effects between intervention and comparison settings for these propositions were not so well pronounced. However, the consistency in content of the BSF intervention with such government initiatives supports this training as a relevant and worthy intervention in the early years.

Furthermore craft rival explanations such as investigator bias and threats to validity are likely to have perpetuated the effects of outcomes, such as the ECERS-R scores and reported use of engagement in informal reflective practice.

In summary it appears that the BSF intervention and political and super rival explanations, along with investigator and design bias account for some outcomes in this study. This study does in part add weight to the use of attachment based interventions in early year's settings and suggests that it is not just the implementation but the content, which makes using this attachment framework in training effective. The consistency of attachment theory with the EYFS curriculum and its strong evidence base advocates it as a good framework to improve practice and understanding of early years' practitioners.

6.4:   Implications for early years practice and intervention.

Several recommendations can be drawn from the findings of this evaluation. Firstly, that training in the early years does matter and is important for ongoing professional development of early year's practitioners. The recommendations drawn from this study are therefore consistent with those outlined in the Childcare Act (2006) that early years'

practitioners should have access to ongoing professional training and emphasises the need for providers to identify training needs.

An implication of these findings is that further support and development is needed following initial training in order to embed ideas in practice. With the BSF intervention, this is specifically the case for reflective practice, which practitioners reported to do informally but not formally. It seems that support groups, access to engagement in group consultations, as in Lowehoff's (2004) study, and advanced or refresher courses may be needed to embed such concepts in practice.

Whitehead & Douglas (2005) found similar results when evaluating the Solihull approach and conclude that when any programme is put into practice it is not enough to only carry out the initial training, as this will not solely embed new practice. Their recommendations included foundation training repeated every 6 months for new starters and for practitioners that would like a refresher; a one day advanced course to extend initial training, and ongoing support in the form of supervision, case studies, reviews and mentoring. Such recommendations would be useful for the Building Strong Foundations project also, to ensure that positive effects are not lost and are fully embedded into thinking and practice.

Ideas for shaping support service practice, in relation to working with early years settings can be drawn from this study. EPs are in a position to apply their knowledge of psychological frameworks, such as attachment theory in early year's settings through the development of training, with sustained support through supervision and mentoring, to assist provisions in developing a positive and nurturing environment, where the emotional

and behavioural needs of children are managed and met by practitioners who are sensitive and responsive to all children and their differing needs.

6.5:   *Future developments.*

It is likely that some limitations in methodology may account for certain effects, and would need to be addressed in the future to make this evaluation more robust. Challenges to the reliability and validity of the design of the study are outlined in the concluding chapter of this volume, where the limitations of the data collection methods, analysis and methodology are discussed in further detail.

Future developments may include the need for a one year follow up of the Building Strong Foundations intervention to establish whether positive effects are sustained. Additionally evaluating whether the use of support groups, mentoring and supervision, following the training, improve outcomes and embed concepts in practice compared to if initial training is just offered, is a possible further development.

In addition, further investigation into the effects of implementation and content of training need to be further evaluated to establish whether different training based on different models of psychology could have an equal effect. Comparing attachment based training and an alternative training model would help to further develop the efficacy of attachment theory training in the early years.

Furthermore the BSF intervention could be offered more widely within this metropolitan borough to health visitors and adapted into a parental programme. The

Solihull Approach format, of having additional comprehensive resources to accompany the training, that also function as an accredited open learning course, could also be a useful and empowering additional element to the BSF intervention.

Further research could also evaluate outcomes of the BSF intervention on child behaviour, rather than primarily focusing on practitioner outcomes. In addition video feedback of staff practice may be offered to practitioners following the training to provide further professional development, as advocated by Bakermans-Kranenburg et al (2003) who suggested that interventions with video feedback were more effective.

6.6:   Conclusions.

This evaluation makes an original contribution to existing knowledge surrounding the efficacy of attachment based interventions in early year's settings. It develops theory by highlighting that the BSF training based on applying and communicating knowledge of attachment principles is effective in supporting the development of practitioner knowledge, understanding, confidence and practice, thus leading to a more nurturing environment and in addition that focusing practitioner thinking through reflective homework tasks, further improves outcomes. Findings are consistent with existing literature on attachment based interventions within schools and with parents in that they increase staff/parent sensitivity and confidence (Van den Boom, 1994, 1995; Bakermans – Kranenburg et al 2003; Connor and Colwell, 2007). Findings also emphasise the importance of embedding training into practice through the use of additional support groups, mentoring, group consultations and training following initial training.

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Appendix 1: Structure and content of the Building Strong Foundations intervention.

Session 1: Tuning in to our own feelings and those of others.

Aims and Objectives

1. To understand the importance of beginnings
2. To understand the concept of the internal world and the interchange with the external world
3. To reflect on the emotional zones of Comfort, Challenge and Stress
4. To understand how observation contributes to Reflective Practice

Session 2: Feelings, Relationships and Development.

Aims and Objectives

1. To understand the concept and two way nature of Projection
2. To introduce the importance of the relational nature of baby brain development
3. To understand the importance of being in tune with young children's needs
4. To introduce Reflective Journals

Session 3: Emotional Exchanges, Containment and Nurturing.

Aims and Objectives

1. To develop an understanding of how practitioners can be in tune with and help contain emotions for children and parents.

2. To identify the bedrock of nurturing principles and practices.

3. To consider how we might nurture each other in the setting.

Session 4: Attachment.

Aims and Objectives

1. To develop an understanding of attachment theory and how this translates into settings
2. To develop an understanding of the different attachment patterns.
3. To think more about adult attachment styles and how this influences us as workers.

Exploring the emotional development of babies and young children

Session 5: Behaviour as a Communication.

Aims and Objectives

1. To understand that a child communicates through their behaviour.
2. To understand that children's behaviour is linked to their emotional and brain development.
3. To understand the reasons why challenging behaviour occurs.
4. To think about ways we can respond that acknowledges this communication

Session 6: Transitions, Endings and Reflective Practice.

Aims and Objectives

1. To appreciate the emotional impact of transitions and endings.
2. To identify ways in which practitioners can contribute to a supportive emotional environment.
3. To understand our individual responsibility in looking after ourselves and colleagues.
4. To reflect on learning and practice and examine models for ongoing reflective practice.

Exploring the emoti...
of babies and youn...

Appendix 2: Case Study Protocol - Based on Brinkerhoff (1983 and Yin (2009).

An evaluation of an attachment based, early-years training package: A multiple case study.

1. Overview of case study.

- Research strategy:

Case study

- Type of case study:

Explanatory – because it is theory testing through evaluation. I have an idea about what I will find out – therefore knowledge driven theory.

Multiple case study design with embedded units

- Replication logic:

Literal replication: With 2/3 case studies in EY settings where intervention has taken place. Hoping to predict similar results.

Theoretical replication: predicts contrasting results with 1 nursery who haven't had training (control case study)

- Embedded units:

Main unit = nursery
Practitioners

Research Question	Proposition
i) How has the BSF intervention increased practitioners understanding of practitioner/child relationships, particularly attachment, attunement, containment and bonding?	**i)** Practitioners will utilise concepts and will make reference directly or indirectly to these terms when describing their relationships and interactions with children
ii) How has the training improved practitioners' understanding of how their role supports children's communication, emotional and social development?	**ii)** Participants will emphasise and rate their role as highly influencing children's social and emotional development and communication
iii) How and to what extent has the training made practitioners <u>feel more confident</u> in helping children to recognise, understand and manage their emotions.	**iii)** Given a situation where a child is displaying emotional behaviour, practitioners will report feeling more confident in dealing with it.
iv) How has the training supported practitioners understanding of the importance of providing a nurturing environment and secure emotional base for children?	**iv (a)** The nursery will have an observable nurturing environment. **iv (b)** Practitioners will provide emotional support and act as a secure base for children who have become distressed by remaining calm and either engaging them in a task or comforting them physically. **iv (c)** Practitioners will use terms such as 'nurturing' and 'secure base' to describe the ideal environment of a nursery
v) How has the training helped practitioners to be more in tune with children's feelings and aware that a child is communicating through their behaviour?	**v (a)** Practitioners will make a connection to children's feelings when describing differing types of behaviour **v (b)** Practitioners will respond sensitively and appropriately when a child is distressed/stressed, and be responsive to differing forms of communication given by a child (e.g. hands in the air = comfort me).
vi) How has the training changed staff practice with regards to engaging in reflective practice?	**vi (a)** staff will report engaging in more reflective practice and reflecting on their own feelings more

Theory:

The case study will show that communicating knowledge of attachment principles and how to apply these in EY settings will have a positive impact of EY staff's practice and will lead to a more nurturing environment for children.

2. *Data collection Procedures.*

Data Collection Method	Type of data
Vignette Scaling question after vignette	Qualitative Quantitative
Semi-structured interview Likert scale on semi-structured interview	Qualitative Quantitative
Observation (ECERS Scale) Narrative notes from observation	Quantitative Qualitative

Ethical considerations:

- Observations of staff within the early year's settings.

- Although primarily my observations are of staff, obviously children will be implicated and observed, so the issue of confidentiality needs to be addressed.

- Own role as a researcher and employee of the local authority, and the possibility of a conflict of interest.

3. *Focus of Evaluation.*

- Object of evaluation.

This evaluation is a summative evaluation. The object of study is the Building Strong Foundations intervention – training package delivered to early years settings. This training was developed to help practitioner's awareness of attachment principles and the importance of creating a nurturing environment within such settings. This training has only recently been developed and carried out in one setting. The outcome measures are increased practitioners understanding, awareness and improvement in practice. The stakeholders of the project are the manager from the early year's team and two senior specialist educational psychologists

- Why is the evaluation needed.

The purpose of the evaluation is to determine how effective the Building Strong Foundations training has been on supporting practitioner awareness to terms of attachment concepts and principles and the importance of creating a nurturing environment, through the development of reflective practice. The outcomes will serve to identify ways to improve the training and to explore the extent to which it achieves its goals.

- Audience for evaluation.

The significant stakeholders are the early year's manager and two senior specialist educational psychologists, who designed the training. They will be able to provide the names of settings which can be evaluated and will be involved in identifying the aims of the evaluation. The audience for my evaluation will be the stakeholders and the extended trainers involved in this project. In addition, the inclusion support service and early year's team within the borough will be told of the outcomes of the evaluation. Feedback will also be provided to the settings involved in the evaluation.

- <u>Evaluation constraints.</u>

Constraints will be...

➢ The availability of settings which have had the intervention.
➢ Time limitations
➢ Own role as a researcher and employee of the local authority, and the possibility of a conflict of interest.
➢ Rival explanations (below), which are likely to influence outcomes.

- The outcomes are the result of chance circumstances only
- The outcomes are a result of limitations in sample, reliability of data collection tools and reliability of analysis
- Outcomes are due to researcher bias and the 'experimenter effect'
- Interventions previously carried out in settings account for effects. Settings 2 and 3 and the comparison setting previously received Behaviour training prior to the Building Strong Foundations Training. Setting 1 received no prior training. Additionally setting 3 received 'Triple P' parenting training and reflective team training.
- The BSF training and the other interventions in the early years settings account for the results.
- The implementation of training, not the content accounted for results. The training may have provided space for practitioners to think through and respond to key aspects of their practice (self-critical inquiry); therefore the process rather than the content caused the outcomes.
- The ten year Childcare Strategy (2004) and the government emphasis on early years through the recent implementation of EYFS curriculum which focuses on developing positive and nurturing relationships with children and improving their emotional wellbeing may have served to improve practitioners understanding and practice in these areas.

Time	Verbatim example
00.25 1.28	It would probably be a family that I'm working one to one with really that I've developed a very good relationship with. I think the important thing is that I've developed it with the parents first and when the child saw that the parents have trusted me then the child's automatically took that on board really. She could be quite a stubborn little girl and when I gave her the work she wouldn't do it. So helped building up the relationship has helped build up a lot of trust and whatever I ask her to do she will respond to now, and she knows my name she comes in happy and smiling and doesn't hide behind her mum now. Why do you think the relationship is important to her? I think it's because she's built that strong bond between us. The parents have built a strong bond with me and so has the child.
2.11 3.20	**In response to asking about nurturing environment...** We do do consistency of routines and staff in play and stay, so if they do progress to playgroup the children know the staff and routines. When new children start we have key workers, which is really important so mum and children know who to come to. We encourage all the comfort things for the settling in period like dummies blankets anything that they want to do, when children become very distressed we ask Mum to bring in pictures of the family so they can look. I was a little aware of it but the training helped me evaluate my practice again, as time goes on you get into the routine of ofsted and planning and sometimes you miss the nurturing and that side of it as well, you don't always realise what you're doing and how important it is really.
4.09 5.27	A little girl who was very developmentally delayed, so she was three but was showing a lot younger behaviour, and that's been a challenge for me. I had to literally work one to one with her, I had to do kind hands and feet and tailor my behaviour management really... even though she was three there was no point doing time out because she wouldn't know... It was working one to one and tailoring it all to her behaviour. Do you think your understanding of children's behaviour has changed since doing the training? Yes... you know, it's been easier for me to think about what's happened before

	and after... if a child has had a tantrum, to think and look at what has happened before and after and at the reciprocity as well, taking the feelings and bringing it back to them and calming it down. I think I've thought about that more recently.
6.33	When new children start in playgroup I'm more understanding and sympathetic, because I understand the bond is very close with the parent and just to give that bit of nurturing and to tailor my nurturing. Some children like a cuddle but other children don't like that they would rather be left quietly but with you near... I am a very touchy feely person, but some children are a bit like 'ooo don't touch me'.
	I just put my hand near them but won't overwhelm them.
8.03	I think I am quite in tune with my feelings and it has made me more sensitive to tuning to children's needs and parenting styles... it has helped me to tune in with the whole family.
	We are going to develop a reflective practice group, but it's finding time.
9.25	**Communication** – very important so it would be 10. You have got to develop that communication. Some parents don't know how to respond to children and communicate, they don't notice the cues. Especially with postnatal depressed mums I might be the person that makes the bond with that child as mum might not have a bond.
	Emotional (10) – still very important to help them regulate their behaviour and emotionally you need to support them and help them understand, because once parents have they gone they think they have left them forever.
	Social – 10 - because that's the main reason parents send children to playgroups I think because of the social side and to learn independence and self help skills.
13.07	**Response to vignette 1...**It's quite typical; really you'd be looking at what had happened before he came to setting, the whole stress of coming in, it can be stressful time of a morning, getting the children ready mum might be going to work, the child may have picked up on feelings that mum is feeling and had as well.
	If mum has been feeling rushed, stressed and anxious this little boy maybe feeling anxiety and picked up on mum's feeling because she would have projected these feelings because she's rushing him to get him to school. Hiding in the toilets and empty spaces, this may be a time/place where he needs to collect his thoughts; he's been rushed and may feel that he needs that bit of space really.

15.37	When he comes in I'd get something ready and prepared for when he comes in, understand that he can be a little stressed when he comes in and he may want that bit of time, just to be very supportive and be there by the side of him. If he does become violent and angry, try and find out the reason for his behaviour, and sympathise with his behaviour and feelings but explain we don't do that in nursery.
16.39	10 – I'd be very confident now. Before training I would have coped with it the best I could but this has refreshed me and made me think a little bit more of ways of dealing with it and considering the reasons why children are behaving the way they are because you do get into the routine ad complacent really with all the other things that are going on.
18.15	**In response to vignette 2...**if he has little capacity to respond to words it might be that he is developmentally delayed or have communication problems. There the things I would be looking at. He's three but he may be functioning at a two year old. The snatching of the toys is very typical for a two years, they are very egocentric... me personally I would tailor the support to his needs and do some assessment to see where he was functioning and tailor the expectations for that child, it's unlikely that a child of two would be able to think about what they have done and process it.

Feeling...he's going to be confused because he can't express his feelings and needs, he's going to stressed and angry and display frustration really. |
| 20.37 | 1 or 2 increase since the training because I'm experienced in this area and with these sorts of children who have developmental needs. |

Appendix 4: Content of semi structured interview.

The interview schedule is in appendix 4a. The aim of the interviews in this study was to gather data on the practitioners' understanding of attachment principles following the training, and how the training had helped develop their practice. Questions within the interview were designed in a way deemed most appropriate to test the propositions of the study (see table 7). For example, the first interview question... *'Could you tell me/describe the relationship you have developed with a specific child in recent months?'* was designed as one way to measure the first proposition that... *'Practitioners will utilise concepts particularly attachment, attunement, containment and bonding, and will make reference directly or indirectly to these terms when describing their relationships and interactions with children'.*

The semi – structured interview used in this evaluation consisted of seven questions. Robson (2002) suggests that it is important to avoid long questions, double – barrelled questions, questions involving jargon, leading questions and biased questions. Consequently, the questions produced were short and easy to understand. As the design of the interview in this evaluation was semi-structured, open questions were used as they are considered to provide further opportunities for probing, which allowed for a more in depth discussion, and provided a more free-flowing, flexible structure to the interview process (Cohen et al, 2007). One interview question (Q6) was designed to produce quantitative data, where the participants were required to give a number on a scale from one to ten regarding their influence over children's social, emotional and communication development.

Semi-structured interview for practitioners.

Introduction

INTRODUCE SELF AND ROLE

Firstly can I just say thank you for giving up your time.

- The overall aim of me being here today is to find out how the BSF training was received, what impact has it had on you as a practitioner, if any, and general feedback and ways to improve the training.

My role is not to make judgements about your practice, there is no right or wrong answer, my aim is to simply gather information.

I am recording this session and I will also make some notes. These notes will be subject to confidentiality procedures as the recording. They will not be shared with anyone outside the project group and no names will be recorded.

1)   **Could you tell me/describe the relationship you have developed with a specific child in recent months?**

Prompt… Can you describe some of the roles that you play in this relationship? Is this relationship important to the child do you think?

2)   **How does the nursery provide a nurturing environment for children?**
Prompt… do you feel you aware of this before the training?

3)   **Can you describe/tell me about a child you have worked with recently who has displayed challenging behaviour? How did you respond?**

Prompt – How do you think your understanding of children's behaviour has changed?

4)   **Have there been any recent changes in the way you support a child's needs?**

Prompt…. What has led to these changes?

5)   **How would you say your practice had developed in the last year or since the training?**

Prompt… more reflection/reflective practice or getting in tune with your own feelings and children's feelings? Are you more confident now in dealing with situations?

6)   **On a scale of 1 to 10 with 1 being the least amount of influence and 10 being the most amount of influence, how important do you see your role in supporting children's**
   a. Communication
   b. Emotional development (how they respond to different situations/regulate their behaviour/emotions)
   c. Social development (e.g. interaction with peers)

7)   **Are there any other comments you would like to make regarding any aspects of the training/course/content etc or are there any other areas where training may be useful?**

Appendix 5: Content of vignettes.

Two vignette case scenarios were presented to participants at the end of the semi structured

interview. It was felt that vignette scenarios would allow practitioners to be able to comment and

make judgements about more observable behaviours and concepts, such as containment and

attunement. The vignettes were designed by the manager of the early year's manager team within

the borough and I, and were regarded as typical examples of behaviour displayed by children within

early year's settings. Two vignettes were included in the data collection methods to allow for two

different types of behaviour to be presented, and thus gaining a richer picture of participants'

responses and practice.

The vignettes were designed in order to elicit responses from practitioners, regarding what

they thought was happening for the child in the given situation, and what should be done differently.

Vignette one demonstrates an example of a practitioner who is attuned to a child, and who has been

able to contain the child's emotions and behaviour by understanding that this child responds better

to engagement in a task, as opposed to physical contact. Vignette two demonstrates an example of a

practitioner who has not understood the behaviour of a child, and who isn't able to contain his

emotions and behaviour. It was hoped that the two contrasting vignettes would allow practitioners

to more easily discuss and identify the importance of attachment concepts, such as containment and

attunement and relate children's behaviour as a form of communication. In addition the vignettes

allowed for practitioner judgment to be made, regarding their increase in confidence in dealing with

such situations, by presenting a Likert scale question after each vignette. Presenting a consistent

scenario to each participant, and asking for their increase in confidence, in relation to the situations,

allowed for consistency in responses between practitioners, which would not have occurred if they

had been asked more generally about their increase in confidence in the semi structured interview.

Appendix 5a: Vignette design.

Vignette one.

George is a four year old boy. George was often distressed in the mornings, after he had been brought to the setting. He often left the room hiding in toilets and empty spaces. He often responded violently to attempts to hold and to reason with him. On one such occasion he responded to a suggestion that he might draw a picture to give to his Mum later and he drew a picture of himself, his brothers and his Mum.

Q1)   How do you make sense of this?

Prompt… how would you respond to this situation?

Q2)   On a scale of 1 to 10, with 1 being no increase in confidence and 10 being the greatest increase in confidence, how much more confident would you feel about dealing with this situation following the training?

Q3)   What would you do to make a difference? (What would you do differently as a result of the training?)

Vignette two.

The children arrive in their setting, take their coats off and begin to interact with their practitioners, their peers and environment. Allan, who is 3 years old, dashes through the door and crashes into another boy, causing them to fall in a heap on the floor. After a few minutes Allan walks up to another boy and snatches the toy off them. The practitioner takes the toy off Allan and gives it back to the other child. Allan seems to have little capacity to respond to words and explanations. For many weeks Allan continued to find arriving and conforming to the practitioners expectations difficult.

Q1) How do you respond to this?

Prompts… *What do you think may be happening for Allan when he comes to school*?

Q2) On a scale of 1 to 10, with 1 being no increase in confidence and 10 being the greatest increase in confidence, how much more confident would you feel about dealing with this situation following the training?

Q3) What would you do in this situation?

Appendix 6:   Description of ECERS-R.

The ECERS-R is a measure originally developed in the US (Harms & Clifford, 1980; Harms et al, 1998) and adapted for use in the UK by (Munton et al, 1997; Sylva et al, 1998). It is an observation schedule consisting of seven scales. Each scale is made up of 4-10 individual subscales. The seven scales describe the quality of provision along a continuum centred on the following areas 'space and furnishings', 'personal care and routines', 'language reasoning', 'activities', 'interaction', 'program structure', 'parents and staff'.

A pilot of the original interviews and vignettes (appendix 7a) was carried out with the nursery manager in setting A. Although it would have been preferable to use a setting which did not participant in this study, this was not possible because of the limited number of settings who had received the training at the time of designing the data collection tools. However, the nursery manager did not act as one of the participants in the final research. The nursery manager provided feedback on the process, questions and vignettes.

Feedback and changes to data collection tools made following pilot study.

Data collection tool	Feedback and changes made
Vignettes	Vignettes were well structured; no changes were made to these following the pilot study.
SSI	Designed as a rating scale following the pilot study, because the original question (see appendix 7b) did not successfully measure the proposition it had intended; this being... *'Participants will emphasise and rate their role as highly influencing children's social and emotional development and communication'.*
SSI	Following the pilot study the order of the questions were also revised, as it was clear that some questions could influence the answers given by participants to latter questions.

The vignettes and revised questions in the interview, following the pilot study were trialled with two early years' workers from settings that did not participate in this project. Feedback was given in relation to the clarity and phrasing of questions, and the prompts which may be required in order to elicit a 'rich' response (see appendix 7b and 7c).

Semi-structured interviews for participants:

Introduction

INTRODUCE SELF AND ROLE

Firstly can I just say thank you for giving up your time.

- The overall aim of me being here today is to find out how the BSF training was received, what impact has it had on you as a practitioner, if any, and general feedback and ways to improve the training.

My role is not to make judgements about your practice, there is no right or wrong answer, my aim is to simply gather information.

I am recording this session and I will also make some notes. These notes will be subject to confidentiality procedures as the recording. They will not be shared with anyone outside the project group and no names will be recorded.

1 **How has the training helped you understand or appreciate the importance of your role?**
Prompt… how has your view, of the importance, of the child-practitioner relationship changed?

2 **How differently since the training do you support a child's needs?**
Prompt…. Social, emotional and communication needs, how has the training changed your response to these needs?

3 **How has the training helped you to understand the importance of a nurturing environment for a child?**
Prompt… do you feel you aware of this before the training?

4   **If a child displays challenging behaviour now, do you respond differently or think differently?**

Prompt – How do you think your understanding of children's behaviour has changed?

5   **How has your practice changed since this training?**

Prompt… more reflection/reflective practice or getting in tune with your own feelings?

6   **What was the most useful part/concept of the training?**

   Prompt…what has changed you or your practice the most?

7.   **On a scale of 1 to 4 with 1 being poor and 4 being excellent, how would you rate this training in terms of its influence of changing your practice or increasing your awareness?**

Prompt… so not in terms of delivery but the impact it has had on you.

8.   **How would you change this training?**

   Prompt… would could be improved, left in taken out etc.

9.   **What would you say to other early year's practitioners who were thinking of taking this training?**

   Prompt… in terms of whether it was worthwhile –would you recommend or did you know most things?

10. **Are there any other comments you would like to make regarding any aspects of the training/course/content etc?**

1)   **Could you tell me/describe the relationship you have developed with a specific child in recent months?**

Prompt… Can you describe some of the roles that you play in this relationship?   Is this relationship important to the child do you think?

2)   **How does the nursery provide a nurturing environment for children?**
Prompt… do you feel you aware of this before the training?

Can you describe/tell me about a child you have worked with recently who has displayed challenging behaviour? How did you respond?

Prompt – How do you think your understanding of children's behaviour has changed?

3)   **Have there been any recent changes in the way you support a child's needs?**
Prompt…. What has led to these changes?

4)   **How would you say your practice had developed in the last year_ or since the training_?**
Prompt… more reflection/reflective practice or getting in tune with your own feelings and children's feelings? Are you more confident now in dealing with situations?

5)   **On a scale of 1 to 10 with 1 being the least amount of influence and 10 being the most amount of influence, how important do you see your role in supporting children's**
   a. **Communication**
   b. **Emotional development** (how they respond to different situations/regulate their behaviour/emotions)
   ~~b.~~c.**Social development** (e.g. interaction with peers)

6)   Are there any other comments you would like to make regarding any aspects of the training/course/content etc or are there any other areas where training may be useful?

Appendix 7c: Revised vignettes following pilot.

Vignettes.

1.   **George is a four year old boy. George was often distressed in the mornings, after he had been brought to the setting. He often left the room hiding in toilets and empty spaces. He often responded violently to attempts to hold and to reason with him. On one such occasion he responded to a suggestion that he might draw a picture to give to his Mum later and he drew a picture of himself, his brothers and his Mum.**

> **Q1)**   What do you think to this situation? *(How do you make sense of this?)*
>
> *Prompt… how would you respond to this situation?*
>
> **Q2)**   On a scale of 1 to 10, with 1 being no increase in confidence and 10 being the greatest increase in confidence, how much more confident would you feel about dealing with this situation following the training?
>
> **Q3)**   What would you do to make a difference? (What would you do differently as a result of the training? /what would you have done?)

2.   **The children arrive in their setting, take their coats off and begin to interact with their practitioners, their peers and environment. Allan, who is 3 years old, dashes through the door and crashes into another boy, causing them to fall in a heap on the floor. After a few minutes Allan walks up to another boy and snatches the toy off them. The practitioner takes the toy off Allan and gives it back to the other child. Allan seems to have little capacity to respond to words and explanations. For many weeks Allan continued to find arriving and conforming to the practitioners expectations difficult.**

> **Q1)**   What do you think is happening to this child? *(How do you respond to this?)*

***Prompts…?** What do you think may be happening for Allan when he comes to setting*?

> **Q2)**   On a scale of 1 to 10, with 1 being no increase in confidence and 10 being the greatest increase in confidence, how much more confident would you feel about dealing with this situation following the training?
>
> **Q3)**   What would you do in this situation?

Appendix 8:   Ethics form EC2.

Form EC2 for POSTGRADUATE RESEARCH (PGR) STUDENTS

MPhilA, MPhilB, MPhil/PhD, EdD, PhD IS

Part A: to be completed by the STUDENT

PROPOSED PROJECT TITLE**:**

An evaluation of an attachment based, early-years training package: A multiple case study

BRIEF OUTLINE OF PROJECT: (100-250 words; this may be attached separately)

The aim of this study is to evaluate the impact and outcomes of the 'Building Strong Foundations' project. This is an intervention delivered to early year's settings and aims to increase awareness of attachment principles and the importance of creating a nurturing environment.

The evaluation will involve a case study design and will primarily focus on the impact the project has had on early years staff's practice and awareness of how attachment principles and the importance of creating a nurturing environment. The theory of the project asserts that these case studies will show that communicating knowledge of attachment principles and how to apply these in EY settings will have a positive impact of EY staff's practice and will lead to a more nurturing environment for children.

MAIN ETHICAL CONSIDERATION(S) OF THE PROJECT (e.g. working with vulnerable adults; children with disabilities; photographs of participants; material that could give offence etc):

- **Observations of staff within the early year's settings.**
- **Although primarily my observations are of staff, obviously children will be implicated and observed so the issue of confidentiality needs to be addressed.**
- **Own role as a researcher and employee of the local authority, and the possibility of a conflict of interest.**

RESEARCH FUNDING AGENCY (if any): **n/a**

DURATION OF PROPOSED PROJECT (please provide dates as month/year):

August 2009 – January 2010. Research to be submitted in August 2010

DATE YOU WISH TO START DATA COLLECTION:

August/September 2009

Please provide details on the following aspects of the research [note that, if completing this electronically, the form will expand as text is typed; use as much space as you need]:

1. What are your intended methods of recruitment, data collection and analysis? [see note 1]

Please outline (in 100-250 words) the intended methods for your project and give what detail you can. However, it is not expected that you will be able to answer fully these questions at the proposal stage.

The study is a multiple case study design involving four separate early years' settings. Three settings, where the intervention has been received, will be evaluated and will follow a process of literal replication. An additional setting will act as a control and will provide theoretical replication. Recruitment of these provisions will be highlighted by the Early Years Team, within the metropolitan borough in which the evaluation is taking place. The control setting will also be highlighted by the early year's team and will be a children's centre or nursery which has displayed an interest or which has been highlighted as needing such an intervention. Recruitment of practitioners within the nurseries, who will be interviewed, will be on a voluntary basis and will be negotiated by the nursery manager and myself.

Data collection and analysis:

Data will be collected through observations of staff practice within the settings. These observations will be structured by using the ECERS (Early Childhood Environment Rating Scale). Semi-structured interviews will be conducted with 4 staff members in all settings apart from the control setting. Staff members in both the intervention and control setting will also be given a vignette of a practice based

scenario and asked how they would respond to such a situation. Triangulation of data will be collected by looking at past ECERS checklists and looking at planning for social, emotional development.

Interviews will be tape recorded and will be analysed with a tape based abridged transcript, categorised into themes. Analysis of data will be reported through a cross case synthesis, displaying similarities and differences between cases. Participant's names will not be recorded during analysis.

2. How will you make sure that all participants understand the process in which they are to be engaged and that they provide their voluntary and informed consent? If the study involves working with children or other vulnerable groups, how have you considered their rights and protection? [see note 2]

The Early Years' Team will gain the setting's consent for me to carry out an evaluation of the intervention. Consent to carry out observations within the settings will be obtained from nursery managers. In addition permission will be gained from practitioners at the beginning of the semi – structured interviews and vignette activity. The purposes and procedures will be explained to them and they will be invited to ask questions about any aspect of the research before giving consent.

Fine and Sandstorm (1988), in Cohen et al (2007), argue that researchers must provide a credible and meaningful explanation of their research intentions. I will take responsibility for explaining to all participants their role in the study and the aims and intentions of the research.

3. How will you make sure that participants clearly understand their right to withdraw from the study?

All participants will be informed of their right to withdraw as part of the giving informed consent. If any participant withdraws, then they will not be questioned. Nor will their actions be recorded within the write up of this research.

The data from any participant that withdraws will be deleted and hardcopies destroyed.

4. Please describe how you will ensure the confidentiality and anonymity of participants. Where this is not guaranteed, please justify your approach. [see note 3]

I will be the only person present in the semi-structured interviews and during the vignette activity and I will be the only person to have access to the recorded data. Although I will know the identity of the participants I will not make this known publically. The participant's names will not be used throughout the research paper. The settings will not be named. The essence of anonymity is that information provided by participants should in no way reveal their identity. A person is considered anonymous when another person cannot identify participants from the information provided

(Cohen, Manion and Morrison, 2007). All participants including the teachers and children will not be identified and therefore anonymity will be provided.

The qualitative data will not be stored against individuals' names and all data will be treated as confidential.

5. Describe any possible detrimental effects of the study and your strategies for dealing with them. [see note 4]

There are always risks associated with interviewing practitioners about sensitive issues, which may lead them to feel distressed or anxious about their practice. If this happens, it may be necessary to abandon data collection. If the community or the nursery managers were able to identify practitioners from the comments about the intervention and/or how they would act in response to the vignette activity, there could be detrimental effects on the individual participants and the early years setting as a whole. Consequently all comments will be anonymised. In addition I will be viewed only as the researcher, as I do not usually work within these early years settings, so will not asked to share my findings from my research in any way that could result in a conflict of interests.

There will be minimal risks to the environment or society. However, I feel I have a responsibility not to jeopardise the reputation of any settings within the borough in which I work or the reputation of the university. I will therefore not publish any results as valid until these have been seen and scrutinised by my supervisor.

The social and political context of this evaluation needs to be considered also, and the potential conflict of interest that I may experience as an 'internal evaluator' in light of this social and political context. That is, whilst being a researcher I am also an employee of the local authority and may find it difficult to disseminate findings about the training, if they do not confirm the positive expectations of the stakeholders who commissioned the evaluation. If there is potential conflict of interest I intend to openly acknowledge this and discuss with stakeholders. I intend to translate any negative comments into potential, future improvements to the training being evaluated, which will then be -communicated to stakeholders as future implications, which will hopefully lead to future programme improvements.

6. How will you ensure the safe and appropriate storage and handling of data?

All field notes of observations, semi-structured interviews and the vignette activities will be stored in a locked filing cupboard, within Inclusion Support in the borough within which this study took place. The electronic recordings will only be kept on my personal laptop, which can only be accessed with a password, which is only known to me.

All data will be kept here until successful completion of my Applied Doctorate in Educational and Chid Psychology, at which point data will be shredded and put in a confidential waste collection bin.

7. If during the course of the research you are made aware of harmful or illegal behaviour, how do you intend to handle disclosure or nondisclosure of such information? [see note 5]

I do not expect harmful or illegal behaviour to be revealed to me through the course of the research. However, if such behaviour is revealed then I will report this to my line manager and supervisor.

8. If the research design demands some degree of subterfuge or undisclosed research activity, how have you justified this and how and when will this be discussed with participants?

This is not applicable – participants will be informed of the purpose of the research.

9. How do you intend to disseminate your research findings to participants?

A non-academically targeted report will be produced for the study's findings. This will be presented to the members of the steering group for the Building Strong Foundations project. This report will be written for the benefit of the steering group and with the view to improving the intervention where necessary. After completing the research I will write to the early years settings involved in the evaluation, outlining my findings. I will also include my contact details in the letter so that the participants can contact me if necessary.

Appendix 9:   Participant Consent.

Building Strong Foundations evaluation consent form:

I consent to participate in this interview as part of the evaluation for the building strong foundation's project.

In giving my consent I understand that I am agreeing to the following:

- The interview will be recorded;

- The recording will be stored digitally;

- The recording will only be available to the researcher, Marie Fitzer and to admin staff if it is thought necessary to make a written transcript;

- That extracts from the recording might be quoted in order to illuminate or illustrate aspects of data analysis, but that no individuals will be named.

I confirm that:

- I have volunteered to participate in the interview and have not been pressured or instructed to take part; and

- The researcher has assured me of complete confidentiality. I will not be named or identified in any way and the recording and any transcripts will be destroyed once the project is completed.

I understand that:

- I have the right to withdraw at any time and if I do so any contribution I have made will be discarded; and

- I do not have to answer interview questions if I feel I do not want to and can leave at any time during the session.

Appendix 10:   Manager's consent for observation of setting.

Building Strong Foundations evaluation consent form

I give consent for my setting to participate in the evaluation of the building strong foundations training.

In giving my consent I understand that I am agreeing to the following:

- An observation using 9 items from the ECERS scale.
- The observation schedule will only be available to Marie Fitzer, the researcher.

I confirm that

- I have not been pressurised or instructed to take part in the evaluation
- The researcher has assured me of complete confidentiality. The setting will not be named or identified in any way and the observation schedule will be destroyed once the evaluation is complete.

I understand that:

- The setting has a right to withdraw, and if this happens any contributions will be discarded.

Appendix 11:   Code definition.

Key codes developed prior to analysis based on propositions:

Code	Definition	How it relates to propositions
atch	*When describing relationships and interactions with children...* **Attachment** – is the deep and enduring connection established between a child and caregiver. It profoundly influences every component of the human condition, mind, body, emotions, relationships, values. It is something that a child and caregiver create together, an ongoing reciprocal relationship.	**i)** Practitioners will utilise concepts and will make reference directly or indirectly to these terms when describing their relationships and interactions with children
atun	**Attunement** – Process whereby the caregiver is sensitive to the needs and feelings of the child and the child responds to the caregiver. Basis for the development of language and communication.	
con	**Containment –** a process of helping a child to manage their own emotions and anxiety, so that they do not feel overwhelmed by these feelings and can start to develop the capacity to think about the situation. Being able to listen, notice, shape behaviour, restore good feeling through physical emotional and verbal contact and expression of feelings.	
bon	**Bonding -** development of a close, interpersonal relationship between a caregiver and child. Bonding is a mutual, interactive process, and is not the same as simple liking. This bond is characterized by emotions such as affection and trust.	
NurEnv	**Nurturing environment** • Children's learning is developmentally understood • The setting offers a secure base • The child is valued by listening, responding, sharing and being recognised as an individual • Behaviour is viewed as communication • Practitioners recognise the importance of transition.	**iv (c)** Practitioners will use terms such as 'nurturing' and 'secure' to describe the ideal environment of a nursery and describe the setting as valuing the child.

Behcom	Practitioners will make a connection to children's feelings when describing differing types of behaviour and suggest that there is a reason for behaviour. When talking about challenging behaviour they will describe that it has a purpose or reason and is trying to communicate a need.	v (a)Practitioners will make a connection to children's feelings when describing differing types of behaviour and suggest that there is a reason for behaviour.
RefP RefFeel	**Reflective Practice –** any formal or informal occasions when practitioners have thought about how they or another member of staff acted in a situation **Reflecting on own feelings** – when practitioners report understanding how their feelings can impact the children and understand the importance of being aware of their own emotions and feelings.	vi (a) staff will report engaging in more reflective practice and reflecting on their own feelings more

Secondary Level Coding

Code	Name	Relation to original code	Definition	How it relates to propositions	Research Question
AB+indir+rel	Indirect reference to Attachment and Bonding	Atch & Bon	Any indirect reference to attachment and/or bonding, as originally defined, when discussing relationships or interactions.	**Pi**	**RQ i**
AB+dir+rel	Direct reference to attachment and bonding	Atch & Bon	Any direct reference to the terms attachment and/or bonding as originally defined, when discussing relationships or interactions.	Pi	**RQi**
AB+gendisc	General ref to attachment and bonding	Atch & Bon	Practitioners have related to terms attachment and bonding indirectly or directly without relating it to a relationship or interaction with a child		**RQi**

AC+indir+rel	Indirect reference to attunement or containment	Atne & Con	Any indirect reference to attunement and/or containment, as originally defined, when discussing relationships or interactions.	Pi	RQ i
AC+dir+rel	Direct reference to attunement or containment	Atne & Con	Any direct reference to the terms attunement (including, the phrase 'being in tune') and/or containment as originally defined, when discussing relationships or interactions.	Pi	RQi
NurEnv	Nurturing Environment	NurEnv	Any correct reference to a nurturing environment as defined originally.	Piv (c)	RQ iv
INNurEnv	Incorrect Nurturing Environment	NurEnv	Any incorrect reference to a nurturing environment.	Piv (c)	RQ iv
BehCom	Behaviour as a form of communication	BehCom	Any reference when talking about challenging behaviour that is described as having a purpose or reason and/or is trying to communicate a need/emotion.	Pva	RQv
ChFeel	Children's feelings	BehCom	Any reference where children's feeling are used when talking about behaviour.	Pva	RQ v
ImpAwa+Prc	Improved awareness and practice	BehCom	Any reference where an improvement in practice has been suggested to be as a result of the training making practitioners more aware of how a child feels and thinking and acting differently in response to challenging behaviour.		RQv
RefPrac+feel	Reflective practice and reflecting on own feelings	RefP & RefFeel	Any formal or informal occasions when practitioners have thought about how they or another member of staff acted in a situation or when practitioners report understanding how their feelings can impact the children and understand the importance of being aware of their own emotions and feelings.	Pvi (a)	vi
ParW	Improved parent working		Any reference to where the training had helped working with families and or parents	n/a	n/a

Appendix 12:   Inter-coder reliability interview and score.

Participant 4; setting 1:

Time	Verbatim example	Researcher coding	EP coding
00:43	'formed a relationship with a little boy who was behavioural wise was starting to get quite bad for mum at home and mum was struggling, when he came to nursery he did make an attachment with me and when his behaviour turned at nursery he would always take it out on me, but he would reason with me once I'd talk to him and tried to settle him and then he'd give me a cuddle'	Atch Con	Atch (a) Con (a)
2.00	'I would ask him if he wanted a cuddle but he would shout so I'd get a toy and try and engage him in that, he come a little closer and when he was calm he'd come to me'	Con/ atun	Con (d)
	He was struggling at home with mum and mum didn't know how to react to him and because I didn't shout at him and would talk and reason with him before he got to far.	Con	Con (a)
2.55	All the staff are very loving and friendly, and we do try and make bonds with all children so that when they come in of a morning they recognise the person who opens the door to them... 'We were aware of it before training but it makes you think more'.	NurEnv Bon	(d) Bon (a)
3.59	'Think more about feelings since training, as in our feelings as well as the children's cause if their upset then we are like 'well I don't know what's the matter', but we have to stay calm because our feelings, they can feel that'	RefFeel	RefFeel (a) RefP (d)
5.05	'Need to get to know child, a lot of contact with parents to know what child needs are... obviously it's a big step coming to a nursery where you mum and dad aren't so you need to be that parent role to meet their needs, knowing what they like what they don't like'	Atun	Atun (a) Atch (d)
5.56	'yes and I think you confidence grows year after year when working with children' 'Are you more reflective since the training?' 'yes – it did help'	RefP	(d)
6.58	Communication – very important – 10: we're the closest thing to them while they're here, we need to know what they're		BehCom

	trying to communicate between themselves and them and us, again to meet their needs.

Emotional dev – very important again - 10: Ensuring that a child feels safe. They are emotional when they come to nursery but we need them to know they are safe with us. Try and give them what their parents give them, that attachment.

Social dev – 10: We may be only social interaction they get, so we encourage that they can play and sharing and turn taking. | Atch | (d)

Atch (a) |
| 10.30 | We are having the course again for new staff and I'm going on the refresh, as I'm now coordinator. | | |
| 10.51 | **In response to vignette...** 'Very lonely, upset, isn't getting the love he needs' Think the nursery aren't trying very hard, he needs loving and attention'. | BehCom | BehCom

(a) |
| 11.46 | **Response to vignette...**'What would you do?'

'lots of support and encouragement, see if he will let you cuddle him, if not at least hold your hand to move around room, to sit with you, if he wants to have a sleep, sit in an empty space but take something with you to engage him that way'

'Would you have done this before training?' 'we would have done that before training' | Con/atun | Con/ atun

(a) |
| 13.02 | 8 – 'Feel a lot more confident, because the training it did make you think about your emotions as well which we didn't do, so it's not just the children's emotions but ours, as they rub off on the child.' | RefFeel | RefFeel

(a) |
| 14.30 | **In response to vignette...**'he's not used to sharing...everything he has he thinks is his. Not so much boisterous but quite dominant. | BehCom | BehCom

(a) |
| 15.32 | He hasn't been around other children, so he doesn't feel that he should have to share as he not used to it' | BehCom | BehCom

(a) |
| 16:10 | 'As for when he's coming through door you would encourage him to walk, if he's snatching toys I'd try and reason...sitting down with other children so he can play and modelling this | Con/atun | Con

/atun |

	with another child, so he can see how to share'		(a)
17.00	'Since the training has your response changed?' 'yeah slightly, just thinking more about child's situation and why he's doing that in first place, what causing him to be like that.'	BehCom	BehCom (a)
17.48	8 – I suppose some children aren't going to take to you as a person, if that child hasn't attached to you it hard to sort out...understanding that a child forms different attachments'.	Atch	Atch (a)

(D)= disagreement- either coding is different or not present

(A)- agreement- same code used

Number of agreements

Intercoder reliability = --

Total number of agreements + disagreements (x100)

15

Intercoder reliability = ----------------------

15 + 6 (x 100)

Intercoder reliability = 71.4%

This exercise highlighted the importance of cross checking code definitions and the need to check interview transcriptions carefully to ensure all possible codes had been allocated.

	S1	S2	S3	CS
■ previous ECERS-R scores	48	32	48	11
□ BSF evaluation, ECERS-R scores	44	16		35
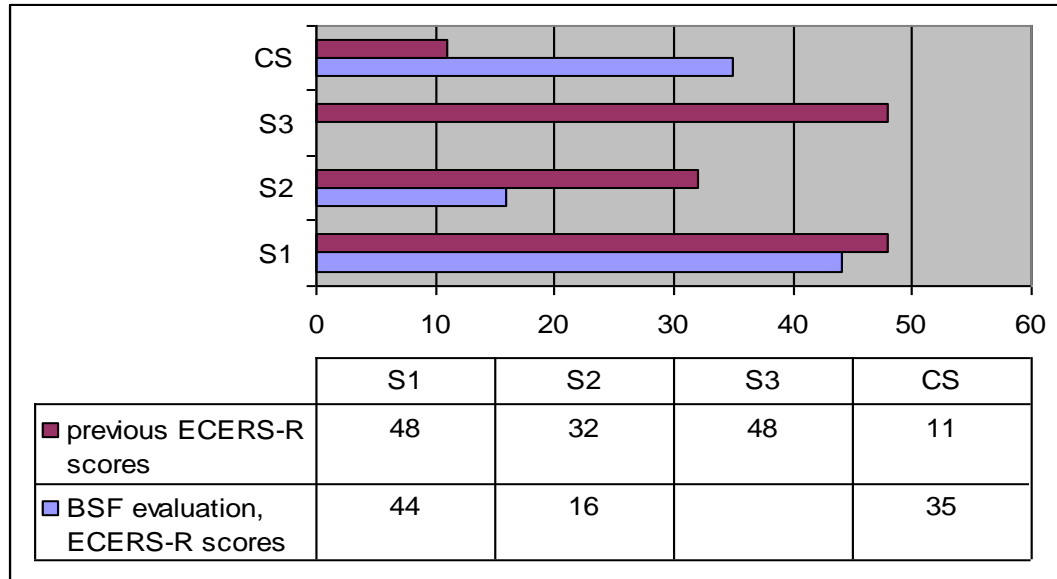
Figure 11: Comparison of total previous and comparison ECERS-R scores.

Data was not available from the Early Years and Childcare Unit on setting 3, so previous ECERS-R scores cannot be compared. Previous ECERS-R scores for setting 2 were taken before the BSF intervention, and therefore it would be expected that these would be considerable lower. Setting 1's previous ECERS- R scores were recorded after the BSF intervention and therefore scores should be at a similar level to those recorded in this evaluation, which is the case. The only discrepancy is in previous ECERS-R scores and those obtained in this evaluation for the comparison setting where scores obtained in the evaluation are lower than those obtained by previously. However, previous scores were taken in 2007 and therefore may not be a true reflection of the setting at the current date.

	S1(previous)	S1	S2 (previous)	S2	S3 (previous)	S3	CS (previous)	Cs
■ Staff interaction & cooperation	7	7	3	4		7	5	1
■ Interactions among chn	6	7	2	4		7	5	1
■ Staff-Child interactions	7	7	3	6		7	4	1
□ Discipline	6	7	2	4		7	4	1
□ General supervision	6	7	1	4		7	4	1
■ Encouraging chn to com	5	7	3	4		6	5	2
□ Greeting & Departings	7	6	2	6		7	5	4
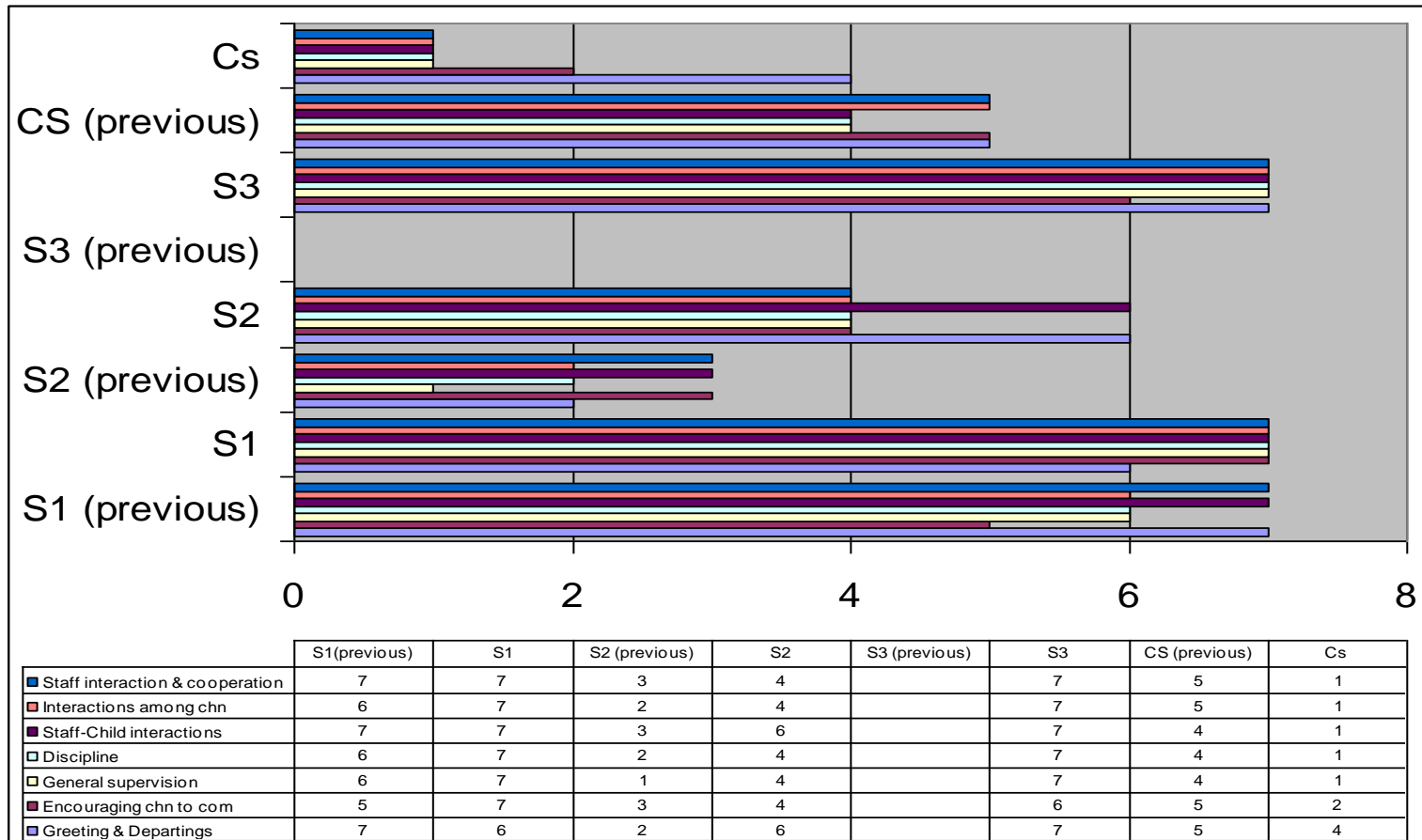
Figure 12 : Comparison of previous ECERS-R scores with evaluation scores, for each seven subscales, per setting

Code	Name	How it relates to propositions	S1					S2					S3					CS				
			P1	P2	P3	P4	T	P1	P2	P3	P4	T	P1	P2	P3	P4	T	P1	P2	P3	P4	T
AB+indir+rel	**Indirect reference to**	**Proposition 1**	1	2	1	0	4	1	1	1	1	4	1	1	1	1	4	1	1	1	1	4

Code	Name	How it relates to propositions	S1					S2					S3					CS				
			P1	P2	P3	P4	T	P1	P2	P3	P4	T	P1	P2	P3	P4	T	P1	P2	P3	P4	T
	Attachment and Bonding																					
AB+dir+rel	**Direct reference to attachment and bonding**	**Proposition 1**	0	0	0	3	**3**	1	0	0	0	**1**	1	0	1	0	**2**	1	1	2	1	**5**
AB+gendisc	**General ref to attachment and bonding**	**Proposition 1**	0	0	0	2	**2**	0	0	0	0	**0**	1	0	0	0	**1**	0	0	0	0	**0**
AC+indir+rel	**Indirect reference to attunement or containment**	**Proposition 1**	1	2	3	2	**8**	1	0	1	0	**2**	3	0	0	1	**4**	1	0	0	1	**2**
AC+dir+rel	**Direct reference to attunement or containment**	**Proposition 1**	0	0	2	0	**2**	0	0	0	0	**0**	0	0	1	0	**1**	0	0	0	0	**0**
NurEnv	**Nurturing Environment**	**Proposition 4 (c)**	2	1	1	1	**5**		2	2	1	**5**	1	1	1	1	**4**	1	1	1	0	**3**
INNurEnv	**Incorrect Nurturing Environment**	**Proposition 4(c)**						1														1
BehCom	**Behaviour as a form of communication**	**Proposition 5(a)**	2	1	2	1	**6**	2	2	3	2	**9**	1	1	1	0	**3**	0	0	0	0	**0**
ChFeel	**Children's feelings**	**Proposition 5(a)**	1	0	0	0	**1**	0	1	0	0	**1**	1	0	1	0	**2**	0	0	0	0	**0**
ImpAwa+Prc	**Improved awareness and practice**	**Proposition 5(a)**	3	2	2	0	**7**	1	1	2	0	**4**	2	2	2	1	**7**	n/a	n/a	n/a	n/a	
RefFeel	**Reflecting on own feelings**	**Proposition 6**	1	1	1	1	**4**	1	0	1	0	**2**	0	0	0	0	**0**	0	0	0	0	**0**
RefPrac	**Reflective practice**	**Proposition 6**	1	1	1	1	**4**	1	4	1	1	**7**	3	1	2	1	**7**	0	1	0	0	**1**
ParW	**Improved parent working**	**n/a**	0	0	0	0	**0**	0	1	0	0	**1**	2	1	2	0	**5**	0	0	0	0	**0**

Appendix 14: Frequencies of codes based on qualitative analysis of semi-structured interview.

Appendix 15: Frequencies of codes based on qualitative analysis of vignette responses.

Code	Name	How it relates to propositions	S1					S2					S3					CS				
			P1	P2	P3	P4	T	P1	P2	P3	P4	T	P1	P2	P3	P4	T	P1	P2	P3	P4	T
AB+indir+rel	**Indirect reference**	**Proposition 1**																				

Code	Name	How it relates to propositions																				
	to Attachment and Bonding																					
AB+dir+rel	Direct reference to attachment and bonding	Proposition 1																				
AB+gendisc	General ref to attachment and bonding	Proposition 1				1	1									1	1					
AC+indir+rel	Indirect reference to attunement or containment	Proposition 1	2	3	2	2	9	2	2	2	2	8	2	2	2	1	7	2	1	1	1	5
AC+dir+rel	Direct reference to attunement or containment	Proposition 1																				
NurEnv	Nurturing Environment	Proposition 4 (c)																				
INNurEnv	Incorrect Nurturing Environment	Proposition 4(c)																				
BehCom	Behaviour as a form of communication	Proposition 5(a)	4	1	3	3	11	2	3	4	2	11	3	2	5	3	13	2	2	3	3	10
ChFeel	Children's feelings	Proposition 5(a)	0	3	2	2	7	3	2	3	1	9	3	1	2	2	8	1	2	2	2	7
ImpAwa+Prc	Improved awareness and practice	Proposition 5(a)	1	1		1	3	1	2	3		6	1	1			2	n/a	n/a	n/a	n/a	
RefPrac+feel	Reflective practice and reflecting on own feelings	Proposition 6				1	1															
ParW	Improved parent working	Proposition 6																				

Appendix 16: Total Frequencies of codes based on qualitative analysis of vignette and SSI response.

Code	Name	How it relates to propositions	S1		S2		S3		CS	

			P1	P2	P3	P4	T	P1	P2	P3	P4	T	P1	P2	P3	P4	T	P1	P2	P3	P4	T
AB+indir+rel	Indirect reference to Attachment and Bonding	Proposition 1	1	2	1	0	4	1	1	1	1	4	1	1	1	1	4	1	1	1	1	4
AB+dir+rel	Direct reference to attachment and bonding	Proposition 1	0	0	0	3	3	1	0	0	0	1	1	0	1	0	2	1	1	2	1	5
AB+gendisc	General ref to attachment and bonding	Proposition 1	0	0	0	3	3	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0
AC+indir+rel	Indirect reference to attunement or containment	Proposition 1	3	5	5	4	17	3	2	3	2	10	5	2	2	2	11	3	1	1	2	7
AC+dir+rel	Direct reference to attunement or containment	Proposition 1	0	0	2	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0
NurEnv	Nurturing Environment	Proposition 4 (c)	2	1	1	1	5		2	2	1	5	1	1	1	1	4	1	1	1	0	3
INNurEnv	Incorrect Nurturing Environment	Proposition 4(c)						1													1	
BehCom	Behaviour as a form of communication	Proposition 5(a)	6	2	5	4	17	4	5	7	4	20	4	3	6	3	16	2	2	3	3	10
ChFeel	Children's feelings	Proposition 5(a)	1	3	2	2	8	3	3	3	1	10	4	1	3	2	10	1	2	2	2	7
ImpAwa+Prc	Improved awareness and practice	Proposition 5(a)	4	3	2	1	10	2	3	5	0	10	3	3	2	1	9	n/a	n/a	n/a	n/a	
RefFeel	Reflecting on own feelings	Proposition 6	1	1	1	2	5	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0
RefPrac	Reflective practice	Proposition 6	1	1	1	1	4	1	4	1	1	7	3	1	2	1	7	0	1	0	0	1
ParW	Improved parent working	n/a	0	0	0	0	0	0	1	0	0	1	2	1	2	0	5	0	0	0	0	0

CHAPTER FOUR:

VOLUME ONE: RELECTIONS AND CONCLUSIONS

Volume one: Reflections and conclusions.

This chapter outlines some final reflections and conclusions, which could not be included in chapter 3, due to the requirement of writing to journal specification. Here I outline limitations in design and methods of the study and also discuss the impact which this study makes to the profession of educational psychology.

1. **Reflections of the research design:**

Although the design of this study has been carefully considered, it is apparent that there are some limitations in the design and methods used. Firstly, the sampling strategy used, can be criticised because convenience sampling can result in acquiring a distorted sample of participants, which may not be representative of the actual population. Although the sample from which I could select participants and settings was restricted, stratified sampling may have been a positive alternative. Here I could have ensured a simple form of stratification by making sure my sample mirrored known features of the whole population (for example, gender, age, qualification, length of experience). Using such sampling for my comparison setting would have increased the internal validity in my study (Robson, 2002), as it is likely that extraneous factors in the comparison setting, made the validity of comparing settings limited.

An alternative to using a comparison group in this study may have been to design the evaluation as a pretest-post-test with one or two settings. This may have demonstrated and allowed changes and improvements in the settings, following the training, to be identified

more easily. However, the short time scale of this project and the timing of interventions in settings permitted this design to be possible. In addition, as with the issue of controlling extraneous factors in the comparison group, there would also be extraneous variables which would be outside of my control in a pretest-post-test design, which could have equally invalidated my research (Cohen et al. 2007).

In addition even though I asked for volunteers to act as participants, I was aware that on occasions some participants had been selected to participate by their manager. This may have resulted in the manager 'hand picking' in order to give the most positive reflection of their setting. In addition the different ages and levels of experience of participants may have affected results. Despite the limitations of the sample selection process, this was judged acceptable as the main aim was to sample the views of practitioners who had received the training.

In addition, the number of settings involved in the project was small, therefore decreasing the generalisability of the results. However, this was not regarded as a problem because of the case study design employed in the project. The problem of generalisation, due to a small sample size, is overcome with a case study design because they rely on analytical generalisation, where the investigator sets out to generalise their results to some broader theory not to a larger population (Yin, 2009).

1.1   *Data collection methods.*

Further design limitations include some aspects of the data collection methods. The semi –structured interview and vignette scenarios were an effective data collection tool for gathering the views of participants. An alternative tool which was considered as a possible method of data collection was the use of focus groups. However, because all the participants were at different levels in their careers and had differing experience, it was felt that these factors could hinder open and honest discussions regarding the intervention. Lee (1999) suggests that acquaintances are more likely to share tacit knowledge, making discussions among group members difficult to interpret. A semi –structured interview and the vignette scenarios' provided an anonymous and confidential forum for participants to voice their opinions and were therefore deemed most appropriate in this instance.

The qualitative data which the interviews and vignettes produced could be considered an additional limitation because of concerns regarding reliability due to a lack of standardisation. Banister (1994) suggests however that the views of participants would not be represented by using quantitative data collection methods, whereas in an interview you can tailor your questions to the position and comments of your interviewee. The semi – structured interviews and vignettes used in this evaluation allowed me to respond and follow up issues raised by participants. In addition, and to complement the qualitative data collection methods, a structured observation and scaling questions were used to allow triangulation of data, in order to confirm and corroborate results, and to add further information and detail to the analysis. Thomas (2009) states that it is to be applauded to use

mixed methods in your design, and Miles & Huberman (2002) state that mixed method approaches enable both researcher and participants' perspectives to be considered.

Using a semi – structured interview as opposed an unstructured interview could also be considered a criticism of this evaluation project. Powney and Watts (1987) suggest that unstructured interviews allow the interviewee to be in control and to set the agenda. I concluded that an unstructured interview would not be a suitable tool in this evaluation because of the limited time allowed for data collection and analysis, and because an unstructured approach is also more open to bias and interpretation. Robson (2002) suggests that this approach needs considerable experience and skill from the interviewer, which I did consider myself to have.

The use of semi structured interviews and vignettes could be criticised because of their lack of validity. Cohen et al (2007) suggests that interviews can allow for too much bias, due to the characteristics of the respondent and the interviewer, and the content of the questions, and that these sources of bias need to be reduced. Kitwood (1977) suggests that reducing bias can be done by careful formulation of the questions in order to make the meaning clear. Careful planning was taken over the questions in the interviews and vignettes, conducted in this evaluation project, and consideration of the extent to which the questions might influence a respondent was deliberated and refined following the pilot study. However, it is apparent as discussed in section 6 of chapter 3 of this volume that some questions did allow for bias and may have influenced the responses given to certain questions. This would be an area for development when conducting this evaluation in future.

The use of a structured observation in this design could be criticised because it did not allow me to gather thick descriptions of social processes and interactions, which Cohen et al (2007) suggests provide an accurate interpretation and explanation of events. However, I decided to use of an observation schedule to complement the qualitative data provided by the semi structured interviews and vignettes, and because it allowed me to generate numerical data, enabling me to make comparisons between settings and note patterns and trends. Additional narrative notes were also taken to allow me to record data which I considered to be a rich example of interactions for the evaluation.

1.2   Challenges to validity and reliability.

This research uses mixed methodologies, collecting both qualitative and quantitative data. Although the traditions of qualitative and quantitative research differ, the concepts of validity and reliability are relevant to both. Lee (1999) suggests that the clarification of these concepts is critical to the application of blending quantitative and qualitative research designs. Lee (1999) describes reliability in its simplest form as:

> *'…consistency and stability of scores…consistency is most thought to mean repeatability…stability is most often thought to mean the obtained scores consistency over time' (pg 146).*

To ensure consistency in this study, a plan and design of the all data collection methods have been included in the appendix, which would allow this study to be replicated. As reliability also derives from the scored outcomes of the measurement procedures (Lee, 1999), one consideration of this study was if scores obtained from the ECERS-R –R schedule

would yield similar data over time. Previous reliability scores of the ECERS-R were checked in the introduction of the ECERS-R handbook. Overall scores were quite satisfactory, with the ECERS-R being reliable at the indicator and item level, and at the level of total score. The internal consistency of the scale at the subscale ranged from .71 to .88 and at total score level was .92. Table 18 below presents the internal consistencies for the four subscales used in this study.

Table 18: Intra-Class Correlations for ECERS-R subscales

Scale	Interrater internal consistency
Personal Care Routines	0.72
Language-Reasoning	0.83
Interaction	0.86
Parents and Staff	0.71

In qualitative research reliability can be regarded as a fit between what the researcher records as happening in their data, and what is actually occurring in the real world (Cohen et al, 2007). The use of multiple methods of data collection in this study allowed further reliability by permitting triangulation, therefore attempting to ensure consistency between my data and the real world situation.

Lee (1999) argues that the concept of validity is universally meaningful to the evaluation of both qualitative and quantitative research, but is often overlooked by qualitative researchers. Thomas (2009) suggests that certain forms of validity may not fit into qualitative studies, but argues that the larger concept of validity should still be relevant. Yin (2009) suggests that case studies have been criticised for failing to develop a sufficiently

operational set of measures, and that too often subjective judgements are used to collect data. This study has considered the issue of construct validity by endeavouring to gather a wide range of evidence from different sources. Construct validity considers if scores actually measure what a researcher claims they do and not something else.

Yin (2009) suggests that in order to ensure construct validity, researchers should compile evidence from a range of measurements (for example, reports, official records, interviews, participate in case settings and examine official artefacts). This study has gathered evidence from observations, semi-structured interviews and vignette scenarios. Furthermore, additional information, needed to identify rival explanations was collected (for example, previous training delivered). Yin (2009) also suggests that participants should review the case study report to ensure its honesty and clarity, thus ensuring that no incorrect interpretations are accidentally based on their own perspective of the studies data. Although I explained my purposes, and read responses for clarity to participants, I cannot be certain that responses were unaffected by their perceptions of me and what I might do with the results.

Internal validity is a concern for explanatory case studies, as in this project, because of the desire to explain why a set of results occurred and make inferences (Yin, 2009). Cohen et al (2007) describe that internal validity seeks:

> *'…to demonstrate that the explanation of a particular event , issue or set of data which a piece of research provides can actually be sustained by the data' (p. 135)*

In this study internal validity was supported by identifying possible rival explanations during data collection and analysis in order to identify conflicting interpretations of the data and

give me more confidence in the data. By doing this theoretical triangulation was also possible, where alternative and competing theories were considered. This is reflected in the discussion of my findings. The issue of external validity has also been a problem with case studies, because of the poor basis for generalising (Yin 2009). This study has attempted to overcome this problem by adopting a multiple case design and applying replication logic.

The reliability and validity of the coding process also needs to be considered, as the way in which we explore a problem will affect the explanation we give it (Bannister et al, 1994). Gillham (2000) emphasises that categories are a product of the human brain and are therefore subjective. This study has partly measured outcomes based on a practitioner's awareness, understanding and practice through, analysis of the interviews and vignette responses. Interpretations are subjective, and it is important to be aware that in this study, my position may have influenced such interpretations of the data. Peer checking of coded data (as advised by Robson, 2002), was a technique used in this study to ensure interrater reliability (see appendix 12). However, this study neglected to gain interrater reliability on observations, due to restrictions of gaining an additional person to contribute to the research, especially those trained in carrying out the ECERS-R schedule. Although previous ECERS-R scores go some way to gain interrater reliability, the time difference between when these scores were obtained, makes them less reliable. Gaining interrater reliability during the observations would be a development for this study.

Robson (2002) outlines 'deficiencies of the human as an analyst' (p. 460) including 'data overload' which he suggests is, being limited on the amount of data that can be received, processed and remembered. This is relevant to this study because of the number

of codes which were used, and because of the need to revise and add codes. However

listening to the interviews and checking the coding, several days after initial coding took

place, was a step taken to increase reliability.

2. **Reflections on the impact and contribution to professional practice**

By carrying out this evaluation project I intended to provide efficacy for the Building

Strong Foundations intervention and thus provide further support for the use of attachment

based frameworks in the early years. This aim has been achieved to a certain extent; the

outcomes of the evaluation are mainly positive, although accepting rival explanations has

been necessary in some instances. This study has served to provide more evidence for the

application of attachment based interventions in the early years.

This study also contributes to professional development, by highlighting the need for

educational psychologists to engage in early preventative development work, especially in

the early years. The document '*A review of the functions and contributions of educational*

psychologist in England and Wales in light of 'Every child matters: Change for Children

(Farrell et al, 2006), suggests that there is a degree of overlap between Clinical and EP roles

in the early years, indicating the need for EPs to carve out their role in this area more

effectively. Preventative organisational work, such as the Building Strong Foundations

intervention, is likely to be an effective way for EPs to work in such settings in the future.

This is consistent with the DfEE (2000) and Wolfendale and Robinson (2001) reports which

supports a move towards the reduction in EPs conducting statutory work, and places an

emphasis on early intervention, through training and preventative interventions that

promote child development, and which contribute to government led initiatives, such as the Early Years Foundation Stage curriculum (DCSF, 2008) and Social and Emotional Aspects of Development, (SEAD, DCSF, 2008).

This study also highlights the need for multiagency work with early year's teams and surestart professionals in order to develop effective interventions and initiatives within the early years, by sharing knowledge and skills. Recent findings by Shannon and Posoda (2007), however, suggest that EPs still engage in a high level of individual casework and although multiagency and organisational work is a high priority for many EPs, there is a lack of time due to individual work. Limited opportunities to engage in research and projects in the early years were also reported. Shannon and Posoda (2007) conclude that there is a considerable amount of EPs who are dissatisfied with current practice and delivery. They conclude that EPs need to demonstrate that preventative work in the early years does make a difference, providing evidence based practice in order to precipitate change and service delivery. This evaluation has gone some way to do this, showing that preventative early years work is effective and valuable in creating positive change in practitioner awareness and practice, and is an effective way of working for EPs.

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