An Exploration Into The Impact Of Animals As A Therapeutic Adjunct In Education For Children With Behaviour, Emotional And Social Difficulties:

A BIOPHILIC PHILOSOPHY FOR EDUCATION

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Coral Harper
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This Thesis is dedicated to the children I have been privileged to work with and the animals who have facilitated their learning; about animals, about themselves, about the world and life within it. Without them, their spirit, their resilience and their determination the notion for this study would never have reached fruition.

Abstract

This PhD study makes an original contribution to to current research by examining through case study the impact of animal assisted activities for children and young people with Behaviour, Emotional and Social Difficulties (BESD). The thesis presents data, which supports that where contact with animals is offered as an alternative to traditional classroom based learning, children and young people with BESD are supported therapeutically, and enabled to build key relationship skills, thus enabling greater chance of success in learning.

The primary motivation for the research was a commitment to better understand and thereby contribute, to a body of literature which seeks to explain and develop solutions and interventions for children and young people with a special need described as BESD alongside a curiosity for the world of nature and animals.

Literature in this field includes consideration of frameworks which underpin work with BESD, such as research into trauma and its implications, leading to theories of attachment and in some cases, other psychodynamic concepts. Studies in Animal-Assisted Therapy and E.O.Wilson's (2003) Biophilia Hypothesis support the consideration of animals as facilitators for mental and emotional health.

The study employs a qualitative constellation methodology looking at three main case study contexts and utilising four additional smaller case studies to triangulate the findings. Psychosocial research tools were employed in order to understand the participants 'story', given the complexity of working with a vulnerable and challenging group.

The main findings of the study show that animals have therapeutic potential as a conduit for relationships, being both social facilitators and taking the role of 'the common third' (Cameron and Moss, 2011). In a natural environment, with positive staff facilitation and purposeful activity, interventions with animals can support the development of key relationship skills such as trust, identification, empathy, nurture, understanding and self control. Further, the study shows there maybe educational impact, emotional impact, language and communication support and even health benefits. The study concludes with a discussion of the findings and makes recommendations for further empirical long-term research in the field of BESD and animal assisted activities.

Chapter One

Introduction to the study

1.1 Introduction

This thesis is an exploration of the therapeutic and/ or educational impact of integrating animals into settings with children described as having Behaviour, Emotional and Social Difficulties (BESD). It is an examination of contexts and approaches to see what factors, benefits, or otherwise may be present when children and young people are involved directly with animals.

The study involves an exploration of activities and interventions between children and animals within a number of settings in order to determine what is happening. It will explore the specified aims and purpose of each setting and consider whether educational and/or therapeutic impact is evident, is useful as an intervention, or indeed as a conduit for education. By looking at a variety of settings, the study will compare and contrast each context and subsequently test out the presenting data against literature, including theories which have prompted this study, such as Wilson's (2003) notion of 'Biophilia'. Ultimately, the study will evaluate these interventions and their potential implications for the education of children and young people with BESD.

This research is motivated by a commitment to better understand and thereby, contribute to a body of literature which seeks to explain and develop solutions and interventions for children and young people with a special need described as BESD. Given the issues that these students present, the focus is on relationships, hence the research design for the study is predominantly qualitative.

This introductory chapter is intended to set out the context and aims of the study by providing an overview of the research. This synopsis includes an explanation of the motivation for the study and an introduction to the participants, the settings and the focus of the study. The chapter begins then, by setting out personal and professional contexts, and secondly, articulating the aims and research questions, which have informed this study. It then goes on to discuss the research context including signposts to key literature and hypotheses contributing to the study. An overview of each chapter is presented, in order to contextualise the research and clarify the direction of the study.

1.2 Personal and Professional Context

My interest in this area of research has grown from nineteen years of teaching, sixteen years of which working alongside some of the most challenging (and I would argue the most rewarding) pupils in the country.

The recently published NASEN guide to education (2013) defines BESD as 'all those pupils of any ability whose behaviour, social and emotional difficulties present a barrier to learning and participation' (p.70). There has been debate for decades over the terminology, causes and provision for dealing with children now described as having 'BESD'; this is explored further in 1.4.1. The children and young people within the debate are often 'mythologised, demonised and pathologised' (Lloyd-Smith and Davies, 1995, p.5) through a misconception of their specific needs and resultant behaviours. Following

the 1988 Education Act, Subject Knowledge and Outcomes, were given significantly greater focus than the more pastoral aspects of education, providing daily challenge to those educators working with children with little concept of themselves and the relationships surrounding them, let alone the world of attainment and academic achievement. This trend has surfaced again with the introduction of the 2014 Primary curriculum in England, heavily focussed on the acquisition of knowledge [https://www.gov.uk/government/collections/national-curriculum, accessed 13/03/14]. Those children labelled and 'excluded' from mainstream schools to date have often been given statements of Special Educational Need (SEN) and placed, in special provision within smaller classes, and a higher staff-pupil ratio, but nevertheless with the same expectations within the curriculum which affords little time for the development of their social and emotional skills.

Garner (1999) summarises three models of intervention for pupils with BESD, noting that most schools offer a 'hybrid approach' (p.24) including:

- The Behaviourist Approach

- Psychodynamic and Therapeutic Approaches

- The Ecosystemic Approach

My own teacher training, emphasised the Behaviourist approach, based upon early theories of learning, cause and consequence, learning and unlearning. Beginning my teaching career in inner city London, working with troubled and troubling children within a mainstream context, it quickly became apparent to me that a Behaviourist approach alone would not suffice. Personal study into Educational Therapy helped me to begin to consider and understand why some children depart from developmental norms and behaviours and become challenged and challenging both emotionally and psychologically and are unable to be adequately supported within the 'usual' school system.

My introduction to SEN specialist teaching came a little later when I started working within an independent residential psychotherapeutic context. Whilst working within this setting, I encountered some children I was struggling to reach and teach. On Friday afternoons, I would take these children for a long walk. Preferring always to walk with a dog, I would rush home at lunchtime to collect my own dog so that he could accompany us on our wanders. The results were astonishing. Simplistically described, Bob the dog facilitated and opened up conversation, loosened inhibitions and enabled first pupil and dog and secondly teacher and pupil, to begin to develop trust, relationships, and attachments. Ultimately, the development of these relational skills and attachments helped initiate a route towards self-development and support the development, self-belief and eventually esteem for these damaged children. I was enabled to meet the social and emotional needs of some of the most challenging and 'defended' (Winnicott, 2005) children within my care.

It is important to highlight that being outside may have helped the much sought after therapeutic effect. Research shows that nature may have an additional therapeutic benefit (Moss, 2012). The exploration of Nature is a bigger study; nevertheless, its place within this specific intervention and in each intervention within the study is acknowledged.

An Ecosystemic Approach to BESD education, as described by Garner, illustrates the change occurring with the introduction of a dog to my own classroom. An Ecosystemic approach, a term originating within Family Therapy, is based on a consideration of a set of individual 'systems', and the dynamics arising at the interface of these systems. Garner comments that "[children's] behaviour is a product of interactions within and between (these) systems…problematic behaviour occurs when there is a dysfunction between these systems" (p.25). In this example, the systems may include the children's routines, environment, relationships and beliefs about themselves. Changing the *system*, or

environment, relationship and focus, changed the dynamic, albeit momentary; of the relationship presented.

Impressed by the response and seemingly systemic change in behaviour of the children on introduction of a dog to my classroom, I began researching the effect that animals can have on children, ill health and people in general. In doing so, I learned of The Biophilia Hypothesis, (Wilson, 2003) which suggests an instinctive and inherent bond and affinity between human beings and other living systems. Biophilia suggests that as humans, we *need* in some way to be in contact with animals and nature in order to fully develop and maintain good mental health and wellbeing. This connection for some will be the physical presence of animals or plants, whether in natural environments outdoors, or the inclusion of pot plants or pets in the home or office. It may be a natural view from the window, an image of nature or animals displayed or a walk amongst an avenue of trees at lunchtime. Biophilia does not assume a conscious connection and is based upon a genetic history of connection with nature and animals over thousands of years. Wilson's theory for me, prompted interest and investigation into the wider impact of animals and nature on children with BESD, and specifically whether intervention might impact on a child or young person's ability to form and maintain attachments.

For the time I have practiced as a teacher and a manager within this field, I have drawn upon intuition and logic as two key skills to develop and sharpen my practice. Through this study, I will construct a framework, so connecting experiences and interests, theory and observations. I will critically examine unconscious beliefs, born out of experience and years of unconscious processing, that I now hold as a result of my practice, exploring what is within 'my blind spot' as well as to utilise the skills of reflection on practice and provision that are part of my daily work.

1.3 Aims and Research Questions

1.3.1 Aims of the Study

The research began with a working title of '*An Exploration into the Impact of Integrating Animals in Therapy, Treatment and Education'.* The field of study was in hindsight too broad and the nature of a study examining impact of an explicitly therapeutic intervention complex with abundant ethical dilemma. Additionally, the working title did not define any specific group of participants. The title was thus modified to suit the study. The remaining title is therefore '*An Exploration into the Impact of Animals as a Therapeutic Adjunct in Education for Children with Behaviour, Emotional and Social Difficulties: A BIOPHILIC PHILOSOPHY FOR EDUCATION'.* This, more clearly describes and explains the primary aim of the study which seeks to explore, examine and reflect on the impact of animals within a range of educational interventions, initiated for therapeutic as well as educational benefit for children and young people with BESD.

The study examines a number of interventions and contexts to consider the impact of and the potential of replication and/or generalisation of factors found to be present in terms of benefit for children and young people with BESD.

1.3.2 Research Questions

The central research question is:

'What, if anything is the social, emotional, academic, and behavioural impact of integrating animals into education and/or as a therapeutic intervention?'

The research is explorative and evaluative, based primarily on three case studies that consider their interventions to be both educational and in some cases therapeutic in nature. Data is triangulated by study into additional contexts with comparable factors.

The study was designed to generate questions around the approaches and methods used and the resultant impact on the clientele. It is an ethnographic and comparative study examining factors present. Exploration inevitably raised further questions such as:

- What is the philosophy and/or the proposed aim of the intervention at each location?

- What is happening for the children and young people academically, emotionally, and socially?

- What is the perceived or measured impact on the children and young people by those initiating the interventions?

- What are the elements present within a range of establishments that are common to the philosophies promoted?

- What lessons have been learned?

1.4 The Research Context

1.4.1 Participants

This research encompasses fifteen original pupil participants, from three different schools. The participants were studied at three case study locations with invitations for participation also presented to parents and professionals at each context. Participants ranged in age between seven and fifteen years old and included two girls. All participants had a statement of special educational need, specifying their primary need as BESD.

To contextualise the study, what follows is an exploration of the historical picture resulting in an accepted definition of BESD, along with a brief outline of current provision for children and young people with this special educational need.

1.4.2 BESD

In England, there has been much debate for decades around the definition of children with BESD (Cole, Visser and Upton, 1998; Kauffman, 2001). Both official and unofficial terms have been used, to describe children and young people with this difficulty by those involved within this field. Prior terms used have included 'mental defectives', 'moral imbeciles', 'minor delinquents', 'disturbed', 'disruptive', 'psychiatrically ill' and in 1930 the umbrella term 'maladjusted' was introduced officially (Cole, 1989). The term was to last, until the 1981 Education Act abolished categories of special educational needs. Prior to this, the 'Maladjusted' were viewed as:

> 'pupils who show evidence of emotional instability or psychological disturbance and require education treatment in order to effect their personal, social or educational readjustment' (Min. of Ed., 1955, part 3,9g).

The Underwood Report (1955), commissioned by the Government to look at 'maladjusted children' refined the definition, feeling the previous definition afforded confusion. In it, was listed six symptoms of 'maladjustment' requiring professional help from psychologists, child guidance clinics or doctors (1955, 4, para. 96) but in practice, it added little further clarity to the definition. Laslett (1977) later added to the definition, describing a maladjusted child as one:

> '…whose behavioural and emotional difficulties, however caused, have prevented the child from benefitting from the ordinary social and educational experiences of home and school, and whose difficulties will persist unless help is given by those with appropriate skills~ a child for whom failure in learning and in socially approved situations is more probable than success' (p.3).

In 1989, the formal definition of a child with BESD in England ascribed by the Department for Education and Skills (DES), was:

'Children who set up barriers between themselves and their learning environment through inappropriate, aggressive, bizarre or withdrawn behaviour and who have developed a range of strategies for dealing with day-to-day experiences that are inappropriate and impede normal personal and social development, making it difficult for them to learn' (DES, 23/89, 1989b).

This was followed by the publication of the SEN Code of Practice (DFE, 1994) which added to the definition by including the sentence: 'may also disrupt the education of others' (paragraph 2:1), as well as defining the root causes, believed to be abuse, neglect, physical or mental illness, including conduct disorders, sensory or physical impairment, or psychological trauma. Attached to each definition was a sense of blame, or perception that the child held some responsibility for his or her behaviour. This focus was amended when Weare (2000) adding to these definitions unofficially defined BESD by considering the opposite factors for good mental health. She listed numerous factors associated with good mental health including a high degree of social and emotional competence, good self-esteem and emotional well-being, the ability to think clearly and accurately about oneself and resilience. These factors, she maintained could be said to be not present in pupils with BESD. Weare surmised that 'the ability to make relationships is a central mental health competency and warm personal relationships are an essential determinant of mental health' (p.27).

BESD, the term in current official use, (though also in use is SEBD, perhaps a political statement by those wishing to correct the emphasis from behaviour leading a difficulty and label to the Social and Emotional factors being presented first. See below) describes children with behaviour, emotional and/or social difficulties. The participants in this study, all hold this 'label' or diagnosis. However, it is the 'S', the social aspect, the ability to make and maintain relationship on which I have focussed this study. This is driven perhaps by the 'E', the emotional issues inherent in and impacting upon this ability to make

relationships and results often in the 'B', the behaviour, which is described as challenging, oppositional; and results in a child or young person's inability to maintain social acceptance, exclusions, special placements, and interventions. BESD then is adopted as a description for the participants in this study within the parameters in which an ability to make relationship is significant. For the purpose of the study, aspects of this constellation definition present as relevant at differing stages. However, it is this aspect concerning the ability to make relationships, which persists as a theme throughout the study.

1.4.3 Origins of BESD

The origins of a child's BESD may be social, biological, medical or psychological in origin or a combination of these factors (Cooper, Smith and Upton, 1994). Along with a general move away from a medical to a more social model of disability; more recently, Cole (2003) reports that the nature and ethos of a person's schooling, including the practice and attitude of teachers, deprivation and/ or family dysfunction may significantly contribute to a young person's BESD, predominating with social difficulties. There may be medical descriptors common to children also diagnosed as BESD, including Attention Deficit Hyperactivity Disorder (ADHD), symptoms of which must be seen in multiples for diagnosis (Elliot and Place, 1998). Equally, there may be cognitive or psychological difficulties. Visser, Cole and Upton (1998) reported that this manifested as pupils underperforming, which without a nurturing intervention would likely worsen as a child ages.

The origins of BESD may be multi-factorial. Medical origins, where recognised are often prescribed medication. However, there are also arguably medical responses to non-medical roots of BESD. Ascertaining the origins of the BESD ascribed to participants in the study was not felt to be relevant, nor helpful and was therefore not identified. Of

greater significance was the symptoms of behaviour exhibited, which presented similarities.

1.4.4 Provision for BESD

As in Garner's models of intervention (see 1.2), I have outlined provision for BESD using three predominant and discrete models. These models are representative rather than exhaustive, chosen because they provide an overview of three distinct foci, representing treatment based on thinking, feeling or learned behaviour. Most provision for children with BESD, as in the case of those organisations selected for this research, will utilise a combination of models and approaches. This involves looking at the interaction between each aspect of personality and a child or young person's ability to integrate their feelings, beliefs and behaviour, a key skill for those with BESD which inhibits or enables their engagement with learning. The models are:

I.   The Behaviourist Model

II.   The Psychodynamic Model

III.   The 'Personal Construct' Model

I. The Behaviourist Model is underpinned by a belief that nearly all behaviour is learned behaviour and it is therefore possible to 'unlearn' unacceptable or undesirable behaviour and relearn new behaviours. Based on the work of Skinner (1988), this approach is based on a view that learning happens when behaviour (thought, feelings or actions) change. It follows a system of conditioning, where reinforcement of positive behaviour selective ignoring or sanctioning of negative or unacceptable behaviour leads to effective behaviour correction.

II. The Psychodynamic Model, largely the domain of independent special schools, has the basic concept that 'treatment' is primarily focussed on feelings. Based on Freud and

others (e.g. Winnicott, 2005; Docker-Drysdale,1990) concepts within this model include working with Transference and Counter-transference to 'catch' and support the expression of powerful feelings (Rollinson, 2006). The essence of therapeutic education follows theories of attachment, aiming first to understand the child's cognition as a result of his trauma and support him with a treatment programme through a therapeutic milieu, which may or may not include discrete therapies. Behaviour is viewed as a symptom of a person's psychology. The psychodynamic model focuses on the child's 'internal world' (Winnicott, 1991) and looking at unconscious dynamics presented.

III. The Personal Construct Model is based on the work of George Kelly (Butler and Green, 1998). Kelly considered that the ways we feel and behave are a result of what he calls our Construct System. A construct is a belief or an individual's way of looking at and interpreting experiences, and is developed as we observe and experience similarities and differences. Similar to the psychodynamic model, this model involves unpicking projections. A child with BESD might for example believe that '*all teachers hate me*'. Projecting this onto all teacher figures will predetermine how a child behaves, even in the presence of a new teacher, perpetuating this belief. The model differs however in that Kelly's model does not reflect on past experience or impacts, but supports the child by the provision of safe and supportive experiences, which challenge negative constructs, allowing the child to re-construct their beliefs.

This study aims to consider aspects of all three models, by considering the behaviour and beliefs of the children and young people involved, their feelings and expressions both spoken and unspoken. Through the process of reflexion and triangulation, the study aims to ascertain the impact of the interventions at the contexts studied.

1.4.5 Case Study Contexts

Four contexts incorporating elements of each model outlined were initially selected for the study, for diversity of population, location, willingness to participate in the study and approach to BESD. These included:

- A Primary BESD Day school working with an off site city farm
- A Secondary Mainstream School with a fully incorporated school farm
- A Secondary Residential BESD School, with a small and developing farm utilised as part of the Science curriculum
- A Stables working with visiting special schools including a school for pupils with BESD.

The Secondary Mainstream School was unable to continue with the project through to its conclusion, however, interviews conducted during an initial visit were added to the supporting data (7.10.2). Each of the contexts provided a unique perspective, given the individual nature of the interventions and a rich source of data.

Professionals at each of the contexts supported the study providing interviews, literature and an outline of the aims and philosophy of the interventions. Parents were invited to contribute to the study. All consented to their children's participation and declined involvement themselves. Further detail of the case study contexts is found within the case study chapters (5.2, 6.2, 7.2).

1.5 Methodology and Methods

Chapter Four details the methodology and methods. The methodology is qualitative and interpretivist as the focus of research is on relational and social and emotional aspects, with a leaning towards psychoanalytic, rather than behaviourist frameworks. The methodological perspective that shaped the study is largely autobiographical

predominantly influenced from my experience and practice working with children and young people with BESD.

The methods employed to gather data was an ethnographic comparative case study approach, including repeated observation and interview. The design includes the generation of ethnographic visual data by participants, which is analysed and triangulated to other data, before themes thus identified formed the focus of a second round of interviews.

There are considerable ethical issues implicit within the study, not least of all working with vulnerable children and working with animals. The ethics are explored in 4.9.

1.6 Key Literature and Hypotheses

1.6.1 Attachment

BESD education, in particular the psychodynamic model has had drawn upon Bowlby's theory of attachment for many years (Bowlby, 1969). Geddes (2006) writes articulately about the practical application of this theory in the classroom. Underlying many children's very challenging behaviour is a desire and yet an inability, to form an appropriate attachment, to a caring, nurturing parent figure. This theory in this study is key. Investigating the possibility that children will/can form an appropriate attachment to an animal in order to explore caring, affection and nurture in a safe unthreatening relationship and so potentially begin to develop skills which they may subsequently transfer to a person is the basis for the study. Attachment theory is explored further in 3.3.

1.6.2 Animal-Assisted Therapy

Levinson (1969) accidentally discovered his theory of 'Pet-Orientated Child Psychotherapy'. His theory was developed when he discovered that the engagement of a

child in a psychotherapy session when Levinson's dog was present, was significantly enhanced. Though much maligned for his theory, Levinson's work has gone on over four decades to form the basis for the Animal Assisted Therapy movement which now includes equine-assisted therapy, visiting programmes, rehabilitation programmes, schools and juvenile delinquent programmes throughout both his native USA and in England. Such initiatives are designed to support the mental, physical and emotional well-being of children, the elderly and the infirm.

Melson (2001) looked in depth at some children with severe emotional and behavioural difficulties placed in a programme of animal-assisted activities. She noted that 'the zoo staff had expected that these boys would have to be physically restrained thirty five times over the six-month period of the programme' (p.120). Melson notes however that, 'remarkably, not a single incident happened' (p.120). The research participants in Melson's study resemble some of the troubled youngsters in this study. This outcome must of course be multi-factorial; it consisted of only 15 boys, in one location. However, this startling occurrence, the production of 100 percent reduction in incidents of physical aggression, highlights an intervention worth exploration. Animal Assisted Therapy is explored further in 3.6.

My own experience of working with animals in schools, suggest that animals can be a source of distraction as suggested by Levinson, and are indeed a source of interest to most, though not all. General observation, beyond this study suggests that it is more than interest. For some children, there lies a desire to interact with some animals, and in particular, infant animals. I have observed children with seemingly the toughest veneer, approach dogs, cats, chickens, horses, pigs, ducks and sheep and within a very short time verbalise affection, care, understanding and nurture, which for some is often absent outside of such interactions. This correlates with Wilson's Biophilia Hypothesis. (2003).

1.6.3 Biophilia Hypothesis

Introduced in 1.2, Wilson (2003) advocates that continued contact between Humans and other species is essential for the development and maintenance of good mental health. Wilson's theory connects with other literature and theory, bringing together both historical and pioneering ideas and current philosophies, which underpin a number of school movements in this country and in the USA. This study explores this philosophy further to understand the basis for his claims and the implications of the theory in practice. Wilson's theory is explored in greater depth in 3.7.1.

1.6.4 Animals in BESD History

Bridgeland (1971), in 'Pioneer Work with Maladjusted Children' explored the historical development of therapeutic education with BESD children. It is of note that frequently, communities or schools grew up around farms, offering children and young people a place away from their difficulties in a rural environment. Many of these communities were built on models, which insisted upon the child taking on a responsibility and learning life-skills. Frequently, the responsibility offered, was taking a role in the farm, caring for an animal and learning the skills of the trade. Little is mentioned in this text of the therapeutic value, other than the importance of the responsibility, and it is interesting to consider why this particular intervention is no longer as prevalent in BESD schools.

Jones (1960) and Laslett (1977) both known for their influential policy for children with BESD independently discussed an appropriate curriculum for 'maladjusted' children. Whilst curricular expectation of this group of children with SEN has moved considerably since then, the essential principles of developing self-awareness, social learning, competence and confidence remain at the core of a young person's development. Jones and Laslett do not mention intervention with animals, however, the focus of development

for these young people, compares favourably with that outlined by later theorists such as Levinson (1969), Melson (2001) and Roszak (2001). The Historical context for the study is explored in 2.2.

1.6.5 Neotony and Anthropomorphism

Theories, which may support an understanding of why this study may have impact, include Anthropomorphism and Neotony. Konrad Lorenz, quoted in Gould, (1980) asserts that young animals, trigger 'innate releasing mechanisms for affection and nurturing in adult humans. When we see a living creature with babyish features, we feel an automatic surge of disarming tenderness' (p.101) arguing that there is a biological response evoked, similar to that of protecting one's own young. Certainly there is research, which suggests that children have an affinity for juvenile mammals, (Gould, 1980; Beck and Katcher, 1996; Melson, 2001; McCardle et al., 2010) but does it necessarily follow that *all* children will have such a response. Is the response, more to do with the anthropomorphic qualities of the animals? Does this necessarily mean that emotional inhibitions, such as a fear of fur, chickens, being trampled by a cow, or bitten by a dog will be overridden? Does it also follow that adults who are culturally and socially conditioned towards certain likes and dislikes will feel a 'disarming tenderness'? These theories are explored further within 3.6.

1.7 Questions

Questions arising from initial exploration, for the study to explore include:

- If there is emotional benefit to animals in education, is there also educational benefit? There may be benefits of including animals around children for social and emotional affect, however, if there is no educational benefit, it may be argued that, given the myriad of ethical and practical reasons opposing the promotion of animals, schools may not therefore be the appropriate place for such interventions.

- Why, given the positive affirmations of animals in education, is the practice is not as widespread and Mainstream as it might be? These questions are addressed in Chapter Eight.

1.8 Chapter Overview

Chapter Two outlines the historical, legislative and political context for the study, establishing the background in terms of an outline of the development of BESD education within the political landscape and how this has influenced the inclusion or otherwise of animals. Eight educational theories are explored where reference to similar interventions is detected. This is in order to understand the backdrop for current practice and evaluate whether this research adds to new thinking. In order to provide some correlation to these areas of research, the history of animals in education generally is outlined.

Chapter Three encompasses a literature review based around key theories for the study. A consideration of the psychodynamic model of education and its basis of attachment theory is explored in order to reflect on the elements explored within the case study contexts. Additionally, a wide-ranging trawl of literature looking at animals and nature for therapeutic affect generally and specifically to points raised in 1.7 is explored for consideration of a constellation relevance to the study. Related disciplines and theories, some, such as Wilson's Biophilia Hypothesis, which have been the basis for the inquiry are explored for their significance to the research.

Chapter Four details the methodology for the study, the methods employed and the associated ethical implications of the study, which are inevitably considerable, detailing the process of the study.

The Case Study explorations are examined in Chapters Five, Six and Seven, supplemented by data from supporting interviews and include details of the findings of the study before analysis in Chapter Eight. Findings include impact on various aspects of relationship skills including trust, empathy and confidence; opportunities for nurture and responsibility, motivation, and minor adjustments evident in improved behaviour, educational progress, language and development, and group dynamics.

In Chapter Eight, a detailed analysis considers the key themes emergent from the data. Utilising the lens of Attachment Theory, the study examines the impact of the interventions on relationship building skills, which underpins the therapeutic potential of any intervention for children with social and emotional difficulties. Finally, the chapter summarises the study and its implications and makes generalised recommendations and identifies areas worthy of further research. Questions, which remain unresolved include, the specific generalisability of interventions such as those explored within the study, quantifying the impact of such interventions and questions around the potential for inclusion within the general curriculum, or the development of a specific Biophilic curriculum based upon such interventions for children or young people with BESD. The study has relevance to educational policy for children and young people with BESD and champions an under researched area of intervention for further exploration of impact both educationally and therapeutically. The concluding chapter identifies ways in which this study is original and unique in its specifics of research into this area.

1.9 Concluding Comments

The introduction to the thesis has briefly set out some of the arguments and theories to be pursued and clarified the direction of the research. The overall aims of the research have been set out here and will appear further into the study; the participants of the study; namely those pupils with a diagnosis of Behaviour Emotional and Social Difficulties, the

methodology; involving data collection across contexts around three discreet areas of England, and the methods briefly introduced.

Key Literature underpinning the study has been outlined and will be discussed in depth within Chapter Three, which exemplifies how and why this research adds to current knowledge and understanding.

My own position in the research has been given consideration and will be more fully discussed in Chapter Four, where I will expand on my reflexive position within the research discussing the ethics and issues of bias. Personal and professional interest with this area of research has undoubtedly influenced my research choices but has not prejudiced my objectivity in conducting the research or analysing the outcomes.

The following section, Chapter Two sets the research within the political, legislative and historical context pertinent to the exploration of this area at this time.

Chapter Two

Policy, Legislative and Historical Context

"The damaged child is one who produces challenging and difficult behaviour. Their behaviour can be demanding, exasperating, frightening and is almost invariably emotionally problematic" (Diamond, 2009, p.18)

2.1 Introduction

In contextualising the study and evaluating previous theory and initiatives in this area of study, this chapter commences with mapping the field of animals and the natural environment in the general educational milieu. This begins with an overview of those educational theorists, who explicitly referenced within their theories, the inclusion of animals and/or nature and moves to more recent developments. This is followed by a brief overview of the historical development of BESD provision, looking specifically at how legislation and political foci over recent decades have impacted on the use of animals, in education generally and in BESD education specifically. These perspectives are drawn together by an exploration of the history of animals as a therapeutic adjunct.

The evaluation of how recent and current political and educational agendas has influenced the inclusion, or otherwise, of animals in the curriculum is outlined. This also references key issues, which have influenced the development of education more broadly including health and safety, safeguarding, *Every Child Matters (DFE, 2005)* and the

changing National Curriculum (2014). Finally, the chapter explores some current movements and trends working to integrate animals into an educational context, outlining the philosophy and aims of each.

2.2 A Historical Perspective: Educational Theorists referencing Nature

Some early theorists who influenced the development of education and specifically BESD education referenced nature and/or animals within their theories or biographies. Inextricably linked with this, is the connection of education with nature in general. Whilst there are a significant number of theorists whose philosophies have contributed to the development of Education in general and to Education for BESD specifically, for brevity and for the contextualisation of the study, this section focuses on only those theorists whose work discusses Nature in its broadest sense as part of their wider philosophy, in order that current interventions researched within this study might be viewed in light of a historical framework. Nature is considered at this stage as a broad context in which 'living things' are implicit. This study argues that where there is contact with nature, there is contact with living things. Whilst the difference between interaction with a plant and a large mammal is considerable, attitudes towards nature as a whole translate to attitudes towards animals in general, beginning with small creatures through to larger mammals. It is therefore useful to consider contact with animals within the wider field of contact with nature in education. Indeed in some circumstances, where a child's experiences, traumas and fears prevent safe contact with animals, nature in general is utilised to a similar end (see 2.6).

As will be seen, as educational theory evolves, so does the prevalence of animals in education. The following selected examples, span the development of theory from the mid 1700's to the 1970's, at which point the emphasis on animals and nature has gradually shifted. As Louv (2011) would argue, we as a generation have become more

disconnected with Nature and animals, favouring technological developments. The examples progress both chronologically and in their explicit mention of nature and/or animals as a conduit for educational development, socially, or academically.

2.2.1 Jean-Jacques Rousseau (1712-1778)

'Everything is good as it leaves the hands of the author of things; everything degenerates in the hands of man.' (Rousseau, 1979, p.37)

A philosopher, musician and educationalist, Rousseau was a protagonist of the 'Nature versus Nurture' debate. Rousseau famously expedited his theories 'On Education' (republished 1979) the chosen alternative name for his descriptive book around the education of a hypothetical child 'Emile'. Central to his theory was education for character, supporting a child to develop 'moral self-mastery', and to remain virtuous despite the influence of society and its imperfections (Rousseau, 1986). Rousseau advocated that a child would be best educated in the countryside, 'a more natural and healthy environment than the city'. Rousseau referenced the broad brush of nature rather than anything specific within it. He considered an educator to be a 'guide' through a child's exploration and experience, and felt that children learn right and wrong through experiencing the consequences of their acts rather than through physical punishment.

Rousseau was one of the first education theorists to promote developmentally appropriate education through descriptions of simplistic stages of child development. Early childhood education in particular, sits on the foundation of this early theory still promoting exploration rather than didactic teaching.

2.2.2 Johann Heinrich Pestalozzi (1746-1827)

'The better family life is, the better education will be.' (Froebel, 2005, p.12)

A follower of Rousseau, Pestalozzi was a something of a militant socialist, driven by his belief that education is 'integral to political understanding' (Palmer, 2001, p.64). Like Rousseau, Pestalozzi was brought up in poverty and developed his theories through practice and belief in education as of central importance to the improvement of social conditions.

Pestalozzi also believed that education was gained from nature; again broadly describing the environment, rather than specifics within nature; and attempted to bring up his own son using the style endorsed by Rousseau in 'Emile' (1986). He, like Rousseau advocated that children learn by experience and activity. His belief was to educate the child as a whole, balancing education between doing, feeling and thinking, summarised in his educational philosophy 'through the head, hands and heart' (Heafford, 1967).

Echoing something of this theory, *Thrive*[ftc] (2012), a recent movement concerned with the mental and emotional wellbeing of young people in our schools, echoes this theory. Utilising recent developments in Neuroscience, the Thrive approach, advocates exploration of a child's needs categorising the early stages of development in terms of 'being', 'doing' and 'thinking'. The approach is designed to support children and young people who by trauma, separation or neglect may not have adequately experienced doing, feeling and thinking and consequently remain without a sufficient stress management system and are consequently unable to fully access learning. Of the numerous actions presented as interventions by the Thrive programme as a means of addressing these lost or lacking early years' skills, the use of animals, nature and natural objects is advocated.

2.2.3 Frederich Froebel (1782 - 1852)

"Play is the highest level of child development. It gives joy, freedom, contentment, inner and outer rest, peace with the world. The plays of childhood are the germinal leaves of all later life." (Froebel, republished 2005)

Froebel was labelled as 'backward' as a young child, and judged 'unfit' for university education (Palmer, 2001). He went to work as a forester where he developed his love of nature. Frustrated by the seeming irrelevance of school to 'real life', Froebel built on the work of Pestalozzi, developing the first 'kindergarten', with the intention of giving small children opportunity to explore and experience nature, led by their own curiosity, to learn first-hand, how the world works.

The Forest School movement (Knight, 2011), though not specifically acknowledging Froebel, pick up many of these themes. Working predominantly with children in their early years, Forest Schools set out to support children's early developmental needs in a natural setting. During the growth of the movement it has been shown to be beneficial for children with limited experience of the outdoors and those whose preferred learning style is kinaesthetic, including children with BESD, and now can be found as a prevalent intervention in schools throughout the country for all ages. The stated aim of Forest School is 'to encourage and inspire individuals of any age through positive outdoor experiences' [http://www.forestschools.com, accessed 24/03/13].

2.2.4 Mary Carpenter (1807-1877)

Founder of the 'Ragged School', a charitable organisation for the education of the disadvantaged, Carpenter is known not only as an educator but also a social reformer (Manton, 1976). She established a number of 'reformatories' for young offenders believing that love, education and knowledge of the bible would set a young person on the right path. Carpenter was an advocate for the poor, the disadvantaged and the delinquent and

opened up the education system for a wide population. Her aim was physically, intellectually, socially and spiritually, to raise children out of their debasement' (Bridgeland, 1971, p.60). This was effectively one of the first schools for children later to be described as having BESD. Carpenter made no specific mention of intervention with animals, however was a general advocate of nature. Her inclusion within this short review is essential however, as a precursor to comparisons in provision for those children and young people with BESD.

2.2.5 John Dewey (1859-1952)

"Education is a social process. Education is growth. Education is, not a preparation for life; education is life itself." (Dewey, in Palmer, 2001, p.180)

Dewey, an American educator was a champion of progressive experimental education. A prolific writer and referred to as 'the most renowned educator of the 20th Century (Palmer, 2001, p.177), Dewey advocated a child-led curriculum, insisting on relevance and the child's interest leading the way. As for many of the early theorists, agriculture permeated the landscape and culture and was consequently a significant part of his philosophy and curriculum.

Dewey's theory was taken further by A.S.Neill (1970) in his experimental school, Summerhill. At Summerhill, children were entirely responsible for their education, permitted to attend or not attend lessons as they chose. A setting within a natural environment within which children were free to wander and explore, Neill believed and proved in his institution, that given absolute freedom to choose, children will inevitably choose education. The notion of freedom, and its relation to the natural environment arises clearly within the case study data.

2.2.6 Margaret and Rachel McMillan (1860-1931)

'The richest cupboard and the best classroom is roofed only by the sky' (McMillan, 1904 republished 2009)

By this point, references to nature were becoming more explicit. Margaret and Rachel were sisters with a passion for children who lived on the streets. They campaigned for the education of young children focussed on health, physical care and mental emotional wellbeing including campaigns for (and saw the introduction of) free school meals in1906 and regular medical inspections in 1908.

Setting up a school of their own, the sisters' aim was initially to provide for children with mental health disorders or those living in deprived housing circumstances. 'Fresh air' was considered the panacea for all manner of difficulties. Evolving out of the care and treatment for not only children with BESD, but also the malnourished, and those living in poor housing conditions, the curriculum involved doing almost everything out of doors including eating, all classes and the use of washing facilities. Included within this curriculum was specifically, the first mention of keeping animals, with children encouraged to carry out all the duties of caring for them, thus promoting attitudes of responsibility and learning to care for others.

2.2.7 Rudolf Steiner (1861-1925)

Steiner's educational philosophy known as 'Anthroposophy' consists of a system of doctrines, the central premise of which is the existence of the 'spiritual world'. Considering the body, soul and mind as one, the basis of a Steiner education is about discovery and development rather than the imparting of knowledge (Palmer, 2001). Pivotal to the theory is the incorporation of the natural world including animals in all aspects of education (Steiner, 1981). Garner (1999) notes that it is Steiner Schools who affirm that because of the interaction of body, soul and spirit, 'education and therapy are inseparable' (p.95).

Steiner schools maintain a considerable presence and popularity in today's private education sector.

2.2.8 Leila Rendel (1882-1969)

Evolving from earlier theorists, the 'Planned Environment Therapy Movement', put emphasis on shared responsibility (Laslett, 1977). Fundamental to its beliefs, was that children should have equal responsibility with adults for the environment in which they live. This freedom, which included a lot of outdoor work including work with farms and farm animals, would allow children to learn from their mistakes and take control of their troubled and 'out of control' lives. The Planned Environment Therapy Trust continues today. It has had involvement in the development and evaluation of many initiatives within BESD including work at The Caldicott Community (Leila Rendel) and The Cotswold Community, which until its recent closure still utilised a farm as part of their education programme.

2.2.9 The Prevalence of Animals in Education

There is little mention of animal involvement in the early 1900's, though around 1912, there were approximately 2,500 reported gardens in schools. (Federation of City Farms and Community Gardens and the Department for Education and Skills, Growing Schools Programme, March 2006). Slowly, supporting this, 'Rural Studies', later to become 'Rural Science' or land-based studies, involving the practices of farming both with and without animals, gained growing popularity within the mainstream curriculum. Its credibility continued to grow until 1963 at which point, 41 percent of secondary modern schools and 5 percent of Grammar schools were to include it in their curriculum.

This upward trend continued until the introduction of the National Curriculum in 1988 which quelled this tide, with constraints imposed by the new prescribed curriculum beginning to force a move away from subjects such as Rural Science, in favour of the new

curriculum. The introduction of Local Management of Schools funding caused a great number of schools to sell off land, resulting in a further decline. Alongside, The Health and Safety Movement changed views on animals radically. Schools who worked with animals in classrooms, were subject to close legislation warning them of 'serious and harmful effects of animals in contact with children' (DfES, 2004) discouraging further the 'risk taking' now required to bring children in contact with animals and the outdoors.

While studying for a Masters degree concerning the use of dogs in schools, I approached two education authorities. In both circumstances, I was informed that policy suggests that the use of animals in schools is not advised, and further, recommendations were that such practice would encourage all manner of health and safety issues[1] (see 2.5). Thorough risk assessment must be regularly conducted and tight legislation governs the use of animals with children. This may explain the apparent demise of animals in schools over the last two decades. Ultimately, the decision of whether animals can be present in schools remains the decision of the Headteacher and Governing Body.

The use of animals in schools emanates from a range of different functions. Several contexts operating experiential programmes with animals are remnants of the long established tradition of Rural Science. Others support the pioneering vision of wealthy benefactors, practitioners and theorists. As the general picture seemed to be in decline, some small organisations and individuals were initiating a movement, which was set to re-establish the practice within education once again. The DCSF Growing Schools initiative began in 2001, following the widespread Foot and Mouth outbreak in England. Its main aim was to reintroduce farming and horticultural education to children and young people (DfES, 2006). With no specific therapeutic interest, in affiliation with The Federation of City Farms and Community Gardens (FCFCG), the Growing Schools initiative set to analyse,

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[1] Hitchings, C. (2006) How to Improve Emotional Resilience; an Exploration into the Connection between Emotional Resilience and the Use of Dogs in an Educational Environment. MA Thesis

and evaluate those individuals and organisations involved and create a network. As the organisation has grown, its remit has also grown. The Growing Schools organisation today, now supports the Government sponsored 'Natural Connections' project[2], which is seeking to evaluate the impact, both therapeutic and educational of learning in the natural environment.

To date, the FCFCG report that there are now one hundred school farms in the network with a further twenty interested in joining (FCFCG, 03/2013). The network exists to support schools and city farms in providing training and education to children and young people on animal care and husbandry and in evaluating the impact of the school farms on the children, school and community (FCFCG, 05/2008).

Whilst farming and farming practice remain on the political education agenda, the practice of Animal-Assisted Activities and Therapy is little mentioned in policy. Therapeutic practice is considered the domain of the therapist, and whilst anecdotally, schools talk about changed behaviour, increased self-esteem and confidence, better relationships and attitudes to learning, this is often not the primary goal of the interactions.

Interview data, reveals evidence of animals visiting schools including PAT[3] dogs, or animals for assemblies and workshops as well as farms, stables and animal homes being visited by schools.[4] The data shows that the practice for some schools at least is very much still alive and is indeed growing. Following the recognition of excellence in Learning Outside the Classroom (LOtC) by Ofsted (2008), the Government acknowledged the trend and began to support schools to explore opportunities available to them.

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[2] http://www.naturalengland.org.uk/ourwork/enjoying/linkingpeople/learning/naturalconnections/
[3] Pets as Therapy. (www.petsastherapy.org.uk)
[4] Interviews with professionals throughout the course of the study, recorded in professional journal, 2010; PAT(2012) data on schools with visiting dogs.

Recent policy within the broader curriculum framework shows an emerging inclination for a reconnection with Nature in general education as well as special education, supported by Government (England Marketing, 2009; www.LOtC.org.uk, accessed 24/03/13) and a variety of literature (Louv, 2006; Palmer, 2010; Harriman, 2008). This makes this topic of study considerably timely and relevant.

Having considered broadly the path of animals and nature in education through educational theorists I will now move to look more specifically at the development of BESD provision and the employment of animals within it.

2.3 An Overview of BESD provision

Behaviour, Emotional and Social Difficulties, (BESD) was first attributed in 1851. Mary Carpenter (2.2.4) began a campaign to change attitudes towards 'mad' and 'bad' children (Manton, 1976) later opening one of the first residential special schools. Children were categorised as having 'mental defectives' or being 'moral imbeciles'. This practice continued until 1930 when in England, the official term 'maladjusted' (see earlier, 1.4.2) came into use (Cole and Pritchard, 2005).

Following Carpenter, and her contemporaries such as the well known Thomas Barnardo a philanthropist and founder of children's homes, there came other 'unique' pioneers such as Wills, Rendel and Lane (Bridgeland, 1970), initiating progressive experimental schools and institutions. These were private and charitable projects, with groups of children collected together largely through their rejection from acceptable society or their inability to conform to it. Often, they were the vision of one charismatic leader with passion and conviction of how things 'should be'. Policy and theory did not play a great part in the development of these institutions, but evolved from ideas practiced, and established therein.

The categorisation of children with BESD has continued to fluctuate throughout the last century. Variables included children who were described in behaviour as 'delinquent', those who socially had little capacity to build relationships, those who had experienced trauma through abuse, neglect or displacement, and those with mental health difficulties (Cole et al., 1998). Along with this variety of need, provision, emphases on the purpose and direction of establishments as well as public opinion have swayed. At one end of the spectrum, children with BESD have been viewed as a societal problem, with blame varying from parents, teachers, society as a whole and the child themselves. Conversely, there have been provisions throughout this period with individuals dedicating their life's work to the support and rehabilitation of children and young people disadvantaged by BESD (Bridgeland, 1970). Provision has been influenced by societal and governmental attitudes towards this area of special educational need. Schools established have covered the spectrum between specialist residential therapeutic establishments, seeking to 'treat' children with BESD, to schools providing sometimes little more than containment of those considered 'uneducable' and many variables in between.

Bridgeland discusses the 'unconventional' nature of the schools established for the 'maladjusted', some of which focussed or specialised in 'cure', others in 'therapy', still others on 'order and intelligence'. He notes that some schools were for 'those who responded best to freedom, shared responsibilities and intellectual and cultural interests' (p.31) others provided for children's behaviours and needs through the arts. He goes on however to add that 'whatever the main motives of the schools' work, each had something special to give a child' (p.31).

The words 'Therapy' and 'Treatment' are somewhat synonymous. Whilst treatment implies the provision of medical care resulting in remedy (Oxford English Dictionary, 2008) therapy, suggests a process, with perhaps the resultant end being similar. As indeed the terms to describe children with BESD have changed, use of the words 'treatment' and

'therapy' have been interchanged throughout the development of BESD with the popularity and understanding of children's difficulties. Burt (1969) in his then ground-breaking volume of books 'The Delinquent Child' described all manner of causes of delinquent behaviour from a limiting environment, trauma, poor parenting, through to a having 'limited intelligence'. The 'treatment' of which, was numerous, but included a free, uncritical environment within which a child could learn about him/herself and so develop understanding and responsibility. This might today be called a therapeutic approach.

Recent developments towards a more inclusive education system mean that BESD special provision has needed to provide something even more specialist, whilst also supporting children and young people to attain in line with national expectations for their peers. This combination of less flexibility alongside greater pressure has ensured that more creative ventures within BESD education have dissipated alongside those of more mainstream traditional schools.

The debate of definition and provision continues today. With reportedly increasing numbers of pupils with BESD (Cooper, 2001; Visser, Daniels and Macnab, 2005), there is an argument for creative and radical solutions to support children and young people with these needs. This makes this research both timely and relevant.

There are many commonalities in the theories and the development of BESD education including the notion of a kinesthetic curriculum immersed in nature. This study however whilst embracing the context of nature, is concerned with one specific aspect that is little researched or evaluated, namely the use of interventions involving animals in education. This next section then, looks at the historical evidence of animals used as a therapeutic adjunct in institutions and in schools.

2.4 The History of Animals as a Therapeutic Adjunct.

In literature, animals are and have always been prevalent. Historical texts such as Aesop's' Fables (2007) exemplify the use of animals as a metaphor for the understanding and processing of social etiquette and feelings, as do children's fairy tales (Bettelheim, 1976).

Animals have featured in the child's world for generations. The children's market is flooded with animals. They are prevalent in storybooks, fairytales, nursery rhymes, toys, games, pictures, DVDs, television characters and digital heroes of video games. In today's culture in the UK, it would be difficult for a child to grow up without knowledge of and exposure to animals in some format, albeit predominantly anthropomorphic. Many children's films and television present anthropomorphic characters such as Mickey Mouse and animal companions in their animal roles, such as *Lassie.* In many respects, children are trained to be familiar with and comfortable around animals from very early on, enabling relationships with real animals to foster. In education, this connection has also been exploited within books, classroom equipment and in a certain era, the mandatory classroom pet.

Utilising books and story with children with BESD as a tool for addressing underlying emotional difficulties with children with BESD is known as Bibliotherapy. Engaging children with books and story, in some circumstances acknowledged as therapeutic (Sunderland, 2001), may be another route through which, children are introduced to or 'seduced by' the world of animals. Perhaps children express preferences for animals because of this, or perhaps, as Kellert and Wilson (1993) expresses there is a 'Siamese connection' (p.5), a need to be alongside animals and nature, determined by our genes and fundamental to mental health. This is Wilson's expressed 'Biophilia Hypothesis' discussed further in 3.7.1.

2.4.1 Animals and Nature in BESD Education

There is a plethora of literature available considering both animals and children. Conversely, there is a paucity of data concerning animals and children with BESD. Though popularity, impact and emphasis has ebbed and flowed, the use of animals in BESD education has featured almost continuously, although in most literature, mentioned in the background rather than as an explicit intervention.

Bridgeland (1971) in his description of the history of pioneers in the field of therapeutic work with children and young people with BESD describes a number of 'unique and special settings'. He outlines incidental descriptions of animals present in early therapeutic ventures, but with no defined purpose other than to encourage children to learn to care, or to provide a sense of normality and purpose. Most establishments were residential and many opened up on farm sites and cited as necessary for the treatment and therapy of the young people, the need for space, freedom and the adoption of responsibilities, mentioning activities such as cleaning, feeding and generally taking care of the animals.

An exception to the picture of incidental appearances of animals however was the revolution known as 'The Open-Air Movement' (Bridgeland, 1970, p.125). This movement, which as its title describes advocated education outside, included pioneers such as Margaret McMillan, Leila Rendel and Margaret Langdon who were advocates for the explicit introduction of animals to support the development of mental and emotional wellbeing (see 2.2.6).

Docker-Drysdale, founder of the Mulberry Bush noted that keeping animals in a residential provision for children with BESD promoted a sense of responsibility and nurture. Whilst these motives are entirely respectable, there is little historical evidence of the impact of

these initiatives. Recent research has begun to explore the use of animals directly with children, young people and adults in a more specifically therapeutic way.

One such behavioural study considered the impact on adults with psychiatric difficulties of working with farm animals. The study found that the combined effect of both contact and work with the animals affected the participants positively by providing a source of physical contact, and increased coping ability through the purposeful daily routines (Berget et al., 2007). Other studies, such as The Therapeutic Benefit of Care Farms (Foster and Smith, 2010) assert similar claims:

> "It *[Care Farms]* provides a more efficient therapeutic facility than traditional social services; it offers a way to revitalise the farming community; and it reawakens people's link with the land"   [http://www.peteducation.com, accessed 11 May 2012]

This evolution of theory following practice identified in earlier theories seems to mirror the methods employed by professionals in the case studies studied in this research. As the study has evolved, it has become apparent that schools, farms, stables, gardens, community projects and individuals assert the vision, conviction and passion for exposing children to nature and animals and talk about an 'instinctive' feeling for the social, emotional and health benefits of such activities for all children and in particular those with BESD. However, there is little scientific evaluation or policy in place surrounding the philosophies exhibited, and theory is currently emerging following good practice and sound evaluation.

Studies that have been made investigating the impact of animals on children generally call for further research. Beck and Katcher (1996) call for further empirical research into the effectiveness of including animals in the therapeutic milieu and Quayle (2007), for informal interventions involving community farms and schools. Melson (2001) who studied a short

intervention with pupils with BESD, and found positive relationship development factors also called for further research to investigate the generalisability of her findings.

2.4.2 Animals in Mental Health

Examples of animals in institutions more generally date back in England to 1792, when William Tuke, founder of The York Retreat, introduced animals as a therapeutic tool for the mentally ill. (Thigpen, Ellis et al., 2005). His practice was known as 'Moral Treatment', which essentially described his philosophy of recovery in an environment that was familiar and sympathetic, complete with animals. Patients were encouraged to wander the grounds, which housed a population of domesticated animals for the purposes of socialisation, to foster responsibility and offer nurture (Beck and Katcher, 1996). Tuke was responsible for reshaping attitudes towards people who are mentally ill, changing psychiatry for history.

The use of animals in explicitly named 'Therapy' however, is a subject first promoted by Boris Levinson, a Lithuanian Psychotherapist, brought up in the USA, with a passion for helping disadvantaged and emotionally troubled children (Kahn and Kellert, S. 2002). His story involves individual psychotherapy with a severely autistic child who was withdrawn and troubled, and the accidental introduction of his dog 'Jingles' to his sessions, the impact of which, was that the child began to develop confidence and trust in first the dog and then the therapist, and so use the dog as a conduit for communication.

Levinson went on to develop theories relating to the impact of animals in schools and other organisations, particularly in residential settings. He wrote extensively and lectured widely, including in England. Despite ridicule by his contemporaries of his 'unorthodox' ideas, Levinson pushed his ideas with therapists and educationalists alike until in a subsequent study of a random sample of 435 psychotherapists in 1972, 33 percent had

utilised pets as therapeutic aides, 91 percent of those had found them useful (Levinson, 1997).

Levinson was an advocate for the use of animals in school, and specifically for their use in school with children with BESD. He actively promoted this work up until his death in 1984. He worked as psychotherapist with challenging youngsters in New York. In discussing this population, Levinson talked about challenges such as anxiety, a lack of trust, depression, challenging behaviour and hostility, and the teachers' emotional response to it. These themes reoccur throughout the study.

> "Since emotionally disturbed children are hypersensitive to such cues, they will find rejection even with a teacher trying hard to conceal his [negative] emotions. Such a child then feels he is accepted neither at home nor at school. The introduction of pets can help assist both the teacher and the students. Animals, a constant source of interest to children, provide a diversion, which dissipates tensions and relieves the anxieties of teachers. " (Levinson, 1997, p.109)

Having considered the limited available literature elaborating the historical context of animals as a therapeutic adjunct, I will move to consider the political and educational climate for the study.

2.5 Political and Educational Climate

This section sets out key changes in the political and educational landscape that have influenced both BESD education and the inclusion or otherwise of interventions with animals.

2.5.1 The National Curriculum

In 1988, the Education Reform Act saw the introduction of the first National Curriculum in England and Wales, with the primary aim of standardising the content taught across

schools in order to enable national assessment and controversially, league tables. The purpose for this in part was to encourage a market whereby parents were free to choose a school for their children based upon a judgement of the school's ability to teach the National Curriculum. Within a few years, the curriculum grew to fill the entire teaching time of schools pushing out many practical initiatives and subjects including Rural Science and working alongside animals.

In September 2014, a new National Curriculum was introduced to schools. Despite a general focus on knowledge acquisition, encouragingly, Horticulture once again features explicitly [http://www.education.gov.uk/schools/teachingandlearning/curriculum/nationalcurriculum2014, accessed 24/03/13]. The potential for this may be to refocus schools towards learning outdoors, looking again at the potential impact of nature and indeed animals on children's wellbeing and ultimately therefore academic improvement. The curriculum focuses on outcomes and less prescriptively on process, but through the recognition of the benefit of working outside the classroom (Ofsted, 2008) perhaps gives licence to opportunities such as those explored within this study. Interventions with animals, commonly referred to as AAT or AAA (see next paragraph) are growing in popularity in England, spurred on by an increase in literature advocating the importance of reconnecting children with nature (Serpell, 1986; Henderson, 2007; Report to Natural England, 2009; Louv, 2011) and may be readily incorporated within the revised National Curriculum.

Arkow (2004) distinguishes work with children and animals in three distinct categories. Animal Assisted Activities (AAA), where a child and animal are within the same proximity; Animal Assisted Interventions (AAI), where the animal is a facilitator to an activity or purpose, such as an educational pursuit; and Animal Assisted Therapy (AAT), whereby the intervention is aimed specifically at addressing a difficulty or issue, requiring process. Cass (1981) defines this AAT as "the introduction of a pet animal into the immediate

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surroundings of an individual or a group as a medium for interaction and relationships, with the therapeutic purpose of eliciting physical, psychosocial, and emotional interactions and responses that are remedial" (p.124). AAI is not dissimilarly described by Kruger, Trachtenberg and Serpell (2004) as "any therapeutic intervention that intentionally includes or incorporates animals as part of the therapeutic process or milieu".

AAT and AAA are primarily concerned with addressing the social and emotional needs of children and young people and there is work to be done in order to achieve the outcomes defined by the National Curriculum through this process. However, with freedom to explore these interventions, the academic potential of learning alongside animals may also begin to be realised. There is a need however, for research to correlate these effects.

2.5.2 The History of the Health and Safety Movement in schools

Historically, all early Health and Safety law was focused on the employment of children or women or individual industries that were notoriously dangerous. Public pressure from unions over deaths and mutilations forced the government to enact legislation to control these specific industries. Laws grew up around controlled mines, quarries, railways, explosive manufacture etc.

1961 saw the introduction of the Factories Act (HSE, 2009), which imposed legislation on all industries, but it was not until 1963 that schools were brought within the scope of Health and Safety legislation as part of the *Offices, Shops and Railway Premises Act.* This act extended some protection to employees of schools, however, the act applied only to the school office and concerned issues of first aid, temperature, lighting, ventilation and sanitary accommodation. The act did not apply to classrooms or staffrooms.

In 1974, The Health and Safety at Work act, included schools and its employees, but pupils were only covered by section 4, which described 'other persons who may be

affected by work activities' [http://www.legislation.gov.uk/ukpga/1974/37/section/4, accessed 18/03/14]. It was not until the early 2000's when a couple of poorly planned and poorly executed school trips causing pupil deaths hit the press, which focused the Health and Safety Executive's attention on how the lack of planning and risk assessment directly led to the deaths. Public opinion required action. HSE began to 'inspect' schools and prosecute Local Authorities.

The aim stated by the HSE is not to avoid risk entirely, but to safely manage it. However, recent views are that the climate has moved from risk *aversion* to risk *avoidance* with many schools reluctant to engage with risky ventures at all (Gill, 2007). In light of this widespread fear and avoidance, Government guidelines have again been produced (2012) demonstrating and encouraging the importance of educational visits and experiences involving risk.

2.5.3 Health and Safety Guidance on Animals in Schools

Legislation around animals in schools is less clear. Current policy stipulates that clear and thorough risk assessment, is essential. However, the DCSF holds no discrete policy on this specific area. The Learning Outside the Classroom movement (DCSF, 2010) brought about by a manifesto of the same name (2006) encourages schools to access outdoor environments, farms, gardens, community halls and so on to provide 'first hand experience of the world' [www.lotc.org, accessed 1/5/2010] and variation to the curriculum.

Direct requests to the DCSF for policy and advice around the utilisation of animals in education directed me to a website[5] 'for resources', which provided no further support. The website again discussed risk assessment but holds no specific policy. Further enquiry to the DCSF referred me to a publication with guidance on keeping pets in the classroom

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[5] http://www.hse.gov.uk/services/education/faqs.htm

(Safety in Science, 1966) a publication no longer in print. This issue has not been addressed since. The RSPCA strongly discourages keeping animals in schools, encouraging instead the use of toys, books or observation of animals in their natural habitat.[6] This may serve to discourage involvement.

Nevertheless, though some schools are embracing the opportunity to keep animals, through interview it was apparent that some schools remain reticent to keep animals or involve them within the curriculum, due to concerns around 'Health and Safety'.

2.5.4 Every Child Matters

In recognition of the need to safeguard children the 2004 Children Act, was prompted by the aftermath of the Victoria Climbie investigations. The inquiry following the brutal murder of an eight-year-old girl in the care of guardians increased the focus on the well-being of children and young people. Among the changes that the Act introduced, was the Every Child Matters (ECM) agenda, which outlined five outcomes for children and young people to be met by schools. These included Being Healthy, Staying Safe, Enjoying and Achieving, Making a Positive Contribution and Achieving Economic Well-being. Each of these, in their necessary teaching, gave permission for schools to once again explore work with animals and nature using ECM as a conduit. Additionally, the importance of the ECM agenda for children and young people with BESD was seen as paramount in supporting children to gain skills to enable them access to a mainstream curriculum.

> "Where the work of a provider includes provision for young people who are vulnerable through the residential nature of their provision, or because they are physically, mentally or socially disadvantaged, inspectors will evaluate the quality of the provision in relation to the five outcomes." (DCSF, 2005)

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[6] http://www.rspca.org.uk/education/teachers/animalfriendlyschools/details/-/article/TEACH_AnimalFriendlySchoolsAnimalsInSchools

The ECM agenda, and the timely Excellence and Enjoyment (2003) strategy for Primary Schools encouraging schools to creatively take control of their own curriculum saw a change in practice and the reintroduction of a few school farms (FCFCG, 2006). March 2013 saw the opening of the 100th School Farm evidencing that this practice is once again on the increase [www.FCFCG.org.uk, accessed 25/03/13]. ECM is no longer mandatory for schools. However, Ofsted consider that its application remains good practice.

2.5.5 Policy and Children with BESD

The last 30 years has seen dramatic change in policy and therefore focus for children with special educational needs. The 1981 Education Act incorporating recommendations from the 1978 Warnock report, gave new rights to parents of children with SEN, the beginning of a decade of 'inclusion'. In 1988, the Education Reform Act and the National Curriculum were welcomed for the equality offered to schools throughout the country. However, this new rigid academic focussed curriculum whilst providing structure to many schools, had an adverse effect on children with BESD, neglecting the space for adequate social and emotional support of children. The general climate of increasing difficult behaviour prompted in 1989 two further papers from Her Majesty's Inspectorate: *Personal and Social Education,* addressing the emotional needs of children to be incorporated within the curriculum and *The Elton Report* in response to discipline in schools. This report however, was overshadowed by the new National Curriculum and therefore not as fully implemented as it might otherwise have been. Whilst this in some way began to redress the balance of what was felt by some to be an overly academic focus, 1992 saw the introduction of Ofsted, a regulatory authority for the inspection of schools. Designed to challenge and improve standards in schools, this again reinforced the focus of rigour, achievement and standards, perhaps lessoning the importance of schools influence in supporting the social and emotional aspects of a child's development.

In 1997, a new government produced a Green Paper 'Excellence for all'. This paper set out a five-year plan of early identification and provision for SEN. The paper re-emphasised the government's position towards inclusion of SEN within mainstream. By 2006, this resulted in the closure of 117 special schools[7] causing widespread concern.

In 2003, *Excellence and Enjoyment*, closely followed in 2004 with the *Every Child Matters* policy (2.5.4) began to redress the balance for children with BESD. Excellence and Enjoyment encouraged schools to deviate creatively from the stated curriculum to provide opportunity for social and emotional development and provide enrichment to education. The ECM's five essential outcomes, promoted for the first time in school aspects of development such as emotional health, and safety.

In 2006, initiatives to address what has been described as 'Nature-Deficit Disorder' (Louv, 2006) an increasingly common complaint describing a person's disconnection with nature, gained in popularity. The national press published recommendations following a report by the National Trust (2009) highlighting ways in which children have lost contact with nature, suggesting fifty easy remedies. The National Trust, the Government[8] and other institutions picked this up seeking to redress this disconnection[9]. This is reflected in proposals within the 2014 National Curriculum and support for organisations such as Learning Outside the Classroom (LOtC), (Ofsted, 2008).

2.6 The Argument for a Return to a 'Natural' Childhood

Recent research (Moss, 2012) reported that on average, children in England watch more than 17 hours of television per week, spend 20 hours online and as children grow older, this increases, with the average 11-15 year old spending around 7.5 hours per day in front

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[7] [http://news.bbc.co.uk/1/hi/education/6196098.stm, accessed 24/03/13]
[8] As at 2014
[9] www.woodlandtrust.org; www.face-online.org.uk/; www.farmgarden.org.uk/; www.lotc.org.uk; www.nationaltrust.org.uk; www.foresteducation.org/

of a screen (p.4). This intensity of 'hard fascination' (Kaplan and Kaplan, 1989, p.192) which describes a flashing image which demands a person's attention, causing the brain to become addicted; along with a necessary degree of inactivity, ultimately leads to health difficulties, thus describing Louv's 'Nature Deficit Disorder' (Louv, 2006). This diagnosis, so called to represent children's increasing disconnection with nature as a result of increasingly available technology has been subsequently used in research to consider a wide range of health difficulties. (Hine et al, 2008; Moss, 2012; Layard and Dunn, 2009). Louv says:

> "Nature Deficit Disorder describes the human costs of alienation from nature, among them: diminished use of the senses, attention difficulties, and higher rates of physical and emotional illness" (p.34).

This is significant. The Learning outside the Classroom Manifesto (HMSO, 2006) notes that 'what we see, hear, taste, touch smell and do gives us six main pathways to learning' (p.2). Children and young people are naturally curious. Children by nature learn more effectively when they are interested in a subject. We must, therefore provide opportunities to them to explore the world around them.

However, it is not simply a disconnection with nature that this problem promotes, it is also an increasing disconnection with relationship. Society, through its advances in technology, is able to share more news instantly, warnings of risks and dangers including 'stranger danger'. This has led to a greater anxiety for parents of allowing their children out to play freely amongst the general public (Gill, 2007). Relationships are superficial and media based with 'friends' online rather than in person, and health and safety legislation means that environmental and educational outdoor visits are bound by endless bureaucracy and subject to intensive risk assessment, which ultimately is a disincentive to schools and organisations.

The Health Survey for England (2008) reported that around three in ten children in England aged between two and fifteen are either overweight or obese. There are increasing numbers of children with mental illness, diagnosed with Attention Deficit Disorder (ADD) and Attention Deficit Hyperactivity Disorder (ADHD), with significant numbers of children suffering from conduct, behavioural and emotional problems (Layard and Dunn, 2009). Moss (2012) reports a declining emotional resilience and ability to assess risk amongst children.

Moss notes that the problem is more pronounced in low-income urban areas. Children surveyed here when asked about why they do not go and explore the natural world offered reasons including television and computer games among their responses (p.2). This resonates clearly. All participants in this study live in low-income urban environments (see Chapters Five, Six and Seven) and expressed limited experience of animals and the outdoors.

Louv (2006) in speaking of the decline in children's contact with the Natural World describes changes in society, including the rapid development of all things technological, alongside a growing libellous culture, ensuring he says, that we are driven by Health and Safety demands and a risk-averse obsession, resulting in less and less contact with each other, freedom and the natural world. This, Louv argues is not conducive to our wellbeing and mental health, nor indeed the sustenance of our planet.

Interestingly however, what remains is the prevalence of pets in children's lives. In England, around 43 percent of the population own a pet. This includes eight million households owning a dog and eight million owning a cat (Pet Food Manufacturer's Association, 2009). According to similar research by the RSPCA in 2004, this is an increase in two million dogs and three million cats in five years. It would seem from these figures that pet ownership is alive and well.

What may have changed is the role of animals in children's lives. With less exposure to the natural world, children's experience of animals, insects, plants and the sense of wonder that accompanies these things, is diminished. Without the understanding of the order of nature, there is perhaps less respect for the animal population in its own environment. Louv talks about the 'spiritual experiences' (2006, p.292) in nature that we look back on having felt somehow emotionally uplifted and with a new respect for nature. Household pets serve as playthings, objects of affection, or status symbols, anthropomorphised to excess, based on limited experience, of learning about animals through books, computers, or television. However, conversely, indifference, assault on animals and extinction are reaching levels never previously experienced (Ascione, 2005).

Within this perhaps bleak picture however, comes a wealth of literature and movements set to promote the reintroduction of animals and nature to children and childhood. Wilson, who first promoted the notion of Biophilia in 1984, and professors of Psychology, Ecology, Ecopsychology, Ethology and Education are beginning to promote the emotional, social, and ecological benefits of reconnecting with the natural world. This is explored further in 3.6.

2.7 Some Current Movements

This section, though far from comprehensive explores some movements evaluated within the course of the research, chosen because they are representative of the main case studies, in that they are directly exploring the impact of combining children (with and without BESD) and animals in interventions and advocate their intervention.

2.7.1 Green Chimneys School

Green Chimneys Children's Services is a residential school and treatment facility for children with severe emotional and behavioural difficulties. It is located in upstate New

York established and built-up over 60years by Dr Sam Ross. The school integrates a farm with a residential and day school provision for around 200 children and young people with BESD.

Ross stated the same philosophy then as he does now. That is:

> "Animals provide a living connection for children so lost in depression and anxiety that other humans- adults or peers- are too threatening to reach them" (Melson, 2001, p.101)

Children who start at the school have often experienced severe abuse, neglect or trauma. They have collected a catalogue of failed placements including schools and often homes also. They frequently display hostile, withdrawn or significantly challenging behaviour. On occasions, this behaviour has included animal abuse.

The school's stated mission is to 'provide innovative and caring services for children families and animals' (Ross, 2011). On admission, each child is assessed and allocated an animal (or plant if the child is deemed to be so troubled that the responsibility of an animal is too great) to look after with support from an adult, to learn about and to generally build a relationship with. This is the central difference in this school. Green Chimneys provides a standard education, including curriculum subjects taught elsewhere, but threads throughout its curriculum opportunities to learn from, with and about the animals that are also resident there.

Green Chimneys, began its life as a small working dairy farm, but has evolved to be a nationally reputed animal welfare organisation as well as a school, taking in farm animals, running a fully functioning stables, having its own wildlife rehabilitation centre and resident cats and dogs in the houses where the children live.

Over the years, a considerable number of studies and evaluations have taken place at the school, including a study by Melson (2001). Overall, Melson argues that the provision in particular, the emphasis on and involvement with animals supports children in developing a healthier self-esteem, reducing aggression, encourages children to be more sociable and elicits a sense of responsibility in the young people who live and learn there. Factors that are claimed to influence this change include:

- The child's perception of animals (as friend, listener, support) helping to build trust (p.47)

- Physical effects: stroking an animal to reduce stress and the surrogate comfort of soft animals as studied by Harlow (1963), (in Melson, 2001,p.128)

- The 'In the moment' factor. Animals do not hold grudges and behave consistently from day to day (p.119)

- Dependence. The animal is dependent on the child or young person to care for it, feed it, clean it etc., which invokes a sense of responsibility and nurture (p.123).

Melson also commented on the lasting impact of the programme and called for further research into this area. She noted that 'There is little evidence that these effects persist for more than a short time in the absence of animals' (2001, p.130). This research, also observed for these factors.

2.7.2 Work with Dogs

There is considerable research and evidence on the use of dogs as compared to other animals. There are examples of dogs in particular utilised within education therapeutically (Davis, 1988; Daly and Morton, 2006; Foster and Smith, 2010) along with individuals utilising this approach reported within the media. The research within this study focuses primarily on other animals, though it should be acknowledged that within each context, there were also resident dogs of whom, the children took considerable note, and one story

reporting data on the impact of the school dog (5.9.1). At one school, the dogs are part of the wider school philosophy, which advocates that animals and nature bring therapeutic benefit to children. The dogs support the de-escalation of hyper-aroused children and offer incentive through relationship. This is evidenced in incident reports. At the stables, the dogs belonged to staff and moved freely about interacting with the children as they went about their tasks. At the residential, the dog was a specific intervention to support reading and literacy, but was also available for children and young people struggling and needing time out.

> "Dogs in particular, because of their interactive, affectionate, non-judgmental, and social nature, have been effectively utilized as adjunct therapists in the treatment of children and adolescents" (Mallon, 1994. p.96).

Studies with dogs, show that canine companions, have assimilated to be particularly responsive to human language, feeling and in some cases medical need (Daley-Olmert, 2009) perhaps naturally therefore making them ideal companions. Organisations such as *Pets as Therapy (PAT), Dogs Helping Kids, and READ dogs*[10] work to harness this connection, based on the belief that interventions such as reading, walking and training dogs enhances self-esteem, self-worth and empathy by offering children and young people opportunity and responsibility to care for and be cared for, feel listened to and understood and through the non-judgemental support of academic success, to develop confidence in their own abilities.

A further example of dogs working therapeutically is a prison based dog-training programme. Rebecca Leonardi, an unpublished PhD student with Stirling University (ISAZ, 2012), set up her programme with agreement from *The Dogs Trust*, a charity working to rehome dogs and her local prison. Two years into the programme, she and a group of

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[10] (see www.petsastherapy.org; www.dogshelpingkids.co.uk ;www.thekennelclub.org.uk/item/4032)

young prisoners have supported the successful rehoming of a number of dogs. The prison, impressed with improved behaviour, attitude, and educational standards amongst the young men who have participated in the programme, asked Leonardi to increase the programme from her initial one-day to three days per week. She is now considering a request to operate the programme five days per week. As well as dog training, a team of volunteers at the request of the prisoners now support literacy and numeracy classes for the inmates, focussed around working with the dogs.

2.7.3 Equine Facilitated Therapy

There are increasingly examples of equine facilitated programmes in England. Historically, the domain of the Riding for the Disabled Association, provided for those children with physical and/or significant learning difficulties, there are now numerous horse riding programmes[11] targeting both autistic children and young people and specifically children and young people, including those with a special educational need of BESD. Objectives include ' instilling a sense of order, to create an understanding of boundaries, to improve focus and to instil trust' (Ewing et al., 2007 p.60). Ewing et al. reported in an evaluation of Equine facilitated therapy with at risk youths, a significant decrease in depression in those participating, as well as improved communication skills, relationship building skills, respect for one another and self esteem (p.61). Data from a brief study of children engaged in an equine facilitated therapeutic riding activity is incorporated within this study.

2.7.4 Learning Outside the Classroom (LOtC)

Mention has already been made of Learning Outside the Classroom (LOtC) as a movement that encourages teachers to take learning away from the classroom, utilising the six described senses: 'see, hear, taste, touch, smell' and importantly 'do'. Initially, a manifesto supported by the Government, it sets out to enthuse a range of providers and

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[11] examples include www.sironacic.com; www.sihequinetherapy.org.uk accessed, 20/09/2013

associations to collaborate with the initiative[12]. This subsequently led to the development of the Council for Learning Outside the Classroom, a hub of expertise and the establishment of a 'quality badge' for LOtC.

LOtC has enabled a growing number of schools to work with or keep animals. The number of organisations now providing initiatives for children to connect with the environment is significant. Formally the domain of the minority creative school, organisations such as *Forest Schools, Eco Schools, Play England, The National Trust, Learning Through Landscapes, the Institute for Outdoor Learning, and Growing Schools* highlight the mainstream nature of this approach promoting the development of life skills, social and emotional development and access to an alternative educational route. Or as Gair in Pether (2012) writes:

> "The skill set that you derive from outdoor learning includes everything that society determines is valuable" (p. 5).

2.8 Summary

The chapter began by exploring key theorists and the strands within theories, which influence current pedagogy, in particular for BESD education. The development of BESD education was outlined alongside a historical picture of animals in mental health and in education. An overview of the political development of the last few decades explains why animals in education have diminished and risen in popularity at different times. Finally, a few current movements advocating work with children and animals were outlined.

Utilising this contextualisation, Chapter Three explores the literature surrounding the theories underpinning an understanding of BESD, and literature concerning animals and nature for therapeutic affect supporting the exploration of this study.

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[12] For an extensive list see http://www.lotc.org.uk/membership/members-list/ accessed 20/01/2013

Chapter Three

Literature Review
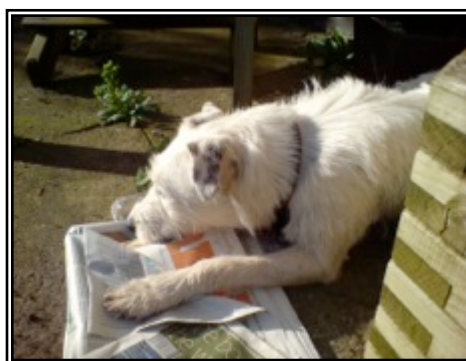
*"You'll never forget your first badger, just as you'll never remember your
highest score on a computer game, no matter how important it seemed at the time'
(Baker, 09/2009)*

3.1 Introduction

Chapter Two outlined the literature surrounding the historical and political context of the study including an outline of literature concerning animals alongside children with BESD. There is a paucity of literature dealing specifically with this area. Research exists only in related areas such as: pets in the lives of children (Beck and Katcher, 1996); animals for health (Cass, 1981); animal assisted therapy (Arkow, 2004); nature therapy (Berger, 2008) and the benefits for children of nature (Moss, 2012). None of these sources however, deals with the impact of animals specifically within an educational environment, let alone integrating such work for children and young people with BESD.

Given the nature of the thesis' focus on children and young people with BESD, the most relevant frameworks which underpin these needs includes research into trauma and its implications, leading to theories of attachment and in some cases, other psychodynamic concepts. Social pedagogy is informed by a range of theoretical models, but fundamentally it can be argued that its main premises are relational. Utilising the notion of 'the common third' (Cameron and Moss, 2011) provides connection via the exploration of the concept of Winnicotts 'transitional object' (2005). Biophilia (Wilson, 2003) and Eco-

psychological views (Roszak, 2001) are even more fundamentally claiming that humans have in built predispositions to relate to nature etc. Wilson's hypothesis does not relate specifically to BESD nor indeed specifically to children. Linking the literature to Attachment Theory attempts to explain why this phenomenon may be significant for children and young people with BESD. Nature theory and research on AAT, again not specifically aimed at children, nor children with BESD nevertheless provides insight which may support this research. There is some evidence from neuroscience to support these positions.

The prime function of this theoretical chapter is to review and summarise the published literature explored to date in this field, with relevance to the research question: *What if anything, is the social, emotional, academic, and behavioural impact of integrating animals into education and/or as a therapeutic intervention?* and to place this research in the context of the literature.

The issue is pertinent, not exclusively for pupils with BESD. Hine et al., (2008) comment that there is considerable pressure on health and social care providers, the prison services and on education providers to supply successful solutions in current society. Challenges include:

> …obesity, depression, prison overcrowding, re-offending rates, disconnection from nature and the increase of the number of disaffected young people" (p6.)

Severe emotional disorders in adolescence can lead to serious psychopathy in adulthood (Ewing et.al.,2007). Therefore positive and effective interventions are imperative to the emotional growth of young people at risk. There is a need then for alternatives to traditional methods of addressing these difficulties, greater initiatives, and radical solutions perhaps and validated research certainly. The inclusion of a pastoral curriculum supporting the development of relationships is of increasing importance in an increasingly

disconnected technological based society. The quality of our relationships is important for our development as it influences our capacity to remain curious and available to learning (Salzberger-Wittenberg et al., 1992). As Garner notes:

> "There is an illogicality in a special setting providing 'more of the same' in terms of curriculum; by all means maximise the opportunities for these youngsters to receive high-quality curriculum input- but do not allow a slavish pursuance of dogma to deflect from the consideration of the very issue that brought the pupil to the setting in the first place, namely his inappropriate behaviour, betraying amongst other things, a lack of social skills." (Garner, 1999, p.92)

This study of less traditional initiatives specifically supporting what may be described as a 'disaffected population' therefore is timely. Consideration of animals as an intervention in education for those children and young people with BESD is an under-researched area making this study an innovative and useful contribution to this field.

For the sake of brevity and relevance, there is an assumption that the understanding of BESD outlined loosely in Chapter One in terms of definition and in Chapter Two in terms of causes and general provision will be sufficient for the purpose of this study.

3.1.1 Chapter synopsis

Attachment Theory (Ainsworth and Bowlby, 1964; Barrett and Trevitt, 1991; Cairns, 2002; Geddes, 2006) is a key theory often considered to underpin work with BESD. The findings of this research show some correlation to attachment theory in particular. In order to contextualise the study, an explanation of this theory helps in thinking about how children with BESD differ from the 'average' child. Trauma theory (Bloom, 1997; Perry, 2011) and Neuroscience research, both of which both contribute to an understanding of Attachment theory, are outlined. This is followed by a consideration of some of the traditional

responses to Attachment difficulties within the field of BESD, before reflection on literature on the subject of animals and nature for therapeutic affect.

All interventions with animals within this study are explored in the context of natural environments, where 'natural' is defined as an environment outdoors and surrounded by living things. With this in mind, and with Animal Assisted Therapy (AAT) being subsumed within the wider field of nature, I have therefore looked also for evidence within this wider field. This supports the research by exploring the impact of the natural environment, of which there is considerable literature, and within which, there are animal interventions. Additionally, literature that looks specifically at AAT is considered, outlining a brief history, perceived benefits for health, social and emotional benefits and for education.

Related disciplines, as mentioned, including the Biophilia Hypothesis and Ecosychology are discussed in order to investigate the reasons for the impact anecdotally described when combining children and animals. Criticisms of AAT and calls for further research are explored before the chapter concludes with a discussion of the commonality across the themes and consideration of how this work might influence work within BESD.

3.2 Trauma and Its implications

Traumatisation occurs 'when both internal and external resources are inadequate to cope with external threat' (Van de Kork, 1989, p.393). This is to say, it is not simply the traumatic event, but the reaction of the individual's mind and body to the event. The resultant impact of trauma in childhood can be explained as a child who then fears for his/her own life or the life of someone they love (Bloom, 1997). Trauma affects thought patterns, self-esteem, memory, behaviour, our understanding of the world and importantly, relationships. It can result in feelings and thought patterns including learned helplessness, loss of control, an inability to think or remember under stress, and dissociation. Trauma

may have been caused by neglect, abuse, violence experienced or witnessed, separation from a parent or illness, accidents or injury (Bloom, 1997). The earlier the occurrence the higher the impact leading to more severe disturbance of attachment patterns and development at physical, emotional, behavioural and even intellectual levels. Though there need not be a medical diagnosis for a child or young person to be identified as BESD (DES, 2004, p.4), children with BESD have commonly experienced trauma at some point in their life (Diamond, 2009).

> "Due to adverse experiences in infancy and early childhood, these children are left with high degrees of stress and bewilderment, a lack of trust in adults and of course, they display challenging chaotic, aggressive and sexualised behaviour. Because of entrenched social, emotional and behavioural difficulties, the children find it hard to be part of a family, classroom or group situation" (p.219)

Sunderland (2007) explains trauma through its impact on the brain, classifying the developed brain into three sections; the brain stem, the limbic system and the frontal cortex (p.18-19). Each of these layers of the brain develops in childhood, with a child initially responding only from the brain stem expressing reflex responses such as hunger, thirst, etc. At this stage, the child is helpless and relies on the support of a positive parenting model. At around eighteen months the limbic system develops enabling the expression of a range of emotions. The child is now beginning to walk and talk and the brain develops the capacity for curiosity and playfulness. Finally the child develops a frontal cortex, enabling reasoning, questioning and rationalisation. In every person, stress or threat of danger, causes a temporary short-circuit to the brain stem initiating the basic instinctual responses in order to seek safety and survival. The chemical motoric responses such as shaking or a racing heart, are triggered by the amygdala filling the body with adrenalin, alerting us to danger and mobilising us to action. Sunderland explains how even minor trauma can cause a person's rational brain to short circuit almost entirely and in some cases remain in a constant state of high alert to stress. Without

access to the thinking part of the brain, it can be near impossible for these children to learn well. Trauma in infancy, and certainly repeated trauma can damage each stage of brain development significantly as is illustrated in Figure 1.
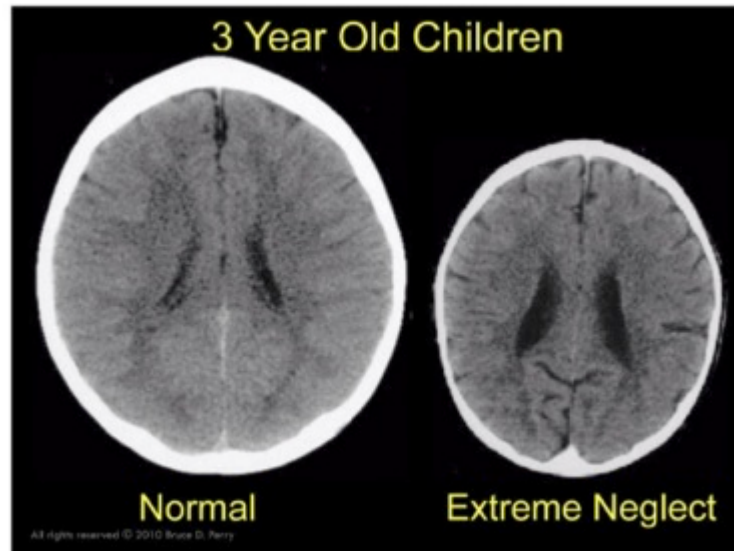
Figure 1. CT scan of a brain of an 'average' three year old child alongside one of a three year old who has suffered extreme neglect. (Perry, 2010). Imaged used with permission of publisher.

The images illustrate the negative impact of trauma and in this case neglect on the developing brain. Neglect may be physical, through under nutrition or stimulation, or otherwise emotional which can also impact physical development. The brain on the right is significantly smaller than average and has abnormal development of cortical, limbic and midbrain structures (Perry, 2010).

Fundamentally, through trauma, a child's ability to function socially is frustrated. Other deficits in a child's environment, such as a lack of appropriate role modelling for example, may lead to a child failing to learn social cues (Perry, 2006). With the addition of trauma, the need to seek safety and survival impedes the child further from accessing the areas of the brain that determine social functioning. Relationship is key to the healthy development of a child and without it, the brain does not make the developments it should (Perry, 2011). This in turn impacts on a child's ability to develop and function within relationship.

"In some ways, the problem posed by [children with BESD] is easily summarised; any form of teaching, counselling or guidance ultimately depends on the ability of the learner to be in relationship with the teacher" (Diamond, 2009, p.218)

Perry (2011) in discussing trauma summarises his belief that in order to function appropriately, a child needs love and empathy. About relationships, he says,

"Humankind would not have endured and cannot continue without the capacity to form rewarding, nurturing and endearing relationships.' He continues, 'Empathy underlies virtually everything that makes society work-like trust, altruism, collaboration, love, charity. Failure to empathise is a key part of most social problems" (p.4).

According to Bowlby (1969) who first classified an Attachment Disorder, the absence of skills of relationship, empathy and the ability to trust are essential symptoms of a child with an attachment disorder. Relationship, empathy and the ability to trust are key themes of this study. Whilst children with BESD do not necessarily also have the descriptor of an attachment disorder, trauma in varying degrees of severity is common.

3.3 Attachment Theory

Attachment theory is largely utilised within the psychodynamic model of BESD education. It is utilised widely in understanding challenging behaviour and by organisations such as nurture groups (Bennathan and Boxall, 1998) and Thrive[ftc] (2012) who seek to understand the emotional functioning of children and young people in order to help them learn and succeed in special school settings and in mainstream schools. With greater urgency to support growing numbers of children with BESD (both diagnosed and undiagnosed), mainstream schools are beginning to embrace attachment theory and its solutions more widely evidenced by the increase in organisations set up to address attachment disorders

in mainstream schools[13] and texts such as Bomber's 'What About Me?' (2011) a book written to support children with Attachment disorders in Mainstream education.

According to Winnicott (1991), the 'good enough mother' is one who allows herself to be used by her infant so that he or she may develop a healthy and secure attachment. This means, the infant is able build a 'secure base' from which he or she may experience and develop a core identity, trust, feelings and empathy, morality, social learning and acceptability and independent thinking skills (Bowlby, 1988). Any trauma, including temporary or long term separation from a parent occurring to a child under 36 months puts him/her at high risk of failing to build this secure base and thus developing an attachment disorder (Geddes, 2006). Trauma may include maternal ambivalence, abuse, neglect, illness, sudden separation, inconsistent or inadequate care, maternal depression, poor parenting or in-utero trauma. An attachment disorder, inevitably gives rise to problematic behaviour.

Harlow (1962) was considered to be something of a pioneer in research into attachment. His experiments involved taking baby monkeys away from their mothers and isolating them with various fake monkeys. Harlow's research has been confirmed and extended (Kraemer, 1985, Van der Kilk, 1989) and findings consistently show that this separation for the first year of life, resulted in monkeys who were,

> "..socially withdrawn, unpredictable and aggressive. They do not know how to engage in normal monkey behaviour, are unable to mate properly and do not know normal monkey social cues" (Bloom, 2010, p.78)

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[13] E.g. Yellow Kite (www.theyellowkite.co.uk); Thrive[ftc] (www.thriveftc.co.uk); Young Minds (www.youngminds.org.uk); Creative Education (www.creativeeducation.co.uk)

According to Ainsworth (1982), there are three distinct types of attachment: Avoidant, Ambivalent and Secure Attachment. Main and Solomon (1986) developed a fourth: Disorganised Attachment. Each of these disorders exhibits behavioural similarities and differences (Geddes, 2006), with 'Secure Attachment' being the baseline for good emotional well-being. Symptoms of each of the disorders elaborated by Ainsworth, Bowlby, Geddes, Main and Solomon are summarised.

Figure 2. (Table is Author's Adaptation from Summary by Geddes, 2006)

Avoidant	Ambivalent	Disorganised
Indifference to new situations	High level of anxiety and uncertainty	Intense anxiety
Rejects support	Needs to hold the attention of the teacher	Controlling and omnipotence
Needs to be autonomous	Difficulties attempting anything alone	Untrusting
Will not attempt tasks for fear of humiliation	Unable to focus/ fear of losing attention	Overwhelming fear of failure/ vulnerability
Hyper-vigilant	Hyper-vigilant	Hyper-vigilant
Unable to concentrate	Unable to concentrate	Unable to concentrate
Limited creativity		May appear uncreative/ unimaginative due to difficulties with conceptual thought
Limited use of language		
Likely to be underachieving	Likely to be underachieving	Likely to be underachieving
Difficulty with social situations: hostile	Difficulty with social situations: hostile when frustrated	Difficulty with social situations: unwilling to accept direction or compromise.

3.4 Reponses to Attachment Difficulties and Trauma

There are numerous responses presented within the education setting to address attachment difficulties and trauma in children. Examples include a range of responses for children ranging from nurture groups (Bennathan, 1998) for those children within

mainstream schooling to therapeutic communities and individual support and therapy for those whose difficulties have resulted in extreme behaviours leading to family and school breakdown. Within each institution, responses include a further range of activities, strategies and approaches. These have included the use of educational therapies, whereby children explore their life stories and feelings therapeutically through educational activities such as storytelling; play, drama and music therapy; and recently, though not explicitly broadcast as a response to attachment difficulties, Animal Assisted Therapy (AAT). Each model is underpinned by a belief in the need to relearn the skills of relationship, an identified theme of the study hence highlighted here, and utilises the principles, if not the practice of psychotherapy.

3.4.1 Therapeutic Communities

The therapeutic community, an alternative to a psychiatric response to dysfunction, describes hospitals and prisons as well as educational establishments. It essentially describes a living-learning situation (Lees, Manning and Rawlings, 1999) within which daily behaviour, emotional and physical states can be observed, and challenged as appropriate through intensive group experiences. In addition Therapeutic Communities are encouraged to experiment with alternative 'corrective emotional experiences' (Whiteley, 1990, p.886). Roberts (1997) defines the therapeutic community as 'a consciously designed social environment and programme within a residential or day unit in which the social and group process is harnessed with therapeutic intent. In the therapeutic community the community is the primary therapeutic instrument.' (p.4)

Docker-Drysdale (1990), a student of Winnicott (1991) and founder of a therapeutic community outlines in *The Provision of Primary Experience,* her philosophy on working in residential education with children with BESD and Attachment difficulties. Her

psychoanalytic approach, contributed to the psychodynamic model of education still in practice in therapeutic communities today.

The Manifesto of the Consortium for Therapeutic Communities (TCTC), [http://www.therapeuticcommunities.org, accessed 30/03/13] states as its core values: attachment, containment, respect, communication, interdependence, relationships, participation, process, balance and responsibility. Each of these values is explained within the context of developing positive and reciprocal relationships.

Docker-Drysdale, Founder of The Mulberry Bush School expressed theories, underpinned by Winnicott's 'good enough mothering', that an adult should be able to feel involvement and empathy for the children within their care and demonstrate reliability and continuity, 'as a good mother would do intuitively' (Docker-Drysdale, 1990, p.11). The model is built upon systems and community and a milieu therapy relying upon consistency of relationship between adults and children. In the early days of the development of her work, Docker-Drysdale included animals to support the social skills development of pupils (2.4.1). This practice may have paved the way for interventions with children with BESD and animals.

Critics of Therapeutic Communities however (Smith, Gates and Foxcroft, 2006, De Leon, 2010) question the measurable impact of therapeutic communities, and whether a focus on a psychotherapeutic approach takes sufficiently into account other important interactions in the child/ young person's life. Being within a residential establishment means that a child is part of a social system and it is incumbent upon the staff to influence this system to facilitate therapeutic interactions. Questions are raised around their impact and effectiveness in social situations outside of the institutions and over time.

Educationally, there are currently few institutions using this approach and in the main, they remain the domain of the independent sector, which some authorities consider overly costly. Within a political climate focussing on standards of academic attainment and achievement and an evidence-based approach, understanding of and provision for the principles and practice of therapeutic communities within the mainstream sector is limited.

3.4.2 School Based Approach

A variety of approaches to address attachment disorders can be found within both the special and mainstream sector including formal structures such as Nurture groups (Bennathan, 1998), The Sanctuary Model (Bloom, 1997), The Thrive Approach [www.thriveftc.com, accessed 30/03/14] as well as those guided by individuals (examples including Winnicott, 2005; Geddes, 2006; Blake, Bird and Gerlach, 2007; Hughes, 2007; Perry, 2011).

Geddes (2006) an educational therapist, takes a school-based approach to attachment difficulties. This work, pioneered by the Forum for Advancement in Educational Therapy and Treatment (FAETT), approaches difficulties by viewing attachment disorders though the model of a triangle exhibiting relationships between the child, the adult and the task (Figure *3*). Geddes also utilises Winnicott's model of the transitional object and talks of the school being the secure base enabling a child to move fluidly between relationship and task. Elaborating the triangle model for each attachment disorder, Geddes illustrates the various responses to learning exhibited by children in the classroom. Responses include over-focusing on the task in avoidance of the relationship with the teacher (Avoidant attachment), an inability to focus on the task; such is the dependence on the relationships/ attention of the teacher (Ambivalent attachment) and the pupil who is unable to engage with either the teacher or the task (Disorganised attachment). Geddes explains how each presents in the classroom, and appropriate responses including safe and supportive

routines, physical containment and strategies to make the task less threatening in order to support the child in this context. This method is picked up and extended by Bomber (2007), a teacher who has worked these examples in context.

Figure 3.

The Learning Triangle of the Securely Attached Pupil (Geddes, 2006, p.59)
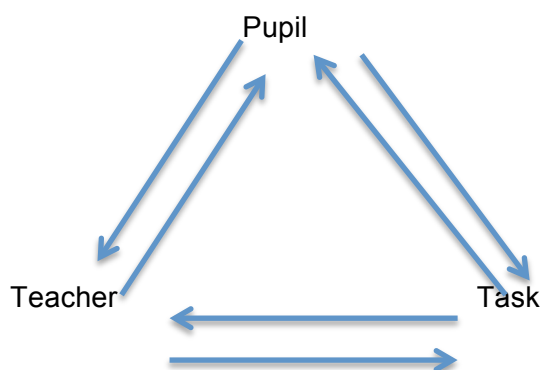
This is a useful model for later consideration of the introduction of animals as task and/or teacher, as utilised within the study and explored within the theory of the common third (Cameron and Moss, 2011), (see 8.3.1)

Nurture Groups (Bennathan, 1998), a model first introduced by Bennathan and Boxall in the late 1970's is a more formalised method of responding to children with an attachment issue. The approach is a short term intervention for a group of between six and twelve children, separated for 'nurturing' activities within an educational context for a part of their day in order to receive social and emotional support to remove barriers to learning. Children attend nurture groups but remain an active part of their main class group, spend appropriate times within the nurture group according to their need and typically return full time to their own class within two to four terms. The model uses the 'Boxall Profile' (Bennathan, 1998) as a diagnostic assessment tool, which though not referencing attachment specifically, highlights symptoms in its assessment. Research evaluating the effectiveness of Nurture Groups (Whitbread, 2007; Reynold et al.; Goldman and Cook,

2008 all in Rose, 2010) though demonstrating positive impacts, have failed to produce credible conclusions, due to their scale and methodologies. Rose (2010), nevertheless promotes the practice of Nurture Groups as making a difference socially and emotionally 'both to the lives of children and families as well as to the ethos of whole schools and communities' (p.5)

The Thrive approach [www.thriveftc.com, accessed 30/03/14] though developed over years, has seen recent popularity in both mainstream and special schools. Based on the underpinning principles of Attachment Theory as well as Child Development theories, Neuroscience and research onto the role of creativity and play, the approach utilises an online assessment tool to establish emotional 'interruptions' which prevent access to learning and supports the user to develop action plans and strategies to support the re-learning of key skills through relationship (including the use of animals). The approach is well grounded in research from Blake, Bird and Gerlach (2007); Hughes (2007); Sunderland (2007) and Perry (2011) and users of the approach report marked improvements in children's social, emotional and academic functioning.

3.4.3 Individual Support

The provision of individual support describes an spectrum of individual therapies, including psychotherapy (Corey, 2001; Lanyado, 2008), play therapy (Axline, 1990), dance or drama therapy (Crimmens, 2006), nature therapy (Berger, 2008), animal assisted therapies (Levinson, 1997; Arkow, 2004; Brookes, 2006; Fine, 2010; Wilkins, 2010) and others. The purpose of these often intensive interventions, is to support the emotional needs of a child or young person with trauma and attachment difficulties. A therapist usually delivers these, though there are models, which promote the use of a caregiver rather than a therapist (Hughes, 2006). The impact of Individual support varies widely. Research surrounding the provision of animal assisted therapy pertinent to this study is evaluated in 3.6.2.

3.5 Social Pedagogy and The Common Third

'Social Pedagogy', a term more familiar in continental Europe than in the UK, also sometimes described as *Holistic Education* (Hannon et al, 2010), is most commonly used to describe the work in settings with vulnerable children and young people, in particular within residential care. The term spans education, social work and childcare, incorporating concepts such as a *shared space* [14] and *the common third* [http://www.thempra.org.uk/concepts_c3.htm accessed 20/08/13] and the development of reflexive relationships within a setting.

'The Common Third' describes, 'activities belonging to both the pedagogue and the child; they are neither 'you' nor 'I' but as it were a 'third party' '(Cameron and Moss, 2011, p.79). Having a common third provides a mutual focus within which relationships can form and grow.

> 'Social pedagogy is a European approach which aims to provide a holistic approach to working with children and young people… The model works from an understanding that everyday activities such as cooking, mealtimes, sport and playtime can provide a situation in which children and adults can find a common purpose and interaction to develop relationships.' (Diamond, 2009, p.220)

As Attachment Theory, Social Pedagogy focusses on the centrality of relationship. The desired outcome is the same in promoting wholeness, wellbeing and strong and positive relationships. Social Pedagogy differs only in the framework by which the theory is constructed. Attachment theory is underlined by the notion of the 'good enough' caregiver providing a secure base (Winnicott, 1991), and looks to the child's earlier experiences in order to understand interruptions from which to develop skills of relationship, whereas Social Pedagogy is a method underpinned by a belief in the equality of all human beings,

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[14] A space neutral to both pedagogue and child within which activities can take place.

child and adult in relationship with one another (Petrie et al., 2006). Underlying principles include practical involvement with the individual and group, sharing, reflecting and enabling the development of relationship skills through organic processes and theory is based on earlier work of Rousseau and Pestalozzi (see Chapter 2.2.1, 2.2.2). Both Attachment Theory and Social Pedagogy are based on an assumption that the child is born 'good'; The Nature versus Nurture debate, (Rousseau, 1986) and that 'Nurture' can impact the quality of relationship.

A further articulation of The Common Third is Winnicott's (2005) 'transitional object', which he described as temporarily extending or taking the place of the mother-child relationship in order to support the child to grow away from his 'secure base' namely his/her parental figure. A transitional object may be an item of clothing belonging to the primary caregiver, a teddy bear or any inanimate object, that the child carries with him to maintain physically the presence of one space or person as he moves to another. The child, who might otherwise be pre-occupied with loss or separation anxiety, inevitably feels a strong sense of attachment to his/her object, and the security provided by this object enables the child to access the activity of the new environment. This concept is useful, in that, as with Winnicott's Transitional Object, it may provide a theoretical understanding of the roles of the animals, adults and children within contexts.

3.6 Animals and Nature for Therapeutic Affect

The link between attachment theory and animals and nature to this point has been tenuous. This study will show however that there may be a significant link. Whether utilised as 'The Common Third' facilitating relationships, or as attachment figures in their own right, animals have been used in various settings throughout history (Christiansen, 2010; Malamaud, 2011; Resl, 2011) to improve quality of life; as well as specifically

relevant to this study, to support the emotional needs of children and young people (Thigpen et. al., 2005). This includes:

- As pets and companions (Podberscek and Serpell, 2005)

- As assistants in therapy (AAT) (Mallon, Ross and Ross, 2000; Odendaal, 2000)

- Creating opportunities for children and young people to become responsible for animal care (Docker-Drysdale, 1990)

- Using animal care topics to access curricular and learning opportunities (Rivera, 2004)

- Providing opportunities for career-focused training in fields related to animals. (Kings College London, 2010)

Underpinning attachment theory, as discussed in 3.3 is the notion of the 'secure base' from which a child or young person can begin to learn about themselves, others and the world around them, through sensory exploration and the development of skills. Where an attachment difficulty exists, a child may be neurologically inhibited from accessing experiences through anxiety and the triggering of the amygdala, causing the fight, flight, freeze circuit to override thinking (Sunderland, 2007).

This study is focused on the use of animals as a therapeutic adjunct. Defined by Thigpen et al. (2005) as that 'in which the animal is used to produce or increase the positive effects of treatment for a given person or group' (p.2), be that to rebuild or develop attachments, social and emotional functioning, to support educational development or for other outcomes. This section then, explores the literature relating to this potential provision within the wider context of nature, and as an intervention. It seeks to examine whether animals and the natural environment may provide this emotionally safe context for a child or young person with attachment difficulties.

3.6.1 Learning in the Natural Environment

One response by schools to an increasingly pressurised curriculum and changes in social and emotional functioning has been to embrace the Learning Outside the Classroom movement (LOtC), an aspect of which is Learning in the Natural Environment (LINE). A study from Kings College (04/2011) considering the benefits of learning in the natural environment (LINE) found that:

> "The value of LINE in England involves benefits arising from educational attainment, attitudes to other children, awareness of the environment and natural science skills, behavioural outcomes and social cohesion, health benefits, school staff morale and a more attractive school "(p.3).

Based on the strength of such outcomes, Natural England, DEFRA[15] and English Heritage have funded a four year research project aimed at increasing the number of children experiencing the benefits of LINE, including 'improved mental heath'. [http://www.naturalengland.org.uk/ourwork/enjoying/linkingpeople/learning/naturalconnecti ons/ , accessed 01/04/14]

Kaplan and Kaplan (1989) similarly claim that exposure to nature reduces directed attention fatigue and restores the ability to concentrate. Called 'Attention Restoration Theory', the theory suggests that being in the countryside alone can engage a person's attention, also described as 'soft fascination'; allowing individuals to attend without paying attention. This is supported by Sempik et al. (2003) who stated that a view or experience of nature invokes involuntary attention and thus requiring no effort, lowers stress and is therefore restorative.

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[15] Department for Environment, Food and Rural Affairs

These outcomes of enabling children to pay attention, lower stress, and what is loosely described above as 'improving mental health', relate closely to the needs described in those children and young people with attachment difficulties (see fig.2, 3.3). Other studies show that the symptoms of attention deficit hyperactivity disorder (ADHD) a common diagnosis in my experience for those with BESD; are less severe when individuals are regularly exposed to natural outdoor environments (Taylor, Kuo and Sullivan, 2001).

Beyond this restorative impact, a recent report from Ofsted (2008) reported that learning outside the classroom (LOtC) led to improved outcomes for pupils including 'better achievement, standards, motivation, personal development and behaviour' (p.4) and 'when planned and implemented well, LOtC contributed significantly to raising standards and improving personal social and emotional development' (p.5).

Quayle (2007) reporting on research around interacting with the environment claimed far reaching educational benefits. One study demonstrated that:

> "Community gardens and farms have positive impacts on the lives of disaffected young people by engaging them where other mechanisms have failed, instilling a sense of responsibility, raising their aspirations and giving them the capacity to reach those goals. The findings indicate that by working with schools it is possible to offer young people who are struggling academically, an alternative education before they become disengaged" (p.82).

This is supported by Gardner (1999) the creator of the theory of multiple intelligences who described an intelligence he called 'naturalistic intelligence'. Gardner described the naturalist as one who may not be academic but recognises and classifies the various species of living things and can appreciate flora and fauna. Experts with this intelligence, Gardner claims, include Charles Darwin, Barbara Woodhouse, perhaps the first celebrity dog trainer and Monte Roberts, known affectionately as 'The Horse Whisperer'.

The report to Natural England (2011) on childhood and nature make the point definitively.

> "It is a recognised fact that contact with nature can play an important role in the educational and social development of children; and that early contact with nature plays an important role in developing pro-environmental values and behaviours" (p.3).

This study however, is concerned specifically with interventions with animals within nature and their impact on children and young people. The question therefore is whether animals provide something above that of a natural environment alone.

3.6.2 Animal Intervention

Animal Assisted Therapy

As elaborated in 2.5.1, The Society for Companion Animal Studies (SCAS) defines Animal-Assisted Activities (AAA) as distinct from Animal-Assisted Therapy (AAT). The former, SCAS claims is a 'non-goal directed activity' [www.SCAS.org.uk, accessed 20/05/2010] and the latter is a specific therapeutic tool for addressing specific issues. The interventions studied within this research fall by this definition into AAA, by virtue of the fact that AAT requires an explicit therapeutic focus. There is little research into AAA however and this study therefore explores literature surrounding both AAA and AAT.

History

Animals as human counterparts, in particular dogs and horses, go back to prehistoric times. Cave drawings show people and wolves sitting around campfires; Egyptians were buried with cats; in ancient Greece, animals believed to have medicinal tongues licked the wounds of the sick (Christiansen, 2010). Documentary evidence dates back to an archaeological find in northern Israel of a human skeleton clutching a puppy, estimated to be 12,000 years old (Anderson, 2004).

Animal intervention for wellness is also not a new concept. Within the last few decades animals in some environments have become viewed as 'agents of socialisation' (Serpell, 2006), meaning facilitators of relationships and relationship skills. However, the first recorded example of animal assisted therapy was in the late eighteenth century at the York Retreat, an institution for the rehabilitation of mentally ill patients (see 2.4.2). Florence Nightingale suggested using pets for patients with confining and long-term illness. In the Victorian era, pets were obtained for children for the positive impact they had on their demonstration of kindness that continued into adulthood (Grier, 1999) and in 1942, dogs were used as companions for convalescing servicemen (Davis, 1988).

Freud too considered there to be a place for animals in the lives of children, though more pragmatically, for guiding children through from 'animal urges' towards becoming civilised human beings (Freud in Melson, 2001). He kept many dogs and presented them often during his psychoanalysis sessions. Freud noted that the presence of the dog was helpful because the patient would find that their speech would not shock or disturb the dog and this reassured them and so encouraged them to relax and confide.

Recent Research

Recent studies, focus on variable impacts of animal intervention, not only therapeutic. Berget et al (2007) considered the impact of farm animals on adults with mental disorders. Their study showed after a twelve-week intervention, improvements in self-efficacy and lowered anxiety. Thigpen at al. (2005) looked specifically at the impact within juvenile residential facilities, and felt that by encouraging residents to interact with other species, intellectual development was stimulated. Katcher and Wilkins (2000) similarly felt that interaction with animals strengthened a person's use of his or her intelligence in a way that the traditional classroom could not.

Some literature and advocates for interventions with animals and children have centred around Green Chimneys School (2.7.1), a school based upon interaction between children and animals. Studies including Melson (2001), and Katcher (1983) have focused on the work of Ross (2012), the founder at the school. Each of these studies supports the positive impact of the school, whose curriculum is built around animal interaction for children with severe BESD. Edes (2010) in comparing the work with that of AAT in the Netherlands summarises:

> 'Throughout children's development animals can make significant contributions to overall development. A well-trained pedagogical professional can benefit from working with animals…The animal increases the environment to a safe, motivating and inviting situation. Animals do not judge, laugh or criticize, allow children to proceed at their own pace, are less intimidating than peers…Professionals provide opportunities to practice new skills and to develop new habits for respect, empathy, peace, nonviolence in relation to animals, people and the earth' (p.11)

Considering the more therapeutic benefits, Foster and Smith (2010) refer to animals in their research as 'co-therapists'. They conclude that children respond to the non-judgmental quality of animals, and when 'listened to' by them intuitively trust, begin to feel both important and needed, and subsequently loved, thus enabling children to begin to take the risk to trust and love. This rather subjective conclusion is supported however by a more scientific approach to examining AAT. Odendaal and Meintjes (2003) studied the neurophysiological correlates of affiliative behaviour between humans and dogs. They discovered that concentrations positive hormones enabling a person to feel good, relax and build a bond were increased after inter-species contact, while stress chemicals, decreased.

The definition of what is perceived to be therapeutic varies, certainly between countries (much of the research into AAT has been conducted in the USA) but also between studies, depending ultimately on the nature of the client involved in the intervention. Haubenhofer and Kirchengast (2006) in evaluating the physiological impact of animals on persons with mental health difficulties define therapeutic broadly as 'a rehabilitative process (p.165), whilst Limond, Bradshaw and Cormack (1997) describe the therapeutic impact in terms of improvements in engagement for learning disabled students. What is common however is that all the research evaluated for this study indicates positive, though often inconclusive, outcomes and advocates both further research and the implementation of initiatives of AAT.

Ascione (1992) a notable authority on animal cruelty, also advocates exposure to animals through educational settings, particularly for more disaffected children, whom he notes are more likely to be associated with crimes of cruelty. Ascione found that children exposed to animal interventions display enhanced empathy for humans when compared with children not exposed to these interventions. This then, introduces an argument for the social benefit of animal interaction.

3.6.3 The Social Benefit of Animals

Kellert and Wilson (1993) claim that by our genetic history, we are hard wired to connect with nature, that there is a natural attraction to animals. Lorenz, supporting this claim explains:

> "The wish to keep an animal usually arises from a general longing for a bond with nature. This bond is analogous with those human functions that go hand in hand with the emotions of love and friendship in the purest and noblest form" (p.120).

There are a myriad of asserted benefits of animal interventions reported in research including better social skills including social support (Odendaal, 2000; Serpell, 1996) an increase in empathy and the alleviation of distress (Hergovich et al., 2002), reduced anger (Kaiser et al., 2004) sustained focus and cooperation (Limond, Bradshaw and Cormack, 1997) as well as a general feeling of well being described by Christiansen (2007).

> "Animals are natural therapists. Their presence, affection and simple needs gives us a feeling of well being that is often missing from today's fast paced world. Animals give us many benefits such as the feeling of being needed and the feeling of safety and security. They are sensitive to our moods and even encourage us to exercise"

[http://voices.yahoo.com/history-animal-assisted-therapy-557454.html?cat=72, Accessed 13 May 2010]

Odendaal (2000) describes a need for attention in all of us that is the pre-requisite for successful social interactions between people. Children and young people with BESD, and particularly those with a diagnosis of attachment difficulties may either withdraw from social contact or seek excessive contact. Because these behaviours are not constructive, they do not lead to successful social interactions, thus frustrating the need in the child further. Odendaal believes that animals can help with this. Learning to care for another living creature, getting emotional needs met and developing mutually positive interactions will satisfy the child's 'attentionis egens' (p.300).

> "The success of human companion animals interaction is probably based on a two way fulfilling of attentionis egens. Animal species traditionally thought of as suitable for human companionship are generally highly social (e.g. the dog) but less social animals can still fulfil the need for attention of their human owners. The greater the need for attention, the more social behaviour an animal exhibits, the more successful the bonding between human and animal can be" (p.300).

Foster and Smith (2008), claim that companion animals have a number of qualities that make them therapeutic. They are:

- Warm-blooded and tactile therefore providing touch comfort.

- Non-judgemental. Animals do not judge the way you look, your popularity or mood. They are 'in the moment' and will usually only respond negatively to acute cruelty meaning that they are accessible to many.

- Providers of unconditional love. Animals sense and respond to emotional changes.

- Good Listeners. They do not interrupt, nor do they share their opinions.

- Helpless, therefore helping us to feel needed and important by providing for their needs.

- Entertaining, as they can seem to clown around.

This correlates with Melson's factors which she maintains impact change (p.55). It has been shown that humans can form attachments to animals (Levinson, 1978) and that positive affects can be obtained even if it is not a person's own animal (Friedmann, 2000). Physical contact is particularly rewarding (Berget et al., 2007). Children therefore may be able to learn about themselves and the conventions of human relationships from observation, interaction and relationship with animals. This study considers this possibility within the interventions studied.

3.6.4 Animals and Nature for Educational Benefit

Studies such as Melson (2001) and Berger (2008) show that there may be educational benefits to animal intervention programmes also. Animals have been used to improve reading capabilities[16] and in some studies (Thigpen et al., 2005, p.6) have promoted

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[16] http://www.bbc.co.uk/news/education-26577565

better communication skills. In a study of an amphibian conservation programme, Randler et al. (2005) found that children aged nine to eleven who participated, performed better in achievement tests and that pupils expressed high interest and well-being and low anger, anxiety and boredom compared with those not involved in the programme.

AAT and AAA can take place within a classroom, but there is an argument for experiencing the animals in their natural environment. Ewing et al. (2007) in discussing equine facilitated interventions noted that taking children out of their school environment and into the animals' environment, promoted a better rapport and greater immersion in the activities. Students making multiple trips to LINE sites developed social skills such as tolerance, caring, group awareness and self-discipline, all skills which benefit the development of a rounded personality and support attachment; as well as research skills involving understanding and managing the natural environment (Kings College, 2011). Whilst this latter example does not specifically concern animals, it again supports the benefit of interacting in a natural environment within which the interventions in this study take place.

Further research supports this. Ofsted (2008) reported that 'learners of all ages involved in [a] survey said that they enjoyed working away from the classroom. They found it 'practical, exciting, motivating, refreshing and fun'. (p.10). However, a key finding demonstrates that it is not enough to simply have pleasant surroundings; the ability to alter one's environment is linked to well-being and achievement (Quayle, 2007, p.80).

Neuroscience shows that when a person is hypervigilant, anxious, bored or depressed, they have less access to thinking skills (Sunderland 2007). Decety and Cacioppo, (2011) talk about our 'negativity bias', which in effect is a neurological inclination to focus on danger before relaxing and seeking out opportunity. If this is the case, then it is only in

immersive and relaxing environments that we can dismiss danger and begin to fully engage thought and therefore learn.

Some children however, are frightened of animals either through a lack of experience and contact, cultural issues or experience of aggressive animals, kept for status, guarding or fighting. They are on high alert. Intervention may still be possible. Research shows that children who come safely into contact with animals and are able to overcome fears, have a sense of enhanced self-efficacy. (Brooks, 2006; Ross 2012). There are differences in responses from different animals. In a study by Kidd, Kelley and Kidd (1983) considering personality characteristics of different animals and their owners, bird owners scored higher for affiliation and nurturance within general social groups than turtle and snake owners.

An additional issue is that not all animals are suitable. The animal's temperament may dictate unsuitability for engaging in stressful situations. It may not be willing to be held, or handled by a range of people, or able to cope with crowds of uninhibited and loud children trying to stroke them. With this in mind, some organisations[17] have devised temperament tests to gauge the suitability of an animal for work children and adults.

AAT and AAA in schools and organisations in England is currently experiencing something of a revival (see 2.5.1). Whilst the prevalence of animals and rural science in the curriculum has waxed and waned over the last few decades and is still significantly more developed as a formal provision in the USA, AAA are now increasingly prevalent in and supporting educational organisations in the UK (FCFCG, 2013). This study seeks to explore how those who have noticed this attraction and initiated intervention have impacted on children's social, emotional, behavioural and educational wellbeing.

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[17] e.g. www.petsastherapy.org; www.rspca.org.uk

The findings of this study, suggest that in addition to social, emotional and educational impact, there may also be some associated health benefits as a result of interventions with animals. Whilst not an initial, nor particular focus of the research during the case studies, as a secondary benefit, an impact on health may support impact in other areas. This next section then, explores literature concerning animals and associated health.

3.6.5 Animals and Nature for Health

Studies (such as Cass, 1981; Allen, 2003; Gleich, 2008) show that animal interactions can have positive impact on physical and mental health. Mallon, Ross and Ross (2000) reported that interactions with pets may be good for cardiac health, boost the immune system and can act as health warnings. Other studies report improvements in self-esteem and a decrease in the likelihood of depression (Saner, 2008; Katcher and Beck, 1983; Odendaal and Meinjes, 2003; Foster and Smith, 2010). Animals have been placed in hospitals, nursing homes, speech therapy clinics, prisons and increasingly, schools (Thigpen et al., 2005; Ascione and Weber, 1996) to help improve the lives of the people within these contexts. Quayle (2007) links contact with the natural environment (and animals within it) with improved personal health.

Studies have shown that exposure to the natural environment alone can lower the effects of various mental health issues that can make it difficult for example, for students to pay attention in class (Natural England, 2011). Studies in women undergoing stress tests have demonstrated that 'the presence of a dog had more of an effect on lowering blood pressure than the presence of friends. Similarly, children who had a dog present during physical examinations, showed lower heart rate, blood pressure and behavioural distress than when the dog was not present' (Foster and Smith, 2010). It may be therefore that because of this physiological impact, some children working with animals may be calmer and more receptive to learning experiences.

In one study, touch is used as a 'diagnostic indicator' in working with children who may have experienced neglect or trauma. Brooks (2006) maintains that how a child touches an animal provides information about how he or she may have been touched, nurtured or not and whether the child has experienced any sort of intimacy. How the animal reacts to the touch also provides information. Brooks maintains that touching small animals such as a lamb, providing a kiss or a hug, can be healing for the child 'giving him or her a second chance to experience being wanted through touch, …allowing children to relax and feel less lonely' (p.202)

The observation of animals at rest has been associated with decreased physiological arousal (Katcher and Beck, 1983) or making people feel safer (Lockwood, 1983) and more interactive, sociable and helpful with others (Bernstein, Friedmann and Malaspina, 2000). An animal merely being present has been correlated with a decrease in anxiety and depression (Daley-Olmert, 2009).

Bjerke and Ostdahl (2004) found that watching birds outside the home was described as mentally restorative. Birds too, have been utilised in speech therapy. Stuttering has been known to be absent during verbal communication with animals (APA, 2000). Speech has been shown to improve in clarity.

> "In order to encourage her patients to speak clearly, speech pathologist Becky Lundeen uses Cheerio, an African grey parrot. It is a unique way for children and adults to concentrate on learning to pronounce words properly when attempting to teach the birds to do the same" [Wilkins, C. (2010) Animal-Assisted Therapy: Uncommon Therapy with Amazing Results. www.associatedcontent.com, Accessed 13 May 2010]

The Health benefits however, are not for humans alone. Odendaal and Meinjes (2003) reported that 'concentrations of endorphin, oxytocin, prolactin, phenyl ethylamine and dopamine increased in both humans and other mammals after positive interspecies interaction, whilst that of cortisol decreased' (p.297).

3.7 Related Disciplines and Theories

I have reviewed key literature concerning Trauma and attachment theory and some responses to these. I have reviewed the literature concerning animals in the context of nature and as interventions. In order to begin to consider why these theories might be pertinent, this section explores related literature with broader hypotheses in an attempt to explore why such interventions may have impact for children and young people with BESD. The theories overlap and include elements that support the exploration of animal interventions in an educational context.

3.7.1 The Biophilia Hypothesis (Wilson, 1984)

More than two decades ago, scholars from different disciplines began talking about 'The Biophilia Hypothesis'. The theories evolved from years before, concerning our interdependency with nature and other species. Essentially beginning with Darwin's ideas, 'On the Origin of Species' (1859), the term Biophilia was first used by Wilson (1984) to describe 'the innate tendency to focus on life and life-like processes' (p.1). Over this time, definitions of what this may mean have abounded. In 1993, Kellert and Wilson outlined the essence of the hypothesis, proclaiming their belief that humans are connected with nature and other species, and without them our mental health suffers. Over a decade later, Wilson, along with professors of Psychology, Ecology, Ecopsychology, Ethology and Education are beginning to promote the emotional, social, and ecological benefits of reconnecting with the natural world and contemporary texts such as Louv (2006) have supported this theory in reaching a mainstream audience.

"That is my theme- Our Siamese connection, our interdependency with a plurality of other mortals" (Kellert and Wilson, 1993, p.5).

Wilson's theory is based on the origin and evolution of humankind. If we accept that for much of human history we have been interconnected with nature and other species, Wilson maintains that we are predisposed to want and need this interdependence with animals and nature, that we are 'hard-wired' for such. This has been further evaluated and supported (see Beck and Katcher, 1996; Kahn and Kellert, 2006; Morris, 2005). This may explain children's attraction to animals. Further notions including heraclitean motion and anthropomorphism sit upon this theory base.

Heraclitean Motion

Heraclitean Motion, a theory purported by Kahn and Kellert (2006) asserts that we are genetically predisposed, biologically programmed, to find certain occurrences in nature, soothing and calming. The pre-Socratic Greek philosopher Heraclitus (c.500BC) is reported to have said 'No man ever steps in the same river twice' (Plato, Cratylus, 402a) commenting on the ever-present changing nature of the universe. Heraclitean Motion then, is the sense that some things are ever changing and yet seemingly the same, chemically supporting us to feel safe and to de-stress. There is a sense that whilst these things include subtle change, there is security in the sameness of them. Kahn and Kellert exemplify these occurrences such as flickering flames, clouds passing overhead, trees swaying in the breeze, fish in a tank, the swash and backwash of the sea, animals grazing and so on. Images all associated with tranquillity. This is also described as 'soft fascination' as mentioned in 3.3.1. Kaplan and Kaplan assert that we are predisposed to become fascinated and absorbed by watching the continuing soothing motion of these occurrences. If this is the case, this may explain the change in energy exhibited when children from urban environments come into contact with environments considerably more

natural, and stand fascinated watching animals feed, graze and play (see Chapters Five, Six and Seven).

The theory has been tested in hospitals, where patients undergoing major surgery have been found to make greater and swifter recovery when given a natural view from their hospital window (Ulrich, R.S. 1984) and another where patients exposed to fish in a fish tank before stressful dental treatment experienced less pain (Kahn and Kellert, 2006). Other studies have shown that exposure to nature and animals can result in greater general well-being and less job stress (Kaplan and Kaplan, 1989).

The impact for children has been found to be significant also, with self-worth and cognitive functioning highlighted as two benefits of exposure to nature alone (Wells and Evans, 2000 and 2003)

> 'The deep connection that so many children feel with their pets as well as the lure that animals, tame and wild, hold for children, may stem in part from combined relaxation and attentiveness that occur even when just watching or in the presence of other species. (Melson, 2001, p.129)

Melson supports both this theory and the wider theory of Biophilia, reframing it within the language of safety. She says 'We are all predisposed to respond to friendly animals as sentinels of safety and as partners in dialogue' (p.131). Putting this experience firmly within the context of working with children and young people with BESD, Melson hypothesises that 'Watching Animals at peace may create a coupling of decreased arousal with sustained attention and alertness, opening the troubled child to new possibilities of learning and growth' (p.130).

Anthropomorphism and Neotony

Anthropomorphism is the attribution of human characteristics or behavior to an animal, or object; Neotony, the look of juvenile characteristics in an adult, which release innate nurturing feelings (Gould, 1980). Both can be found in an interaction with animals. Neotony, is built upon the recognition of juvenile features, such as a short nose, big eyes, prominent cheeks, some of which are inevitably found in both young and adult mammals. Also known as the 'Ah' factor. When an animal behaves as a human would, we attribute thoughts, motives and feelings to the animal. As in the example of characters such as Mickey Mouse, who is dressed and portrayed as a human engendering empathy, an animal in a farm may nuzzle, or mimic some human behaviour causing us to laugh at or interpret the behaviour as we would if a human did so. Comments from children in the study such as 'He likes me' resulted from such anthropomorphic behaviour (see 5.8.1).

3.7.2 Ecopsychology (Roszak, 2001)

Ecopsychology describes a symbiotic relationship between ecology and psychology. This discipline advocates the preservation and protection of the psyche and the environment and is concerned with the synergistic relationship between planetary and personal well-being, primarily to encourage healthy human behaviour. Ecopsychology is based upon the assumption that 'the human psyche remains sympathetically bonded to the Earth that nurtured us into existence' (Roszak, 2001, p.5), or as Wilson asserts in his Biophilia Hypothesis, an 'innate' connection.

Ecopsychology has become relevant in recent decades with children on average spending increasing amounts of time in schools, at computers and other screen related activities, with decreasing opportunities to engage with nature (National Trust, 2009). Utilising Wilson's Biophilia Hypothesis, Ecopsychology attempts to explore and understand a person's identity in connection with the natural world. Perrin (2009) an ecopsychologist

explains that if a person can identify similarities and differences between himself and other humans, animals and plants, he is more likely to demonstrate helping behaviours and thus a greater empathy. Again, this movement suggests that relationship; this time with plants, animals and the wider environment, is integral to healthy human development. (Louv, 2006; McIntosh, 2008; Nabhan and Trimble, 1994) As Attenborough (2010) described in his 'Speech to Communicate Conference':

> 'No one will protect what they don't care about and no one will care about what they have never experienced'.

Ecopsychology goes beyond traditional therapeutic models looking not only at individual, family, and social dimensions of the human personality but also taking a 'planetary view' of mental health (Roszak, 2001). Ecopsychologists consider that a capacity to live in balance with nature is essential to human emotional and spiritual well-being, a view also held by indigenous peoples past and present (Roszak, Gomes and Kanner, 1995), who themselves, it may be said live in close connection with nature.

Though the theories have been present for over a decade, Ecopsychology is still a marginal discipline less embraced than more traditional Western psychological theory.

3.8 Criticisms and Calls for Research

Research shows some positive potential for Animal-Assisted therapies and interventions. One study of 80 children involved in a farm programme in the USA showed reduced incidences of violent and aggressive behaviour and showed that children learned to use the animals to feel more positively about themselves, as well as learning to care for the animals (Mallon, 1994). However, critics of AAT (Beck and Katcher, 2003; Arnold, 1995; Granger and Kogan, 2000) discuss considerable risks including a lack of available training, the potential of zoonotic infections, hygiene issues, the danger of bites, scratches, kicks, pet allergies, and financial costs. Additionally, they cite potential stress issues for the

animals; not all animals, even within the same species are the same and will react differently; the risk of neglect or abuse from participants, the ramifications of withdrawing animals from an intervention or from having the animal die or become seriously ill.

Perhaps for these reasons among others, Berget et al. (2007) commented that 'effects of human-animal interactions have been widely studied with pets, but there is almost a complete lack of scientific studies of human-animal interactions during interventions with farm animals in animal assisted therapy' (p.102) calling for further research into this area.

Studies of AAT with horses showed that riding a horse may lead to improved quality of life and better social skills (Berget et al., 2007). However Ewing et al. (2007) recounted research into a nine week programme of equine facilitated riding therapy which, in contrast to other research reported that self-esteem did *not* increase after the intervention despite positive changes in conduct and social acceptance (p.68). This same report noted that children between the ages of ten to thirteen can be viewed as of an appropriate age for AAT, noting that this is old enough for children to participate without being past the age of openness to learning (p.71). The study at William's school shows that there may be impact with pupils up to the age of fifteen (see Chapter 7).

Importantly, there seems little research to evidence that those who develop positive relationships with animals can generalise this behaviour to positive relationships with people. Animal interaction is not a panacea for all. Levinson (1978) noted that 'It will take more than providing children with pets for them to function as productive, happy members of the human family' (p.3) but goes on to describe the then under appreciated health and relational benefit of animals. Daly and Morton (2006) who conducted an investigation of human-animal interactions and empathy as related to preference, ownership, attachment and attitudes in children call for empirical research investigating the relationship between human-animal interactions and empathy (p.113).

There is a suggestion by Ewing et al. that positive outcomes may not be as a result of the animal, but of the adult supporting the venture. 'A positive role model taking an active interest in a child who has known abuse, neglect and the stigma of a label 'bad kid' can be the turning point in his or her young life' (p.71).

Substantial evidence exists to indicate that Learning in the Natural Environment (LINE) properly conceived adequately planned, well taught and effectively followed up offers learners' opportunity to develop their knowledge and skills in ways that add value to their everyday experiences in the classroom (Kings College, 2011). The same study also notes however that the benefits accruing from LINE can be reduced remarkably easily by a lack of adequate preparation, weak pedagogy and inadequate follow-up (p.4)

This then, evidences the importance of this research topic both for this study and for future work.

3.9 Conclusions

In order to fully explore and understand the social, emotional, academic and behavioural impact of integrating animals into education, literature in a range of subjects has been evaluated including definitions of BESD, key theories including attachment and trauma theory and responses to these theories in the context of children and young people with BESD. In summary, the literature review suggests that there may be a considerable number of factors contributing to a child experiencing BESD and responses vary considerably. However, common to the experience is the notion of and ability to form and develop relationships and relational skills.

Included in this discussion also is the issue of nature and animals as symbiotically related to human beings. Literature that underpins the basis of many animal assisted

interventions, such as Wilson's Biophilia Hypothesis and Roszak's Ecopsychology have been evaluated. Again, the notion of relationship is apparent.

The presenting outcomes of children working alongside animals in nature appears to suggest an initial attraction and interest in animals, thus presenting opportunity for learning, and therapeutic social and emotional benefit in its broadest sense. The conduit of relationship for the development of a variety of skills including those lacking in children and young people with attachment issues is an area of considerable interest in this study. The lack of research into interventions with animals and children as opposed to nature in its broadest sense or animals and people generally is apparent. This indicates an issue worth exploration, contributing new knowledge to this field.

Chapter Four outlines the methodological underpinnings of the study the methods employed and the considerable ethics involved in exploring interventions with children with BESD and animals.

Chapter Four

Methodology and Methods

'It's not the clever mind that's responsible when things work out. It's the mind that sees what's in front of it and follows the nature of things'

The Tao of Pooh, Benjamin Hoff, 1982

4.0 Chapter Overview

This chapter presents a conceptual framework (4.1) highlighting the focus and the ontological and epistemological foundations of the research. This includes a summary of the rationale and philosophical assumptions, which define the parameters for the research. The chapter articulates the process of the methodology before detailing the methods used within the study as well as giving full consideration to the ethical issues in this research.

Consideration is given to the central research question (4.2). The research strategy for the study is articulated (4.3) explaining the constellation methodology employed and the elements which contribute to it including a justification for the selection of a qualitative research paradigm initially based on a Grounded Theory approach (Glaser and Strauss, 1967). To set the context, the subject population is outlined (4.4). This is later explored in greater depth within the methods section.

There then follows a discussion of the research methods and procedures beginning with Case Study (4.5). The inhibiting practicalities of the study are briefly acknowledged (4.6) before an explanation of the process of data collection analysis and verification (4.7). Generalisability is discussed (4.8) before the chapter concludes with a detailed discussion of the ethical considerations (4.9). Particular consideration is paid to the challenges confronting research with vulnerable children and young people, and research with animals.

4.1 Conceptual Framework

The conceptual framework for the study arises from my own experience and background as an educator, working with children with social, emotional and behavioural difficulties (BESD) in a setting underpinned by a psychotherapeutic milieu. Central to the research, therefore is the employment of psychosocial research methods (Clarke and Hoggett, 2009) including narrative interview techniques (Hollway and Jefferson, 2000), an image based ethnography, (Pink, 2000) and observation paired with reflexive journaling (Etherington, 2004). Focussing the research on the participants, their stories, their perspective and their understanding has an organic evolution, which fits naturally within a qualitative study. This methodology was adapted from Grounded Theory (Charmaz, 2006). Taking elements of this approach, and working through an experiential epistemology the study seeks to scrutinise available literature, conduct field investigations, and explore and examine the impact of the interventions studied.

4.1.1 Personal Context

At the root of BESD children's difficulty is that they have often not received, or have failed to grasp basic social and emotional concepts that provide others with a platform, or springboard, from which to access learning within society's modus operandi (Cooper, 1999). This might be for a variety of reasons, from poor parenting, medical issues that

inhibit, e.g. ADHD; through to trauma, neglect or abuse, or a range of complex mental health reasons. Personal experience leads me to believe that children with BESD frequently have a strong academic potential that remains frustrated by their inability to access 'mainstream' methods of education. The personal context of my research then, is the acknowledgement of this potential of the children with whom I work, and a desire to see it fulfilled.

The study arose in part from personal interest and observation of a growing phenomenon in England within education, that of 'Learning outside the Classroom' (LOtC) and within the scope of LOtC, the recently popular 'Learning in the Natural Environment' (LINE) (See Chapter 3.6.1) of which interventions with animals is a part. The growing popularity is evidenced by the uptake of schools to the Government driven initiative outlined in the Learning Outside the Classroom Manifesto (DCSF, 2006). Specifically, this study relates to a small section of this initiative, that of the integration of animals into the general curriculum.

4.1.2 Constructing a Focus

Whilst working for a Master's degree (Hitchings, 2006) I explored a little of the impact of animals around children with BESD. Subsequently this has been broadened, with a personal interest and observation of LOtC and LINE, championed by the aforementioned government manifesto (DCSF, Nov 2006) and specifically, in the integration of animals into the general curriculum. The needs of a group of BESD students are both diverse; in that each has individual preferences and experiences; and specific in that the presenting difficulties for children and young people with BESD are relational. The natural progression of my interest therefore, was to explore this area fully with particular regard to the impact for children and young people with BESD.

As demonstrated in Chapter Three, within education in England there lies a plethora of anecdotal data and a growing body of research literature, suggesting that an 'outdoor contribution' may be of value to a child's education. In line with my own philosophy on education, this study seeks to explore this area, narrowing the focus to look specifically at the animal contribution, to examine the impact of such interventions with young people identified as experiencing BESD. Over the history of BESD education, and indeed education in general, there have been numerous recorded interventions utilising animals in a therapeutic manner (see Chapters Two and Three). However with limited historical and academic data explaining both its presence in history and its disappearance from more recent education, this study is pertinent.

A qualitative constellation methodology was employed, including Case Study to examine number of contexts integrating animals into education with children and young people with BESD. The aim of the research was to discover the impact of the practice at each context along with the potential of replication and generalisation of factors found to be present, in terms of benefit for this group of children and young people. No intervention was initiated for the study; the research participants included those already involved in such an activity.

4.1.3 Ontology

Wellington (2003) describes two ontological positions that are prominent in educational research, Rationalism and Empiricism. Rationalism theorises, that opinions and actions should be rooted in reason and knowledge; Empiricism, that knowledge is derived from experience. Pring (2000) warns against the danger of drawing '…too sharp a contrast between different…kinds of enquiry' (p.44) and supports the philosophical reflection of a range of methods choosing the most appropriate not for definition but for utility.

My own ontology as it relates to this research is a constellation of several positions. Experience and knowledge affords me a rationalist position in relation to children with

BESD. I know these children, hold opinions on them, understand the theory as relates to their education. I have studied this group extensively and through continuous professional reflexive journaling, have sought always to deepen my understanding and sharpen my practice, finding progressively more accessible options for the support of these vulnerable children and young people. Equally, one might argue that this knowledge has not been acquired through reason and study alone but through years of first-hand experience working alongside, listening, teaching, supporting and encouraging. Without knowledge and reason, one can make little sense of experience.

Therefore, it is from an empirical position that my research begins. Central to my research is a methodology that is dependent upon the collection and analysis of empirical data. Whilst I consider that I have experience and understanding of the subject population, there is little current specific research or evaluation into the intervention being studied.

4.1.4 Epistemology

Kant (in Wellington 2003) argues that in the study of human nature and knowledge '…most knowledge is a synthesis or combination of two or more epistemological approaches' (p.196). My epistemological position similarly, is a combination of several approaches located within one central paradigm.

Schwandt (in Denzin, 2000) elaborated three epistemological stances for qualitative inquiry: Interpretivism, Hermeneutics and Social Constructionism. Each position it is postulated, merits a discrete method of inquiry. For my research however, I have embraced a synthesis of these epistemological approaches. This is elaborated within 4.3.2.

4.2 Research Question

The research question, as discussed in 1.3.2 initially purported to consider the impact of animals in therapy, treatment and/or education. The final central Research Question is:

What is the social, emotional, academic, and behavioural impact of integrating animals into education and/or as a therapeutic intervention?

The study was designed to generate questions around the approaches and methods used and the resultant impact on the clientele. Underpinning the central question then, was a range of secondary questions, designed to elicit information:

Secondary research questions to elicit this information were:

- What is the philosophy and/or the proposed aim of the intervention at each location?

- What is happening for the children and young people academically, emotionally, and socially?

- What is the perceived or measured impact on the children and young people by those initiating the interventions?

- What are the elements present within a range of establishments that are common to the philosophies promoted?

- What lessons have been learned?

Additionally, the study sought to answer the question 'How does it work when it works? Who does it work for and why? The development and use of these questions is elaborated within 4.5.

4.3 Research Strategy

"Any methodology that attempts to understand experience and explain situations will have to be complex" (Corbin and Strauss, 2008, p.8).

The strategy identified for the research is appropriately a qualitative interpretative paradigm, utilising case study and psychosocial research tools (Clarke and Hoggett, 2009), incorporating variables and changes in context, circumstance, opinion, contribution and cooperation as a valid part of the data collection. This section outlines the rationale for this choice of methodology, exploring the contributing elements.

4.3.1 Why Qualitative?

Bryman (1988) argues that it is essential to employ a well-thought out and appropriate research method, as without a solid research base, the resulting modelling processes and theories would lack validity. The research involved both vulnerable pupils, and animals. It was essential therefore to ensure that the design chosen would be sensitive to the needs of the pupils and to staff involved with the interventions. Denzin and Lincoln (1994) see qualitative researchers as designing the sort of study: 'involving real individuals and with the intent of immersing in that social setting over time. They study a social setting to understand the meaning of participants' lives in the participant's own terms' (p.210). Qualitative research represents a more holistic approach than a quantitative one within an educational setting. This is particularly appropriate in light of the particularity of children with BESD and the sample size selected for this study. Multiple factors, involving the education of children with BESD, various interventions with animals and the complexity of creating comparisons from a small sample, do not lend themselves to a quantitative research strategy.

One of the major strengths of qualitative research is that it allows for the complete focus on specific situations or people. As the questions guiding this research focus upon the

interactions between children and animals a qualitative approach allowed for clearer exploration of these issues.

4.3.2 A Constellation Methodology.

The study, as stated sits within a qualitative paradigm and is a constellation methodology. The methodology includes an overall Case Study methodology, combining interpretative, hermeneutic and social constructivist approaches. It is reflexive and began with an adapted use of Grounded Theory. Etherington (2003) postulates that there are a variety of meanings to reflexive research, determined by a researchers own position in relation to his/her philosophy and in relation to a researcher's chosen methodology. Utilising psychosocial research tools such as Free Association Narrative Interview (FANI), (Clarke and Hoggett, 2009) alongside the use of reflexivity allowed for flexibility within the variety of the contexts and rigour through the triangulation of data.

4.3.2.1 Grounded Theory

The methodology for the study began with a consideration of Grounded Theory (GT) developed by Glaser and Strauss (1967). GT dictates that research begins with minimal preconceptions and no predetermined 'research problem'. A GT researcher is almost as a 'blank page' (Thomas and James, 2005) allowing for the apparent agenda to become the theme and focus of the research. I however began with a research problem (as outlined in 4.1), namely to determine whether there was benefit in children with problems engaging with animals and nature, and if there was, what were these benefits? Therefore the methodology moved from a conventional GT approach utilising aspects which enabled me to examine an area of considerable interest within general parameters and with focussed but flexible research questions. This interpretative paradigm allowed for the exploration of the impact of interventions at a range of institutions drawing findings from the collation of

comparable data collected at each of three contexts and the triangulation of findings to theory.

The following aspects of the Grounded Theory approach (Glaser and Strauss, 1967) much favoured in Educational Research, were utilised:

- Data collection was qualitative, and largely in the form of interview and observation. This was supplemented with insights gathered from participants in other ways, outlined within the procedures. The analysis of the initial collection of data determined the subsequent course of the study.

- Analysis involved a degree of coding, summarising, drawing out concepts, themes, approaches and inferences and relating these ideas to further ideas.

- Theory and concept were developed from the analysis of the ideas generated from the coding and summarising of the data.

- The integration of literature began with the ideas generated from the data.

- The emergent findings developed from the former stages, were tested with research participants and subject to further analysis.

4.3.2.2 Case Study

Case study may be both a methodology and a method. Stake (1995) identified three types of Case Study: Intrinsic - when the researcher has an interest in the case; Instrumental - when the case is used to understand more than what is obvious to the observer; Collective - when a group of cases is studied. Elements of each are present within this study, though the study is predominantly of a collective case study methodology.

Case study considers and analyses a range of perspectives, thus considering both the voice and the perspective of the participants as well as the environment and the interaction between them. The variable nature of animals and varying responses from

children are best explored through case study. For this research, this meant building relationship and engaging with groups through observation and interview in order to fully understand the participant perspective, compare each context and explore correlations between them (see 4.5.1). As Bogdan and Biklen (1992) comment 'qualitative researchers go to the particular setting under study because they are concerned with context. They feel that action can best be understood when it is observed in the setting in which it occurs' (p.30). Basing my fieldwork on case study, I have drawn upon Yin's analysis of methodology (2004, p.119). Yin talks of two general types of analysis resulting from single case study.

    i.   Particularising analysis

    ii.   Generalising analysis

The first type of analysis involves description and explanation, a somewhat positivist approach. The second is a more fluid generalising of principles from aspects of the observation of a single case, which I would argue, requires subsequent checking out and triangulation, through interview. This, used in this way constitutes a more interpretivist approach. The need for triangulation arises from the need to confirm the validity of the processes. Yin (1984) in addressing this, talks about the use of multiple sources of data (see 4.5). Additionally, this is addressed through the employment of a variety of approaches.

The strength of multiple cases

Yin (2004) in discussing the strength and drawbacks of 'multiple-case design' (p.86) talks about the beneficial analogous element of multiple case studies. Three contexts may be considered to be limited in generating theory and hypothesis from case study. However, it should be noted that whilst case study is the basis for the data collection, findings and subsequent analysis was triangulated with further exploration in related establishments and organisations and with individuals, alongside a scrutiny of literature surrounding the

initiatives. Emerging themes were re-examined across the contexts to adequately test out the results and make fair comparison before building an argument for any outcome.

4.3.2.3 Interpretivism

In my own research, I have favoured an interpretivist approach, generalising analysis through the triangulation of data. Interpretivism argues that there is no distinct reality. Each of us is subject to our own version of 'truth'. This approach is based on interpreting and understanding a persons' perspective, actions and words as they see them, though good observation is key to interpretation also. This sits comfortably alongside the use of psychosocial research tools.

Within the confines of qualitative research of human behaviour, where the researched are children with special educational needs and the interactions observed are with animals, both groups are very variable in character, mood and behaviour. It would therefore be highly subjective and ethically questionable to build a hypothesis based purely on my beliefs of what I have observed and experienced without contextual knowledge. The employment of Hermeneutics and contextual knowledge for triangulation will ensure that potential subjectivity is eliminated.

4.3.2.4 Hermeneutics

Hermeneutics, in its origins, relates to the 'critical analysis or explanation of text' (Schwandt, 2000, p.194). Definitions have since expanded to include the interpretation of 'human behaviour, discourse, documents and so on' (Wellington, 2003, p.197). Differentiating Hermeneutics from Interpretivism is the belief that understanding cannot be necessarily explained purely by the behaviour and explanation of an individual or group, but that there is a hidden or subconscious message created by a person's biography and experience, culture or gender influencing their responses, actions, behaviours and experiences. This narrative, requiring interpretation, may or may not be 'accessible' to the

teller. Clarke and Hoggett (2009) describe this in psychoanalytic terms as an interpretation on a person's 'internal world' emphasising that hermeneutic research considers the 'conscious' and the 'unconscious' (p.5). The application of this approach is elaborated in 4.5.

4.3.2.5 Social Constructivism

Schwandt, (2000) states that:

> "All knowledge claims and their evaluation take place within a conceptual framework though which the world is described and explained " (p.197).

In exploring children with BESD, the 'nature' of the child is often best elicited within a group setting. The interventions I am exploring occur within a group setting. It is within groups, usually class or social groups (rather than interview with a relative stranger) that most children feel most comfortable in sharing their thoughts and feelings around every day occurrences. Observation of the groups then is paramount, in ascertaining 'usual' behaviour and 'truth' as well as the observation of group interplay and dynamics, which in itself contributes another level of data. The observation of children participating in an activity, the scrutiny of images collected through observation, video, used during interview and captured by the children themselves, further supports the contextualising of thought, action and comment.

Within the context of a school, a social learning space, and in conducting work with children who are socially disadvantaged, namely those with BESD, it is this model which best fits philosophically within my own epistemology. Learning, for a child and an adult, happens most frequently in the context of a group, even if explored or reflected on individually. We find out what we think of things, what others think of things, what others think of us and what we think of others by verbalising and scrutinising others opinions, body language and behaviour. Within my research, of particular interest is the interaction between animals and children. Many animals are social creatures (in particular those

involved in this research). Responses from animals cannot be understood through interview, but can be observed and articulated by participants.

4.3.2.6 Psychosocial Research

To conduct my research, the nature of the task and the subject population leads me to the collection of data using psychosocial research tools namely, narrative interview (4.5.5). Kvale and Brinkman (2009) in talking about the epistemological issues in interviewing, discuss the subtle difference between 'knowledge collection' and 'knowledge construction' (p.48). One involving the collection of a set of responses from a structured or semi-structured interview, the other, taking a psychosocial approach to interview, based on eliciting a person's 'story'. Psychosocial interviewing, such as Free Association Narrative Interview (FANI) borrows concepts from psychotherapy, but it is clear that there is no therapeutic intention assumption or practice. The concepts are utilised to make sense of observations that might not be captured by a transcript, such as discomfort, pleasure or other feelings communicated in affect, i.e. non-verbally, during the interview; but not responded to as they might be, were it a therapy session, rather than a research interview. The researcher is never trying to be a therapist, merely to understand and have an assumption that taking into account unconscious dynamics helps deeper understanding.

4.3.2.7 Reflexivity

My role within the study is that of observer, utilising a practitioner's lens and hence, 'reflexive practice' is key. Etherington (2003) describes 'the conscious use of self' in research, articulating that as well as observing, the researcher must draw on his/her own knowledge, experience and assumptions, perceptions, internal processes and bias questioning always the dynamics of what is observed as well as the dynamics created by the research situation. Reflection is a process at a conscious level. Reflexivity however is bi-directional, considering cause, effect and allowing for the research to be redirected according to emergent themes. As well as reflecting on the meaning of data, reflexive

journalling is concerned with questions such as 'What do I bring to the research?' 'What influence have I in situations of observation/ interview?' 'What are my thoughts and themes? Do they correlate with what is being said? Where have these themes emerged from? Can I substantiate them?'

4.4 Subject Population

The intention of this section is to outline the nature of the general population selected for Case Study; those children and young people with BESD. Section 4.5.2 will look at the particular group selected for this enquiry, but prior to this within the context of methodology as a rationale for a qualitative enquiry, is an explanation of subject population including the complexities involved in establishing relationship and the social context of working specifically with children and young people with BESD.

4.4.1 Social Context

The degree of social difficulty presented by children and young people with BESD is changing (DCSF, 2008). Mainstream schools are now dealing with children with increasingly challenging behaviour brought about by social and emotional difficulties. Some years ago, these same children would have been placed within separate special education settings (DCSF, 2008) though not all and only those able to receive adequate identification and support. Those now placed within special education are children with increasingly complex problems and behaviour. The changing profile of difficulty prevalent in our society, includes increasing issues of anti-social behaviour, an increasingly health and safety aware, risk-averse population (Gill 2007), family breakdown, social deprivation, drug dependency, unemployment and crime (Hine et al., 2008). The issues are associated in numerous ways to the complex population of children and young people with BESD. This emotive political trend is showing little sign of decreasing.

The conventional curriculum is designed to support children to learn skills, knowledge and concepts drawing on the rich tapestry of experience offered to them throughout their lives through school and family life, to enable them to grow to be resourceful and competent contributors of society. This for the wider population is based upon a fundamental assumption of a positive and secure maternal attachment, which supports the essential development of good relationships, and provides skills of reflection, resilience, resourcefulness and reciprocity (Claxton, 2002).

4.4.2 The Complexity of Building Relationship

The ontology of this group is complex. The research came about from a need and a desire to explore creative and innovative philosophies, which promote engagement with education for children with BESD, specifically to support their fragile social and emotional states. The root of BESD is discussed in 3.2. Children who have been diagnosed as having BESD, have in common a catalogue of failures in school and often in home life and an inability to fully understand and function within social expectations. This very nature means the development of relationship for the purpose of research would be challenging. Presenting emotions and behaviours may include a very poor sense of self-worth, a lack of confidence, an inability to trust, a poor understanding of consequence, depression, extreme anger, fearfulness, and many other socially debilitating feelings and emotions (Visser, Cole and Upton, 1998). Often, they have an associated attachment disorder (Geddes, 2006). Children with attachment disorders can present as chaotic and boundary-less, oppositional and challenging, usually necessitating the imposition of firm boundaries, which in turn, they push against. At the extreme, children with BESD are suspicious, anxious, have poor self-esteem, lack the ability to trust, cooperate or form appropriate relationships. The absence of such relationship skills means that engagement within a research context necessitates a qualitative methodology. The development of relationships is elaborated in 4.5.3.

4.4.3 Subjectivity

Research with children and young people with BESD is problematic. Any change in nature, behaviour or attitude can be temporary and multi-factorial. The choice of research tools relies heavily on the experience and reflection of the researcher to make considered judgements. Observation and case study over a period of time in a number of locations minimised the risk of momentary judgements as did experience and knowledge of BESD children. Careful and sensitive inquiry into additional factors affecting children and young people and the checking out of judgements with participants themselves, helped to isolate valuable data.

4.5 Methods

4.5.1 Case Study

The goal of research using case study is to understand the complexity of a case by looking at all angles possible. Case study research therefore, often involves the use of multiple methods of data collection. By using multiple sources, Stake (1995) argues it is possible to attain the richest possible understanding of a case. Methods include interviewing, observation and the consideration of documentation.

4.5.1.1 The Role of Practitioner/Researcher

A Case Study approach (Yin, 2004; Stake, 1995) forms the basis of the study, exploring three contexts in depth for longitudinal study varying between six weeks and two years. Each case study was conducted utilising primarily observation and interview as research instruments, supported by the use of visual research methods (Banks, 2001) and the process of reflexive journaling (Etherington, 2009). The role of the researcher within this study as stated, was that of informed observer, drawing on my experience as a practitioner and considering reflexively my own practice with children with BESD and animals.

4.5.1.2 Sampling

Where possible, each case study context was chosen to be 'typical' and 'representative of other cases' (Stake, 1995). However, the nature of animal-assisted activities within England varies enormously (See 2.2.9). Sampling was therefore based on the following factors:

- Logistics: Working as a part-time researcher, time and access were crucial. Schools within the locality would not however provide suitable comparison, and so a small number of establishments spanning education authorities were selected.

- Variety: An appropriate variety of age and provision (two secondary schools; one day and one residential provision, one primary day provision) with a central commonality (children with BESD aged seven to fifteen working alongside animals)

- Cooperation: Cooperation and consent was essential for the establishment of relationship and successful data collection. Agreement was established with those who wished to allow and support the continuous collection of data in the absence of the researcher.

- Special Educational Need: Given the potential scope of the study within the limitations of the logistics, a decision was made to limit the study to the examination of those pupils classed as having a Special Educational Need in the Area of Behaviour, Emotional or Social Difficulties (BESD).

All contexts had pre-existing programmes in place and permission was sought to work alongside these children and young people in a non-intrusive and non-continuous way, observing, interviewing and analysing their experience.

4.5.1.3 Triangulation

Case study is designed to make useful comparisons, (Stake, 1995) drawing out themes relating to individuals across contexts and though the strength of case study is not in supporting generalisations, the selection of multiple case studies makes this more possible. The strength of Case Study however, is the possibility of triangulation with theory. Of pivotal importance therefore was the use of focussed and informative research questions, deciding what to look for within the contexts in order to make fair comparison, without any established hypothesis. The questions inevitably raised further questions for exploration. The inquiry was concerned with highlighting common strands, drawing on both my own experience and on theories underpinning the philosophies.

Whilst case study was the basis for the data collection, findings and subsequent analysis were further triangulated with exploration into related establishments and organisations and with individuals, alongside a scrutiny of literature surrounding the initiatives.

4.5.2 The Case Study Contexts

Four contexts were selected for the study. Ultimately, only three participated (see 1.4.2). The contexts were chosen primarily as they all worked with animals, but additionally being from differing environments, with differing age groups and levels of involvement with the animals, to provide breadth to the data. A BESD primary day school in Bristol was selected along with a Stables working with a BESD day secondary school in Wiltshire and a residential BESD secondary school in North Yorkshire. All three contexts had existing programmes involving animals.

Each context studied selected their own participants from those children and young people participating in programmes with the animals. However, in doing so, each selected participants who would engage with and promote the interventions being researched. This then, was bound to influence the data gathered and necessitated further exploration with

those who do not or cannot so easily engage. Regrettably, the only child found to oppose the venture ultimately declined to participate in the study. Nevertheless, further exploration revealed an almost unanimous enthusiasm for participating in the interventions.

4.5.2.1 Context One: Wildwood School (Chapter Five)

Wildwood School, also my place of employment, is a primary BESD day school. The pupil population is 54 and children travel to the school from all areas of Bristol and surrounding local authorities. There is a high level of deprivation and unemployment in the families of children who attend the school. The vast majority of the children live in urban settings. All children have a statement of special educational need for BESD. Seventy per cent of children (and 100 per cent of children involved in this research) have 'Attachment Disorder' as a descriptor within their statement of Special Educational Need, though this was not initially a factor leading to their selection for the study. The intervention studied within this context visited the local city farm weekly to work alongside the animals, learning about them and carrying out various animal related tasks.

The community farm worked with a group of five children (four boys, one girl) from Wildwood school, aged seven to nine on a weekly basis during the afternoon. The children were 'volunteers' at the farm, helping out with various tasks including the cleaning out of animal pens, feeding, and showing visitors around the farm. Two staff from the school supported the group. The stated aim of this activity was social skills, community contribution and learning about animal care. The school staff involved in the interventions, support a belief in the therapeutic benefits of animals to children and the group who visit have been selected on the basis of potential social and emotional benefit. The research tracked the children over two years.

The stated aims for the inclusion of pupils within the programme of this context were:

- Improving children's engagement with animals

- Offering opportunity to engage with the community

- To build social skills by participating in a group activity

- To train children in a sense of responsibility

- To build self-esteem and confidence

- To learn about animal care and responsibility

- To develop trust

4.5.2.2 Context Two: Great Oak Stables working with a local secondary school (Chapter Six)

Great Oak Stables is both a rehoming service for ex-racehorses and provides programmes of intervention to surrounding schools and services. Located in a rural setting and an area of affluence, the stables offer short-term interventions to individuals and school groups of pupils with BESD or Autism. The Stables were enthusiastic to participate in the research and agreed access for me to work with and gather data from a group of Year Seven BESD pupils and their staff from a local day BESD secondary school, attending the stables for a short intervention. The demographic population data for the young people involved is similar to that of the participants from Wildwood School with deprivation and attachment disorders prevalent. In hindsight, although the school agreed to me working with the students and provided full consent including parental and student consent, the school was significantly less enthusiastic to engage with the research, feeling somehow that they themselves were being 'evaluated'.

The Stables had two full time education staff offering a six or ten week 'life skills and emotional literacy' intervention to pupils from special schools. Pupils visited for an afternoon or a morning per week to work alongside the horses and other animals based at the stables; to develop skills in 'team-building, cooperation, social skills, animal care and

confidence with horses' (Great Oak, 2009). The research was conducted with six boys aged eleven and twelve and their staff over six weeks.

The stated aims for the inclusion of pupils within the programme of this context were:

- To build social skills by participating in a group activity

- To train children in a sense of responsibility

- To build self-esteem and confidence

- To build confidence around horses

- To learn about animal care and responsibility

4.5.2.3 Context Three: William's School (Chapter Seven)

Access to William's School was gained via a contact on the senior leadership team. The school is a reflective and continually developing school and senior staff at the school were interested in the potential of the research to refine good practice. The School is residential and caters for pupils of secondary age with a statement of special need for BESD. There are approximately 100 pupils at the school who board Monday to Friday and occasionally at weekends. The demographic population data, as in the previous contexts detailed urban deprivation and attachment issues. The school has a farm provision within its grounds, overseen by the Science department. The intervention studied at this context was the work carried out by a selection of pupils, chosen by the school to engage with the animals.

William's School has a Rural Science curriculum as well as a number of on-site specific therapies including psychotherapy, art therapy and horticultural therapy. The on-site 'farm', housed two goats, a selection of chickens, and some rabbits. The Science teacher has an enthusiasm for incorporating animals into the curriculum and has a classroom full of small pets and insects. The stated purpose of the farm is the teaching of the science curriculum,

but anecdotally, the school supports the initiative wishing to validate it as an animal-assisted therapeutic intervention. The research was conducted with four boys, and the school staff over one academic year. Participants were selected by the school, for a spread of age to include those pupils who engaged with the animals regularly. The boys were aged between twelve and fifteen.

The stated aims for the inclusion of pupils within the programme of this context were:

- To develop scientific life processes understanding

- To train children in a sense of responsibility

- To build self-esteem and confidence

- To learn about animal care and responsibility

- To develop trust

4.5.3 Establishing Relationship

The exploration involved three locations involved in animal assisted activities (AAA) with children from BESD special education settings. Those promoting or initiating the activities did not specifically set out to develop therapeutic activities, though those involved in carrying them out, in two of the three settings believed them to be so. Before establishing relationship with the participants, it was essential that informed consent be ascertained (see 4.9.5). My role was that of observer rather than participant. Delamont (1992) in discussing relationships in fieldwork, talks about the dilemma of creating appropriate relationships. The establishment of trust and 'useable relationships' (p.121) is a pertinent issue. One of the locations studied, was my own workplace where children are not only familiar with me, but are in a trusting and dependent relationship. The ethics here concern my responsibility for the emotional safety of the children in my care versus the rich data source. Equally, there were issues of reliability and considerations of the power dynamic.

Children with whom I have implicit trust may tell me what they wish me to hear. The reliability of this data must be scrutinised. The ethics of this is discussed further within 4.9.

Different locations posed similar problems from an opposing standpoint. Some children not known to me were shy or suspicious of external involvement. Establishing relationships required rapport building. Delamont (1992) discusses numerous cases where researchers attempt to identify with their researched and associated complexities. Noting these difficulties, it was important to the study that I documented these relationships through the use of journaling in order to balance an over-cautious or an over-familiar one.

4.5.4 Observation

One of the key tools used as part of each case study was observation. In observing, it is possible to see at different 'levels'. A focus area for observation on each occasion was identified, around the secondary research questions highlighted (see 4.2). These included for the first observations:

- What is happening for the children and young people academically, emotionally, and socially?
- How is the philosophy/ aim for the intervention understood by the participants?
- What value do the children place on the intervention?
- How do the children engage with the intervention?

Subsequent processes highlighted areas and questions to be considered, which altered the course of the observations minimally. These questions included in addition:

- What are the elements present within each establishment that is are common to the philosophies promoted?
- What observable impact is there on the children and young people?

- What is changing?

Photographs were recorded throughout the observations, as well as detailed notes on the observations of the interactions, comments and responses alongside a written record of my own feelings (see 4.5.8), thoughts and responses to the observations for later use in reflection, analysis (see 4.7.2) and interview (4.5.5), facilitating conversation with the children.

4.5.5 Interview: Free Associative Narrative Inquiry (FANI) method.

My aim in considering various research tools was to explore a method, which enabled free conscious and unconscious communication to play a part in the data I collected in order that I might have reached a greater depth of understanding of the children studied. With this in mind, I explored the use of Psychosocial Research Methods (Hollway and Jefferson, 2000). Kvale importantly thinks we can learn from, not *be* therapeutic interviewers. Using psychosocial tools, enabled me to both listen to the words shared with me and to listen to the story 'beneath the surface' (Clarke and Hoggett, 2009) searching for meaning in the spoken and unspoken messages implicit within the conversation, reflected on through the subsequent exploration of transcripts, and follow-up 'checking-out' interviews. In using free association narrative interview (FANI) I am taking a hermeneutic interpretative approach.

> "A research interviewer strips the surface of conscious experience, whereas a therapeutic interviewer mines the deeper unconscious layers"
>
> (Kvale and Brinkman, 2000, p.48)

Hollway and Jefferson (2000) talk about the FANI method of interview in terms of four principles; each designed to facilitate the production of the interviewee's meaning' (p.34) These are:

- Open-ended questioning

- Eliciting a story

- Avoiding 'why' questions

- Use of the respondents order and phrasing

The method is about understanding a person's 'gestalt' (p.131) rather than more straightforward interviewing which may represent a person's told story and viewpoint without a deeper understanding of their perspective.

In consideration of my clientele, I felt that this method had significant benefits, though considerable challenges and considerations. The pupils I interviewed, by nature of their special educational need are cautious, guarded, often suffer from low-self-esteem and are prone to answer questions with what the asker may want to hear. The FANI method gave the interviewee some power or control to guide the interview in the direction of his/her choosing, giving freedom to his/her expression and insight.

Methods of free-association seem to be well suited when looking at organisations involving children, given their natural uninhibited creativity and their ability therefore for free association and unconscious logic. It is my experience that impolite or disagreeable thoughts are not held back, particularly in BESD, therefore the honesty makes psycho-social research all the more appropriate and illuminating.

4.5.5.1 Appropriateness of Biographical Interview

In establishing the appropriateness of this research tool for use within the study, a sample interview was conducted after which I concluded that in working with children, free associative narrative inquiry can be useful (4.9.5). Children are predominantly uninhibited and given to free expression. In gaining some insight into a child's relationship with animals, the method of interview was useful. Conversely however, the limitations including a child's discomfort in talking, talking with a camera, continuing one-to-one discussion,

and talking about their biography could be somewhat restricting outside of a trusting relationship. Based on this, I decided to incorporate the use of visual images recorded by the children and myself to support and accompany these interviews (4.5.7).

4.5.5.2 Variables

At each context, following consent, the research was explained and cameras give to the children together with a printed information sheet. Only after the children had had time with this, was the initial interview initiated. On each occasion, each young person was asked again if they were happy to be interviewed. Some children declined on the second or third interview. The impact of this is discussed within the case study chapters (see chapter 6.6 and 7.6). At the first context, two children requested to be interviewed together. At the second context, the adults insisted on remaining present through all the interviews (see chapter 5.5 and 6.6). In the third context, distance and weather inhibited the regularity of the visits. A compromise was established; that the third interviews were presented by school staff and video recorded. Guidelines around questions and presentation were given, however, these interviews took the form of a semi-structured interview. They nevertheless provided rich insight and data that may not have otherwise been obtained.

The children were asked if they were happy for me to video record their interviews. In all cases, with agreement to review the film once complete and in two cases, to carry out a video interview of me, all children consented to being recorded on each occasion.

4.5.6 Additional Interviews

The study is triangulated by a range of interviews with adults and young people engaged in similar projects, the rationale for which is to offer either an organisational viewpoint or a personal one (or both) to support the triangulation of data. The examples provided were

chosen for three reasons: their philosophical approach was in keeping with the main case study contexts; organisations and individuals represented established practice in AAA thus contributing to the longevity of data and good access to each programme or individual meant that repeat interviews and/or the checking out of data for accuracy and triangulation was logistically possible. A further selection of interviews were considered and dismissed for reasons of brevity, but more importantly as there was little correlation to the case study data. Those represented are elaborated within the data chapters (see chapters 5,6 and 7). These are:

- The staff facilitating a once weekly on-going therapeutic riding experience for Primary aged children with BESD in order to elicit the (anecdotal) impact of the programme on the children and their engagement with learning; the focus of the intervention.

- The story from a parent and child around a relationship with a dog, the opportunity of which presented itself through the study when discussing strategies to support the child's emotional and social engagement.

- The Director of a charity working with disengaged teenagers learning to train dogs in order to re-engage them with education. An intervention specifically targeted at re-engagement, the focus of the interview was to elicit any common features from the case study contexts.

- A Mainstream Comprehensive School, originally selected as a case study with an extensive working farm on site. Semi-structured interviews were held with the Head of Faculty and a young person working within the programme, who was keen to advocate the intervention. This was included as a useful contrast of work with mainstream pupils as compared to BESD.

- Chicken Club: A programme to learn about chicken care at a local city farm. The interview highlighted additional outcomes of the programme beyond those intended or expected.

- The Founder and director of a stables and a small residential school for difficult to place adolescents in Yorkshire, whose practice grew from the chance impact of pairing young people with horses and later as a result purposefully established a school to exploit the affect on young people. This offers a perspective from the viewpoint of a school growing from an intervention rather than a school initiating the intervention.

4.5.7 Visual Methods: Image-Based Research

The visual image is a major contributor in today's society (Pink, 2007). Television, Social Media, cinema, magazine and computer images influence how people think, and make judgements and decisions about themselves, other people, their present, and their future. Children in particular are engrossed in a visual world (Banks, 2001). In my experience as an educator, the visual learning style is increasingly more prevalent than the auditory and BESD children in particular need visual images to support their concentration, their learning, their understanding of the world.

With this in mind, I have incorporated aspects of a visual methodology for my research. Image based-research utilises images in whatever form to construct a 'visual sociological picture' (Prosser, 1998, p.24). This can take any visual form. Considering correlation and support of other research tools such as FANI interviewing, the following four elements were selected for use.

- The use of children's drawings to represent their views and feelings on their environment. This was taken up only by one school and therefore not used in the overall correlation and analysis of data. This tool was selected on the basis of enabling expression from children with BESD who may be less comfortable with spoken interview (Tommerdahl, 2009).

- The use of children's photographs to understand their perspective on a place and support discussion in interview. This tool was selected both for supporting children to access the interview and as motivation to participate in the research (see 4.7)

- The use of photographs taken at observations, to initiate discussion and support conversation in interview. This tool was useful also to capture the environments, and to evoke feeling in interview, thereby promoting dialogue and understanding of the children's perspectives.

- The use of a camcorder to record interviews with children for review, reflection and analysis (see 4.9.6).

Appropriateness of Image-Based Research

In working with children, image based research is useful. Children do not always have the tools of verbal expression, or the conscious understanding of their own feelings and thoughts. The use of their own images will support that expression and give insight into a child's internal world, in conjunction with FANI interviews.

The limitations of image-based research include its subjectivity. Children may not have the capability to draw their 'world' any more than they can talk about it. This method is a little used and recognised method of research, largely to do with said subjectivity. It has been felt for many years that the contribution it can make is limited. (Prosser, 1998). The analysis of children's drawings is a well-researched topic (e.g. Di Leo, 1983; Cox, 1993) and of use, in understanding the complex and often unspoken histories of children in therapeutic circumstances. This said, I did not project my own meaning onto any individual image, rather I was able to use the combination of images to elicit themes and specifically, to use the images to promote discussion and dialogue with children, so deepening my understanding of them. Therefore the analysis of the images does not

feature discretely in the research, but to act as a conduit for the spoken expression of thought, feeling and opinion.

4.5.8 Reflexive Journaling: The Reflexive Researcher

A lesson taught to me as a practitioner working with children with BESD was that my most precious resource was 'The conscious use of self' (Rollinson, 2006). In part, this is achieved by a practice within psychosocial research by reflexive journaling. This describes documenting, reflecting upon and examining the meaning of interactions, interviews, conversations and actions (Etherington, 2004). Through this discipline, it is possible to explore meaning 'beneath the surface' of communication (Clarke and Hoggett, 2009) and to consider the impact of self as researcher on the researched, which in the case of examining contexts with children with BESD and animals, may be significant.

Claxton (2002) talks about Intuition as 'knowing' at a level, which might also be described as perception, 'gut-instinct' or a 'hunch'. It is this sub-conscious which might be examined reflexively in the light of my own experience as a practitioner in the field that may support the understanding of the interactions and responses elicited through other means.

Following observation, conversation and interview, I endeavoured to reflect on how my own autobiography and contributions may have altered the interactions and meaning within the context. The thoughts and meanings inferred from these interactions were tested out in subsequent interviews and observations and through discussion with fellow colleagues, taking account of my own bias and narrative.

The impact of my own experience on an observation within this research was subject to scrutiny to ensure that impartiality was observed, whilst also utilising my 'conscious use of

self' in interactions, searching for understanding and meaning in not only the young person's responses, but also in my own.

Regarding the place of reflexive versus reflective practice. Reflective practice considers the place of things, their fit and their effect on their surroundings. Reflection is the processing of observations, comments and data and may bring about judgements on the potential meaning and impact of the data and interventions.

Before embarking on interview or observation, through reflexive journaling and in the analysis of the data, consideration was given to the impact of the process on the child. Reflexivity (Benner, 1984) is a process of reflection on dynamics brought to the study by the 'use of self in research' (Etherington, 2004, p.28). Rather than raising ethical issues, reflexivity is a method of scrutiny through which the consideration of subjective data is tested. The process involves reflection on what unconscious processes may have contributed to the dynamics of a situation, considering cause and effect. Reflexive practice within this study is central to the process of the analysis of findings. Emergent findings, thoughts and theories were tested against theory and the viewpoints of all participants.

4.6 Logistical Complications

Initially, four establishments were approached for research. Permission was declined in one context and the decision was made therefore to proceed with the remaining three.

A number of frustrations around access slowed the initial stages of the study.

- Conflicting Priorities: In common with all practitioner/ researchers (see 4.9.8), having a dual role in my own place of work, highlighted conflicts of interests and some ethical concerns. Reflexion enabled me to identify and therefore resolve

conflicts if and when they arose and therefore continue access to this case study successfully.

- Weather: A period of bad weather during Winter 2009 meant that access to two of the schools was delayed by two months.

- Safeguarding: Rigorous checks meant that researching beyond the local authority where I work with different guidelines restricted my access to one locality for a further two months.

- An issue highlighted by both Bell (1999) and Mauthner, Birch, Jessop and Miller (2002) and one which I had not previously considered, was that of the influence of 'Gatekeepers': Ensuring the welfare of the organisation at one context meant that several layers of permission had to be sought before the research could commence. Access and consent slowed the initial stages of the research, however, those responsible for the welfare of participants (parents as well as senior leaders within the case study contexts), in demanding clear and transparent guidelines, ensured not only good welfare for the children, but also rigour to the study.

4.7 Data Collection, Analysis and Verification

4.7.1 Collection

The format of data collection for the case study at each of the contexts followed the following process:

4.7.1.1. Identification of individuals.

In each context, four children were selected by the participating schools on the basis that they were involved in interventions with animals and were both interested and willing to participate in the study. Yin (2004) discusses the pros and cons of random selection. Selection was left to the schools. In my own context, this also ensured impartiality concerning relationship with the children.

Delamont (1992) discusses the issue of motivation for participants in research. Children were given returnable postcards and encouraged to record thoughts, viewpoints, changes and feelings between observations. They were supplied with cameras, which they were allowed to keep to record their own viewpoints and paper for artwork, capitalising on visual as well as verbal communication.

4.7.1.2 Baseline analysis

A Baseline analysis of the experience and the person was conducted, not necessarily at the beginning of the intervention, but at the start of the observed period by observation and interview of the young person and a supporting adult involved in the intervention. The basis for selection of the questions was the identification of emotional responses to and educational contribution of the initiative. Focus questions were 'What are the attitudes to the intervention?' 'What is the engagement like?' 'How does it feel?' 'Why does the young person participate? Is learning taking place?'

4.7.1.3 Observations

Observations were conducted in each context several times throughout the intervention, as was possible and appropriate. At each visit, investigation into both the practice and the educational philosophy within each was explored as well as observation of the children's interventions with the animals. In addition, I examined my responses to what I saw, testing the assumptions that are inevitably made by looking through my own lens, with those that work there.

Timeframe varied across the contexts due to logistics and the nature of the interventions. Access to Wildwood, being my place of employment was straightforward and therefore the case study was data rich and conducted over the fourteen-month duration of the intervention. At Great Oak, the intervention was a short programme of six weeks. I was able to visit twice during this intervention and once following. The third location, being in

the North of England gave rise to some logistic difficulties. Nevertheless, the case study lasted for a full twelve months, during which I was able to visit four times. The differing timeframes for the study did not adversely affect data gathered however. The projects at each location differed in the length of the interventions and therefore, rather it enriched the possibility of comparison of impact across variable timescales.

4.7.1.4 Interview

In addition, on each visit, I spoke with each of the children and a staff member at the location. The purpose of the interviews was to sensitively explore the young person's continuing experience with the intervention, and test out assumptions made from previous conversation/ interview and observation.

As mentioned in 4.5.4, the data collection was further extended through interview with a number of additional individuals and organisations in order to triangulate aspects of the study.

4.7.1.5 Scrutiny of Literature

A full and extended scrutiny of literature stretching across the history of BESD education, through pioneering theories and activities in and outside England ran alongside the fieldwork offering support, challenge and in places, answers to some of the emergent themes and questions.

4.7.2 Analysis

The general framework for the analysis of data followed several cyclical stages involving the continual comparative analysis of data gathered within the case studies, the use of visual data in subsequent interviews, and the analysis of the images alongside the response of the interviewee. Supporting this was the on-going reflexive process (4.3.3.7)

involving evaluating and responding to emergent themes and ideas from observation, discussion and interview. From this, the process involved relating ideas and themes to theory, the appropriate coding of data and the testing out of themes with participants.

Specifically, analysis of the observations consisted of reflection on and the recording of, thoughts and responses to the observation to accompany transcripts of observation notes and images recorded. Subsequently, and through a reflexive process, the development of themes and questions for checking out via interview and subsequent observations. Data from observation was coded and correlated with coded data from interview before triangulation with theory and other findings.

Analysis of the interview data consisted of reflection and the recording of thoughts and responses to the interviews to accompany transcripts. Subsequently and through a reflexive process, the development of themes and questions for checking out via subsequent interview. Data from interview was coded and correlated with coded data from observation before triangulation with theory and other findings.

Following this cyclical process, emergent themes contributed to the development of theory, through the critical analysis of the data and testing out of themes and emerging theories against existing substantive literature and research. The application of phenomenology supported the eliciting of the social and emotional impact to ensure that despite the small scale of the case study, generalisations may be made for similar cohorts and interventions.

4.7.3 Verification

Reliability is viewed by Kirk and Miller (1986) as 'the extent to which a measurement procedure yields the same answer however and whenever it is carried out' (p.19). Hammersley (1992) defines reliability as that which 'refers to the degree of consistency

with which instances are assigned to the same category by different observers or by the same observer on different occasions (p.67). Silverman (1993) writes that the standard way of assessing reliability is through the triangulation of methods. He cites the example of using interviews as well as observation. Kirk and Miller (1986) argue that the value of such triangulation is that it 'forces the ethnographer to imagine how multiple, but somehow different, qualitative measures might simultaneously be true' (p.42).

These methods of ensuring rigour, were applied to the study. Observation was conducted on several occasions at each case study context. Added to this, interviews with participants used images from observations. Data from these interviews was then used to focus and support subsequent observations. Triangulation of themes was applied across contexts and further supported by supporting interviews.

Hammersley defines validity as 'truth: interpreted as the extent to which an account accurately represents the social phenomena to which it refers (p.57). The validity or truthfulness of the data collected and the interpretation of such data is the most crucial aspect of any research design. Within this study, the aspects of validity of significance were the accuracy of research methods used and the interpretation of data.

Accuracy of Methods

The methods selected for use within the case study were deliberately open-ended in order to guard against bias, both my own and that of the enthusiasts promoting the interventions. Triangulating the data collected from observation and interview ensured that only with repetition over several interviews, observation and several contexts, was a theme considered significant. Measures were implemented to minimise the impact of factors which might invalidate the data including:

- Clear explanation of the purpose and parameters of the research to all participants.

- Clear and ongoing consent, with a reassurance of confidentiality.

- Regular and clear communication with each participant and staff member involved in the research.

- Flexible decisions around methods in interview, according to the child or young person's preference in order to support him/her to feel comfortable and open with their responses. In one location, this meant including a staff member in children's interviews; another, the third interview was conducted by school staff and recorded.

4.8 Generalisability of Results

The study is qualitative, empirical, and interpretative. Humans are subjective beings and the eliciting of data through the chosen research design despite rigour attached to each stage of the data collection process may be valid, but may yet be un-comparable and limited in generalisability. Denscombe (2002) talks about the importance of providing 'proof' in stating findings and answering research hypotheses. By its nature, research into a namely 'therapeutic' intervention is reliably difficult to quantify. Both children and animals are prone to behave and respond differently to one another, varying further on different days, in different groupings, contexts and situations. This can be further frustrated under research conditions. For this reason, it was felt that the exploration of a hypothesis would be both unrealistic, and unreliable. Starting with no determinable hypothesis ensured that there was nothing to 'prove'.

The results generated were a suggestion of themes, which when tested against literature sit comfortably within an umbrella theme of Attachment. The findings present no formula for outcome, but a suggestion of common factors pointing to an indication of benefit where children with BESD work alongside animals. The findings within these parameters can be said to be generalisable.

4.9 Ethical Considerations

Ethically, the study is complex and presents numerous dilemmas to be considered and addressed. The nature of this work demands first a discussion of substantive ethical issues that arise from working which children with BESD and with animals and secondly the ethical issues arising from the research process elaborated below. It is imperative that I am transparent and rigorous in the examination of all processes and in addressing these issues to ensure that the research is of the highest integrity.

Ethical issues under consideration regarding the nature of the research involve:

i. Research with children and young people with BESD, regarded as a 'vulnerable' population and the impact of the research on the participants and intervention.

ii. The use of animals in an intervention.

iii. The issues around and potential for animal cruelty.

Ethical issues of qualitative research, and peculiar to this research process are:

i. Confidentiality and anonymity of data.

ii. Informed consent.

iii. The Subjective interpretation of information.

iv. The use of visual data: cameras, video recording equipment, voice recorders.

v. Ethics of Psycho-Social Research: potential for disclosure.

vi. Issues of relationship: Are the children known or not known?

vii. Access to the data.

viii. The use of reflexivity

4.9.1 Research with Children and Young People with BESD.

Guidance was sought from the BERA Ethical Guidance (2011) throughout the research, drawing on and implementing advice to ensure the utmost integrity of the study. Issues in social science research are concerned to 'ensure that the interests of participants in

research are safeguarded' (BPS, 1996:1). Children with a statement of special educational need are regarded as 'vulnerable'. BESD children are complex and both experience and express extreme emotion. Any change in nature, behaviour or attitude will be temporary and multi-factorial. Observation and case study over a period of time in a number of locations will minimise the risk of momentary judgements as well as my experience and knowledge of BESD children. Within my role, I am subject to an enhanced Criminals Record Bureau check and therefore able to work alongside children and young people with appropriate permissions, which were sought from venues, staff, parents and the child/young person themselves.

Careful and sensitive inquiry into additional factors affecting children and young people supported the isolation of data. No intervention was initiated for the research. The process of reflexivity was employed to carefully evaluate the impact of the research on the children, young people and interventions.

The welfare of the children about whom the research is conducted is paramount. Both anonymity and confidentiality were assured and maintained (see 4.9.4). Where the research may have been considered intrusive, such as through the use of video during interview, or interview on a one to one basis with an unfamiliar adult, an alternative approach was available.

In observation also, my intension was to be non-intrusive. In all cases, I tried to ensure that the 'normal' context was preserved. In some cases, this meant repeated observations. In two of three case study contexts, initial findings as raw data was shared with participants and consent re-established. In one context, this resulted in richer, more fluent data. In the second, the outcome was an increased distance, with participants becoming difficult to contact.

The process of informed consent was rigorous in that all participants were presented with detailed information on the study and both written and verbal consent was secured before the start of the research. It was also flexible, allowing participants the right to withdraw from the research at any stage. Consent was again obtained verbally before each observation and each interview. Any child or adult wishing to withdraw from the research at any stage was informed that they could do so without question. This was ultimately and regrettably the case for the secondary school in the research after the end of their involvement with the stables, who declined a third interview.

The use of psychosocial research tools initially gave me some cause for concern. The potential of FANI approach, being led by the participant, (see 4.6.3) may be to act as a cathartic outlet, but may equally bring about disclosure from an individual. Additionally, having assured the participant of confidentiality, I would be in breach of this agreement to divulge this information elsewhere. Participants were therefore informed of my obligation to pass on any information, which might represent any safeguarding issues, and appropriate safeguarding officers at each context were identified. Thankfully, this issue did not arise.

Hollway and Jefferson (2000) discuss the questionable ethics within the issue of informed consent. They argue that the nature of narrative interview as a research tool may cause sensitive information to surface. Oliver (2003) too discusses the dilemma facing the researcher over the use of material, the breach of agreement and the ethical position of the researcher.

As a professional experienced in working with this client group, I believe that this supports my position in the research. I aspired to conduct my research with the highest integrity with confidentiality, ensuring honesty, respect and the promise of protection from harm, assuring children that certain information may need to be shared in the event of disclosure.

Should this have happened, I was prepared to remain impartial and seek the guidance of safeguarding officers responsible for the child's immediate welfare.

One notable aspect of the study was the prevalence with which animal cruelty was discussed. In each case, children reporting knowledge about animal cruelty looked to me for affirmation that this was 'wrong'. In each circumstance, I endeavoured to be the 'container', hearing the emotion and communication, validating the child's feelings and noticing the impact of this knowledge and/or experience on the opinions of the participant to the study.

4.9.2 The 'Use' of Animals in an Intervention

The use of animals in an intervention raises ethical questions of animal welfare. The involvement of animals in any intervention with children with emotional and behavioural difficulties raises questions of safety, hygiene and ethics. There is substantive research, which shows a correlation between animal cruelty and children with BESD (see 4.9.3). Questions were asked of the venues to establish treatment and care of the animals and their consideration for animal welfare and of the educational contexts accessing these provisions to ensure adequate precaution of both child and adult against identified risks. All venues maintained high standards of care for both animals and children. Only one of the venues however, presented a written ethics statement.

To conduct the most ethical work alongside animals requires enough knowledge of animal behaviour to be able to see subtle signs of stress an animal may experience in working alongside children or young people. Each venue supported the interventions, by having a member of staff present who was knowledgeable about the animals. Two of the three organisations consulted, questioned the word 'use' of the animals, stating that the animals work as 'partners' in interactions with the children. Each of the contexts felt that without

question, if an intervention was felt not to benefit *both* child and animal, then the intervention would not continue.

4.9.3 Animal Cruelty

Mentioned in a high proportion of interviews and a prevalent difficulty within BESD education is the important issue of animal cruelty. Discussions where children have observed or been told about cruelty towards an animal are all too frequent amongst children and young people with BESD. Occasionally, they themselves have perpetrated violence or cruelty on an animal. This resonates with children and young people having also experienced domestic violence, or abuse within the household (Lockwood, 2007). Within this climate, opportunity to talk about issues including power and control, animal welfare and responsibility become essential facets of the therapeutic treatment process as well as important protectors for both child and animal within the interventions.

Ascione (2005), a psychologist who specialises in research into animal cruelty notes that kindness and/or cruelty to an animal has been seen as an indicator to a child's character for some time. Ascione asserts that extreme, intentional and repeated cruelty, of which there are far less frequent occurrences, may be an early indicator of psychological disturbance.

Diamond (2002), the director of the Mulberry Bush School, home to some of the country's most challenging young people with BESD, describes an experience where two young residents 'murdered' the pet guinea pigs.

> "Early that morning, two boys from one of the residential units, quietly dressed themselves, crept downstairs and forced open a window lock in the living room. They had then gone across the field to another of the units. They entered the garden

and opened the pen containing three guinea pigs, a white mother and her two brown babies.

They said their original intention was to play with the animals. When the guinea pigs did not respond they killed all three by smashing their heads against the wall of the children's sandpit and hitting them with sticks. They also joked about hanging them from the washing line, but instead, they left the garden with all three bodies. They placed the two babies alongside the wooden fort in the adventure playground. They separated the mother and put her in a 'den' (their own words) among nettles on the other side of the hedge."   (Diamond, 2002, p.3)

Diamond goes on to reflect on the psychotherapeutic implications of the act at the school, relaying that these damaged young boys had acted out 'on behalf' of those with similar difficult or murderous feelings. He notes that, were it not for the guinea pigs playing their role, their feelings may have incurred 'far more serious implications' (p.6), inferring harm perhaps of a human.

The emotional responses to incidents such as these are inevitably very strong. An animal is likely to be the first living creature over which a child has absolute control and power. Melson notes that 'precisely because children connect so readily to symbols of every emotional hue, pets and other animals are vulnerable to a child's rages and resentments' (2001, p.162).

Whether a child's investigative and curious nature turns towards protection or destruction is determined by their culture, experiences of nature, experience of violence and cruelty towards animals (Ascione, 2005). Fundamentally, their underlying feelings of care and being cared for and ultimately, their capacity for empathy determines their actions. Many a child has in experimentation pulled off the legs or wings of an invertebrate, but these

experiences do not usually translate to patterns of deliberate cruelty. It is this pattern, usually accompanied by other indicators such as general aggression, fire-setting, truancy and general delinquency that gives rise to indication of a child's deep-seated emotional disturbance, and necessitates urgent intervention.

This leaves conflicting feelings for those operating interventions with vulnerable children and animals. For Green Chimneys School, who specialise in animal-assisted therapy for very emotionally troubled young people, this means a policy of not admitting those young people with an explicit history of having harmed animals.

In each context visited, there was adequate supervision for both children and animals and no indication of intent to harm or cruelty from any of the children. On the contrary, children became protective and defensive of 'their' animals towards other children who showed interest in interacting with them. However, in interview, more than half of the children discussed experiences of animal cruelty, either first hand or slightly removed from. Experiences such as *'the puppy disappeared, because I forgot to feed it. I think it's dead now'*; or *'my next door neighbour left the hamster out in rain in the garden when he'd had enough'* were recounted. When asked to reflect on these observations, each person gave the suggestion that this was not acceptable, looking for approval or confirmation of this opinion from the present adults. There was a sense of uncertainty, perhaps reflecting chaotic and in some circumstances violent homes where boundaries and a sense of 'acceptable' varies from that of their schools. Nevertheless, the interventions had sought to foster this sense of care and responsibility, which may invoke a sense of responsibility for animals in their futures.

Leonardi (2012) reflected that the issue is about education. She feels that children are rarely perpetrators of violence as a *deliberate* act. She noted that amongst the prisoners who work with her on a dog-training programme, few had any idea that the discipline that

they had tried to instil in their own animals may be cruel, and that there may be a better way to train a dog to do what they want it to do. Once re-trained, they were delighted not to have to shout at and punish their dogs. This, I suspect is the case for many of the young people in the study. It is therefore essential that within these interventions, opportunities be found for the explicit addressing of such issues, to talk through the context as well as the act and to offer lessons in care and responsible animal ownership as an alternative.

4.9.4 Confidentiality and Anonymity of Data

Issues of confidentiality and anonymity were discussed at each of the places to be studied. Privacy of child participants was preserved throughout the research. For the purposes of the research no individual needed to be identified and confidentiality in terms of individual's sensitive histories and data was respected. For the purpose of objectivity in terms of the general nature of the study, it was not necessary to identify any individual establishment by name, though all have consented to names being used for feedback on individual case study data.

All participants have been kept informed of the research throughout and given full access to all analysis. Data around BESD children can be sensitive and harmful in the wrong hands. Sensitive data which could be used to identify individuals, has been kept securely and anonymised before use in the research. On-going consent for the use of all data was established until completion of the fieldwork.

4.9.5 Informed Consent

With the stated research design, the process was continuously evolving. Initially, consideration was how to truly establish informed consent, particularly amongst younger children who it may be argued are cognitively unable to fully understand the research and therefore to consent to it.

Throughout the research, my intention has been to be open and transparent with all participants. Having no specific and direct intervention, I have ensured that children and adults have been where possible, fully informed of the process and purpose of the research throughout each case study. I have done this by providing proposals; all materials to be used within the research, and detailed consent allowing any participant to withdraw at any point of the process. I have reported on my findings to each context about their context. No research was initiated without verbal consent established.

The dilemma over informed consent with the chosen population has been thoroughly examined. Children had the research explained initially by myself and subsequently by a trusted adult, detailing the process of the research. The offer was made in addition to parents, though all declined. Participants remain the owner of material shared until the research is complete, and have been supplied with copies of all photographs. Copies of interviews and transcripts were viewed by interviewees where requested, and after transcription and analysis, subsequently erased. Any child not comfortable with anything divulged, observed or recorded has been given the right to withdraw the data.

Returned written consent for some children was difficult to obtain and whilst willing to participate, dilemmas existed over whether the material should be used based on verbal consent alone. The decision to pursue written consent prolonged the process, but was nevertheless subsequently obtained.

Hollway and Jefferson (2000) raise a further issue considering the nature of informed consent with psychosocial narrative interview. They question whether explaining the explicit nature of the interview will in itself affect the data and therefore, how a researcher can present what is most helpful to the process whilst remaining transparent and ethical. This is a dilemma I needed to negotiate with each interview.

It was important to me that participants felt fully informed of the process. Explaining the nature of the free association narrative interview to children without it sounding intrusive, threatening or difficult can be challenging. However, it was important to explain fully in simple words the concepts of a biographical free-association interview. Establishing informed consent was of the utmost importance in order to protect the duty of care, spoken about by Holloway (2006) that I have towards the children, both those within my own context and those whom I have a duty of care towards as a researcher and professional.

A further associated ethical dilemma, is the nature of those who consent to work within the research. I have occasionally thought that those 'keen' to share would like some 'proof' or validation of their intervention, identifying enthusiastic pupils and staff who may therefore present skewed data. This was a necessary consideration in the analysis and triangulation of data.

For the sample interview, the dilemma of knowing or not knowing the subject was resolved by opportunity of access. I knew both the subject Oliver[18], a pupil at my own workplace and his parent and therefore consent was easily obtained. Despite a general and transparent non-intrusive design to the interview, the subject matter of animals and the frequency with which in my experience children articulate experiences of cruelty, I felt a pressure to know the subject to some degree in order to be ready for questions, which may evoke traumatic or emotive memory. I am a practitioner, but not a therapist and I had concern regarding the potential intrusive nature of the interview.

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[18] the child's name has been changed for anonymity

For the sample interview, a letter was sent home to Oliver's mother following a telephone call outlining the specifics of the interview. Signed consent was returned. Oliver and I drew up the guidelines of the interview together.

In terms of working with children and adults who are not known to me, the sample was a useful introduction. It was important to phrase the consent clearly, outlining the specifics of the interviews and observations (Appendix One details the ethics statement presented to participants in the study). Control remained with the participants both in terms of participation and the subsequent use of materials.

Jessop and Miller (2002) discuss the difficulties of informed consent when a trusting relationship is already in place. This was of concern to me, not wishing to jeopardise the good relationships I had with children and parents. However, my research was not advocating any change in provision and therefore, I felt it was ethically viable and would cause no harm or distress to child or parent.

In approaching the research, my intention has always been one of openness and transparency with all participants. I endeavoured to ensure that children and adults were fully informed of the process and purpose of the research throughout, and gave their continuous informed consent (acknowledging the potential limited cognition of some participants) at various stages of data collection. Miller and Bell (2002) argue that consent should always be 'ongoing and renegotiated' (p.53) in research which in itself poses complex problems. At what point is it acceptable to retain the copyright of material gathered for use in the study? Up to publication, after publication? Ever? In my own study, I offered the copyright of materials to the participants until the case study was completed at the locations. Thereby afterwards, what is written is written. Having made this explicit, I feel that I have behaved ethically towards my participants. In addition, I have given

thought to sensitive material that may affect a young person unduly and ensuring fair anonymity, the images I believe represent themes rather than any individual (see 4.9.6).

4.9.6 The Use of Visual Data: Cameras, Video recording equipment and Voice recorders

In the sample interview, I chose to use a video recorder, despite being aware of the 'camera factor' that initially tends to close participants down and restrict their fluency. The use of a visual recording however is common practice with children and seemed more tangible than a voice recorder. Oliver was asked if he was happy with this equipment and consented to the use of a video recorder. After the interview, he was able to look back through the images and re-live the interview. Following the interview, Oliver was given a copy of the interview on DVD, a more accessible transcript than a written account. Each of these methods seemed to support Oliver in participating fully and comfortably. Therefore it was initially decided that the same processes would be used within the main study. Logistics prevented the safe transfer of DVD's after interview however and the decision was subsequently made, once the child has seen the recording, to destroy the footage.

In interviewing adults, I chose instead to use a voice recorder. Adults presented as considerably more self-conscious of being filmed and more straightforward in their communication. I therefore chose to dispense with video. Again, all participants were asked for consent before the use of any equipment and retained consent to withdraw the transcripts until such time that the data gathering process was complete.

The use of cameras raises considerable ethical questions including the use of images throughout the study, whether current consent gives future consent, the ability of children to fully understand consent to the use of their image. The children's use of the cameras was pivotal in the study. Both my own recordings of observations and the recording of

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children's observations with a camera, suggest a viewpoint on the study. Cameras were supplied to the children participating in the study. The purpose was threefold.

1. To engage children with the research~ children were given the cameras to keep.

2. To support the interview process~ copies of these images were used to stimulate conversation and explore themes.

3. To represent the children's interest and pre-occupations at the stables; with no restrictions placed upon them, children inevitably captured images which interested them. Additionally, during the observed session, pictures were taken to represent the main activities. These too were presented during interview with the children with a view to recalling the experience and exploring the child's perspective on what was happening.

Ethical issues concerning the use / misuse of images (Prosser, 1998) were addressed by the following guidelines:

   i.   Children and parents consented to the study (including the use of images) before being given a camera to keep. The pictures were theirs to keep and were each individually reviewed for further consent before inclusion in the study.

  ii.   Children were issued guidance on the use of the cameras. For example, the cameras were only to be used in connection with the intervention, and asked not to photograph other pupils without consent, but what they photographed during the sessions was entirely up to them. The cameras were not available for personal use until the case study was complete. This was supported by staff at the contexts, who facilitated the use of the cameras, the recharging of batteries and the processing of images.

 iii.   The camera remained under the control of the staff member facilitating the research in order to keep children from being given a tool that might be lost, broken or used inappropriately, until the research was complete.

 iv.   Permission from all participants was obtained to share images with one another and for free use within the research.

v.   Images remained the property of the individual who has taken them for the duration of the data collection and could be withdrawn from the research should the owner have requested.

vi.   A staff member monitored all images.

vii.   Images were used to facilitate discussion and interview and to represent thoughts, feelings and images. Images were not be analysed in isolation of other findings.

viii.   All images used within the study were shown to those persons in them for further specific consent and identity has been anonymised.

4.9.7 Ethics of Psycho-Social Research: Potential for Disclosure

Initially, in learning about psychosocial research tools, I struggled with the potential ethical issues. A hazard in researching around trauma and vulnerability generally, rather than specifically through utilising psychosocial research tools offers the potential for disclosure. Psychosocial methodologies are particularly good at acknowledging issues and the greater potential for them to arise when taking a stance in interviewing that fosters relational aspects hence are potentially more likely to have disclosure events. I am not a therapist, but potentially, using these techniques in this context, I considered that I might be exposing children to aspects of themselves that they may not be aware of or comfortable with. Hollway and Jefferson (2000) discuss the dilemma and the importance of protecting the welfare of the participant. In piloting the use of the techniques, I was somewhat reassured. However, in the event of disclosure from an individual, I was sufficiently prepared with the information and ability to remain impartial and seek the guidance of identified safeguarding officers responsible for the child's immediate welfare. Confidentiality was maintained and such information was not used within the research.

4.9.8 Issues of relationship: Are the children known or not known?

The realities around being a practitioner researcher raise ethical dilemma around the 'use' of relationship. For the sample interview, in which I was piloting a psychosocial research technique, I conducted a short interview with a child known to me within the context of my work (see 4.9.5) I was interested to learn about the use of biographical interview. Several dilemmas were presented around the ethics to explore life history with a child who has a complex and traumatic past and the conflict between being researcher and practitioner at the same time.

I approached Oliver who readily gave his consent to be interviewed. I carefully selected a child with whom I had a safe and trusting relationship. This selection was made in order that he may feel supported by the relationship, in exploring issues that are personal and safe that I would terminate the interview should he request that I do so.

I conducted, recorded and analysed a short twelve-minute interview on the subject of the animals in Oliver's life. Given that he is a child, a short interview felt appropriate. The control and security offered within this time enabled him to be interviewed a second or third time. Following the interview, I presented anonymously and with Oliver's and his parent's consent, the experience of the sample interview in a work-discussion session with colleagues. This enabled me as researcher to step away from the data and consider its impact on others not known to the study, or the individual.

The dilemma of knowing or not knowing the subject was resolved by opportunity of access. I knew both the subject and his parent and therefore consent was easily obtained. Oliver felt able to talk freely and remaining in control of the conversation, was not in any way obligated to disclose or think about any unpleasantness. The conversation flowed easily and revealed useful data.

A converse position played out in the second context. Children were wary of me and requested that another adult was present during the interviews. The adult however proceeded to answer for the children or to suggest what they might 'want to say' which ultimately may have left a misleading impression of the children's true thoughts.

4.10 Summary

This chapter charts the methodology and methods utilised in research into an intervention with animals and children and young people with BESD. I have outlined my philosophical assumptions and processes, highlighting the chosen paradigm, and research strategy. I have discussed the procedures and methods employed. Data collection and analysis processes are outlined and a discussion of the verification of the data is explored. Details around consent and equipment included throughout including in a detailed look at the ethical issues within the study.

Chapters Five, Six and Seven go on to explore the details and process of each case study context and additional supporting interviews drawing out the findings before detailed analysis and discussion in Chapter Eight.

Preface to Chapters Five, Six and Seven

Exploring the Child's Perspective: Three Case Studies

An Overview

My aim in these following chapters is to summarise three case studies chosen for detailed exploration and the resultant themes. In telling their stories, I have tried to use the words of those involved in the study in order to represent their sense of the place, their experience and their sense of identity. "Each human being has his or her own version of the world" (Stake, 1995, p.101). The stories have a common thread, of passion, and belief in the purpose, process and outcome of the contexts. It is my aim to represent the collective view, as objectively as possible without advocacy; whilst acknowledging some inevitable bias, the process and programmes represented.

Supporting the case studies are supplementary interviews, which offer either an organisational viewpoint or a personal one (or both) supporting the triangulation of data. This data came about in three different ways:

- One-off interviews conducted to investigate initiatives of relevance

- Data presented by interested parties as relevant to my field of study

- Data collected as part of my role as a Deputy Head Teacher within a school for children with BESD

The five settings, chosen for their relevance in supporting the data from case study contexts, range from individual through to planned group interventions. They include both primary and secondary aged students, but this time additionally, those not necessarily diagnosed as having BESD.

Data for these settings was collected primarily through semi-structured interview with adults, and in one case, a young person and through the use of evaluative questionnaires in the case of the horse riding and chicken club, though consent was sought to include

them within this study. Additionally, explicit consent was sought from the child and his parent to include the comments and report on 'a boy and a dog'. As is the case throughout this study, all data has been anonymised.

The stories told and themes presented in the following chapters are not exhaustive. Some, I have briefly mentioned, considered and dismissed, being minority viewpoints, unsubstantiated between individuals and contexts, and which ultimately detract from the strength of the analysis of the data. Those themes that remain have emerged from analysis of the data prominent in each of the contexts, which in addition, resonate with my own extensive experience of working alongside children and young people with BESD. The stories are presented in order to support an understanding of the contexts, the individuals and the nature of their experiences within each programme. "The spoken word, as data, is both reliable and valid in terms of the speaker as an individual actor and should be recognised and valued as such by the recipient" (Garner, 1999, p.xi). They are selected to provide a basis for the analysis and understanding of the impact of the experience of animals on children and young people with BESD.

The method of analysis chosen was to attempt to explore 'beneath the surface' (Clarke and Hoggett, 2009) of the views expressed through the repeat exploration of emergent themes from initial interview and observation, and by applying reflexivity (Etherington, 2004) to the data, so generating a psychosocial perspective of the individuals and contexts. The use of visual ethnography (Pink, 2006) further facilitated the generation of data within interview and greater triangulation to the analysis thereafter. The representation and analysis of the experience of any person, let alone a child with BESD, at a given time is subjective and complex and therefore reliance upon reflexive practice, commonality and difference are the presiding factors in the themes presented to provide a meaningful interrogation of the data overall.

Chapter Five

Case Study One: Wildwood School at the City Farm

"Once they were at the farm, anxiety and hyper-vigilance just disappeared"

Teacher, Wildwood (March 2011)

5.1 Introduction

This is a report of the data collected and subsequent analysis of the initial findings from a case study conducted jointly with Wildwood School and their local city farm. The School is a local authority school for primary aged children with BESD. Involvement with the local farm operates in a variety of forms for a range of children throughout each week. This study focuses on one of the interventions offered a group of five children. The case study took place between November 2009 and December 2010, during which the children visited the farm weekly and took on a range of caretaking activities with the animals. The intervention was considered a pilot by the school to see if intensive engagement with the animals could provide a social and emotional tool for 'hard to engage' children, and ultimately support improvement in engagement with the curriculum. The pilot was initiated following anecdotal reports between staff at the school and the farm, of engagement with animals impacting positively, socially and emotionally on other groups of children who visited the farm less frequently, in non-structured sessions. The school identified the children according to their BESD need (see Appendix Two). The children within this local authority are funded on a banding system according to the complexity in their need and resulting level of challenge presented from Bands one to six. Each child was also tested,

again by the school for a baseline of social and emotional functioning using a Boxall Profile (Nurture Group Network, 1998, see Appendix 2). The teacher was asked to monitor children on their visits and diary changes, engagement and group dynamics for the duration of the experience. A second assessment was completed (again by the school, this was not a formal part of the research) following the experience to measure progress.

Supplementary to this case study is a report on two further initiatives, also arising in this location and adding support to the evidence gathered through the case studies. These include a report from a parent on an intervention with the school dog (5.9.1) and the school's 'chicken club' (5.9.2).

This is one person's encounter. It summarises the findings and analysis to present emergent themes requiring subsequent analysis and triangulation within the wider study.

5.2 Context

My first official visit to the Community Farm (CF) as researcher was in October 2009, though I have known the context for some years. The research at this context differs from other case studies, in that it involved children from my own workplace; therefore the students are children I have known and worked with for between one and three years. In common with the other contexts, I had no active part in the farm-based activities, other than to observe and conduct interviews, and to subsequently analyse the apparent impact. I have selected however, to 'use myself' in research utilising this sagacity; the experience and knowledge I have of the children to support the process of reflexivity (Etherington, 2004).

I was welcomed by Peter the farm manager, who freely offered information on the farm's philosophy and history. CF is a charitable organisation which describes itself as 'a

community-managed project that aims to improve the quality of life for local people and it's service-users' (farm publication, May 2010). Peter told me that CF is committed to community cohesion and animal welfare. Amongst its aims is the support of those at risk of social exclusion.

CF is located on a piece of land of approximately eight acres in size within a large housing estate in a deprived part of the city. It would not be easily found by accident, its entrance found in a small gap between two houses. It is physically at the 'heart' of its immediate community, which includes the BESD school. The project began as an initiative to transform a rubbish dump into a useable space, which would benefit residents of the estate. The atmosphere is one of calm, laughter and pleasantness, with free access to the public, year round, six days a week. There is little restriction, innumerable volunteers supporting the running of the farm and a small selection of both small and large animals. The farm is in a low employment, high crime area and suffers frequent incidents of burglary, vandalism and theft with animals hurt or killed by members of the community.[19] Education for the locality about the farm is a key aim for the farm, for this reason.

A relationship between the school and the farm was initiated in 2008. Different groups of children from the school visit weekly to work as volunteers, learn about animal handling and care, participate in a 'Forest School' (Knight, 2011), an initiative involving children learning outside in the context of a woodland; and learn to get along in a less familiar environment. Championing this agenda is the school's support of the Government initiated Every Child Matters agenda (ECM), now obsolete, in 2003, promoting safe, healthy lifestyles and community involvement. A part of the initiative was to educate local children, the main perpetrators of incidents at the farm, who were perhaps themselves prone to out

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[19] At the time of the research, the farm was experiencing monthly attacks during the night times including the theft of a guinea pig, 50 chickens let out and subsequently killed by a fox, the community orchard burnt down and three incidents of damage and vandalism.

of school hours' delinquent activity. This was to include introducing them to the benefits of places such as the farm, to support and build relationships with staff and animals and hence develop a greater empathy and hopefully prevent future incidence.

Each week, on a two-hour visit to the farm, the children were allocated jobs, which would benefit the farm as whole, working with and caring for an animal of their choice, followed by some free time to simply be amongst the animals. Later in the year, the children were designated 'farm volunteers', provided with a badge on arrival and given sole charge of a specific animal to care for week on week.

5.3 The Children

Five children, aged between seven and ten were identified to attend the farm one afternoon a week in all weathers, for a period of a year, accompanied by two staff. Those children assessed on admission to the school as 'Band Four children' (Appendix Two). The school's philosophy is to provide Band Four children, those presenting some challenge in their home environment as well as the school one, with a small group intervention in addition to their standard school based curriculum, which will support the development of in particular, social skills. Some other 'Band Four' children take part in a discrete small group intervention to learn about social skills, a gardening group facilitated by the school's learning mentor, a role within the school allocated to supporting the most vulnerable children and challenging behaviour. The initial group consisted of four boys and one girl: Billy, Kevin, Sian, Harry and Jack. However, Jack was excluded from the group (see5.6.5) part way through the year, after disengagement and replaced by another girl, Maggie.

5.3.1 Billy is eight years old, lives with his mother and her partner on the other side of the city to the school. Billy is an intelligent and charismatic child, externally confident and

chatty but suffers from extremely low self-esteem. Billy cannot tolerate being left out, or feeling forgotten. Docker-Drysdale says of children with this symptom:

> "Many of the most serious and distressing symptoms that we meet in our work with emotionally deprived children are present because the child has been unable to tolerate a *feeling*…Many of the feelings have been experienced at a pre-verbal stage so that the anxiety is unthinkable and the feeling cannot be contained" (Docker-Drysdale, 1990, p.97)

When Billy finds things challenging, (which is usually socially rather than academically), he reacts violently and dramatically with threats of suicide, placing himself in volatile and dangerous positions, such as on high banisters, in the middle of main roads and struggles to accept support. Other children often find Billy irritating, due to his intense need for continual attention, which he manifests by talking continually, hugging, poking or any other way of provoking a response from his peers. Billy is usually a victim of his own provocation, but does not recognise this behaviour. Despite having pets, Billy was initially overtly frightened of the animals.

5.3.2 Kevin unlike Billy is very self-contained, neither requiring attention nor easily accepting support. He speaks only when he has something to say. Kevin lives near Billy and they travel to school together in the same transport. Kevin is nine and lives with four siblings, his mother and his stepfather, with whom he has an ambivalent relationship in what is reported to be a chaotic household. He has at various times been under a child protection plan for violent abuse and neglect. Kevin is small for his age and looks under-nourished. The special school regularly expressed concern about his home environment, brought about by tales of violence, neglect and drug abuse from Kevin; but whilst investigated, these concerns have never been substantiated. Kevin's mother and stepfather say that Kevin lies. In school, Kevin works hard, and is rarely involved in any

difficult or challenging behaviour. Kevin shows indifference towards task, activities and people, typifying a child with an avoidant attachment disorder (Geddes, 2006).

5.3.3 Sian, aged ten is shy, and has a very low self-esteem and emotionally presents as a much younger child. Speaking with a stammer, she is significantly over-weight and both conscious and embarrassed about this. Sian strives for acceptance and friendship and is often not included in friendship groups. She is very loud. She shouts, shrieks, giggles, and speaks at high volumes. While she enjoys 'girlie' activities, in a school where she is one of only three girls, she prefers adult company to that of children. Sian has experienced bullying, racism between her family and neighbours, violence in the home and has some moderate learning difficulties. Her personality is bubbly and enthusiastic about *anything* offered to her. Sian lives with her mother and two sisters who are both adults. She adores animals, but loves them similarly to soft toys. Her response when excited or thwarted is to moan or shriek loudly and throw herself around physically.

5.3.4 Harry aged nine lives with a younger brother, his mother and an alcoholic father in a very deprived part of the city. Harry is intelligent and articulate and presents as a very confident young man. Harry is not easily identified as a child with BESD; He can be charming, demonstrates some good social skills and is 'low-risk' according to the schools behaviour risk assessments. Whilst in a previous school, he was reported to be 'chaotic, hyperactive and overly aggressive'. The most challenging behaviour Wildwood has reported, is Harry becoming over-excited and unable to regulate his silliness. Harry is undergoing a transition to return to a mainstream school after a period of four years at the school.

5.3.5 Jack lives alone with his mother. Early trauma between his mother and father resulted in Jack and his mother becoming mutually protective and dependent on one

another. Still at age nine, Jack behaved in a physically 'clingy' manner towards his mother and puts on a much younger voice when speaking to her. This reflects an ambivalent attachment disorder (Geddes, 2006). Despite this close relationship, Jack physically assaults his mother if he does not get his own way. This relationship is mirrored by Jack in his relationships with some female staff. Jack can present as arrogant and superior to his peers, despite a low self-esteem. He is particularly precious of his own possessions and appearance and finds it hard to share. Jack and Harry are good friends, but adults at the school reportedly struggle to find him endearing. Jack refused to wear appropriate clothing to the farm (warm waterproof coat and wellingtons) and as a result became cold, wet and disheartened on the visits, which hindered his engagement.

5.3.6 Maggie joined the group midway through the year. Maggie is aged ten, an angry young girl and a self-confessed tomboy, with beautiful long blond hair. She tries hard to be 'tough'. Maggie lives with her mother and two older sisters; her father is serving a prison sentence for violent assault. She regularly comes to school unwashed, unkempt, riddled with head-lice and ripped clothing. Her mother says that she cannot control her. Maggie is independent and prone to fighting. There are concerns over each of the girls in her family, with her eldest sister recently having been taken into foster care following allegations of abuse in the family.

*Table 2 (*overleaf) presents an overview of the characteristics of each participant.

Child	Billy	Kevin	Sian	Harry	Jack	Maggie
Age	8	9	10	9	9	10
Family	**Only child. Lives with mother and her partner.**	**Four siblings, mother and stepfather,**	**Mother and two sisters (both adults).**	**Younger brother, mother and alcoholic father**	**Only child. Lives only with mother.**	**Mother and two older sisters; (father in prison) Eldest sister in foster care.**
Home	A deprived area, south of the city	A deprived area, south of the city 'chaotic household' tales of violence, neglect and drug abuse.	Bullying, racism between family and neighbours, violence in the home.	A deprived area in the centre of the city.	North of the city. Jack and mother mutually protective and interdependent.	A deprived area, south of the city Her mother says that she cannot control her.
Attachment Disorder	Disorganised	Avoidant	Disorganised	Previously thought to be Ambivalent	Ambivalent	Avoidant
Characteristics	Intelligent Charismatic Externally confident chatty Very low self-esteem. Cannot tolerate being left out, or feeling forgotten.	Self-contained, neither requiring attention nor easily accepting support. speaks only when something to say. Works hard, Rarely involved in any difficult or challenging behaviour.	Bubbly and enthusiastic also shy. very low self-esteem Speaks with a stammer, significantly over-weight, conscious and embarrassed Very loud. Shouts, shrieks, giggles, and speaks at high volumes. Enjoys 'girlie' activities, Moderate learning difficulties.	Intelligent and articulate. Presents as very confident. Not easily identified as a child with BESD; charming, Prone to silliness.	'Clingy' Low self-esteem. Precious of his own possessions and appearance Adults at the school reportedly struggle to find him endearing.	Angry Tomboy, Tries hard to be 'tough'. Regularly unwashed, unkempt, riddled with head lice and ripped clothing. Independent and prone to fighting.
Response to challenge	Reacts violently and dramatically with threats of suicide, placing himself in volatile and dangerous positions Struggles to accept support.	Kevin shows indifference towards task, activities and people, but will not accept support.	Response when excited or thwarted is to moan or shriek loudly and throw herself around	The most challenging behaviour Wildwood reported, is Harry becoming over-excited and unable to regulate his silliness.	Physically assaults his mother if he does not get his own way. Opts out and withdraws	Physical and aggressive.
Initial attitude to	Overtly frightened of	Indifference	Adored animals	Nurturing	Positive, (other than	Nurturing

animals	the animals.		Loves them as soft toys.		not wishing to get dirty).	
Peer response	Other children often find Billy irritating, due to his intense need for continual attention, which he manifests by talking continually, hugging, poking or any other way of provoking a response from his peers.	Indifference Kevin lives near Billy and they travel to school together in the same transport.	Sian strives for acceptance and friendship and is often not included in friendship groups. Prefers adult company to that of children.	Positive and well liked	Finds it hard to share. Can be arrogant and superior to his peers. Jack and Harry are good friends.	Indifference, though Maggie is popular amongst her peers.

Table 2. Characteristics of each participant at Wildwood Context

5.4 The Observations

Over the year, I undertook two FANI style formal observations of the group (see 4.5.5), whilst also receiving and recording in a professional reflective journal, informal feedback from the staff supporting the groups on a regular basis. These conversations reflected on the group dynamics, the levels of engagement, children's individual preferences and the appropriation of activities. This data was incorporated applying principles of reflexivity (Etherington, 2004) before 'translating meaning' to themes.

5.4.1 Observation One: December 2009

The initial observation took place one month after the group began visiting the farm. The children were supported by two school staff, a teacher and a learning support assistant (LSA); both known to the children, but not their usual class staff, and Jenny from the farm.

The weather was fine, albeit somewhat chilly. The group arrived and straight away, were assembled by the teacher into those who could be regarded as 'trustworthy' and those who needed closer supervision. These groupings were based on previous experience, when closely monitored had led to some of the children exhibiting mildly delinquent behaviour. The teacher developed these groups, on the basis that her aim was for all children to participate at the farm supervised but unsupported, giving those children in the 'needing closer supervision' group a goal to work towards. The trustworthy group, Kevin, and Harry, were deployed to clean out the pig accommodation and duly disappeared to start their task followed loosely at a supervisory distance by the LSA. The teacher explained to the group (for my benefit, in part) that the 'Keep Close' group were working towards the responsibility of being allowed to work away from adult supervision. I wondered about the wisdom of the decisions, given the children's evident attachment preferences. Were the right children kept close? Should those children with 'avoidant

attachment disorders' necessitate support of an adult? Sian immediately began whining about being cold, Jack sulked and Billy felt and expressed that he should already be allowed this privilege. This was not acknowledged, but not indulged, and Jenny swiftly took Sian and Billy off to clean out the Guinea Pig houses, while the teacher remained with Jack, in an attempt to coerce him to participate.

I followed Sian and Billy with Jenny. Jenny all but ignored the subtle moaning of the children, remaining positive and quickly handed the Guinea pigs to the children, whilst explaining the jobs. Billy was his usual bubbly, vocal self, until handed the small animals. At this point, he visibly shrank; curling himself physically into a ball-like shape, with the guinea pig nestled into the bend of his elbow. He spoke softly and gently to the animal. 'Don't worry little Sasha, I'll protect you from the cold'. After a short while, I spoke to Billy, who for a moment did not hear me, despite the fact that I was only inches away. Billy had dissociated (Cairns, 2002) and lost in his own thoughts, his presentation was melancholic and quiet. Only when the group were reassembled before leaving did Billy's extroverted demeanour return.

Sian, despite her moans, was a willing participant. She loudly offered 'aw' expressions and repeated 'Isn't he cute?' with a Guinea pig in hand. Her expressed pleasure seemed as if she were seeing the animals for the first time. This pleasure transferred to willingness when Jenny then motioned to the pair that they should clean out the house. Throughout the time that they were cleaning of the huts, Sian offered minimal effort and maximum delight, squealing with both delight and disgust at the animals and their habitat. Sian was pursuing attention and response from the animals intensely, perhaps looking for relationship that she struggled to find in her peers. She talked to them constantly, stroked and made noises, looking constantly for reaction from Jenny and the animals. Children

who have experienced trauma or suffer from an attachment deficit, often feel things deeply and show extreme emotional reaction to events, and seek external regulation of their feelings (Cairns, 2002). Jenny gave Sian regular gentle reminders to be calm, quiet and be gentle around the animals. Each time, Sian whispered 'Sorry, sorry, sorry!' and continued whispering until something surprised her and once again, would squeal. This dialogue not only supported Sian in understanding her own feelings towards the experience, through Jenny's clear and supportive dialogue, it also built a shared experience and therefore relationship with Jenny. Jenny (and I, observing) found it hard not to laugh at the pleasurable response and Sian's efforts to contain herself.

Over the other end of the farm, Kevin and Harry worked independently and together cooperatively, giving the impression that they had known and understood the tasks of animal care at the farm for a long time. The LSA worked alongside them silently, responding when spoken to, but leaving the boys happily in their task. Harry appeared confident. He occupied himself, offering his services to staff once the 'pigs' job had been completed. Later, on route home, I spoke with Harry about the farm, whereupon he was able to recall a lot of information from previous sessions, including what pupils had been doing. This sense of hyper-vigilance is typical in children with BESD who may have experienced trauma (Perry, 2007) brought about by a need to be continually alert to present or imminent threat or danger around them. In this instance, Harry's hyper-vigilance led to greater learning rather than anxiety. Harry seemed to have found his niche, and did not need others to evaluate his role there. Supervised only at a distance, I felt that this 'trustworthy' label had allowed his self-esteem to flourish.

Kevin went about his work silently. Once the pigs accommodation was cleaned, Kevin was offered a choice of what he would like to do on the farm next. Without a word, Kevin

headed straight for the duck pen. A choice he made every week. Here he sat alone on a seat watching, completely absorbed. Kevin sat alone, still and quietly for twenty minutes.

Throughout the session, Jack remained visibly silent and withdrawn. He stood slightly away from the group and refused to participate in the animal care despite regular coercion from all the staff. As time went on, Jack complained of being cold and bored. He remained watchfully with the group however, despite opportunity to remove himself. I felt that Jack was struggling to find a role within the group and whilst not able to commit to the jobs, did not want to distance himself too much, for fear of being forgotten by the adults or as (Docker-Drysdale, 1991) phrases, not being 'held in mind'.

After around three quarters of an hour of working on the set tasks, the children were offered choices of activity. Billy returning to a state of hyper-arousal (Cairns, 2002) went around each of the animal pens at high speed, Harry went to the goats and Sian remained faithfully chatting to the Guinea pigs. I was aware of the falling temperatures, but other than Jack, who had developed a pre-occupation with being cold, the children seemed oblivious to it. Twenty minutes later, the teacher announced that they would be leaving in five to ten minutes. The preparatory warning was helpful. Once the time came to leave, the children regrouped and almost instantly reverted to the group behaviour observed before the start of the intervention. Kevin, Harry and Billy began giggling and play fighting, Sian started to moan, "I don't want to leave yet Miss' and Jack muttered under his breath whilst walking very close to his teacher.

I noted that there were a considerable number of hazards present, such as sharp tools, trip hazards, animal faeces etc., which could have left adults and/or children in a situation of unease. Nevertheless, there was a very relaxed presence from the farm staff. The

school adults therefore relaxed and easily handed over responsibility to the children to organise themselves with equipment such as shovels and pitchforks and brooms, as well as the disposal of manure, and replenishing bedding from enormous piles of straw and hay. The children were allowed to roam freely throughout the farm. This presentation of calm at the interface of the children and farm supports theories, which assert staff as critical to the affective facilitation of learning for children with BESD (Lloyd-Smith and Davies, 1995).

On return to school, the children were debriefed, asked about what they had done, what they had enjoyed, anything they would like to record, and anything they would like to do in the future. The children felt a self-sufficient group. They willingly cooperated, (including Jack) and shared with one another their thoughts. Docker-Drysdale says:

> "A higher level of self-sufficiency as a group fosters a high level of responsibility in each person. The use of everyone's skills and expressions adds value to the culture and to the individual"   (Docker-Drysdale, 1990, p.62)

There was no obvious directed educational activity throughout the course of the afternoon. However, on reflection, I noted subtle cues, to reinforce learning in the areas of:

- Social skills: listening, turn taking, cooperation, trust, and responsibility.
- Specific and general knowledge around animal handling and care.
- Reflection, written and verbal.
- Goal setting and evaluating.

5.4.2 Observation Two: May 2010

Seven months into the programme, I visited again. By this time, Jack had been replaced by Maggie following several months of increasing disengagement. This tells us something

about the use of animals with children such as Jack (see 5.6.5) Children were now working as 'Farm Volunteers'. All five children had graduated to the group entitled 'trustworthy'.

On arrival, the children no longer re-capped the health and safety rules, but were handed their 'volunteer' badges and initiated immediate conversation with Jenny as to the week's jobs. Jenny provided updates on the animals (How the lambs and piglets were progressing) and today's jobs. A discussion emerged about the process of the lambs to meat. Children were clearly both intrigued with this process, asking multiple questions and somewhat uncomfortable, perhaps feeling some conflict between their thoughts of nurturance and fondness and the process of the farm.

Once allocated, the children set about their tasks. Billy was calm, contained and chatted happily to the LSA throughout his tasks, Sian did not complain. Children referred to one another to seek expertise on 'their' animals. They shared tools and conversation. I asked the teacher about this change. She felt the familiarity of the farm and the routine they had developed alongside a sense of purposeful responsibility enabled the children on the whole to pursue activities effortlessly and with a sense of satisfaction. She and the LSA felt that the animals had facilitated and quickened the development of cooperation and social skills. I reflected on the change in maturity evident at the farm and wondered about the transference of this to the classroom and other groups.

Once the general jobs were complete, children moved independently to their chosen animal: Billy, to the goats, Sian to the Guinea pigs and Maggie, to the lambs. All three began to interact with the animals, as if it were their own; asking the animal how it had been, how it was feeling etc. Kevin moved to his usual seat with the ducks, quietly talking

to them at a volume that no one nearby could hear. I moved closer, and Kevin aware of my presence stopped talking. Feeling intrusive, I backed away.

Nearby, Harry directed the teacher to the chickens. He had initiated some months back a walk through the pen each week. The teacher had expressed a phobia of chickens fluttering and pecking at her. Harry, each week invited the teacher to hold his arm as they walked through the pen. The sense of trust placed in his hands was not taken lightly. Harry walked slowly and calmly through, telling his teacher (who was closing her eyes) where the chickens were, where he was going, and what the chickens were doing. Harry was justly proud of his initiative and was convinced that this would end the teacher's fear of chickens. At the end of the walk through, Harry securely held a chicken in his hands for the teacher to touch.

The atmosphere was calm and purposeful. I was struck by the contrast and change in confidence of the children from the previous visit.

5.4.3 Reflections on the Observations

Reflecting on the observations of the dynamics, both spoken and unconscious, group, human-human and animal-human interactions, presented six prominent themes. These themes were selected, as they represent impact for each of the participants in the group.

5.4.3.1 Theme One: Positive Staff Attitude and Knowledge. Staff with a positive attitude and sufficient knowledge of the children and animals was pivotal to the successful facilitation of the intervention. Understanding of BESD, attachment disorders and other difficulties was neither apparent nor seemingly necessary. School staff and farm staff supported the positive ethos of the farm intervention. Without their guidance, tolerance

and gentleness, some children may not have engaged as easily. Their continued support and willingness to do the jobs alongside the children, even highlighting their own vulnerabilities provided a powerful role model for the children. Jenny was very laid back, and expressed a philosophy of 'freedom' even tolerating the children's confused realities 'He's going to eat me' (Billy, 2010) with gentleness and assurance without pandering to fears, helping children to re-evaluate dangers and fears and their experiences of each and perhaps as Docker-Drysdale asserts, ultimately their internal worlds.

> "There are two kinds of reality. One is outer, in that each of us perceives reality in a different way …the other is inner reality, which is unique for each of us, furnished from our earliest experiences onward."   (Docker-Drysdale, 1990, p.45)

Children with BESD often confuse reality and fantasy, defaulting to fears perceived impossible by adults. This may be as a result of early trauma, whereby the brain fails to build a picture of secure reality. Jenny, in this instance did not negate Billy's fear, nor did she support it. With confidence, kindness and reassurance, she supported Billy to explore his fear and recreate a more accurate perception of the animal.

Children were free to wander and develop their own initiative. This allowed the children not only to build relationships, but also to feel a sense of responsibility, purpose and role, whilst having a reassuring 'secure adult' to check back with and rely upon.

5.4.3.2 Theme Two: Purposeful Activity. CF offers a positive learning experience providing opportunity for explicit learning about animals, in particular, considering the care and feelings of animals, which in turn challenged children to translate these lessons to learning about people (and ultimately themselves?) through conversations around empathy and care. Jobs offer a powerful conduit as a focus for distraction, conversation, for learning about both animal and human behaviour and emotion. The observed

difference in the children in terms of their confidence around the animals and their self-control and discipline to carry out the most unpleasant of jobs without hesitation or complaint, between the first and second observation, was significant. As quoted by a teacher supporting the children during a later visit, who observed that 'anxiety and hyper vigilance just disappeared' (Teacher, Wildwood, March 2011). It also impacted on the children's sense of cooperation and collaboration, also reflected on by the staff supporting the children. The activities (cleaning and grooming the animals) appeared to have a marked effect on anxiety levels, evident by focus, silence and the calm nature of the children's responses. This may correlate with studies exploring health benefits of companion animals, which have highlighted impact of companion animals on stress, in particular, the decrease of blood pressure, as well as positive psychological associations. (e.g. Beck and Katcher, 1996; Allen, 2003)

5.4.3.3 Theme Three: Responsibility and Relationship. Specific oversight of an individual animal, or group of animals, allowed the children to feel an important part of the farm and build their expertise and relationship in that one area. Farm staff and class teachers reported both enhanced confidence and esteem and reduced anxious and attention seeking behaviours. This was immediately apparent whilst at the farm, however class teachers initially reported a short-term impact, but no longer lasting effect between visits. Nevertheless, towards the end of the project on conducting a subsequent Boxall profile assessment (See Appendix Two for a sample Boxall) teachers reported improvement in areas such as an ability to form and maintain attachments with peers, and increased confidence when taking responsibility generally. Despite unpleasant weather conditions, such as falling temperatures, the animals did not fail to engage the children at some level (even Jack who talked about the animals at a distance). The relationship the children developed is conditional on care, yet predictable and safe, affirming safety and

consequence and allowing them to explore the relationship within safe defined parameters. When one-to-one with the animals, the atmosphere was calm and focussed. The children were offered responsibility with real living things and responded by conducting themselves maturely, safely, demonstrating initiative, enthusiasm and autonomy. Many of the children have not been trusted with such responsibility before, or managed to sustain any relationship.

5.4.3.4 Theme Four: Group Culture. A mixed group of personalities, experiences and attitude and therefore approach to the experience was evident. The children were drawn from different classes with different staff. The children viewed the sessions as 'an afternoon off'. The collective group culture was one of calm, enjoyment and team, deferring to one another for specialism. This was developed over time through shared experience alongside the animals. Docker Drysdale (1990) and Perry (2010) make much of the power of group culture in influencing the individual, for good or otherwise. Both reference in particular those children who have experienced some degree of emotional deprivation. These children, they assert will subconsciously mirror the behaviour of peers in order to feel acceptance, recognition and develop a sense of belonging. Perry argues that the power of peer pressure for these individuals cannot be overruled by any system of prevention or correction. In this circumstance, the collective culture was strong and positive, and sought to further consolidate the experience of each individual.

5.4.3.5 Theme Five: Emotional Safety. Routine activities that were repetitive and familiar provided the children with emotional safety. The children knew the dangers, the rules, the process, the jobs and the expectations, all of which helped in sustaining a climate of safety. Great emphasis was placed on safety, both emotionally and physically. When children showed signs of being bored, new activities and responsibilities were introduced,

when fearful, reassurance was provided, when questioning, answers were available, when inappropriate or delinquent behaviour threatened, (which rarely happened), the children were quickly distracted by the animals. This was not a planned intervention but a development, which evolved through conversation and reflection between the professionals, sharing their mutual experience with the children and the animals respectively, following each session.

5.4.3.6 Theme Six: The Animals. The impact that the animals had on the children varied and included fear, respect and fondness, but was ultimately always favourable. Children held each of the animals in high regard and developed particular fondness for idiosyncrasies of the animals. There is of course literature which supports the argument for children who are not disposed to fondness of animals (Serpell, 1996), but literature also shows there inevitably remains an attraction or a fascination for those children also (Beck and Katcher, 1996).

'Bear the Boar', one of the few 'pets' at the farm, who interacted with the children presenting his chin for a scratch, was a firm favourite with all. Kevin talked about the beautiful colours and calmness of the ducks, Sian about the 'snuggling' with the guinea pigs, Billy about the comedic effect of the goats, Harry, about the entertainment value of chickens, and the pleasure of being followed around. Maggie enjoyed cuddling the lambs and the piglets. Jack was able to reflect on the pleasure of holding the guinea pigs and the rabbit and just chilling out and stroking them. The children were relating that the animals made them feel good, an experience to which they would like to return. They were in essence reporting the therapeutic value of animals (see 3.3.2).

5.5 Interviews with the Children

Three Interviews were conducted with each of the children. Children were offered the option of being interviewed alone or in pairs, in order to find a balance between the desire to generate knowledge and to respect the children's somewhat understandable anxiety of the process as discussed by Kvale and Brinkman (2009). Billy and Kevin chose to be interviewed together for the first two interviews. The first interview at the beginning of the intervention was to gauge the children's perceptions of the farm, the intervention, animals generally, and of themselves.

The second interview was three months into the intervention. Again, the aim was to establish the children's perspective on what was happening whilst at the farm and to help them to reflect on their own thoughts about any impact or changes that may or may not be occurring. Images recorded by the children were used during this interview as prompts for conversation (see 5.8).

The third and final interview was conducted with the children at the end of the intervention. This interview was to confirm and follow-up on previously emerging themes and to support the children to reflect on the year overall. In preparation for this interview, I reviewed the school's own assessment of the intervention. Maggie, who exchanged places with Jack late into the programme, was only interviewed once.

Interviews were led in a Free Association Narrative Style (FANI) (Hollway and Jefferson, 2000) See 4.5.5.

5.6 Individual Findings

5.6.1 Billy: A People Person

Billy was articulate and spoke boldly of his likes, dislikes, and his general knowledge, which is strong. While speaking confidently however, Billy fidgeted, bit his nails and struggled to maintain eye contact, reflecting a very nervous side. In my knowledge of Billy, this contrasting behaviour is not unusual. When starting at the farm, Billy was initially very anxious about the animals. He told me that he had little experience of animals and voiced vociferously a fear of being hurt, bitten, infected or chased. 'I'm not sure how I'll deal with it'. He was however, incongruously pleased to be chosen for the farm group and demonstrated his usual excitement for new experiences. 'Yes, I'm very very excited. I love to be outside. Its like being free!'

For the first two interviews, Billy asked to be interviewed with Kevin. Billy talked about enjoying the farm in general, less specifically the animals, and expressed that 'sometimes it could be a little boring'. He reasoned that 'It's great because you get fresh air', and talked of improved relationships with his peers. 'The farm helps me and Kevin with our friendship'. Much of Billy's discussion centred around the farm, rather than any specific animal. There is a need to consider the implications of the impact of the environment as opposed to specifically, the animals, certainly for Billy.

Billy voiced a preference for the goats; 'Billy's goats', whom he liked stroking and feeding. He was subsequently given responsibility for these animals when he visited the farm. Billy was observed relaxed and giggling around the goats, although he remained always at a safe distance and would not enter their pen without an adult or another child.

Throughout the interviews, Billy deferred with his eyes and his comments to Kevin when talking about his experiences. He looked for affirmation in his answers (which Kevin did

not give). His reflections centred on contact and friendships with people. When asked which animals Billy enjoyed, he listed one animal followed by seven people, naming each of his peers, the teacher, the supporting LSA and Jenny, the farm staff. Billy's photographs taken at the farm were predominantly of people and when asked about what he had learned in the evaluation by his teacher, Billy recounted which animals, jobs and preferences each of his peers had worked with. 'I learned that Ms Y now likes the chickens, Harry has helped Ms Y with her phobia, Maggie likes the guinea pigs and M (LSA) likes the goats like me'. The small, contained space and group enabled Billy, whose hyper vigilance and need to feel a sense of reciprocal friendship often overwhelm both him and his peers, to participate constructively in the activities with a sense of 'belonging and containment'. (Docker-Drysdale,1990). These parameters seemed to enable Billy to relax and enjoy the experience. Questions remain as to whether this may have been equally achieved without the intervention of animals.

Billy, who talks almost continuously whilst at school, was observed on several occasions at the farm sat quietly nurturing a guinea pig. Billy promised the guinea pig that he would always love it and protect it. I felt that Billy identified somewhat with the animal's vulnerability. Perhaps a need to feel loved and protected. When I asked him about this he replied nonchalantly 'Well, someone has to love them'

At the end of the year, I interviewed Billy alone. I felt that Billy was eager to please, to say the 'right' things, and as such, subsequent reflection on the video recording revealed more from Billy's body language than his words. Billy recounted that the experience had been 'awesome', 'exciting' and had 'taught him a great deal' about animals. This however reveals little about the impact of the animals themselves as opposed to the experience of visiting the farm. We talked through Billy's photographs, which revealed a concurrence of

smiling extroverted Billy and a quiet melancholic Billy. Billy acknowledged the two experiences, but was not able (or willing?) to elaborate on the associated feelings. Billy told me how 'when things got stressful' he was able to retreat and sit with Sasha the guinea pig. I sensed that whilst Billy had gained some confidence in handling the small animals, the greater change was that Billy had derived a great deal of satisfaction from relationship building whilst at the farm. This was subsequently confirmed by his teacher, who felt that Billy, whilst at the farm, was now 'more engaged, able to work better alongside his peers and less attention seeking' (January, 2011).

Talking more generally about animals, Billy talked of his family pets, two budgerigars who 'like me talk on and on and on, God! They are so stressful!' This I felt was a communication from Billy, of displeasure with himself and a very poor self-esteem and recognition of why he struggles with friendships.

Billy's Images
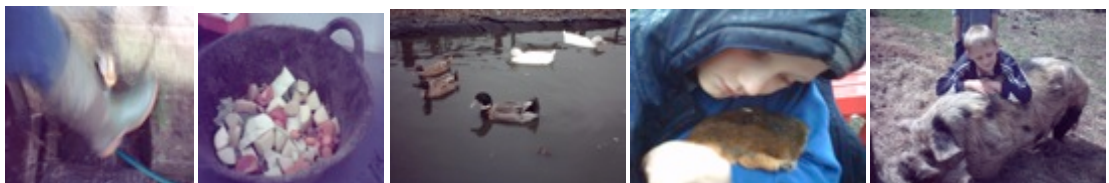
1. Billy's wellington boot. 2.The Pig Food. 3.The Ducks. 4. Billy talks to and shelters a Guinea Pig in the rain 5. Billy enjoys a wrestle with Bear.

- Billy did not offer any explanation for his selection of photographic subjects, other than 'things he liked'.

- Over 50 percent of Billy's images taken throughout the year were of people. Over half of this number, were without any animal subject. People were central to Billy's experience of the farm and in viewing his images during interview, brought many smiles and fond recollections.

- Other images included inanimate objects (Car dashboard, wellington boots, animal food, fences etc.) This represented Billy's acute observation skills (hyper-vigilance) and his need to know the place of things.

- Pictures of animals included the ducks, Bear the Boar, the goats and a few of Billy sheltering a guinea pig in the rain. Whilst a less significant part of Billy's experience, through discussion with Billy, is was apparent that the animals were a conduit for his exploration of some feelings and social skills.   This theme is developed in 9.3.

5.6.2 Kevin: Calmness and Serenity

In contrast to Billy, Kevin is 'streetwise', quiet, introverted, secretive and very self-contained. His demeanour at school is usually quiet, focussed and passive. Kevin had little to say about the farm before he began the visits, other than to express mild pleasure at being asked to join the group. 'Yeah, I suppose I am [*pleased*]'. He was uncharacteristically chatty in each of his subsequent interviews. For Kevin, the farm experience was all about the ducks. Kevin participated in the visits willingly, but every week, asked to be with the ducks, occasionally handling them, but mostly just watching them. Kevin's second interview immediately focussed on the ducks, what he did to care for them, and why he liked them. 'They're just beautiful really, with their colours and that.'

Kevin said that he enjoyed visiting the farm because 'it just chills me out'. He talked about his enjoyment of being outdoors, and specifically, 'Bear' an enormous pet boar at the farm, who 'mostly chills us out because when we go to get him water, he blocks us from getting out again, then we smooth him on the nose and that chills us' (Kevin, Age 9, 2010).

Observations of Kevin at the farm revealed an accord with this 'chilling out' theme. Kevin was observed to be on the periphery of group activities, and keen to work alone with the ducks (whom he was allocated responsibility for once the routine had been established). Once supporting adults had noticed this, Kevin was directed to group involvement each week before being allowed 'Duck time'. The result was that Kevin wholeheartedly threw himself into the tasks, and became an active participant of the group.

Kevin was also observed to take on a nurturing role around the new-born lambs. This offered opportunity for Kevin to show a softer side of his personality and whilst back at school he feigned embarrassment over the photo of himself and the lamb, 'Oh no, not that photo!' he quietly said that he 'loved the mummy and the soft soft baby'. Kevin's teacher noted that Kevin was very kind and gentle with the animals; a very different presentation to the way he presented when in the classroom, and quickly took on confident responsibility for them. This I felt reflected his own experience of needing to take care of himself.

Kevin talked also of irritations at the farm, which he reflected were mostly caused by disagreements with other children. While Billy found 'jobs' stressful, Kevin enjoyed the 'smelly tasks'. 'Whenever we're cross at the farm, we always go to the animals, we never hurt them or anything, they just chill us out.'

A final reflection on animals more generally revealed a concerning picture of animals in Kevin's home life and his feeling of responsibility for them. He said that 'I've got two dogs at home, though one died 'cos I overslept and forgot to feed it and take it for a walk for two days, so we had to get another one. This one's still here though.'

Kevin's Images

1 and 2. The Ducks (a feature of many of Kevin's pictures). 3. Kevin cuddles the lambs. 4.The Guinea pig being held by Sian. 5.The piglets (a few weeks old).

- Kevin took few photographs. Some weeks he used the camera constantly, others he did not use it at all.

- All of Kevin's images included animals. 40percent of his images were of the ducks.

- Other images included numerous close ups of the guinea pigs, usually being held by others, the lambs and the piglets. None of the other animals featured, and heads of people were not included. Kevin focussed his images on the few aspects, which were of greatest importance to his experience.

5.6.3 Harry: The Tour Guide

Harry is an intelligent young man, and popular with his peers. He presented as knowledgeable and wanting to convey such. His general demeanour, whilst not arrogant can be interpreted as superior. Harry told me (and I subsequently observed) that he was comfortable around all of the animals. Harry absorbed and recounted a lot of information and knowledge about the animals, their habitats, their likes and their dislikes. He was able to articulate his experiences at the farm, the purpose of the jobs, and the personality of many of the animals. Harry spoke with enthusiasm about his responsibility for the guinea pigs, which he could not remember the names of.

During observations, Harry shone as a responsible volunteer on the farm. Farm staff very much enjoyed his charm and intelligent conversation when he sidled up to them for jobs.

The farm being open to the public, regularly received small infants with their parents wandering amongst the animals. Harry took initiative when these toddlers arrived at the farm and introduced them to the animals, showing consideration and nurture. Harry talked of his great achievement as helping 'Miss' to overcome her phobia of chickens. This 'treatment plan' was initiated by Harry and he carried out the role sensitively and effectively. Asked about his experiences at the farm, he replied 'Yes, I was good at it'.

The teacher reported that on one occasion, farm staff were unavailable, there were no other visitors to the farm and Harry was required to work alongside peers servicing the animal cages. This levelling experience resulted in Harry becoming bored, then silly, over-excited, delinquent and ultimately verbally abusive to staff. This may have been a result of Harry feeling emotionally unsafe, without the support of the knowledgeable staff, or feeling less special as a result of working alongside his peers, with less responsibility. Harry clearly responded to stimulation, which on this occasion was not present.

The farm, gave Harry an opportunity to take on significant responsibility. Harry, a natural leader was able to absorb new information, accommodate it alongside his own comfort with the animals and utilise his skills to 'lead'. Only when this opportunity was not available, did Harry feel threatened by his sense of equality with his peers. Harry would not talk about this occasion. This represents perhaps some emotional instability which Harry is unable or unwilling to address.

When talking of animals more generally, Harry reflected uncomfortably on a story about his own dog. He talked about 'Bingo' who 'had to go because he was biting me and my brother and jumping up so we had to get rid of him'. He lamented that his father would not let him have a dog again because at its death, Harry and his brother would be

'heartbroken'. This led Harry on to talking more generally about death and how his own parents and subsequent children might love him or hate him on his own death. (I wondered about his ambivalence towards his own parents, or reflections on his own behaviour as being perhaps volatile like the dog's) A preoccupation with attachment was echoed throughout Harry's relationships and it felt that the family dog was a conduit for exploration of those relationships.

Harry felt that going to the farm had helped him. 'Definitely'. He felt better informed about the care of animals and felt that he was starting to like the other children. He talked positively about every aspect of the farm and described the experience in detail. He commented that he always enjoyed the farm, whatever the weather and his favourite experience was rescuing the missing rat (another opportunity for Harry to be praised, for rescuing a more vulnerable creature, hence making himself look better perhaps, than he feels) Harry believed that going to the farm taught him the importance of rules, so therefore made him behave. He did not think however that this would transfer to school. 'Because we don't do any work, we just look at the animals and learn about them. If it's a hot day, we'll do something like get them some mud for them to roll in, because otherwise their skin cracks and they get blisters. You behave because you don't want to upset the animals. I love it. '

Harry's Images:
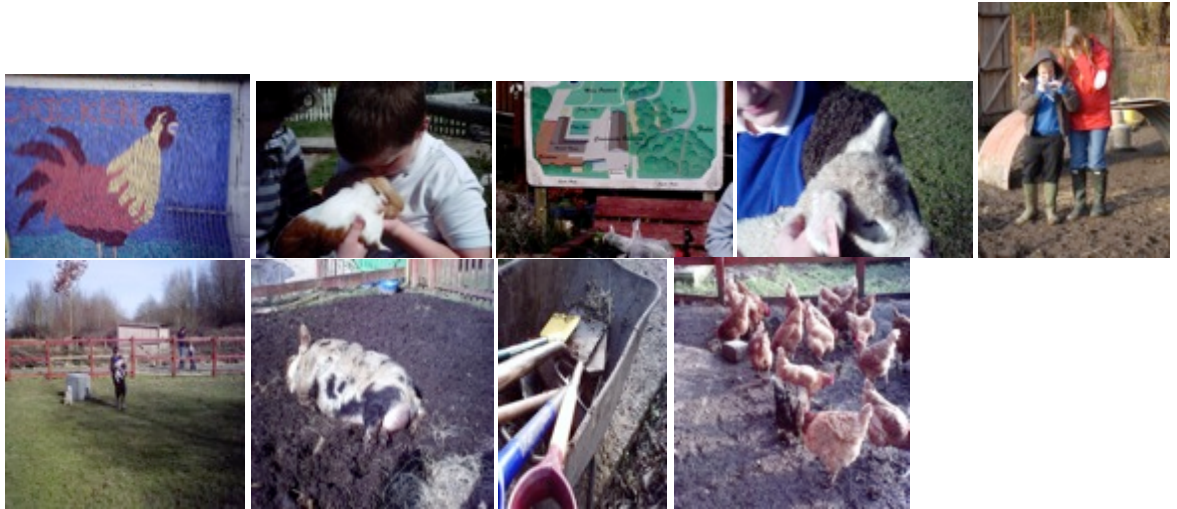
1. Chicken mosaic (displayed at the farm). 2. Harry nuzzling 'Sasha' the Guinea pig. 3. The map of the farm displayed at the entrance. 4.Harry holds a lamb. 5. Harry reviews his pictures on his camera whilst supporting his teacher with a chicken phobia to walk through the pen. 6. Harry holds a lamb for a visiting toddler to touch. 7.Bear 8. Spades 9. The Chickens.

- Harry's took the most pictures, by far; almost double the amount other children took. His images were the most varied of the group. He tried to capture every animal and every aspect of the experience including the journey and arrival at the farm. Harry took some creative images of everyday objects.

- 60 per cent of Harry's images included him. This may reflect his need to feel central/ important in the experience. Many of these images show Harry 'helping' an animal or a smaller child.

- The images represent Harry's overall enjoyment of every aspect of the experience.

5.6.4 Sian: A Family Girl

Sian was initially, the only girl in the group. She did not wish to talk much during the interview and did not wish to be video recorded. She willingly told me that she loves the farm and in particular likes the 'big pig' and the guinea pigs. 'I liked it because I got to do real things with animals' was her best expression but could not elaborate otherwise on why. 'I don't know' was a frequent answer. Sian quickly began to relate the farm experience to her own family animals, her sister's mice, and her father's pet rat, her mother's friend's cat. The farm's guinea pig shared a name with her elder sister and farm staff reported that Sian bonded closely with this guinea pig. Sian told me that she found animals easier to approach than people 'because they aren't going to be annoyed with you'.

Reflecting on her learning, Sian talked largely about playing with the animals. She then recounted learning all about pigs. She talked primarily about the support she received from the staff to do jobs and spoke fondly of these relationships. Sian was reluctant to do anything without continual adult motivation, but enjoyed and seemed to benefit from this one to one contact. 'When *Jenny* was with me, I was good at stuff'.

During observation at the farm, Sian was at times uncharacteristically quiet. She did not enjoy the 'mucking out jobs', moaned and called upon staff support continually. Even this, after initial visits she did sensitively without upset or volume. When happiest, Sian perceived herself to be 'playing'. After the initial few months, once given responsibility for her chosen guinea pig, Sian happily took care of the animal and all its needs without support. Observations of this showed that Sian chatted happily to the animal without stammer, speaking softly, mindful of not startling the animal in any way. 'Bear is really

funny; his nose goes up and down. When you go to see him, he stops eating and comes and pushes you. That's why I like him the best'

Sian's Images:

1. The Farm entrance. 2and3. The Guinea pigs. 4. A close up of one of the goats. 5. A close up of one of the chickens.

- Sian took numerous close-ups of animals or parts of animals. Many of her images were so close, that they were too dark/ unfocussed. Sian held a strong desire to get as close as possible to each of the animals. This mirrors her tendency to invade other children's personal space.

- Several of Sian's pictures were of other children posing for her, often with their friends. None of her pictures showed children posing as her friend. I felt that these images represented her desire to belong.

- Sian had captured at least one image of every animal on the farm. The majority of her images however, were of the guinea pigs.

5.6.5 Jack: Mr Reluctant

Jack was the only child in the group who did not really wish to go to the farm. Initially, he enjoyed 'getting out of school' and had a fondness for the animals. However, Jack was very image conscious, would not wear appropriate clothing for the farm visits and therefore once cold, or at risk of becoming dirty, became stressed and started to demonstrate challenging behaviour. Jack received support and several warnings, before his place in the group began to undermine the experience for the others, causing them to

leave early, worry about group dynamics, and at its worst, join Jack in his delinquent behaviour. The decision was made to terminate the experience for Jack. This was an important lesson. Without the full commitment of the children, alongside the understanding of the elements they should commit to, such as appropriate clothing, abiding by Health and Safety guidance, would the intervention have been successful? The teacher reflected that Jack had been considerably demanding of her sole attention, an experience which she found draining and which frustrated her attempts to support other children in the group.

Jack is an only child, and lives with his mother. She is devoted to Jack, who she describes as 'the man of the house'. Jack swings between pseudo-adult behaviour and that of a small clingy infant.

I interviewed Jack both during the intervention and after the decision had been made for him not to continue. When I observed him at the farm, Jack was well behaved, but on the periphery of activities. Jack jealously guarded the attention of the teacher and was hyper-vigilant to the other members of the group who were considerably more pre-occupied and involved with the animals than with Jack. I wondered how the experience might have been for Jack visiting the farm alone.

Jack expressed that he enjoyed the farm, 'not doing work' and 'being with the animals'. However, he lamented over the jobs required of him and the 'bad smells'. He felt that staff had been unreasonable and believed that 'if he was good' he might re-join the group. Jack was able to comment on elements of the farm that he enjoyed, such as piglets, and holding the smaller animals, but overall, his recollection was about unpleasant smells, feeling cold and wet, and 'other children annoying him'.

I felt that Jack was disappointed, but not unduly upset not to be continuing to visit the farm. I felt it more likely that the experience of rejection was felt more acutely than the loss of the experience. He did not fully understand why he would not be allowed to continue. When I asked him what (if anything) he would miss, he answered 'Will I still get to keep the camera?' Questions remain as to whether a child who does not express enjoyment for an intervention such as the farm visits, can benefit.

Jack's Images:

1. A close up of Bear. 2. A close up of one of the sheep. 3. Two rare breed chickens. 4. General shot of the chickens feeding. 5. Jack and friend pose in the farm's picture board (Jack as the owl)

- Jack's images were both artistic and unusual. He captured unobvious images that the others did not, suggesting that he viewed the farm very differently, and representing his pre-occupation with how things look.

- The teacher described Jack as 'obsessed' with the camera, and unable to focus on the tasks as a result of it.

- The images present a different impression to that in interview, or the opinion given by the staff. Jack clearly did get to know about the details of the farm, capturing close-ups of animals, representing personality, activity and aspects that would not necessarily have been presented without his images, such as the picture above of Bear the Boar, the chickens feeding. Whilst Jack may not have involved himself physically with the animals, the images show that observationally, he did.

5.6.6 Maggie: The Nurturer

Four months into the pilot, Jack was replaced by Maggie. She was selected within the original criteria, but primarily as a child who would mix well with the other four students. Maggie rejects any attention or care offered her, which might highlight her as different from the boys. As such, she often appears tense. Maggie has enjoyed the company of animals for much of her life and volunteered that she felt at ease with them.

Maggie took to the farm quickly. She enjoyed getting 'stuck-in' to jobs, and instantly showed a nurturing capacity for both the younger animals and the boys in the group. Maggie was confident to hold chickens, lambs, guinea pigs and rats and was observed showing others how to hold them, with careful instruction and subsequent supervision.

Maggie's own reflections on the farm were of obvious enjoyment. She became animated, talking of all she was able to do. Her preference was for the lambs and the guinea pigs, which given choice she was seen to sit with silently and pet. When I asked Maggie what the farm might have done for her, she was unable to articulate anything. Observations confirmed that the farm had offered Maggie a space to stop and observe, to relax, and to demonstrate from a position of strength; others looked to Maggie for her knowledge and abilities with the animals~ and offered her an outlet for the expression of her female nurturing capabilities.

Maggie's Images:
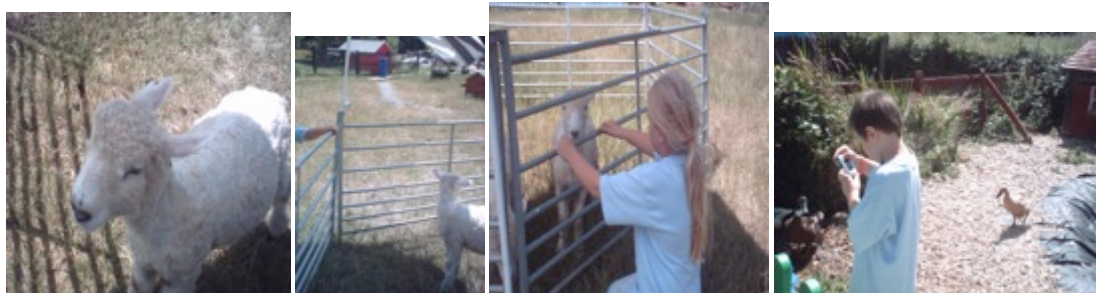
1and2. Lambs in the pen. 3. Maggie petting the lamb. 4. Maggie captured a picture of Kevin quietly photographing the ducks.

- Maggie took the fewest images (and had the shortest experience at the farm).

- Maggie started visiting as the lambs arrived. Her photographs were almost entirely of the lambs. These images showed the lambs alone, Maggie holding them, and showing others how to hold them.

- A few other pictures showed the guinea pigs, and a photograph of Kevin watching the ducks. Maggie's images suggest an outsider/ observer of the group.

5.7 Interviews with Farm Staff

Throughout the observations, it was apparent that there was significant importance in the ethos presented as well as the presence and facilitation of farm staff. All six children during at least one interview nominated staff as a significant contributor to the success or facilitation of the experience. In order to examine this phenomenon and to establish a comprehensive understanding of the purposes and processes involved in the context overall, I conducted interviews with farm staff individually, and along the same lines as the children, beginning with one central question: 'Tell me about your role here, how you came to do what you do, and the experience of working with Wildwood school', reflecting back answers to encourage elaboration of the individuals own pre-occupations. This

question was selected across contexts to encourage free-flowing conversation, starting the interviewee from a pragmatic descriptive description, but inviting more emotional and subjective reflections. In doing this, I was inviting participants to consider their own viewpoint and contribution to the impact of the interventions, as relates to the central research question. The rationale for this method of interviewing was to let the story of the individual present the data rather than shaping the outcome with any preconceptions I may have. Following this question, the FANI method enabled me to reflect back on answers and encourage development from the areas focussed on by each individual (see 4.5.5). The following emerged.

5.7.1 Peter, Farm Manager: 'Facilitating Freedom to Grow'

Peter described his role at the farm as a co-ordinator and communicator between the management committee, a group of local volunteers who define the long-term goals of the farm and the staff team, who implement these. He rarely works directly with children.

Peter talked with passion of his 20 years' experience working at city farms. He believes them to 'make the world a better place'. Peter talked frequently about freedom. He spoke excitedly around 'giving people power' and 'making a positive impact'. He believes that without such ventures, providing interest, a safe and supporting setting, providing community and purpose, some people might even be dead.

The farm offers local residents who live in flats usually without gardens, opportunity to connect with the land through the community gardening programme and creates situations for neighbours to speak to one another. Peter noted that in his experience, many visitors are more comfortable relating to animals than people. Perry (2006) supports this theory in discussing severely traumatised neglected and otherwise damaged children,

discussing the neurological impact of trauma and the resultant need for predictable behaviour, which is rarely found in humans.

One of the intentions of the farm, promoted by Peter, is to be informal, and friendly. Staff work to ensure that signage around the farm indicates freedom rather than restriction. Peter also insists that staff promote a 'meet and greet' atmosphere, so that all visitors feel welcome.

I asked Peter about the children. He believed that the vast majority like adults, experience a sense of freedom by coming to the farm. He noted that the overall, children become absorbed, engaged and involved with what they do. The smaller minority can appear initially quite 'stand-offish', but Peter felt that this feeling was temporary and experienced when children are out of their comfort zone. In these circumstances, staff direct children to the animals, who quickly 'break down barriers', of a metaphorical kind. Animals act as a conduit for conversation and interaction with other children and adults. Peter believes that the impact of the farm on children is that it widens children's experience, from simple things such as explaining where food comes from, to the more complex issue of facilitating relationships. Important lessons are to make mistakes, experience freedom and to grow. This was confirmed in observations where children were gently directed, supported and forgiven when making mistakes, or deliberately behaving in an unacceptable manner, without disparagement, and therefore enabled to take greater risk and feel the much talked about freedom.

Regarding the animals, Peter believes that the 'livestock', (rather than 'pets' ~ farm staff consider the animals a part of the production) are very tolerant, without stress and enjoy the attention lavished on them. He feels that whilst not intentional, working at the farm is a

purposeful and meaningful career from which he feels enormously rewarded. 'The only downside' said Peter, 'is mud!'

5.7.2 Karen, Education Manager: 'Natural Responses'

Karen's job is to promote and facilitate learning on the farm. Karen works across animal care, gardening and also recently has begun leading a forest school on the site. Karen's motivation is around contact with people, a sense of community and a sense of connection to the land. She enjoys facilitating creativity and seeing others enjoy the same. She noted that some people experience tension and put pressure on themselves to 'be creative', defining themselves as 'creative' or 'not creative' but feels that showing people the door to their own creativity is a satisfying and rewarding experience, which facilitates the development of confidence.

Regarding the children who visit the farm, Karen reflected that she sees a variety of reactions, from the youngest children who are either 'terrified' or 'completely in love' with the animals and both reactions change. Older children, such as the school group quickly become immersed in the experience, attached to the animals and are often reluctant to leave. Karen thinks this 'immersion' is a natural response for most children (see 5.8.3). Once children become older, the farm encourages individuals to become 'volunteer farm hands' and she feels that the responsibility that this brings encourages greater social interaction, leadership qualities, maturity and an accelerated knowledge about the animals, as children are no longer visitors, but 'part of the team' who provide care and ownership to the animals. Karen volunteered that the farm staff view the children from this school as a favourite group. When I asked why this might be, she spoke about the children's interest, questions and enthusiasm for the experience. Karen noted that children from school are 'very intense' and need constant stimulation, but farm staff feel rewarded by their

engagement, eagerness to learn and enjoyment and enjoy passing on information to 'the little sponges'. Karen described the children's 'deep care' as different to the average child visitor. The key reason for the children's positive engagement Karen felt, was the willingness of school staff to get alongside the children in working with the animals and staff's own determination to support and extend the children and facilitate the most learning.

Karen talked frequently of 'natural' responses, which she feels are part of a children's make-up around animals. Children usually want to feed the animals. I wondered if this is an expression of trying to connect with the animal, and elicit a response. Karen feels that doing so helps children 'get something out of the experience'. Another example she feels is the fascination with the sensory experience of the farm. We talked about 'Bear the Boar', a regularly mentioned favourite of the children, who responds to a scratch around the ear or a hand full of corn by grunting and nuzzling the children, who generally love (and perhaps slightly fear) this contact with an enormous swine and collapse in giggles. Karen noted that the small and vulnerable animals, be those guinea pigs or the new-born lambs tend to have the greatest draw for the children.

Almost as an afterthought, Karen recounted spending many of her childhood hours at a local stable, just helping out. She recalled 'being outside and just doing physical things', which led to walking, being in the woods and a love of nature in general. She feels that she therefore identifies with the children and considers there to be every possibility that their limited contact at the community farm, being outside, exposed to nature and responding to animals might positively affect their emotional wellbeing and the determination of their lives profoundly.

5.7.3 Jenny: Livestock Co-ordinator: 'Change Outdoors'

Jenny has responsibility for 'everything to do with the animals', including the buying, selling of livestock, coordinating volunteers, including school groups, to care for the animals, some teaching of animal handling and oversees the selling the produce. She started working at CF after years of working in offices because she enjoys animals and feels that she is giving something to the community. 'It doesn't matter what you do in an office; it's still an office. I have to be outdoors'.

Jenny feels rewarded by watching children 'change', She noted that often some older local children who come unsupervised can seem initially quite hyperactive, loud and unruly, 'some come in and throw stones at the chickens and ducks', but once they engage with staff and animals, learn to respect the animals and behave in a much more measured way towards them. When children cause trouble, staff make a special effort to involve them in order to re-educate them rather than 'ban' them. These children often become the greatest advocates for the farm in the community.

Jenny believes that children learn a lot about the farm in terms of where their food comes from and animal care 'much more than the average adult'. Half of the farm volunteers are under eighteen years of age. Many of them have suffered bullying in school and find the farm facilitates friendships and subsequently a sense of confidence. Jenny feels that being outdoors plays a really significant element in this, as is having other people to talk to and listen to them. She elaborated that it was her belief that the farm benefits less privileged children more than others. In her experience, these children have had a limited experience with animals, and once over their fears they become very quickly absorbed. With less interests and much more to learn, the experience is more fulfilling.

Jenny talked about having a better understanding of children in general through working on the farm and having learned a lot from her colleague, Karen. Jenny feels her love for the outdoors is in her genes. Both her parents were farmers. I reflected back to Jenny that she reported all aspects of the experience as immensely positive. Jenny reflected on this and commented that she enjoyed all weather for the different feelings it evokes~ again reinforcing her love of being outdoors. Jenny paused and lamented that 'well I suppose some days you can feel like all you've done is told people off, which isn't great, but those days are very rare.'

I was left with the feeling of a very calm, knowledgeable optimist and considered the positive and powerful impact of this support in engaging in any learning activity.

5.8 General Findings: Images

Children were encouraged to take photographs, which were utilised as a supportive framework to talk to during interview (see 5.5). Collating and examining images captured by children presented in itself a unique ethnographical journey. Whilst there is much debate around the reliability of image-based interpretive research (Prosser, 1998), five themes resonate with the children's stories, confirmed through the children's own elaboration in interview and exemplified during observation.
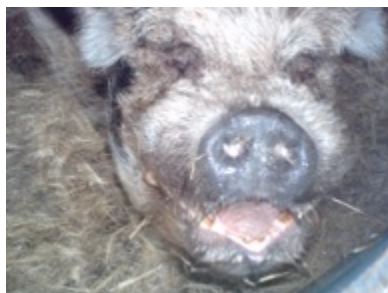
5.8.1 Relationship

There were multiple images of 'Bear the Boar' representing the children's attachment to him. Bear is a 'pet', which is unusual at the farm and responds to children with attention, nuzzling and anthropomorphic comical expression. He likes to be rubbed and scratched like a domestic animal, but due

to his size, children are exposed to a sense of vulnerability in their relationship. The incongruousness of Bear's size, with these neotinous expressions seem to engender affection from everyone who encounters him. Gould (1980) talks of this 'juvenility trigger releasing mechanism for affection and nurturing' (p.101). It was this engendering of affection combined with 'Bear' welcoming repeated visits with a seeming familiarity that supported a sense of relationship and acceptance. The Farm, and the animals in particular presented multiple opportunities for the exploration of relationship skills including interaction, communication, compromise, care, nurture and trust. Accompanying staff reported improved relationships over the course of the intervention and some transference of these skills immediately following each visit, back into the classroom.

5.8.2 Trust

The children were given opportunity to demonstrate that they themselves could be trustworthy, by being the sole carer whilst they visited for a chosen animal. Many of these animals could be crushed; others could be easily startled or hurt. The children enjoyed and respected this trust put upon them. Equally, the children needed to demonstrate trust in the animals and the staff who ensured the children of the animal's temperament. Wading into a cage with an unfamiliar animal demands a range of skills including trust that the animal will not hurt. Trust was initially raised by adults and talked about explicitly with the children, through situations repeatedly experienced both in terms of their behaviour and in terms of the need to trust the animals, their instincts and to recognise that the animals were

dependent on (and therefore trusting in) the children. Over weeks, this was subsequently initiated and talked about by the children.
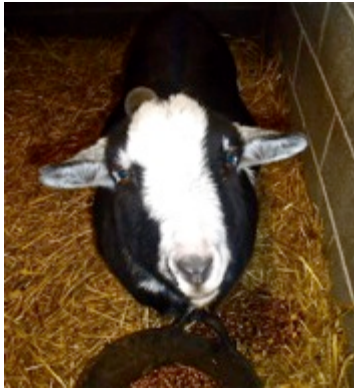
5.8.3 Fascination and Absorption

The sense of magical fascination that certain animals provided; which was different for each child, led to emotional absorption. The animals were not simply activities, but drew children in to intense observation and close contact. This resulted in children developing strong bonds with some animals and feeling a sense of connection. Children subsequently became both curious and reflective, learning quickly about the needs of their animal and were eager to develop the provision for them, questioning and suggesting better housing, food or different ways of care. Many of these ideas were adopted by farm staff (see Karen, 5.7.2). This ability to alter the environment around them, in turn is linked to well being and achievement (Quayle, 2007; see 3.6.4)

5.8.4 Nurture

There is a human tendency towards a fascination with the young of a species. (Lorenz, in Gould, 1980) The piglets and lambs proved that this was no exception. Adults and children alike cooed over the cute neotinous features of the young lambs and described feeling nurturing and protective towards them. The young animals engendered a sense of empathy, or perhaps an opportunity to express appropriate control; to nurture a vulnerable animal. Whichever was the root reason for the fascination, the lambs and piglets evoked a sense of calmness, serenity, nurture and maturity.

5.8.5 Responsibility

 Each of the animals explicitly required children to take responsibility and begin to nurture. None of the children showed any difficulty with this. For the boys, Kevin and Jack in particular, I felt this offered a legitimate space for their softer nurturing personality, without fear of being mocked by streetwise peers. Many of the group have experienced a lack of nurture in their own lives. This has led to challenging behaviour, which in turn has led to the removal of any opportunity for trust or responsibility. The animals offered no judgement of this, but simply required nurture and gentleness, allowing the children to give and consequently share in, the feeling of care.

5.9 Supplementary Evidence

Two further case study examples are summarised here, providing further evidence that address the research question. These include a story of increased confidence, participation and stress reduction, from a parent at Wildwood School who approached me directly to express her pleasure with the impact on her son of working alongside the school dog and the story of a '*Chicken Club'* set up at Wildwood in order to learn about chicken care at the same city farm before embarking on the adoption of some school chickens.

5.9.1 One Boy and a Dog

B started at his BESD special school in October 2008, when he was six years old. B has a statement for BESD, a diagnosed attachment disorder, a history of some significant trauma and was at that time under investigation for other metal health issues including

depression, or Asperger's Syndrome. The child and adolescent mental health service (CAMHS) did not complete their assessments. They discontinued working with B and his mother, as B was 'too aggressive'. B presented as a sullen, depressed child, rarely smiling, unable to join in with other children and having a particular opposition to the instructions of women. B was regularly restrained for aggressive and violent behaviour towards other children and staff. B although making slow and steady progress in his learning, showed significantly greater cognitive potential and in the first two years he was at the school, showed little improvement in his demeanour, his behaviour or his attainment. In December 2010, B was taken along with the rest of the school on an outdoor ice-skating trip. B did not wish to participate and sat outside the rink alone in freezing temperatures for twenty minutes watching, looking sad. Staff tried to cajole him, offering support, distraction, conversation, all of which was declined. The school dog (with a member of staff) approached B and his demeanour changed instantly from a sad and anxious expression to a lighter, smiling and more relaxed one. B was fond of the dog at a distance, having stroked it in passing and accompanied others on dog walks occasionally. On this occasion, the teacher offered B the opportunity to walk the dog alone, within certain parameters and B accepted. Within minutes, B was smiling, running, playing with the dog, then laughing and giggling. Such was the change that a number of staff stopped to watch B. B's teacher noted this too.

On return to school, she initiated multiple opportunities throughout the day for B and the dog to spend some time together, the dog was utilised as reward, incentive, and even de-escalation. When B had to be held, the dog was brought into the room. Not wishing to upset the dog, B stopped struggling and fighting. Every time. B was applauded for his skills with the dog and given the daily responsibility of walking him, holding him for the teacher, reading to him, feeding him treats and showing other children how to handle him.

When in the dog's presence, B was relaxed, chatty, responsible and child-like, attributes not otherwise typical of to B. B's mother too noticed a change. B, who formally 'hated' school, would come home and relay stories of his day, mostly about the dog, but also increasingly about his learning. This marked another change. B slowly and steadily started engaging in class. He began to reveal interests, ask and answer questions and began to make rapid academic progress. B's mother was so impressed with the change in him, she purchased a puppy for B to care for at home.

By February 2012, B was still at the school, still retained a statement of BESD; still often gave the appearance of being sombre, even depressed on occasion. However, B was now working at age-appropriate ability, had frequent moments of pleasure, some friendships and went for weeks without violent or aggressive incident. He no longer visited the dog as often, but when he was stressed, he would walk out of his class and seek out the dog to talk to, walk or just sit in silence. After a period of time, he would return to class and continue with his learning.

B's improvement cannot be attributed solely to his relationship with the school dog. Nevertheless, B's mother felt that for the first time, B managed to negotiate a relationship and in doing so, discovered that he could relax, and share some of his difficulties, subsequently enabling him to learn.

5.9.2 Chicken Club

This venture began as a lunchtime club for children who self-selected to attend. In this example, what emerged from the data was the unexpected social and emotional impact of the club on the children.

The club met for half an hour per week for eight weeks visiting the local community farm to learn how to care for chickens. Each week, the children were taught about one aspect of care for the chicken, tested at the end of each session on their new knowledge and presented with an egg if they got the question correct. This training would culminate in a certificate in chicken care, presented by the tutor, the livestock manager at the farm. The group would subsequently take on the responsibility for selecting and caring for a group of school chickens, involving daily care and the supervision of other children in attending to the chickens.

The group was overwhelmingly popular. Out of fifty-four children who attended the school, forty-eight elected to be part of the club. Seven children were selected across the classes, beginning with older children, with the premise that younger children would get a turn in subsequent clubs.

The evaluations by farm and school staff reported:

- Planning of the club was essential. Without careful staff facilitation, structure and routines, the excitement of the children overwhelmed the task. When staff were prepared with routines and boundaries as well as carefully selected tasks, the children's enjoyment flourished.

- The absorption of information far exceeded expectations. Children, even when appearing not to be listening had retained information on the care of the chickens. Questions developed week on week to test previous weeks learning. Even the least able of children were able to retain the learning from all subsequent weeks.

- Following the completion of the club, and with taking on responsibility for the school chickens, class teachers reported that the esteem of the seven children flourished. The opportunity for responsibility and feeling that they had some knowledge or expertise in a field allowed children to feel 'special'.

5.10 Summary and Conclusions

The purpose of the case study was to evaluate the experience a group of five primary children from a school for children with BESD, over the course of a year whilst they engaged with farm animals at the local city farm in order to investigate the social, emotional, academic, and/or behavioural impact of integrating animals into education.

The visits were set up as an additional intervention for a specific group of children with the aim of supporting children socially, emotionally and behaviourally.

The highlighted aims from the school's perspective ranged from engaging the children in community involvement, to physical contact and the general development of social and emotional skills. The staff at the school and at the farm in interview at the end of the year felt that the aims of these intervention had been fully met, so much so that the intervention has continued and expanded to other areas and with other children.

At the start of the year, the school undertook a Boxall Profile, an assessment of behaviour, social and emotional difficulties, for each child. This process was repeated at the end of the year. Staff reported that improvement was shown in areas to do with partnership and tolerance of others, and a developed sense of self for each of the children completing the experience. Whilst the farm cannot be isolated as solely responsible for these improvements in behaviours, when examined alongside that of peers who did not participate in the farm initiative, there were more dramatic improvements observable in key areas targeted by the intervention for each pupil who participated in the animal activity for the full year.

The observations revealed that the environment provides opportunity for positive learning experiences, with explicit learning about animals, people and when internalised, provides children with opportunity to reflect on and learn about themselves.

The impact of the animals on the children was generally favourable. Aside from one young boy who failed to engage in the process, specific oversight of an individual animal, or group of animals, enabled the children to feel responsibility, inhabit a position of trust, and feel a sense of belonging, and arguably, when considering the place of Oxytocin (Daly-Olmert, 2009; Moberg, 2003) also develop a bond (see9.4.5).

The interviews revealed that individual children gained very different things from the visits. Overall themes included children's relationship with and preferences for different animals, confidence, enjoyment, the reduction of stress, leadership, communication, and a sense of group identity. Worryingly, each of them also referred to experiences they knew of involving animal cruelty or death (see 4.5.3), though these experiences did not in any way relate to the interventions. It could be argued therefore that a greater awareness and understanding of how wrong this is has evolved from being in a context of new and satisfying experiences alongside the animals.

The importance of staff contribution in facilitating the engagement for the children with animals was evident. In interviewing staff, I sensed that their own personal story was a significant contributor to the motivation for the work they do. Alongside children with BESD, this contribution is more significant facilitating not only the experience with animals, but also the interpretation of such and the opportunity for relationship with adults. Thus children were able to begin to practice the skills of attachment.

The images revealed similar issues to those arising from the interviews, reflections of the process, nature and content of the children's learning. There was a general fascination with individual animals for whom the children were allocated responsibility, either the need for a detailed overview, or a need to focus on one thing in particular, and a predominance of the central characters.

In this case study, analysis of the data demonstrates that there was social, emotional and behavioural impact. This was observable whilst at the context and reported on in interview. Academic impact was both commented on and inferred through interview by children and adults. Staff involved, perceived the intervention as therapeutic, whilst children's expression of enjoyment, and demonstration of absorption and fascination support the findings.

I conclude that there was an overall positive impact at this context from the intervention. There is correlation in the highlighted benefits mentioned in the study with presenting deficits evident in children with attachment disorders, (Geddes, 2006) which is fully explored in Chapter Eight. Questions remain as to the transferability of the skills gained into the classroom, over time, or the depth of the learning.

Chapter Six

Case Study Two: 'Horse Confident' at Great Oak Stables

'There is something about the outside of a horse that is good for the inside of a man'

Winston Churchill, (date unknown)

"…an interaction between the vulnerable child and the rescued racehorse that built both of their confidences up to such an extent that before too long a bubbly little girl would arrive chattering gaily, and a recovering horse would whicker at the sound of her voice. " *(The Horse Confident Programme, Great Oak Documentation, Feb 2010)*

6.1 Introduction

This is a report of the data collected and subsequent analysis of from a case study conducted at Great Oak Stables. Great Oak is a charity working with ex-racehorses and with children with Special Needs offering young people an intervention involving a series of visits to the stables, designed to educate and inspire by interaction with the horses and other animals.

This case was selected due to the variety and logistical possibilities. The Stables (and school) was within travelling distance for frequent visits, worked with horses rather than farm animals, and the programme offered variety in that it worked with visiting schools rather than a single BESD school. Additionally, the stables advocate the intervention and were keen to associate with research to test and evaluate their beliefs. This Chapter summarises the findings and analysis to present emergent themes requiring subsequent analysis and triangulation within the wider study.

Supporting this case study is a report on a horse-riding initiative with children from a Primary BESD school adding support to the evidence gathered through the case studies.

6.2 Context

My first knowledge of Great Oak was a magazine article outlining the *Horse Confident*[20] project. I approached the stables with a view to conducting a case study and was welcomed by the project's teacher and intervention developer, Liz. My initial visit to the stables took place in February 2008, and involved discussion of the research, a tour around the facility and an opportunity to learn about the history and context of *Horse Confident.*

In this context, my role was that of practitioner observer (Stake, 1995) observing with the lens of a teacher; and evaluator in as much as the data suggests merits and shortcomings. Both a biographical and interpretative role was also engaged within interview and the subsequent analysis of the data.

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[20] The name of the programme has been changed for anonymity

The owners of Great Oak, are self-confessed lifelong lovers of horseracing. They began the Stables with the intention of rescuing, rehabilitating and where possible re-homing ex-racehorses. The horses include those who have suffered neglect, abandonment, and mistreatment, an interesting parallel with some of the clientele from local BESD schools attending the *Horse Confident* intervention. The charity prides themselves in never turning away a horse in need. Located in a distinctly rural spot, the 200 acre ex-dairy farm, houses both horses for re-homing and some long-stay horses, unsuitable for re-homing in the 'sanctuary'. The latter are used to support the charity's work with children.

Following the owner's observation of an interaction between a vulnerable child and one of Great Oak's rescued racehorses, the *Horse Confident* programme was initiated. *Horse Confident* had at that time, been operating for around four and a half years, with much of their business coming from word of mouth contact. Overseen and developed by an experienced Special Needs Teacher, Liz and supported by an assistant teacher, Helen, the programme's stated aim is to 'educate and inspire children with Special Educational Needs' (Great Oak documentation, Feb 2010).

Liz has developed the curriculum for *Horse Confident* from the start, creating what is now a comprehensive programme of intervention for a range of visiting groups spanning children between Key Stage one and four, (approximately 50 percent of those they work with are primary pupils and around 50 percent secondary). They work with individuals and groups of up to eight children; with a range of special educational needs including Autism, Asperger's Syndrome, Moderate Learning Difficulties, or Complex Learning Difficulties, and Children with Emotional and Behavioural Disorders (BESD). The charity advocates that despite this wide remit, that benefits are available to all groups of children (with special needs or otherwise) in terms of raising esteem, confidence and knowledge and

experience of handling horses. My focus concerned whether the school felt that there is any particular or specific impact for children with BESD.

Liz's own background is working with pupils with BESD, and is responsible for both the development of the intervention and the recruitment of schools. The stables, perhaps in relation to what Liz feels most comfortable with therefore works predominantly with children with this special need. Some young people in secondary education are able to acquire an accredited OCN qualification (Open College Network) comparable with national vocational qualifications (NVQ) and enabling them to consider work in horse-related employment through their work at the stables. The intervention for secondary children is usually aimed explicitly at achieving these more measurable and definable outcomes.

Great Oak documentation presented to BESD schools states that the *Horse Confident* programme is primarily aimed at pupils displaying behaviours such as high anxiety and/or low self-esteem. (Great Oak documentation for schools, accessed February 2010). The children visiting from a nearby BESD secondary day school, selected to participate in the study, suited this remit. Within these parameters, the school was identified and selected by Great Oak for participation in the research.

Each week, a group of six, eleven and twelve year olds visited the stables for an afternoon session of approximately two hours. The format began with classroom time to recap and outline the afternoons activities, time out in the stables to complete the activities, involving feeding, cleaning of stables and the farmyard as well as some grooming of the ponies and racehorses followed by a debrief and evaluation exercise back in the classroom (see 6.4).

6.3 The Children

Children attended Great Oak stables each Monday afternoon for a period of six weeks in all weathers, including snow. The children were supported by three school staff; the SENCO who had initiated the intervention and two Teaching Assistants**.**

For anonymity, the children are referred to as Alf, Ben, Charlie, David, Ed and Frank. Although consent and explanation of the research had been outlined in advance, my first face-to-face meeting with the children was during the first observation. This was the last visit of a six-week intervention. One session was missed due to the school being closed due to heavy snow. The following were initial impressions, tested against staff presentation of the children, and questioned reflexively; using 'myself' as a tool in the research (Etherington, 2004) drawing on my own knowledge, experience, understanding and research following subsequent observations and interviews.

6.3.1 Charlie was outspoken, swaggered and gestured, offering the impression that he was the 'top dog' of the group. He spoke confidently, loudly and tried hard to entertain the other children. Whilst he appeared confident, staff told me that Charlie suffers from very low self-esteem and self-confidence.

6.3.2 Frank was visibly silent and withdrawn. He seemed uncomfortable being amongst the group and physically hunched. When addressed he spoke very quietly and only when spoken to. For much of his school life, Frank has been an elected mute.

6.3.3 Ben was physically larger than the rest, quite loud and recalled a lot of information from previous sessions. He was impatient with those who spoke quietly (Frank) and those who couldn't remember previous weeks learning.

6.3.4 Ed seemed nervous and didn't speak throughout the observation. The SENCO, later told me that he was a very troubled young man with some moderate learning difficulties, who is significantly introverted.

6.3.5 David was the 'chatterbox' of the group. He clearly craved attention of any sort, sitting closest to the teacher, offering as many answers as he could and fiddled with his own camera, which he brought with him. As soon as the group moved from the table, David gravitated towards me to talk about himself, his camera, the farm…anything!

6.3.6 Alf made little impression at the initial group. He was alert and focussed but not overly outspoken. The SENCO referred to Alf as 'a Natural' at Great Oak.

6.4 The Process

Liz and Helen operate *Horse Confident*, an intervention designed to support social and emotional development by offering a timetable of sessions at Great Oak for between six and ten weeks. A group of children visit once per week with their school staff and engage in multi-sensory activities, tailored to the specific needs of the children, whether these be practical skills, group building or individual needs. Activities included grooming, cleaning out smaller animals, collecting leaves, muddy walks, feeding, and always something to do with the horses. The staff encouraged the children to think about their sensory responses to things: how things felt physically and emotionally, the smells, and to talk about these feelings. The focus of the group is identified through an initial consultation conversation between the referring staff and the staff at Great Oak. Following each session, children complete a simple evaluation identifying what they liked, disliked, learned and found challenging; the referring teacher also participates. A debrief is held, to evaluate and further tailor the visits based on the children's responses and feedback. The individual

programme is generally built around activities involving 'looking after', caring and providing for the smaller animals, (goats, sheep, ponies, chickens, dogs, geese) walking, gardening, some class based activities and grooming large racehorses under the supervision of a groom. Much of the learning takes place in the conversations between stable staff and children. Liz and Helen have not received therapeutic training for running the intervention. They do not run the intervention however without the support of the staff to ensure the children's needs are supported. Liz is a qualified teacher, and has had an extensive teaching career in special needs. Helen is a qualified teaching assistant and has experience of working with children with autism. Both have considerable experience of handling horses. Most of what they offer, by their own admission, is basic animal husbandry and horsemanship, with personal (and I consider intuitive) interactions. The staff work alongside the children and build relationships.

At the beginning of this period of observation at this setting, I met initially with Liz to explain the research that I was undertaking and to learn about her history, her work and her vision. Subsequently, I sought permission from Great Oak trustees, submitted a proposal and sought permission from the school selected by Liz as a possibility for case study. The school began working with Great Oak in January 2010.

Prior to observing the children at Great Oak, I met and interviewed Liz and Helen (January 2010). Cameras were left for the children's use, to aid discussion in later interview. I then observed the school at Great Oak, (February 2010) and ended my visit by again speaking with Liz and Helen. After three failed attempts due to snow and staffing issues, I met and interviewed four of the children at their school. (March 2010)

After three months (June 2010) I approached the school to re-interview to check out my thoughts arising from their initial data and evaluate any lasting impressions or impact of the intervention on the children. The school, felt that the project had ended and the children had moved on to other things and therefore declined to engage without further comment. A subsequent interview was therefore not possible. Withdrawal from the research without comment was agreed when establishing consent. However, I informed the school that I would present my findings to the stables and should they wish to add comment at a later stage, they would be invited to do so. I re-interviewed Liz and Helen in November 2010, presenting themes and ideas from the observation and interviews and through dialogue, developed and refined those ideas. My perception of the disengagement presented and confirmed by Great Oak staff, was that the project had ended, little evaluative importance had been placed on the intervention and now, other priorities had taken hold.

6.5 The Observation

Two observations were planned at the outset of the study. However, weather and disengagement from the school resulted in only one observation of the group. In addition, I received and recorded in a professional reflective journal, feedback from the staff leading and supporting the groups. These conversations reflected on the group dynamics, the levels of engagement, and the appropriation of activities. This data was incorporated applying principles of reflexivity (Etherington 2004) before 'translating meaning' to themes (see 4.4.6).

6.5.1 Observation One: February 2010

The group of children and two staff from the BESD school, arrived at the stables ten minutes late. In a lively and noisy manner, as they gathered in the classroom, Liz and

Helen enthusiastically and warmly welcomed each individual, speaking to them by name and recalling small connections of previous sessions with each. The group quickly settled and listened attentively as Liz tested the children on what they had been previously taught about the ten 'dangers on the farm', which the children recalled easily. She then went through 'dangers around horses' which again, with some additions, the children were able to recall. In their recounting, it seemed that there was no fear of the apparent (multiple) dangers, and enjoyment of the experience and recollection of the rules. They talked animatedly of being leaned on by thoroughbreds and nuzzled and nudged by goats.

I understand from a later conversation with both school and stable staff that this settled impression took a couple of weeks to achieve. Children were noticeably unsettled on their first visit, expressing their anxiety at things new, potentially frightening and out of routine. At that time, none of the children had previously visited a stables, nor come into close contact with horses. Naturally, they were out of their comfort zone. The comfort zone allows a person to use a limited set of behaviours to deliver a comfortable and stable level of performance without a sense of anxiety or risk (White 2009).

The group moved to the 'boot room' where they dressed in their coats (mostly borrowed) and wellingtons ready to brace the outdoors where it was beginning to snow quite heavily. Ed wore an enormous oversized coat with a hood. The weather was very cold and it was snowing. The children had arrived ill prepared for winter weather. This was later confirmed to have a significant impact on the experience. In hindsight, this lack of preparation may have been indicative of the school's short lived investment in the initiative. The role of supporting adults and a structured plan for interventions is discussed in 8.5.5. Ofsted (2008) in discussing LOtC, note that without careful planning, preparation and follow-up, the impact to experiences is significantly minimised.

The group were given first the task of cleaning out the goats. The children seemed very relaxed with this. They took brooms and pitchforks and responded responsibly organising themselves into groups of which jobs to do. Within ten minutes, children were occupied elsewhere (fetching hay, clearing the yard, filling up water bowls), whilst the supporting adults continued clearing the goat pen, chatting happily amongst themselves. David used his camera to take photographs continuously, with Charlie posing in them as often as he could, Ben offered various animals some distractions. He offered the goat his camera strap to chew, tried to get the dog to eat his folder. Daniel exhibited quite a bit of impatience with the others, particularly if they didn't remember things that he felt they should. One of the LSA's offered her observation to me 'They're a bit distracted today as it's their last day'. My impression of the children was however, that I observed them to be quite focussed and motivated by seemingly unpleasant or menial jobs. I asked Charlie about this. He explained to me that it was fun doing the jobs, because 'looking after animals is what it's about'. He elaborated, telling me that once 'jobs' were done, children (who had proven their ability to be responsible) were allowed contact with 'the big horses'.

A small argument broke out between Alf and David. David told Alf that he wasn't doing the job properly. This was skilfully diverted by Liz and Helen, one of whom, whisked David away to do a job elsewhere, the other directing Alf to stroke the goats. Doing this, he calmed quickly. Wishing to re-engage him, one of the school staff then took him to fetch fresh straw, which he did enthusiastically. The children then fed the goats. I observed a group of boys quite mesmerised by the seeming simplicity of goats eating. Alf quietly asked a goat to marry him, reflecting his emotional response and affection towards the animal. I noted that there were a considerable number of hazards present. This said, the adults were relaxed and easily handed over responsibility for pitchforks, brooms, animal

feed, composting to the children. The children were free to roam throughout the stable yard.

The children were regrouped and taken for a wander amongst the thoroughbreds. The children became noticeably calm and quiet, looking with some expression of reverence and suggesting perhaps an emotional move from comfort to challenge. Liz led the metaphoric conversation here, by introducing the personality traits of the horses (Grumpy Jeff, the nervous crib biter, etc.) leaving the interpretations and comparisons to be made by the children. Children contributed to the discussion easily anthropomorphising with comments such as 'He doesn't like me', 'He is happy because he has a friend' and 'He wants to eat me'.

The group then moved to a grooming activity. Three Shetland ponies: Toy Boy, Poncho and Aran were introduced to the group, and the children were asked to groom the horses with a partner. Frank and Charlie groomed Poncho, supported by Helen who chatted with the boys about Great Oak's website and how they might continue their interest in Great Oak and horses. Frank became animated and chatty within this grouping. He was clearly absorbed in the task and volunteered information about himself to Helen freely. Ed and Ben groomed Aran. Ed elected himself instructor directing Ben and Liz. When it was his turn to groom, he handled the equipment and the horse quite roughly. Ed demonstrated little empathy for the pony. Alf worked with David grooming Toy Boy. This pair was supported by the SENCO. The boys worked cooperatively together. For a pairing who had disagreed within the previous half hour, no tension was evident.

From a seemingly unchallenging task, the children were then invited to groom a thoroughbred. All children were required to wear helmets and these horses were held by

the stable's own grooms, Paul and Robbie. The horse was significantly larger than the children, near double their height. A visible sense of awe, perhaps fear was apparent, perhaps because of the horses, perhaps the grooms, or maybe both. Children in interview later expressed admiration for Paul. There was quiet and hardly a word spoken other than occasional comments such as that from David 'I'm holding a big horse!' This activity continued for almost ten minutes. All children were quiet, concentrating, focussed, in very close proximity to one another and the horses and seemed at ease. Finally, the children were taken inside. Asked to wash their hands and complete an evaluation, all children were acquiescent. They were required to score themselves and to write, both activities, which in my experience, are considerably challenging and provocative to children with BESD, completed without any difficulty on this occasion.

As a last day treat, the children were allowed to try on racing silks. Liz told the children which Jockey's had worn the silks and to which horse they belonged. The children were delighted by this opportunity. Children demonstrated excitement, asked interesting and searching questions, listened carefully to explanations. They were relaxed, laughing, enthusiastic, cooperative and fed one another with compliments. There were no long or fond farewells. The children thanked Liz and Helen and left.

6.5.2 Reflections on the Observation

Reflecting on the observations of the dynamics, both spoken and unconscious, group, human-human; animal-human interactions, presented six prominent themes. These themes were selected, as they represent impact of the intervention as relates to the research focus, for each of the participants in the group

6.5.2.1 Theme One: Staff Attitude and Knowledge.

The engagement of the staff, their attitude towards the children and the initiative and their knowledge of the subject matter played a significant part in contributing to the impact of the intervention on the children. Liz and Helen created a positive warm and welcoming atmosphere: smiles, warmth, encouragement, and laughter. The children and staff arrived and appeared to be at ease. Settling anxieties is an explicit aim for Liz, observed in comments such as 'Fantastic, you know nothing' reinforcing that knowing nothing was not a negative experience and a point from which the children could learn a lot. Experience and knowledge of BESD, attachment disorders and difficulties was implicit within her interactions, evidenced by her skilful blend of assurance, support, challenge and encouragement in her conversation with the children, adapting to the children's needs and anxieties. Both Liz and Helen's pleasure and enjoyment of the children and task were obvious. The use of young, male grooms provided a strong role model for the children who looked, spoke and listened with some considerable admiration.

Conversely, I wondered what the understood purpose of the intervention was from the school's point of view. Misbehaviour meant that some children on other occasions were left behind as punishment. It might therefore be assumed that the intervention was considered a treat rather than curricular. This seemed to conflict with the rationale for the intervention outlined by the stables, who equally expressed disappointment in the school's

commitment to the venture. Liz reported that this however, was a too frequent response from schools who perhaps did not understand the level of commitment in preparation and follow-up necessary to embed the experience (Liz, Feb 2010). This lack of investment in the initiative was additionally apparent with judgements made around and to the children incidentally, which in my experience may affect a child's perception of the experience: 'They are wobbly', 'They are a bit distracted', 'Gosh children, it's so cold isn't it'? These comments could have given rise to difficult behaviour. During my observation however, they did not.

A mixture of personalities, experiences and attitude and therefore approach to the experience was evident. Children had in common a tutor group within a BESD school. None of the children's 'own' staff were accompanying. I wondered whether this had an impact for the good or otherwise. This was later confirmed in interview, when children recalled their 'favourite' session as the one where their own tutor attended.

The power of role models in this context has been much explored. Cooper, Smith and Upton (1994) affirm a significant influence of supporting adults on children with SEBD positively or otherwise citing numerous studies, including those where behaviour difficulties were not only exacerbated, but *caused* by supporting staff. This is an important theme within this case study which I will discuss in greater depth later in this chapter.

6.5.2.2 Theme Two: Physical and Emotional Safety.

Great Oak provides a safe environment. Warm people put you immediately at ease. The environment offers support, challenge, compliments and emotional learning. Subtle analogies are made between children and animal and challenges are discretely issued within a framework of activities with the animals. 'Freddy is frightened of everyone the first

time~ 'How did you feel when you first met him?' (Liz, during observation, Feb 2010) I was impressed to see an atmosphere of calm focussed contentedness with six children with BESD working in close proximity in silence. Whilst physical safety was explicitly planned for, emotional safety was not (see 6.8.2).

A key inhibitor to learning for children with BESD is the need to satisfy a hierarchy of needs as defined by Maslow (1954). He devised the much-quoted triangle (figure 4
) outlining the importance for a person's needs to be met at the most basic level before proceeding to the next. This theory underpins much developmental psychology. Though Maslow's theory has been contested, as being too rigid and indeed whether actualisation is possible (Rodgers, 2004), there remains evidence to suggest there is importance in the elements outlined, certainly for those children with SEBD, who are well attuned to their physiological and safety needs. With this in mind, the observation suggested that in some way, the activities were meeting the needs for providing a sense of safety, even perhaps a sense of belonging in order to allow   children to learn.

Self-Actualisation

Esteem

Love/Belonging

Safety

Physiological
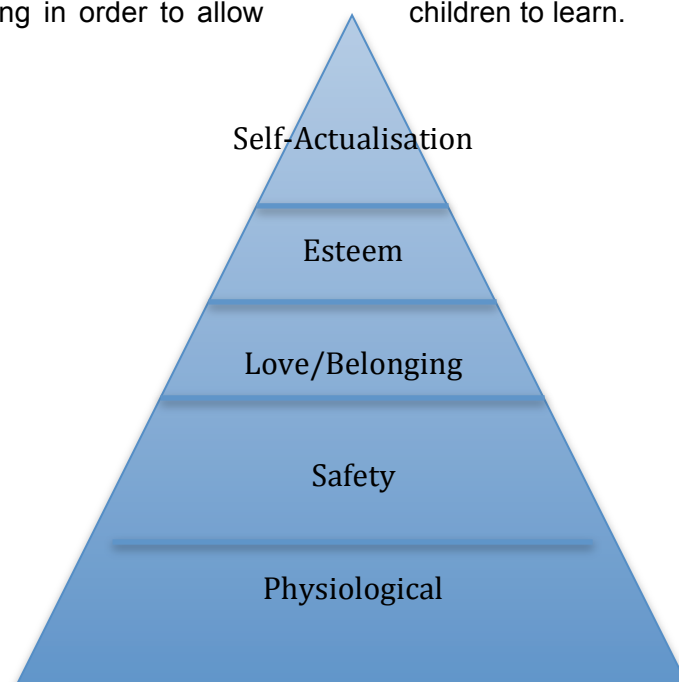
Figure 4:representation of Maslow's Hierarchy of Needs. (Maslow, 1954)

The activities were routine and familiar (this being week six). The children knew the dangers, the rules, the process, the jobs and the expectations. Emphasis was on safety, both emotionally and physically. The evaluation and preparation of activities tuned to the group each week provided continued stimulation and progression. Children asked continual questions and every child was acknowledged and answered. At point of conflict between two children, the children were quickly distracted by staff who redirected them to the needs of the animals.

The impact of the safe climate was evident on return to the classroom. The children demonstrated confidence and optimism, tackling tasks such as evaluating themselves and writing about their afternoon, which in other contexts or circumstances, they would certainly struggle with.

6.5.2.3 Theme Three: The Environment.

Both the physical environment and the learning environment provided contrast and challenge to the children. To get to Great Oak, the road passes through endless green fields and affluent villages. The children came from an inner city environment, some never having previously seen a real horse. Children will likely have seen pleasant and natural spaces and may associate them with happy positive thoughts. The Stables was a bright, airy stimulating space, both inside and outside, the school from which the children came, a less well kept building, with the eye mostly drawn to concrete and vandalism. The anticipation and contrast from their more familiar environments would almost certainly place children out of their comfort zone.

Change, new experiences and challenge, move a person through stages of 'comfort' (see figure 5). Moving from one's comfort zone creates cognitive dissonance, providing tension

between what a person has previously experienced and a new picture or perception. This in turn promotes creativity, new learning and new vision. Being too far out of a comfort zone leads to anxiety and panic, which conversely leads to defensive and protective mechanisms to initiate. Children were supported *not* to feel stressed and anxious, but instead, supported in a positive and explicit learning experience. This, when beginning with children with high anxiety as established in the selection of the group, was a considerable risk.   Being in pleasant surroundings may also have been experienced positively however.

Comfort
Zone

Tension

Anxiety

Panic
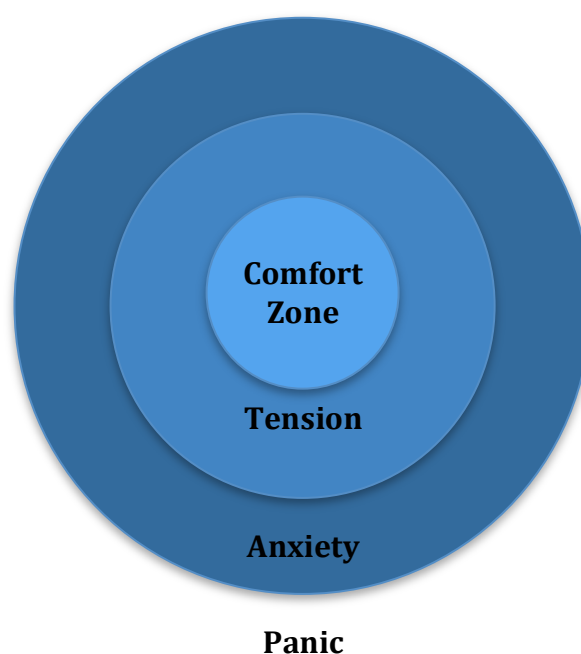
Figure 5: Moving from the Comfort Zone, image used with permission from, The Pacific Institute, 2007

6.5.2.4 Theme Four: Purposeful Activity.

Jobs offer a powerful conduit as a focus for distraction, conversation, for learning about the animals and for the feeling of responsibility. Despite inclement weather~ it was minus degrees and snowing heavily~ the children were engaged and the atmosphere was calm and focussed. The presence of the animals in this was paramount. Children were motivated by the engagement with the animals directly. Each of the activities (cleaning,

grooming) appeared to have a marked affect on anxiety levels, evident by focus, silence and the calm nature of the children's responses. Children responded to the less popular jobs, understanding their purpose in supporting the welfare of the animals.

6.5.2.5 Theme Five: Risk, Responsibility and Trust.

The children were asked to take risks, and offered responsibility. This established a climate of mutual trust. Children responded by conducting themselves maturely, safely, demonstrating initiative, enthusiasm and autonomy. Trust was possible because of the reality of the circumstances. Real animals, real dangers, genuine trust. The animals and the tasks provided a set of rules that are not arbitrary, but real. The children responded to that reality, rather than having to deal with authority and power dynamics, as in Benjamin's idea of relational practice (Benjamin, 2004). Children were both offered trust in caring safely for the small animals and challenged when asked to step into a stall with a racehorse weighing approximately half a tonne. The animals themselves provided the motivation for this exchange of responsibility and trust not usually found within a BESD setting, exemplifying the magnetic attraction of the animals.

6.5.2.6 Theme Six: The Horses

The Horses provided the context and the framework to the experience for the children and enabled social and emotional learning. Whilst some of the afternoon was taken with activities *not* specifically horse related, the children's conversation, motivation and focus remained about them. Children experienced and expressed both fear and ambition, 'Will it kick me?' 'Do you think I could be a jockey some day?' a sense of awe and wonder and being alongside them, once again put children out of their comfort zones. Being in a stall with a racehorse necessitated dependence and trust on the adults at the stables, focus and attention, calmness, an internal locus of control. Each of these skills for children with

BESD, can otherwise take years to bring about. Equally this required adults to be sure that children would be safe, responsible and trustworthy, attributes not always associated with these young people. When with the horses, the children demonstrated an implicit calmness and serenity and remained transfixed with the animals themselves. Other than one child, who remained focussed on his control of the group, the children expressed empathy and admiration for the horses. The impact of the horses in my view, was instant and transformative. Whether this experience lasts given continued exposure to the horses was not apparent. Other research investigating the longitudinal impact of an intervention with horses (Melson, 2001) showed some diminishing of impact after the intervention ended. However, the introduction of these feelings to the children allowed a significant amount of learning not only about horses, but also about the capacity of their own emotions.

6.6 Interviews with the children

Interviews were conducted with four of the six children, one month after completing their visits to Great Oak. One child was absent, another declined to meet with me. The purpose of the interview was to explore with the children, their impressions and perspective of the intervention and to try to elicit any apparent impact. I interviewed the children individually at their school, using their own images as prompts for conversation. Despite having met the children previously and securing consent from the children, the school and the parents, an LSA elected to sit in on each of the interviews. The children may have felt supported by a known adult being present, but equally, this inhibited the opportunity for children to talk freely evidenced by their checking out of answers with the LSA and pauses in children's dialogue interrupted with an adult contribution with suggestions of her own as to how the child may have felt.

Interviews, as in other contexts were led in a FANI Style (see 4.5.5). Following the interviews, attempts were made, without success to re-engage the school to check out the impressions and interpretations of the interview. Reflections were therefore presented to Great Oak staff for comment and contribution. This was through the presentation of a report of themes and responses to which the staff were invited to contribute or comment on. This process was helpful in confirming or dismissing impressions presented in brief supported interviews with the children against deeper knowledge and experience of the children throughout the intervention. It also gave opportunity for the staff to reflect on the delivery of the intervention. This process was disappointing however, in not having this opportunity to check the accuracy of impressions with the children themselves.

6.6.1 General Findings

Complementary to those themes emergent from observations, reflecting on the interviews presented five general findings common to each child interviewed.

6.6.1.1 The experience was remembered positively

All four children interviewed remembered the experience vividly and fondly. They loved being outdoors and around the animals.

6.6.1.2 The influence of adults had significance for the good and otherwise.

Recollections of the experience inevitably focussed around 'Paul the Groom'; and Liz and Helen were afterthoughts of support for the involvement with key jobs. Careful facilitation supported children to focus on the animals and the job, resulting in positive impressions of Great Oak staff. Equally however, the intervention of the school staff may have significantly undermined the experience. After repeated attempts to engage the school staff further to explore, test out and understand the contributions failed, I reluctantly was

left with the initial data only. The one-off comments during the one observation such as 'too cold for the children really' and 'I don't like that animal' dissuaded children who may otherwise have embraced the activities and provided 'hangers' as excuses for them to register their reluctance. This occurred also in interview, where a supporting adult begun by saying 'you didn't really like it did you?' Questions were asked of the school and the stables as to whether there was an underlying root of the negativity experienced. A satisfactory answer was not found.

6.6.1.3 Responsibility, Vulnerability and Trust.

Children very much embraced and enjoyed '**jobs'** feeling a sense of responsibility and enthusiasm. Being trusted to care for the animals alone~ every child reflected on the sense of purpose of doing a 'real' job~ as well as the opportunity to do those jobs alongside **key adults** 'I got to work with Helen' was important. Conversely, a feeling of vulnerability was communicated powerfully as children recalled standing in a stall with a [half tonne] racehorse. This invoked trust again, this time, the children needing to place trust for their safety in an animal.

6.6.1.4 The impact of the experience was short term.

Children enjoyed the experience: they did not associate it with helping them with schoolwork, nor did they consider it as a long-term intervention. It was presented as and considered a 'treat'. Positive aspects of this include that the experience remained positive throughout (no time for over familiarity) and was remembered as a privilege. Additionally, the experience is remembered in a very multi-sensory way (feelings, smells, sounds etc.). This validates the emotional investment in the experience.

Conversely however, in this context, children did not fully embrace the relationships and some children also missed sessions. The weather, being winter had a greater impact on the overall experience than if it had been warmer, or indeed a longer intervention. The long term overflow impact into life and learning cannot be ascertained; though initial verbal feedback provided by the school following the observation asserted some children to be calmer in presentation on their weekly visits and on return to the classroom.

6.6.1.5 Outside of the Great Oak experience, interviews revealed repeated themes including:

- Conversations and reflections on animals in their own lives
- Thoughts to future careers
- Conversations around Animal Cruelty

6.7 Individual Findings

6.7.1 Charlie: Too Cool for School

Charlie came across as confident and the self-elected group leader during the observation. He was quiet, somewhat sullen and reluctant to engage with me during the interview. The LSA seemed nervous about this and frequently intervened prior to Charlie answering some of the questions, to answer on his behalf.

I was told by the LSA, that Charlie presents as 'Streetwise' at School; He regularly creates havoc at school, and is very outspoken in the classroom. During the observation Charlie wore a jumpsuit/ overalls, with no hat or coat. He complained of being very cold, didn't get involved with others, kept a distance. Once back inside, his swagger returned. I observed that he was not at-ease with animals.

Charlie's interview revealed a very limited experience with animals. He was out of his comfort zone. Despite his initial 'front' of 'It was un-cool', I felt Charlie suffers from a low self-esteem and compensates by replaying activities and behaviours which allow him to feel 'safe' and comfortable. Charlie struggles to put himself in a position where his 'strength' might be questioned. Charlie reported that he enjoys football and computer games. He had not had any experience with horses prior to visiting Great Oak, and felt the one thing he had learned was that not all horses are brown. This I felt was a genuine reflection and throws considerable light on how far removed the experience was for him. Reflecting on his time at Great Oak, Charlie commented that he didn't choose to go, and indeed didn't always want to go, but once there, he enjoyed the sessions. (Charlie was one of the children left behind due to misbehaviour on one week). The visits took place through the coldest part of the year and Charlie noted that he hated being cold. In addition, going to Great Oak meant arriving home late, which impinged on his football time.

Asked what the best bits of the visit were, Charlie answered quickly and candidly, 'staying inside'. He went on to reflect further that the 'best bit' was grooming a racehorse alongside a groom to whom he looked as a positive male role model. Charlie could not relate his experiences at Great Oak to school, his behaviour or his learning. He did not feel that the sessions benefitted him in any way explicitly or otherwise. He did however wish to return~ in the summer.

Talking more generally about animals, Charlie relayed a story of animal cruelty he had experienced. He searched for affirmation from myself and the LSA present, that cruelty was 'wrong'. Charlie spoke passionately about it, expressing displeasure and a wish that he had 'known what to do'.

6.7.2 David: Know it all

David is a very defended child. He presented a confident front as 'knew it all' before the intervention began. David enjoyed the experience of Great Oak, but felt that he did not 'need it' as he considered himself to have no BESD needs. During the observation David chastised another child for not doing the job properly~ despite his own actual lack of knowledge, which caused momentary conflict. Throughout the session, David was kept well occupied by adults. This child felt that he had no problems, but was in a special school as a result of being misunderstood and because of other people's difficulties.

His interview revealed enormous enthusiasm for the activities; though he continued to present to me that it was 'boring' as he had done it all before. When asked of his experience, the story was wildly inflated involving riding bare back on the back of racehorses and sliding off backwards at speed. He maintains that he learned nothing; however observations of his involvement and the recollection of his experiences through interview suggest that working with the animals allowed him to explore the possibilities of stepping out of his 'safe' position. David required supervision at all times and a short intervention was perhaps not enough to provide the security which allowed him to lower his façade of 'absolute knowledge' to the point of being able to truly embrace the experience. Nevertheless, the emotions communicated through interview were of excitement, and delight.

6.7.3 Frank: The Invisible Child

Frank is an intensely quiet child; described by his staff as 'an elective mute' for much of the time; hyper vigilant and rarely relaxed in his environment. When in a group setting, Frank spoke only when spoken to. He very much blended into the background. Frank

happily engaged in the activities, and once allocated a job involving the animals (and in particular grooming) and space from the children, he seemed to physically relax and begin to talk, both to the animals and to adults and peers.

His interview revealed that Frank considers animals like family, safe, unthreatening and of significant value. When talking about animals (his own and others), he became animated and expressive revealing a complex and advanced vocabulary. Frank gains positive feedback from helping and caring. Memories of Great Oak unlocked his confidence in conversation. He clearly found a 'safe space' at Great Oak. He said of the experience:

' [I felt] Happy because I got to meet different animals that I haven't actually seen in real life before or got to touch and play with them. Each week I enjoyed it more because I got to see more of the animals and I got to see Po and the new horses there; The animals listened to me, I liked just helping with the goats like tidying them up because most people think it would be disgusting but it's fun because you feel like you're helping them out. I like getting their straw for them too, making it look better and all nice for them.'

6.7.4 Alf: The Sponge

Alf in observation did not stand out, other than being a good team player within the group. Pointed out as a 'natural', He was happy, willing and straightforwardly enjoyed the experience. His interview revealed that with no apparent complex emotions to overcome, he gave himself fully to the experience and remembered and revelled in the details: the learning he encountered (about goats, horses, the ducks); the characters of the animals: 'the three devil horses at the back'; and the overall feeling of well-being. Alf seemed to have absorbed the experience, become absorbed in the experience and would love to return. Alf like each of his co participants noted that he liked Liz and Helen, because they 'helped them' and enjoyed what they set out for them each week.

6.7.5 Therapeutic Value

With further observation and interview, I had hoped as in other contexts to provide some reflection on the therapeutic value of the experience. Initial responses from the children indicate that there was an impact, but without further conversations reflection and triangulation with staff, this viewpoint was not possible to ascertain.

6.8 Interviews with Stable Staff

6.8.1 Initial Interview with Liz and Helen: 'The Power of Two'

Central to the impact of the work with the horses at Great Oak, is the staff. I reflected on difficulties such as bad weather, disengagement, absence, refusal and some apparent obstruction from school staff, which may have sought to undermine the case study. The study was maintained in this context through the support, transparency and availability of Liz and Helen. I considered that in a similar way, they may also anchor and hold the impact of the intervention for children visiting Great Oak. My interview with Liz and Helen together, provided insight into the impact of the programme with horses. Both opted to be interviewed together, which I felt represented their complimentary styles and dependence upon their team relationship.

During a one-hour, free association narrative interview, (Hollway and Jefferson, 2000) the following responses and impressions were presented. Central to the interview was to explore the role that these two played in the life of *Horse Confident*. This formed the initial question, as in other contexts, from which other narratives emerged. The interview began with: 'Tell me about your roles here, how you came to do what you do, and the experience of working with the visiting school', reflecting back answers to encourage elaboration of the pairs' own pre-occupations. This question was selected to encourage free-flowing conversation, starting the interviewee from a pragmatic descriptive description, but inviting

more emotional and subjective reflections. In doing this, I was inviting Liz and Helen to consider their own viewpoint and contribution to the impact of the interventions, as relates to the central research question. The rationale for this method of interviewing was to let the story of the individual present the data rather than shaping the outcome with any preconceptions I may have. The FANI method enabled me to reflect back on answers and encourage development from the areas focussed on by each individual (see 4.5.5).

Liz and Helen work as a team. They rely on one another and have a mutual appreciation and respect. This was evident in all interviews, and during observations. They plan, deliver and evaluate together, spoke of a strong interdependence and complementary skills. This provides unity and strength in the role modelling of adult relationships for the children. Both have a clear and shared **belief, philosophy and passion** for the work, which they express as 'providing safety and prospects for the children and young people' (Helen, February 2010). Their motivation they attribute to achievements with individual children and groups, which were freely anecdotally reported to exemplify the development of **teamwork, pride, enhanced self-esteem, responsibility, independence and communication skills and confident interaction with horses.**

Their **personal stories** are important; their own childhoods correlate to experiences and represent the passion they express for the work. Liz began working with troubled children and rode horses as a hobby, Helen pursued a career in horses and 'fell into' work with troubled children. Both relayed country childhoods in the outdoors, surrounded by a variety of animals. Both expressed distaste at the thought of 'an inside job'

The team express a strong assertion of the offer of '**positive regard for young people**.' Integral to the project, they offer relationship, time, listening and acceptance. This is

crucial to the success of the intervention, and provides emotional safety in a climate where children are unfamiliar with staff, surroundings, the animals and activities, and hence likely to feel unsafe. Liz asserts **relationship** and **empathy** for the client as pivotal to the success. This in turn facilitates relationships with animals, and between staff and enables use of the **animals as metaphor**. Children, in their interactions may find a mirroring of themselves in the animals as they are described. 'The loser' who has never won a race, the horse who needed his best friend by his side, the one who worries at everything and so on. Equally, children in selecting individual animal preferences may sense this mirroring without description and without identifying it themselves. The animals in their behaviour certainly symbolise characteristics of humans such as innocence, control and power, vulnerability, fear, stability or unpredictability.

In supporting the children to consider their impact on others, Great Oak staff use the animals, who themselves are or have been needy and vulnerable to elicit and explore the vulnerabilities of the children. This is usually not done openly, but rather suggestively, allowing children to make their own connections with the experience. For example, Liz reported a child who considered himself 'better than the others'. She took him to a stall with two racehorses and shared their story. One horse was a 'winner' having won every race of his career and earned his owner a considerable amount of money, the second, a 'loser', having never won a race. Liz told the boy how the two were 'inseparable' friends and the 'winner' would not leave his stall, nor allow another in without the safety of the second horse being present. Liz, utilising the power of the metaphor suggested to the child that everyone has strengths and weaknesses and we can complement one another.

There is a belief in the **process and potential** held and expressed by both Liz and Helen. This is also expressed by the charity's founder as an identified purpose in the official

documentation around the beginnings of the *Horse Confident*. The charity believes that provision of the experience with horses, provides opportunity for each child which over time can lead to the development of 'an array of social and emotional skills' (Great Oaks documentation). This has subsequently been supported by evaluations from participating schools. Further research might look at the views of *Horse Confident* by other schools. This was not logistically possible during this study.

6.8.2 Struggles and Tensions

As well as the strengths suggested by Liz and Helen, there were clear struggles and tensions presented in interview.

Is the work **therapeutic?** Liz felt unable to name the intervention as therapeutic, 'not being a therapist' (Liz, February 2010) and carries anxieties around a description as such, yet there is a desire to validate the therapeutic nature of the intervention. Exploring this within the interview, I asked about Helen and Liz about their knowledge and/or implementation of theories discussed including Attachment theory, Maslow's hierarchy and so on (see 6.5.2). Despite an inherent understanding of these theories, they acknowledged that they were not actively considered when planning the interventions; though Liz and Helen both recognised their importance and by doing so, commented that they were likely in their 'make-up' and interactions.

Should they aim to be educational or therapeutic? Liz felt that the educational input of the intervention was limited, though recently accredited with the Open College Network (OCN) and the social emotional development was by far the greater goal. This represents an important issue, which permeates this research.

Attachment theory considers the importance of a 'safe-base' (Bee and Boyd, 2004, p.299) in relation to a significant parent figure from which a child can 'explore the world around him'. This argument is represented throughout a child's development, and can be witnessed in BESD education, where a feeling of personal safety in a child's environment is key to them accessing the learning experience. (see 6.11.5) Perhaps the therapeutic element of the experience at Great Oak, is this provision of social and emotional safety. The Education is both explicit, in the learning about animals and implicit in that the experience supports children to begin to learn about themselves.

This dilemma, leads the pair and their supporting trustees to question whether the work is **valid.** Without a definitive and measurable aim or outcome, both Liz and Helen struggle in defining their work as valid, aside from anecdotal stories and a 'belief' that it is. This inevitably makes them cautious in making assertions over the impact of the intervention and somewhat understated in their contribution to the work. For this reason, they have sought external recognition.

The charity supports both horses and children, but a further tension exists for Liz and Helen between the charities aims and therefore funding streams. *Horse Confident* began *as a result of* the charity, which was set up for horses and relies upon it for its existence. *Horse Confident* still however takes less importance in the charities eyes than the rehoming of the horses, meaning fewer resources are directed towards its growth. This, it seems is at the heart of the tension.

Liz feels that the presentation of *Horse Confident* to children may not be **honest.** This clearly follows from her dilemma around whether the work is therapeutic, which by definition she considers *must* be honest. The presenting purpose of the intervention for

the children is to work alongside horses. However, the underlying purpose is to provide opportunities for the children and young people to challenge themselves, to use the animals as a vehicle, for exploration of their issues such as non-engagement, anxiety, fear, social skills, and so on. This indirect approach to social and emotional skills development at the hand of working with horses and other animals does not conflict with the presenting purpose however. The work and interaction with the animals appears to be a vehicle for the learning of a variety of different skills at different levels including both social and emotional learning as well as other more practical skills specific to animal husbandry. This vehicle might also be described using Winnicott's notion of transitional objects (2005) and Cameron and Moss's notion of the common third (2011) (See 3.2.4).

A further 'struggle', by Liz and Helen's definition is the **interface between the charity and the schools**. This again, relates to the clarity of purpose. Liz and Helen assert that they have a clear philosophy, but this is not easily communicable. Without a mutual understanding between the participating schools and the stables, the practice can feel diluted. I felt there was a need to support them in a better understanding of what they are doing and doing well in order to help them articulate their own position and philosophy.

Beyond philosophy, the pair feel frustration with practicalities. They expressed a lack of **time, resources and impact**. The work is entirely charitably funded. Liz fundraises for her own post and participating schools are not charged. Only two staff, too many children and only short interventions permissible and possible, leaves both Liz and Helen sometimes feeling the work is unfinished. The solution is felt to be a need to expand to survive, which causes a further worry around whether this may dilute the impact of the intervention.

6.9 Interview with School Staff

6.9.1 Jo, School SENCO

Unfortunately, the SENCO, who initiated the venture with Great Oak was, despite numerous attempts and a scheduled appointment, unable to meet with me for interview. I was able to steal a short conversation with her post observation, where she reported her observations. Her thoughts concerned the changes she had observed in the children over the six weeks.

Jo reported that she felt the experience had taken children out of their comfort zone, which had been difficult for staff, and resulted in some children not taking part some weeks due to their challenging behaviour. Jo felt that this was 'a necessary evil'. She commented that over the six weeks, she and other staff had observed changes in the children's behaviour at Great Oak including 'an eerie calmness' and improved self-esteem. When asked to elaborate, Jo reflected that there was no measured improvement; simply a 'gut feeling' based on anecdotal experiences of children demonstrating pride in their activity, reflecting feelings of achievement, and a general sense of increased communication and overall confidence.

Geddes (2006) in describing children with BESD, describes all behaviour as communication of a person's preoccupations and experiences (p.17). With this in mind, I felt it important to consider carefully the changes in behaviour reported by staff and children.

6.9.2 Emma, LSA

Following the intervention, at the school one of the accompanying LSAs agreed to an interview. The themes presented were:

- It was cold. The LSA mentioned this no less than twelve times through a twelve-minute interview.

- The children were not boys Emma knew well.

- Emma believed that the boys very much enjoyed themselves, despite also mentioning a reluctance to go, an expression of boredom from some boys, and an anxiety from them around getting home late. Her impression was made upon 'their little delighted faces' and the enthusiasm with which they took to the tasks.

- Emma felt that the intervention was positive in promoting team and social skills, requiring them to work together on numerous tasks in close proximity.

- The intervention was defined and presented as a 'treat'. Emma felt that it benefitted the 'younger' children as they needed to get along as a group and might realise that 'if you behave, you get treats like this'. When asked if it might benefit older pupils, she replied that she thought not, as they needed to focus on schoolwork.

- In terms of lasting impressions, Emma felt that the learning would be useful if the boys were around horses again, in particular, knowing about the Health and Safety aspects.

I surmise that Emma was not fully informed of the intervention and its purpose and hence, for her, in her interpretation of the experience, it did not hold significant value. She did not know the boys well, nor the aims of Great Oak. Whilst she felt that the trip was enjoyable, she was not aware of any stated aims above that of participation and perhaps teambuilding. Emma's preoccupation with the cold and lack of understanding of the initiative may have had an impact on the children's impression of the experience.

6.10 The Images

Children were given a camera to capture images to support the ethnographical journey of the experience.

6.10.1 A selection taken during observation

1. Child in yard watches the geese.

2. Two children clean the yard.

3. Fetching fresh hay for the goats.

4. Waiting to groom a thoroughbred.

5. Two children work together to groom a pony.

6. Child grooming a thoroughbred.

7. Staff clean the goat shed, whilst child strokes the goats in the foreground.

6.10.2 A selection taken by the children

1. Goats were as popularly photographed as the horses, appearing in some 25 percent of the children's pictures. The frequency of the pictures suggests that they played a significant role in the experience for the children. Each week, a job in caring for the goats was allocated whilst staff talked with the children, assessing their mood and feelings around the animals. The goats enjoy the company of the children and approach them readily, allowing the children to feel 'welcomed'.

2. The Thoroughbreds were photographed frequently, (25 percent) but most pictures contained only a part of the horse, an obscure angle or an overly dark picture. This may represent the anxiety of the children in getting too close to the horses.

3. Geese represented thirteen percent of the photographs taken. Geese were a less significant part of the experience and less interactive animals. Nevertheless, when

children tired of more active jobs, or needed respite from the group and might otherwise have opted out entirely the geese provided a ready and 'calming distraction' (Liz, February 2010) for children who stared, herded and talked with them,

4. Twelve percent of photographs were taken by the children of each other, (not shown) alongside the animals, posing, or incidental pictures. This represents the importance of the social experience.

5. Ten percent of photos taken were of the quad bike present during one session. The children neither rode the bike nor saw it ridden. This possibly represents the boys' fascination with gadgets and vehicles, a more familiar source of interest to them.

5. The Shetland ponies featured in ten percent of photographs. The ponies were used to discuss character and temperament of horses, before moving on to the enormous thoroughbreds.

6. Great Oak staff and School staff were the main subject of five percent of pictures, representing the facilitation of the experience. On the week of the visit by the children's own teacher, he featured in every child's image. This represents the importance of that adult to the children. I was surprised not to see more images of Helen and Liz. However, this seems to suggest that the animals took precedence over staff, which indeed was the presenting purpose of the visit.

6.11 General Findings: Emergent themes from Images and Interview

Reflecting on the images captured by children and their presenting preoccupations during interview provided a narrative to the experience. Prosser (1998) argues for the use of a visual narrative, but suggests caution in their interpretation. No themes were identified therefore from the images alone, but rather from the suggestions made by children on reflection of the images of the experience. Five emergent themes resonate with the children's stories as presented in adult and child interviews and are exemplified through their use of images and in observation.

6.11.1. Relationship: 'Positive Regard for Young People' (Liz, Feb 2010)

Adult Relationship (including role modelling) underpins the experience without dominating it. The presenting warmth, acceptance and support of the Great Oak staff allowed children and adults to feel at ease. The lack of understanding of purpose and throwaway comments from school staff at times may have limited the impact (or at least the understanding of the impact) for the children. Adults' personal histories emerged frequently without prompt. Their 'stories' commonly told of experience both good and bad with animals and people and bore some relation to the job they now do. Those who as children experienced 'the outdoors' or contact with animals to be a positive and influencing factor proved to have a greater supportive influence over the children.

Additionally staff who know the children well provide a greater degree of support. Children commented that when their tutor came with them, they enjoyed the experience a little more. The provision of positive role models (grooms in particular) was an overall outstanding experience for all of the boys who visited the stables. The strong relationship and unity presented by Liz and Helen~ a team of two adults with a shared language able to use cross talk was a powerful reinforcement of behaviour and support.

6.11.2 Trust and Vulnerability

For many children with BESD this is a new and safe exploration of positive relationships. The apparent welcome and acceptance of the goats, (One child asked a goat to marry him), the necessary trust in stable staff to provide safety and protection from the multiple dangers, the building of relationship through learning about personality traits and characteristics of the horses and ways of approaching them. Children are trusted with the care and treatment of animals, and dangerous equipment. The environment is a leveller for school staff alongside children and staff (in some circumstances, e.g. the LSA who had no experience visiting a stables) must come to trust children to support them. The converse of this is the exploration of one's own vulnerability. Adults and children suggested that the notion of vulnerability is important. The opportunity to work with something vulnerable (e.g. small animals) and be completely responsible as well as the chance to stand and feel vulnerable (e.g. alongside a racehorse) learning to trust and rely on others.

6.11.3 Responsibility and Motivation

Jobs were offered as a conduit of responsibility. On more than one occasion, children expressed pleasure with the autonomy for a job with an animal (see 6.6). Some of these children are not otherwise trusted or given much responsibility, a comment noted by

supporting staff. Caring for the animals provided motivation (would they otherwise be looked after?) and may also have supported positive feelings of esteem in being able to provide good dependence for the animals. Offering what is needed but has not been received; perhaps in the children's own nurturing experiences, is a common way of compensating for the lack of it. Staff reported the intervention as a motivator for children through the week. During the observation, children worked independently of the school staff with in particular, the goats, demonstrating acquiescence and other subtle behaviour changes in the presence of the animals~ including calmness, a sense of pride in their activity, expressed feelings of achievement, demonstrated independence, increased communication, and overall confidence. (Reflections from school staff, February 2010, post observation).

6.11.4 Empathy

For some, the exploration of animal's feelings may have helped to develop understanding of children's own feelings and those of others. Liz and Helen cited examples of how they used the horses' own stories to try to relate to difficulties children were experiencing. Helen talked of shyness when grooming the thoroughbred with Alf which he easily engaged with, Liz led the children through a metaphoric conversation of the various horses' personalities. This is an explicit aim for the *Horse Confident* programme, to use animals as a metaphor for the exploration of residual feelings and emotions. There was however, little substantial evidence aside from anecdotal reporting by those who led the exploration of the metaphor. Pictures and recollections clearly showed an attraction to the animals. Children were offered opportunity to nurture and care which had a 'softening' effect on some of the children's otherwise 'streetwise' nature and provided explicit understanding of the elements of nurture and care. This as defined by Perry (2011) is a precursor to empathy. Perry in discussing the importance of empathy, describes those

children who have had little experience of nurture and care themselves, those with attachment disorders who 'are much harder to soothe or teach' (p.135). With little experience of empathy themselves, this can lead to problems including 'clinginess or desperation' or worse, seeking pleasure in wielding power over others.

6.11.5 Emotional and Physical Safety

Themes of safety and fear were recurrent. The two themes are emotionally synonymous in this context. The degree of challenge presented, took children out of their comfort zones making them vulnerable, but with support, led to an outcome and a feeling of achievement and therefore increased confidence. The children were supported to explore their own vulnerabilities and fears. Elements of the provision which contributed to this sense of safety are as follows:

- Enjoyment. All children and adults enjoyed the intervention. Whilst enjoyment does not necessarily mean outcome, as Maslow (1954) presented; without a sense of safety and enjoyment, a person cannot progress to higher order learning (see 6.5.2). This however is an assertion on which Maslow has been criticised. Current child development theory postulates that once can learn whilst not necessarily enjoying the experience, though one may learn better when absorbed and enjoying the experience (Claxton, 2002)

- Freedom is both experienced and referred to in metaphor often through the children's communications as desirable and synonymous with being outside, and around the animals and was a motivating factor, and provided physical and emotional health benefits

- Time and Space: There was little pressure. Challenge came from the interactions with the animals. However, children were supported to do so and staff waited until children were 'ready', giving time and space to 'know' the children and animals.

The importance of space, to explore, make mistakes and survive them is an important precursor to the development of resilience.

- The use of language. 'Good enough support' was evident where children were provided with challenge and just enough verbal support to allow them to take the challenge on. Language can be motivating and affirming or restrictive and reinforce fear. In addition, language provided a bridge between children and animals.

- Just enough support was offered. Enough to provide a safety net, but not enough that children were left without challenge. This resonates with Piaget's theory of equilibration; maintaining a balance between assimilation and accommodation in order to progress cognitively (Donaldson, 1986). This also closely relates to the notion of 'good enough mothering', essential for healthy emotional development. This theory was presented by Winnicott and explored in depth in work with children and adolescents with BESD by Docker-Drysdale (1996) (see 3.4.1).

- A continuity of experience: The children visited weekly for two hours. The journey meant that children frequently arrived home late, misbehaviour resulted in some children being left behind on one week, snow closed the school for one week, resulting in a missed session and staff reported anxieties on-route to the stables, expressed as children not wishing to go. Despite these multiple difficulties, the intervention continued supporting children to accept that positive experiences cannot always be undermined. All staff and children report engagement and enjoyment whilst at the stables.

6.11.6 Animal Cruelty

Not present in conversation with adults, nor in observation, a sixth and important theme was presented, unprompted in each of the four interviews. It therefore feels important to

include and explore within the study. Animal cruelty was raised by the children repeatedly in interview. What seemed apparent was a lack of knowledge about rights and/or care of animals, despite an inherent instinct to protect and care. Many of the children have experienced cruelty, often first, or second hand and held varying opinions on it. The distress and/or confusion suggests that children have a lack of knowledge of how to rationalise or deal with this issue. It may also support the idea of identification with the animals, through which they might be able to indirectly think and talk about their own experiences.

6.12 Therapeutic Horseriding with children in a BESD primary school

A further case study example is presented here, providing further evidence that addresses the research question. In November 2011, an opportunity arose for six children from a BESD primary school to receive horse-riding lessons at a nearby Riding for the Disabled Association (RDA) stables, for an hour per week. The RDA work with children and adults with every disability and special educational need, and were approached to see if they would cater for a group of primary children with BESD. This summary is as a result of a semi-structured interview with the class teacher responsible for the initiative.

Six children were selected by the primary BESD school for the intervention, based upon the gravity of their emotional and social difficulties and presenting challenging behaviour. The children were selected from the most challenging children, and the 'hardest to reach'; those whom the special school struggled to fully engage in learning; One child was selected as his aggression and learning disability contributed to a very low academic output and very low sense of self-belief; he considered himself 'useless'. A second child, equally prone to significant outbursts of violence, presented almost continually within a school setting as withdrawn and depressed. A third child, struggled with school

attendance, often barricading himself in his home to prevent him from having to attend school, showed significant anxiety to any change and extreme distrust of adults.

The initiative was a trial, to occupy the children in a physical activity (they were showing considerable physical discharge and little academic motivation) and in order to build relationships with supporting staff in order to ultimately improve their engagement back at the school.

The initial pilot was for a period of twelve weeks, after which, possibilities of continuing, beginning with a new group, or not continuing with the intervention were discussed based on the progress children had made through the 'grades[21]', as well as evaluations of improved engagement with learning, engagement with the intervention and any change in number or quality of aggressive incidents at school. In eventuality, the outcome having been evaluated by the school as beneficial in terms of improved engagement and reduced incidents of aggression, the same group continued for the academic year at the end of which one child left the school moving out of the area, a second requested to finish horse riding and two children prepared to transfer to secondary school.

The School's baseline, presented four children who had never ridden a horse before, and despite some bravado, acquiesced with some trepidation. Two children were more than this: openly fearful and refused to agree to participate. They were subsequently taken to visit the lesson with a promise that they would not have to ride, or touch a horse, and could return to school without further pressure if they so chose. Both these children chose to mount a horse on the first visit.

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[21] Children were led through the RDA's own qualifications of horse care, Grades one and two.

The stables were well staffed with volunteers, one per horse as a leader and one overall instructor. Additionally, the teacher and a learning support assistant from the school were in attendance. Medical checks and permission aside, no prior information on the children or their special need were requested or offered. This proved to be an asset to the experience. Adults working regularly with young people who present extreme aggression, often moderate requests or instruction for fear of the child's response. No such 'tiptoeing' was present with the instructor who insisted on continued good posture, excellence and close adherence to all instruction. All children rose to these expectations.

The outcome of the intervention from the adult and child perspective following the school's own evaluations showed:

- Positive engagement with a learning activity for those who struggled to engage elsewhere.

- A transformation of attitude and ease. Whilst with the horses, previously tense and anxious children who rarely smile, and struggle to maintain any social construct were malleable, cooperative and in some cases laughing and smiling with the horses, staff and peers. This was previously unheard of for this group of children.

- Confidence resulting from a sense of achievement both in terms of the skills acquired and in terms of knowledge and understanding.

- Children had kudos with peers. For the withdrawn children, this was significantly esteem enhancing; for the children who had previously held this position, it offered a positive means (rather than a delinquent reputation) from which to construct their popularity.

- Children felt 'different' as a result of the riding, more confident and in some cases happier (reported in interview). One child reported a preference for horses to people at the start of the venture. This may reflect his absence of trust and his

attachment difficulties. Towards the end, K was beginning to initiate interactions with his peers and adults, a behaviour previously unheard of for him.

- All children and staff requested that the intervention continue for this group of children, such was the 'reward' of the experience. Stable staff felt that the development would accelerate in terms of rider skills should they continue.

- Two parents reported that their child was happier on the days when horse riding took place, and there was no struggle to get them to school.

"I feel happy because it's fun. It's the *funnest* thing on earth and I want to go there for the rest of my life" ~K, horserider, 2012)

- There appeared to be no adverse impact other than, by continuing with the group, the school was unable to provide riding lessons for other children

- There was a general decline in aggression from the children in the school, evidenced by data from the schools tracking of incidents context and increased trust between the children and adults supporting the group enabling de-escalation from a trusted adult at other times.

- Only one child asked to end his sessions after the initial twelve weeks. This was because a timetable conflict meant that he missed his most enjoyable subject by attending the riding.

6.13 Summary and Conclusions

The purpose of the case study was to follow a group of six secondary aged children from a school for children with BESD, throughout their six week participation in the *Horse Confident* Programme with Great Oak Stables The visits were set up by the school

SENCO as a trial intervention for a the school's younger children with the aim of supporting children socially, emotionally and behaviourally.

The highlighted aim for the school was the general development of social and emotional skills. This said, I felt there was a lack of understanding and therefore commitment to this aim by the school staff. Consequently, at the end of the intervention, one member of staff at the school evaluated the intervention as 'a nice experience'. Stables staff expressed frustration with this interface, and the discontinuity of the provision over the six weeks but felt that at least in part, the aims of the intervention had been met. The intervention has continued with children in the next year group up at the school, as was planned at the start of the intervention.

Anecdotally, staff expressed improvement whilst at the stables with social interaction, engagement with task, emotional presentation and an increased sense of self-confidence. Children were not able to reflect on these changes after the intervention, and the staff member interviewed could not isolate the experience as having long-term effect. It was unfortunate that the school declined to continue engagement with the research process and therefore further opinions could not be sought.

The observations revealed that the environment provided enjoyment overall and challenge, taking children out of their comfort zone and gave opportunity for positive learning experiences, with explicit learning about horses, interactions with one another as well as provided children with opportunity to reflect on their own attributes and learn about themselves.

The short-term impact of the animals on the children was favourable. Children were enthusiastic in their interactions with and recollections of smaller animals (geese, goats, Shetland ponies). The large thoroughbred horses provided children with an experience of awe and danger. No child shied away from this opportunity despite its challenge. All children recounted a feeling of achievement having entered the stall of and groomed the racehorse. Whether there was any longer term impact, was not determinable from this case study.

The interviews revealed differing impressions of the experience. Overall themes included the general attraction of the animals as a conduit for the experience, the importance and influence of adult roles and relationships, an experience of exploration with issues such as trust and responsibility, the opportunity to work with and develop emotional and physical safety and disturbingly, as in other case studies, each child also referred to experiences they knew of involving animal cruelty or death.

The function of adults, for the good or otherwise was significant. In interviewing staff, I was aware of the influence of their own personal story as a contributor to the work they now do, and the prevalence of experience with animals in shaping this. Further exploration of the adult or animal, or both as the 'common third' (Cameron and Moss, 2011) will support the understanding of the importance of the role of the adults.

The images revealed similarly to the interviews, reflections of the children's preoccupations and experience. There was a general fascination for the racehorses who maintained a significant status with the children and conversely the goats, whom the children could care for, relate to and demonstrate confidence around.

An additional case study of children with BESD attending horse-riding sessions adds evidence to the data, supporting that an environment with horses may promote improved engagement, self-esteem and a reduction in aggression.

I conclude that there was an overall positive impact from the intervention. My own preconceptions and generalisations changed conceptually during the course of the study and in later analysis. When presented with the intervention by Liz and Helen, I considered Horse Confident to be a well-planned, orchestrated and detailed project, perhaps even a therapeutic intervention. However, in practice, the limited time span along with the ability of the participating school to share the philosophy and ethos and therefore achieve the stated aims is less reliable, leading to less confidence in stating impact.

As in the previous case study, there appears to be some correlation in the themes prevalent with presenting deficits evident in children with attachment disorders, (Geddes, 2006) which will be explored in subsequent chapters. Questions remain as to the impact of such a short-term intervention, given the frustrations and potential for disjointedness in the logistical transferability of the skills gained into the classroom, over time, or the depth of the learning. This again raises the need for follow-up activity at the school in order to fully embed experiences.

Analysis of the data demonstrates that there was social, emotional and behavioural impact, observable whilst at the context and reported on in interview. Academic impact was more explicit in this context, with children asked to engage in formal writing tasks, which staff reported they otherwise may often object to. Stable staff asserted the intervention as therapeutic, which the finding supports.

Chapter Seven

Case Study Three: William's School, A Residential School for BESD
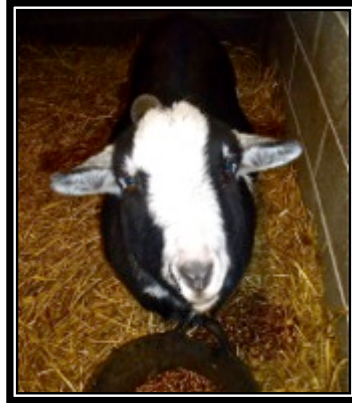
"Goats calm you down~ you can't get angry with a goat can you?"

Ben, William's School, November 2009

7.1 Introduction

This is a report of the data collected and subsequent analysis of the initial findings from a case study conducted at William's School. The School is a residential secondary school for children with behaviour, emotional and social difficulties (BESD) situated in the north of the country. The school has a small farm on site, which is the responsibility of the Science teacher and utilised primarily for the Science curriculum.

This study focuses on a group of four young people from the school. The case study took place between November 2009 and December 2010, during which time, I visited the school three times. Final interviews were conducted by the Science teacher in February 2011.

For logistical purposes and to ensure no bias from the researcher perspective, Charles, the teacher, and Brian the Vice Principal identified the children that I would track. Their selection was based on which children they felt engaged well with the school farm and

one child who expressed an aversion to it. All were boys, aged between twelve and fifteen. The School used their own Individual Education Plans on each of the children to track changes in behaviour and emotional progress, but despite its potentially rich data source, this was not available to me and therefore aligned to the research.

Supplementary to this case study is a report on two interviews from contrasting locations adding support to the evidence gathered through the case study. These include a report from a professional working to integrate dogs into secondary schools for pupils with BESD for social and emotional benefit and an interview with a secondary aged pupil in a mainstream school, who reported that working alongside animals had 'saved his life'.

This chapter summarises the findings and analysis from these cases to present emergent themes requiring subsequent analysis and triangulation within the wider study.

7.2 Context

I approached the Vice Principal of the school after reading an article in a national newspaper about the intervention the school conducted using a school dog. Brian elaborated on projects at the school including the small animal area, known as the farm and the beginnings of a horticultural therapy provision at the school. He agreed the school would participate in my research. The school keeps animals, believing them to support pupils to build attachments to the school, and Brian was interested to learn about other applications I may be able to introduce him to across different settings, through participating in the research. Charles, the science teacher, a relatively new teacher to the school, manages the farm and has a keen interest in developing the provision for science curriculum support and social emotional benefit. The farm at that point consisted of two

goats, rabbits, ducks and an array of small mammals kept within the science classroom. There is also a dog at the school.

My first visit to the school was in November 2009, during which I was able to secure consent for the participation of staff and students. Four key adults agreed to be interviewed: Brain, Vice Principal; Charles, Science Teacher; Dan, owner of the school dog and Learning Support Manager and Mark, Head of Therapies.

As in the other case studies, my role was that of practitioner observer and evaluator (see 4.6), though in this context, greater emphasis was on the analysis of data. Though participants agreed to be interviewed, there was some reluctance to engage with me once the process had begun, and some logistical difficulties caused by distance. Both a biographical and interpretative role was engaged within interview and the subsequent analysis of the data.

William's School is a small state funded special school, housing eighty boys. The boys board either Monday to Friday or through weekends, depending on the distance they travel and their family circumstances. The grounds of the school are wedged between two housing estates, which has caused some difficulties for the school in terms of theft of their animals. The school backs onto farmland however, giving the impression of space. The animals are a historic instalment, having been at the school since its beginning and part of the environmental and land based science curriculum, though recently, work initiated by Mark, and coinciding with publicity around the impact of the school dog, has led school managers to consider the application of animal assisted therapy at the school. This work is in its infancy.

I was shown around and escorted by a pupil, curious to find out why I was there. On explaining that my research was around children and animals, he said to me. "Yeah, our animals are great and they help you loads. Job done!" As well as being humourous, later reflections confirmed that this young man communicated an organisational response to the animals at the school. In this sentence, he conveyed belonging, affirmation and impact.

The school is a long established organisation, with long standing staff. Of the staff I interviewed, three of four had been at the school for over fifteen years, the fourth for six years. Each independently reflected on changes and struggles within the organisation including a dramatic change of philosophy over the past five years from one of containment and behaviourism (Rogers, 2007) to a greater emphasis on high standards and a therapeutic nurturing philosophy. A variety of therapies have been initiated at the school including horticultural therapy and creative arts therapies. The Management of the school do not consider the work with the animals a therapeutic endeavour; though feel that there is social and emotional merit in children working with them. This supports a very pragmatic initial impression I gained in talking with the boys, the staff and visiting the school. The animals were introduced as a function to schoolwork rather than with any suggested emotional attachment.

Children selected for the research engaged formally with the school farm and garden during two science lessons per week. They were also free to visit the animals with staff at any time, including residential time.

7.3 The Children

Four children, aged between twelve and fifteen initially took part in the research. Part way through, I attempted to engage a fifth child on the basis of disinterest in the animals at the

school. This child declined to be interviewed and participate fully in the project, but was happy to share his views with his teacher.

For anonymity, the children are referred to as Jason, James, David and Ben. Initial consent was gained in advance, however, my first face-to-face meeting with the children was to introduce the research and present them with a camera to record their thoughts and observations over the period of the study. I visited the school and interviewed the children on a further two occasions, the fourth visit frustrated by logistics of weather and events at the school forcing repeated cancellations. The final interview was therefore constructed myself, but conducted and recorded by the teacher, Charles. The following were initial impressions, tested against staff presentation of the children, and questioned reflexively (see 4.4.6) using 'myself' as a tool in the research (Etherington, 2004) drawing on my own knowledge, experience, understanding and research following subsequent observations and interviews.

7.3.1 Jason aged twelve, presented as a sombre child. He expressed little pleasure with school, the animals or anything. Jason told me that he was at the school because he was naughty. Most of his responses to questions were limited and he bit his fingers continually, indicating anxiety. Jason is ambivalent about the school having been at it only a year. He described problems at home and at school vaguely. Whilst Jason participated willingly in the research, I felt that he was a very 'defended' child (Docker-Drysdale, 1990)

7.3.2 James aged thirteen, was keen to engage with the process. He confidently offered opinions and interpretations. James has been at the school four years and spoke fondly of each and every aspect of the provision. He was particularly fond of the goats and told me that his voluntary involvement with the animals was around managing his own stress. A

tall and lanky young man, James held himself confidently and presented himself as something of an ambassador for the school.

7.3.3 David aged fifteen, presented as the child with the most genuine and continued interest in the animals (rather than the process). David talked about the school, work experience and a desire to work with animals in the future. David was sincere and cooperative and became very animated when talking about the animals. Staff informed me that David was the most difficult child to deal with behaviourally, but had 'found his niche' with the animals.

7.3.4 Ben aged fourteen, whilst cooperative, did not offer free-flowing conversation. I was left feeling that Ben would have told me anything I wanted to hear. This was confirmed with staff, who described him as a 'people pleaser'. Ben told me that he lived *and worked* at the school, working to look after the garden and animals. On checking this out, I learned that whilst Ben frequently volunteered to support with these jobs, staff do not describe the role as 'work'. This may be indicative of Ben's desire to feel grown-up and of importance to the school in which he reported considerable affection for.

7.3.5 Robert, aged thirteen did not speak directly with me; his views were expressed to Charles. Robert had an aversion to the animals and struggled with Science lessons. Robert worked predominantly with plants rather than animals. His fear of animals began while he was very young.

7.4 The Process

To begin the study, I liaised with Brian, the vice principal around the purpose and logistics of my proposed research. Having secured formal consent from the management of the

school, Brian liaised with Charles to identify four or five young people to participate in the case study and secure consent.

During my first visit (November 2009), I was able to observe children and animals and speak informally about the project with the pupils, leaving them cameras to aid interview discussions. I then spoke with Charles, met and interviewed Dan, the learning support manager and his school dog and familiarised myself with the school and its policies and systems.

After six months, (May 2010) I visited the school again. On this occasion, I interviewed three of the children, and discussed with them the images captured by them with the cameras given to them on our initial meeting. In addition, I conducted an observation of a group of young people and interviewed Mark, the Head of Therapies and Brian.

A Third visit (July 2010) intended to check out my thoughts arising from their initial data and evaluate impressions or impact proved difficult. Again, I was only able to interview three children (though a different three) who each expressed tension between their commitment to the research and a desire to participate in more exciting activities convened on this morning. The interviews were very brief.

In order to validate the data, a fourth and final visit was scheduled, and subsequently rescheduled four times. Cancellations due to inclement weather and conflicting commitments for the school meant that a return visit was proving very difficult. In discussion with Charles, we agreed that he would possibly generate a more favourable response from the boys if *he* were to conduct the final interviews, and at a time to suit him and them. I therefore constructed the interview questions based on my analysis and

reflections briefed Charles and sent him the recording equipment. The interviews were competed in February 2011.

7.5 The Observations

Only one formal observation was conducted during the case study. The young people selected to participate in the research were each from different classes and therefore were not taught together. The observation was of a group of Year 9 students, including Ben from the group. In addition, I received and recorded in a professional reflective journal, informal feedback from the staff leading and supporting the observed group. These conversations reflected on the levels of engagement, and changes in the children within the activities. This data was incorporated applying principles of reflexivity (Etherington 2004) before 'translating meaning' to themes.

7.5.1 Observation One: May 2010

As I arrived, the group including four young people, and two adults were leaving for the farm and garden area, located at the back of the school, a minute's walk from the science classroom. Charles had briefed the class in the classroom about the activities before changing footwear and walking to the area. The boys were very much a group, lively and boisterous, pushing each other, teasing and joking. There was an adolescence and swagger to their behaviour. The two staff, Charles and his teaching assistant maintained a calm and focussed outlook, engaging with the young people, not overtly bothered by the disruptive tendencies of the group.

Once in the garden, Charles reminded the group about safety, before handing out garden tools including a trowel and a hoe. He encouraged the boys to work together to plant some seeds, demonstrating cooperation with his teaching assistant. The boys continued

to laugh, make jokes and taunt one another, Ben in good humour bearing the brunt of much of the teasing. I was not sure that the children had internalised either the instructions or the caution of the tools, but on allocating tasks and handing the activity over to the children, the boys undertook the activity in close proximity to one another according to the instructions. One young person hoed, another dibbed a hole, a third planted the seed and the fourth watered it in. The group did not seem to take the activity too seriously and jokes and conversation remained around each other and activities outside of this experience. Nevertheless, they cooperated and completed the activity remaining relatively focussed, with prompting from the staff, until the completion of the task.

Once this was complete, the group moved to the farm area next to the garden, where they were asked to feed the animals. Staff stood back and offered little direction. The activity was clearly familiar. This time, the children quickly separated from the 'pack' heading directly for their chosen animal. The 'tough' charade of the boys disappeared, jostling and joking ceased and was replaced by an apparent regression in each of the young people. Ben took on a soothing tone with Pedro the goat who began chewing Ben's sleeve, gently pulling it back from the goat and giggling like a much younger child. Two of the boys stuck together, spoke softly to the rabbits as they fed them, encouraging them to 'eat up' and 'enjoy their lunch'. The fourth child diligently walked between the feed store and the goats, not interacting especially, but quiet and focussed on his task, taking his allocated responsibility seriously. The adults were incidental to the activity and remained at the gate silently watching the young people from a safe distance.

After ten minutes, Charles, called the group to reassemble where he was at the gate of the farm and the group returned to the classroom to process, consolidate and record their

lesson. The humour and jostling returned. I was left with the impression that this was an adolescent mask of bravado, and in observing the young people with the animals, I had been privileged to see the removal of these masks, and an insight into seemingly smaller younger children underneath for a short while.

7.5.2 Reflections on the Observation

Reflecting on the observations of the dynamics, both spoken and unconscious, group, human-human; animal-human interactions, presented the following four prominent themes. These themes were selected, as they represent impact for all participants in the group. Other themes, relevant for one or two of the group only, were considered and dismissed.

7.5.2.1 Theme One: Group Culture. This by far was the most dominant theme of the short observation. The young people, all boys aged fourteen continuously jostled and teased one another, recalling stories of their popularity, delinquency and pranking. I wondered if the camaraderie perhaps masked a pressure to conform, or to establish their position and popularity amongst the group. This echoes the issues presented within other case studies (5.4.3; theme four) and discussed by Docker-Drysdale (1990) and Perry (2010). Ben, the only research participant in the observation was on the receiving end of the kindly directed jokes. Ben does not involve himself in much delinquency at the school and has been reported to be progressing well in terms of his behaviour. The challenge for Ben in managing his own emotions in this context I felt was significant; to be accepted as part of the group, he tolerated teasing in good humour, a particularly challenging thing to do for a child with BESD, characteristically with low self-esteem (Geddes, 2006). The group was contained and managed by two calm, supportive and non-intrusive adults. I reflected on how easily, this low–level behaviour might have escalated given confrontation and how skilfully the adults maintained the focus of the lesson whilst containing this

behaviour with encouragement and gentle prodding, drawing on skills of coercion rather than confrontation. This was subsequently mirrored with the animals. The young people had learned that coercion enables animals to participate with human contact whereas confrontation results in animals frightened and fleeing.

Interestingly, once amongst the animals, the dynamics of the group altered significantly. The competition amongst the group dissipated. The most relaxed member of the group was Ben who demonstrated an air of confidence amongst the animals. Other children became pre-occupied with task rather than the group. I asked Charles if this was typical. Charles reflected that considerable support had been given to the group until the children had developed routine and relationship with the animals and jobs, but for some and in particular Ben, this had been an almost instant appeal requiring little support from adults.

Contrary to the case study at Wildwood School, the group Culture I felt in this context, sought initially to challenge and potentially undermine the task, but once among the animals, was considerably less significant. The order of the group was reversed with Ben, formally the 'underdog', leading from a position of confidence and strength.

7.5.2.2 Theme Two: Animals versus The Outdoors There was a clear impact of the animals on the children. Being outside, the children were observed to be cooperative, lively and focussed on task, all assertions made by the teacher. With the minimum of support, the young people were able to learn about and participate in a seed-planting lesson. However, there was a marked social, emotional impact observed when the children were asked to be around the animals. The children became visibly quieter and more absorbed in their task (as in 5.4.3). This raises questions around whether this

noticeable impact was due to the purposeful nature of the task, the familiarity of a repetitive task, the relationship of the animals or something different.

7.5.2.3 Theme Three: Purposeful Activity. Previous case studies showed that jobs offered a powerful conduit as a focus for distraction, conversation, for learning about the animals, as an opportunity to nurture and for the feeling of responsibility. Again, when feeding the animals, this was evident with this group of young people. The presence of the animals in this was paramount. Children were motivated by the engagement with the animals directly, more so than when planting seeds, arguably an equally purposeful activity. Each of the young people appeared to present differently from the previous part of the lesson evident by focus, soft speaking, limited adult supervision and the absence of frivolity. The young people demonstrated an understanding of purpose in feeding and nurturing the animals and may in return have received some nurture from them.

7.5.2.4 Theme Four: Staff Support and Attitude. As in previous case studies, staff demonstrated a clear understanding of BESD (knowing when not to confront and escalate, maintaining appropriate distance, supporting both the task and the children's volatile emotions), which was pivotal to the success of the lesson. The teacher's own experience and philosophy centres around taking children outdoors, connections with animals and purposeful activity (Charles, 2010) and this belief supports the strong delivery of a curriculum tailored to the individual children, whom he knew well. Charles and his teaching assistant demonstrated strong subject knowledge, allowing the children to access support when necessary, though this was not imposed upon them. Again in this case study, the adults provided emotional safety (cf. 6.5.2; 5.4.3) for the young people and acted as a conduit for positive and engaging activities, which unsupported may have been risky. In this instance, the adults took the role of 'the secure base' (Winnicott, 2005)

holding the 'ego' for the young people, enabling them to 'safely' interact emotionally with one another.

7.6 Interviews with the children

Interviews formed the greater part of this case study. Three interviews were conducted with David and Ben, two interviews with Jason and only one interview with James. Initial interviews were conducted six months into the case study, with three children, James, David and Ben, Jason being absent from school on that date (May 2010). The purpose of this interview was to establish an impression of the impact of the animals on the students thus far. Problems with the cameras had meant that the images were not all available for discussion at this point. Therefore, being relatively unfamiliar to me, I offered each child the opportunity to film the other being interviewed, which they agreed to. The videos were then copied for the children to keep. The focus of each interview was to elicit thoughts and feelings around the impact of the animal work, beginning with the general question 'Tell me about William's school, how you came to do what you do, and the experience of working with the animals', reflecting back answers to encourage elaboration of the individuals own pre-occupations. This question was selected across contexts to encourage free-flowing conversation, starting the interviewee from a pragmatic descriptive description, but inviting more emotional and subjective reflections. In doing this, I was inviting participants to consider their own viewpoint, as relates to the central research question. The rationale for this method of interviewing was to let the story of the individual present the data rather than shaping the outcome with any preconceptions I may have. Following this question, the FANI method enabled me to reflect back on answers and encourage development from the areas focussed on by each individual (see 4.5.5).

The second interview, (July 2010) was an individual interview with a voice recording, discussing the children's own images taken at the school. James, having had a difficult morning at school, declined to engage with the interview.

The third interviews were conducted by mutual agreement by Charles. (February 2011) Charles filmed the interviews with the animals, and sent the recordings to me. The implications of this are discussed in 4.5.5. James was not at school during these interviews.

Following the second and third interviews, contact was made with the school to check out the impressions and interpretations of the interview with staff primarily, but also students where possible. Reflections were presented to Brian and Charles for comment and contribution. This was through the presentation of a report of themes and responses to which the staff were invited to contribute or comment on. This process was helpful in confirming or dismissing impressions presented through interview, against the deeper knowledge and experience of the children that Charles and Brian held. It also gave opportunity for the staff to reflect on the delivery of the intervention. At this stage however, it proved impossible to check the accuracy of impressions with the children themselves.

7.7 Individual Findings

7.7.1 James: A Snapshot in Time

In the initial interview, James who had been a pupil at the school for four years presented as an advocate for the school and the animals. He told me that he enjoyed coming down to visit the animals when he felt 'moody and stressed'. James had negotiated a system whereby if he was struggling in lessons, he could ask to leave for a period and 'go and shout at a goat, or stroke them and feed them'. This James asserted was his best anger

management strategy. Despite this favourable impression, James was clear that he only liked particular animals, namely the goats and the rabbits as 'I got attacked before by ducks and swans'. James talked of his future after William's school and reported that he was 'not really fussed what I do. I like bikes though'.

At the time of the second interview, James declined to engage having had a difficult morning. I asked staff if he had used the animals that morning and they told me that he had not.

My lasting impressions of James were of a child who was physically tense, trying hard to answer correctly and behave appropriately, almost physically 'holding himself together', and I wondered for how long he would be able to do so. The use of animals as a strategy for emotional functioning did not have great depth or transferability in James' case.

James' images:

1. James in a stall with the goats.

- James stood tall and proud, not smiling in many of his images. I did not get opportunity to ask him about this, but staff commented that James rarely smiled for his photographs, but liked to be in them. I wondered if this symbolised his low feelings of self-worth, yet his desire to be 'held in mind.' (Docker-Drysdale, 1990)

7.7.2 Jason: Playful as a Puppy

Jason was the youngest of the children interviewed. In his interviews, he communicated a very poor self-image "I'm here 'cos I'm naughty" and a playful enjoyment of all the animals. Jason reflected on his experience of the school and told me, that "it helps a bit". Jason made good use of the animals at the farm, taking frequent opportunities to visit the animals.

Jason was a nervous and reluctant interviewee, but when he began to think about the animals prompted by his own images, he was able to articulate feeling. "I go see the animals a lot. Not every day. Sometimes we choose what we do. I like to play with the goats and cuddle the rabbits. Then I feel happy. I go there when I'm stressed and that. They're playful so they cheer me up. It's good to have animals. Leo (the school dog) helps kids with learning. I do my jolly phonics with him then I take him for walks."

Play was a common theme in each of Jason's interviews, reflecting his young emotional state. Jason shared his dreams of expansion for the animals at the school. Jason would like to see a dog in every classroom and lots of chickens at the school "because they are funny". He used play to connect experiences in school and at home, where he told me he plays with his own dog. Jason found conversation and eye contact difficult. I sensed that while the conversation was 'playful' and remained unthreatening, he was able to engage. This reflected his interactions with the animals.

Jason told me that he felt safe with Leo the dog; I felt this was an important communication. I wondered if Jason felt safe in the interview, or around people in general.

Jason's images:

1. Jason strokes the school dog. 2. The rabbits Jason spoke of cuddling 3. Jason plays with one of the goats.

- Jason's images showed a wide range of animals and interactions, many of them playful.

7.7.3 Ben: Old Head on Young Shoulders

Ben informed me in his first interview that he both lived and worked at the school. He presented as the 'perfect child' and something of a pseudo adult. He held himself well and told me that he had no problems, and was not really sure why he was at the school. Given the input that Ben told me he gave towards the animal care and the garden, I wondered if he felt that the school needed him rather than the converse. Ben talked of the goats more than other animals, and how they calmed him. "When I get angry, I use the goats to calm me down. At me old school I started with a horse and two pigs. When I feed 'em, they seem to laugh." (Ben, 2010)

Ben talked of his enjoyment of the school and I sensed that he felt a sense of belonging and purpose there. Ben expressed aspirations to work at Pet's at home to help 'little 'uns to get to learn about animals'.

In Ben's second interview, he eagerly regaled that he had been looking after the animals more and more. On this occasion, I felt even more emphatically, the expressed

importance of the services that Ben provided for the animals. "I've been looking after the animals more, especially the poor ones. I enjoy it. I share all my secrets with 'em. One of the rabbits at school is mine. He's sneezing a lot and he's just not up to it. Vet says its hay fever. I've just been on the phone now". Ben was eager for me to be impressed by him and I wondered how this may have skewed the interview data. I felt on occasions that Ben was looking to tell me whatever I wished to hear.

Snippets of an animated child within were apparent when recalling experiences looking at his images. "Animals and outdoors make me excited, I'd rather be outside 'cos when days are nice, I hate being inside." (Ben 2010)

Ben's images:
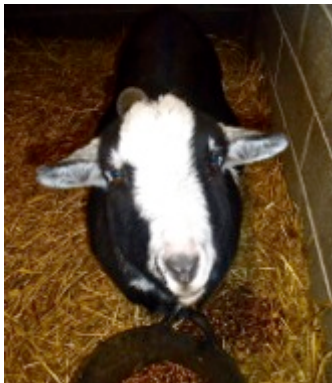
1. Pedro the Goat.

- The majority of Ben's images were of the goats, of whom he talked fondly

- Latterly, Ben captured numerous images of the rabbits. He told me that these rabbits were his that he had donated to the school.

- Ben featured in a number of his images. In most, he appeared relaxed and smiling. I felt that the animals had a clear importance for Ben, perhaps providing some feeling of importance for him.

7.7.4 David: Horses for Courses

David presented as the child with BESD. He was extroverted and humourous and exuded confidence in his interactions with me. David was the oldest of the participants and had been at the school for three years. He held clear ideas about his goals and future (though these ideas changed slightly between interviews). David told me that he loved animals and wanted to work with animals. Charles, David's form tutor as well as his Science teacher spoke fondly of him, his liveliness and his problematic and challenging behaviour. Charles identified David's difficulties as a short attention and negative peer influence. David recently went through a turbulent time in his home life, which unsettled his progress in school. Despite this, his affection and commitment towards the animals was unwavering, which allowed staff to develop an individual 'strategy' to support David back on track, using the animals as de-escalators and reward. In particular, some work-experience was set up for David at a local stable, where he immediately engaged and thrived mucking out and grooming the horses. David was considered an asset by the staff at the stables, which promoted his self-esteem considerably.

David's interview reflected a deep loyalty for his family and a genuine affinity for animals. He talked of 'good feelings' when being around animals, David spoke positively about the school, but lamented that he had to board. He told me how he preferred to be outside with a sense of freedom. David attributed his problems to his family circumstances and animals as the panacea for all.

"My problems are family. My mum and dad used to fight and I used to run away from school to see that my little sister were all right. Then they put me here. When I get older, I want to work with animals at a farm or something. I just get good feeling when I think about animals. I wanted to be a vet but it's too hard, so I want to work with animals. When

I was young, my mum got horses, pigs, dogs and stuff and I loved 'em. I do work experience with horses and its great. " (David, 2010)

I felt that David was struggling for some order and control in his life. At home, David had witnessed his parents' difficulties and struggled with a feeling of helplessness, frustrated further by his desire to protect his younger sister. This manifested in school with David needing to take delinquent control over his day-to-day interactions. However, with the animals, David was able to demonstrate appropriate control of his circumstances and importantly offer the nurture to vulnerable animals perhaps helping him to symbolically work through that nurture he felt prevented from offering to his sister, In addition, he learned that his skills in this area not only benefitted the animals, but earned him considerable accolade from stable staff.

"I clean out horses and that. Then I ride them. They're sort of like friends. I don't know. I just like being with them. I'd rather be with animals than people~ sometimes when I get angry, they're better." (David 2010)

David's Images:

David in one of many photographs of him working with the horses

- All of David's images included himself. All images were of David carrying out a 'job', reflecting the importance David placed on being purposeful. Many of David's

images were with horses at his work experience, which had a significant impact on him. David was smiling in all of his pictures; a sight adults at the school reported was otherwise rare.

7.7.5 Robert: Plants Only Please

Robert did not wish to participate in the research. In relaying his feelings and thoughts to his teacher, Robert represented those children whose anxieties about animals prevented him from interacting with the animals. Robert expressed that he did not like animals and therefore did not want to go near them. Charles relayed that he had overcome this in science lessons by giving Robert the responsibility for plants. This responsibility, Robert embraced enthusiastically and in Charles' words had 'both him and the plants have thrived' (Charles, 2011).

7.8 Interviews with Staff

Interviews were conducted with four key staff at the school. Each of the interviews presented a different dimension to the study. Brian, as Vice Principal was able to provide insight into the organisational structure and support for the work with the animals; Charles, into the children individually and the response to the various ways children accessed the facilities. Mark, as Head of Therapies gave a useful picture as to how the work fits within the therapeutic model and philosophy of the school. Dan, the owner of the school dog provided a picture of the impact of the dog, his own philosophy of working with animals and a vision for future practice.

7.8.1 Charles, Rural Science Teacher: 'Rigour and Academics'

Charles, when I met him had been the Rural Science teacher at William' School for just over a year. Prior to training as a teacher, he worked at the school as a member of care

staff. Charles told me that his interests included animals and the outdoors and this therefore was his 'perfect job'. Charles talked about the various modules and classes and the specifics of what the children have to learn. He reported that he had taken over from a teacher who set up the school farm, but was 'tired by the job' and 'had not been up to the task'. Charles expressed feeling some pressure to develop the subject and evidence the impact of his curriculum. I reflected from the comments around his predecessor, that the school's view had been that this teacher was more interested in the farm than the details of the subject. This did not help the school's agenda for academic standards and progress, and gave some insight into Brian's opinions on the provision of animals.

Charles was keen to tell me that he felt 'Academically, there is definitely an impact' [having animals as part of the curriculum]. He elaborated that in his opinion, 'GCSE's are easier for the kids. Having things hands-on makes sense. Some things in science can be quite complicated. 'Biology, you can do things, watch things grow, seeing the results of their work. It's much more interactive. Children are much happier working collaboratively on this stuff. '

Charles believes that there is an emotional connection with the learning.

> 'Emotionally, they rush over to the hamster or the guinea pig. They always want to see the animals. They get so excited. Teaching them how to behave around the animals is a big thing (because of the loudness) but when they know that, they take the responsibility and they start to treat one another differently too.' (Charles, 2010)

Charles felt that there are great gains to be made by connecting children with animals. He gave several examples of children who had been supported to engage with learning both

within science and outside of his subject. He regularly supports children outside of lesson time to have some 'time out' or to feed the goats scraps, supporting the children to build relationships and work through their problems.

Charles is a young, fit, gentle, intelligent man. He provides a strong, nurturing role model to the boys at the school, who clearly look up to him. I wondered if interest in the animals may offer access for the children to him and his passion. I asked Charles if this might be, and he coyly dismissed the idea. 'I get on well with the lads, but the animals are the ones that hold their interest over time'.

Discussing the negatives, Charles told me that he struggles with ensuring rigour recording the evidence that ensures the children have things in their books, and describing how children change. The experience of the animals for the children is centred on Charles' positive and nurturing philosophy, but the tension for academic evaluative outcomes dominates his preoccupations.

7.8.2 Dan, Learning Support Teacher: 'A Dog's Best Friend'

Dan has worked at William's School for twenty years. Thirteen of these were as care staff. Seven years ago, Dan moved to work as a Learning Support Teacher and developed his own rationale for a school dog. The rationale outlined possibilities for Leo the Labrador to be utilised in lessons, as reward, for time-out and incorporated into the residential aspect of the school.

Leo came to the school as a four-month old puppy. Dan was able to tell me numerous stories about his four years at the school, his inclusion at camp, football matches and the children's support for Leo's hydrotherapy. (Leo has a hip problem). Dan reported that Leo

helps build relationships with the children, enabling him in his role to 'have mature and calm discussion, giving the lads some responsibility'.

Asking Dan about his aspirations, he told me 'I say to the lads, come with me and have a walk and a chat. It's better than the confrontation of dealing with stressed kids. I want to get Leo into therapies more. I want to make sure that the kids have a good chance to achieve what they can. The rationale we put in place hasn't worked yet. Some of the teachers don't use him as much as they could do.' Dan expressed some frustration that Leo was under-used. I wondered whether this was reluctance amongst the staff, as he suggested, or a perception that Leo is over-attached to his owner, inferred by Brian (7.8.4).

One teacher, a phonics support teacher does use Leo in her lessons. Here he listens to children reading for six sessions a week. This work is documented and has supported children accelerate their reading progress. Children who have worked on this programme, including Jordan, report that Leo was a great help.

Dan is keen for Leo to be recognised as a therapy dog. The children who use him reportedly love him. Dan told me 'He's an in for lads who don't get on with me. I try to leave him in class, but he's a softy and likes to be with me.' On reflection, I wondered whether children perceive Leo as 'their' dog, or a 'school' dog or very much 'Dan's' dog and what the impact of this on their own relationships with Leo and their exploration of attachments might be.

Throughout, I felt that Leo was central to Dan's experience at the school, and there were many occasions where the children had come alongside Dan through Leo. There were also many citations of positive and uplifting experiences children had had with Leo.

However, these experiences appeared to be very different from those expressed by the children who sought solace and relationship with the farm animals with less ownership associated with them. By November 2012, both Leo and Dan had left the school having received redundancy through restructuring. This may or may not have been a conscious statement from the senior leadership of the place of the dog, and hence the value of the use of animals in therapy generally.

7.8.3 Mark, Head of Therapies: 'Passion for the Pastoral'

Mark has worked at William's School for nineteen years. Prior to working at the school, he was in the military, before which he trained as a psychiatric nurse. Mark expressed a long held frustration that the school had wrestled with a behaviourist approach versus those staff more interested in the emotional aspects of learning. Mark described working for some years within the care side of the school with what he considers were 'many of the most damaged children.'

Mark developed the 'therapies arm' of the school, which to date includes arts therapies, a counsellor, Neuro-Linguistic Programming therapy an educational therapist and recently a horticultural therapist. Mark was not familiar with animal-assisted therapy, but told me he had a dog! He considered the work with the school dog as beneficial therapeutically. Elaborating on this, Mark told me how the 'hardest' kids tend to opt out of and are directed to look after the animals, giving them a sense of purpose and responsibility. These children respond well to this, as it offers them a sense of routine and structure which within social situations they find difficult to navigate. Mark commented that in his opinion 'Therapies underpin the work of the school. It's why people do what they do. Not everyone likes to talk about their thoughts and feelings. The work of Leo in education is very subtle.' I asked Mark why he did what he did. He told me that he had 'a morbid fascination with

psychiatric issues and how people tick'. Drilling deeper however, Mark's philosophy was not around intensive therapy sessions for all, but more generally around supporting the emotional needs of children whilst containing the behaviour rather than simply dealing with the external impressions of extreme and challenging behaviours. He spoke passionately about therapy being integral to the work of the school 'not a bolt on'. Mark reported that he was initially criticised by some staff who commented that the school had 'gone soft'. Slowly however, he reflected that staff are beginning to understand the place of therapies and in addition refer children for some one-to-one experience and support.

Returning to think about the animal work at the school, Mark reflected that children have a natural affinity with animals and therefore the work was very much in keeping with the therapeutic development for the school. Mark reflected that he believed there is 'lots of documented evidence to show it has an impact' and 'gets my seal of approval *if it can be validated*.' This last comment resonated with opinions frequently expressed in my own experience. Mark himself had commented on the positive engagement with difficult and challenging children. This however, was not enough in his mind to validate the intervention as therapeutic. I reflected that there appeared to be some tension and confusion between the specific individual therapy on offer at the school, which was defined by Mark as 'measurable' and more general therapeutic approaches, less explored and understood by staff, such as the work with animals, and how these two approaches function together.

7.8.4 Brian, Vice Principal; 'Recognising Individuality'

Brian was enthusiastic to participate in the research when I first approached him. Having worked at William's School for twenty-five years, he spoke with extraordinary commitment and passion about the children and the work of the school. Brian told me that he began

his career at William's as a 'green care worker knowing nothing, but enthusiastic to learn on the job'. His passion for the 'rough kid' he described as the same today as twenty-five years ago. In his words they 'ooze character' and provide tremendous reward to staff.

As a senior leader in the school, Brian's described his job as equally satisfying, enabling him to develop and evaluate the impact of initiatives throughout the school. Brian described his philosophy as 'recognising individuality and understanding children individually' and enveloping this, providing for all collectively.

On the work of the animals at the school, Brian again concurred with the individual support that it provided for some individuals, but reserved some judgement. He acknowledged that children have some attachment to the school dog and attraction to animals in general, but was keen to develop 'structure' around the provision. He spoke highly of Charles and his ideas for development within the context of the Science curriculum. In evaluating what they currently had, Brian talked about tangible impact such as 'supporting the transference of skills, understanding life cycles, care, control, empathy and so on'. This I felt was reflective of a pragmatic approach not uncommon in schools under pressure to evidence progress.

Brian told me of a recent evaluation on the impact of the school dog. 'All children like the idea of Leo, but a lot of the children felt that Leo is fixated on [Dan], How can anyone else take him for a walk? That's restrictive not therapeutic'. Additionally, some children asked for another dog at the school, and opportunities to walk Leo more. These were concerns also acknowledged by Dan in his interview, which he felt reflected staff's general attitude that the work with Leo was 'Dan's job'.

Brian went on to talk about the development of the work. He viewed the work at this point as something of an experiment, and encouraged research around it. Before fully embracing work with animals on any scale however, he felt that he would want to evidence some 'therapeutic impact' and see it in operation in other schools.

7.9 General Findings: Emergent themes from Images and Interview

The images and interviews with the young people at this context varied with the individual personality of the children. This again presented a unique ethnographical journey. At William's School three strong themes emerged.

7.9.1 Relationship

There were multiple images of the goats from all participants representing relationship or attachment to them. The goats, as the other animals are essentially pets, and serve no purpose other than recreation and the recycling of scraps. Goats can be comical in their normal behaviour and these two were no exception, playing, nibbling and stealing from the children. They enjoyed the children's company and walked towards them when approached (possibly associating humans with feeding), allowing the children to feel recognised, important and welcomed. The small goats, to the big children offered opportunity for the young people to nurture and care, whilst some talked of the cathartic opportunities offered by talking through their difficulties.

The animals, as in other case study contexts presented multiple opportunities for the exploration of relationship skills including interaction, communication, compromise, care, nurture and trust.

7.9.2 Nurture

The fascination and absorption experienced in other case study contexts, was also evidenced here. The slight difference in aged of the children offered a difference in their expressed emotional responses. Children at William's school offered the impression that the animals needed them, rather than the converse. However, it is this opportunity for nurture and affection handed out liberally by the young people to whichever animal, offered them the opportunity to be responded to with affection and nurture without losing credibility, something challenging for adolescents, with 'street- credibility to maintain. Again in this setting, the animals evoked a sense of calmness, serenity, nurture and maturity from the otherwise frolicsome young people.

7.9.3 Responsibility

For these children unlike in the other contexts where there were animal staff, responsibility for the animal's welfare lay directly with them (supported by Charles). The young people thrived on this responsibility, happy to take the time necessary and responsibility seriously. Discussions with Charles, revealed a lack of nurture in the boys own lives, which has inevitably perhaps led to challenging behaviour, and in turn the label of 'untrustworthy', leading ultimately to little unsupervised responsibility. The animals offered no judgement of this, but on the contrary, looked to the young people as those that could provide (such as the goats walking towards the young people on approach) allowing the children to give and consequently share in, the feeling of non-judgemental appreciation.

7.10 Supplementary Evidence

Two further interviews are reported here, providing further evidence that address the research question. These include a story of work with adolescents and dogs leading to increased engagement with education and the story of Ron, a young man who faced

considerable emotional difficulty at a mainstream secondary school before engaging with the farm animals in his setting.

7.10.1 Dogs Helping Kids (DHK)

DHK is a charity working with out of school and disengaged teenagers. Through the programme, the young people learn to train dogs, with the aim that the skills they learn support the young people to reengage with education. I approached Tracy, the charity's director as a part of this study specifically to gain her views on the impact of an animal intervention on those children who are not in education or employment.

Tracy told me how she had begun as a dog behaviourist. Through her work, she came across a young person who had been excluded from school and was asked if he could join her for some work experience. Tracy felt that the young person presented similar behaviour problems to some of the challenging dogs she worked with; namely confrontational behaviour in the face of fear. Without too much understanding of the root of the young person's difficulties, she took him on as an apprentice and watched as he, with a responsibility for thinking about the dog's behaviour learned to moderate his own. Tracy felt that she had an opportunity to help other young people and so began the charity.

DHK takes young people not in education, employment or training (NEETs) and works with secondary Pupil Referral Units (PRUs) and Special Schools for young people who join her for a programme of six to ten weeks. Tracy works with her own dogs, those from volunteers and with dogs from rescue centres requiring training. She works explicitly with the dog's behaviours, teaching basic commands. Tracy maintains that the discipline and responsibility necessary to turn up each day and focus on repetitive tasks, to be available and reliable for the dogs in order to support their learning, to be assertive yet gentle,

teaches the young people how to relate responsibly with animals and subsequently people. The pleasure that the young people get from being 'in relationship' with the dog, she maintains, allows them to feel nurtured and supported.

I asked Tracy about the impact of DHK. Tracy reported that all of her clients sat the course. Over fifty percent of her clients return to education of some sort, many of them to pursue training in animal related professions. Though there has been no formal evaluation of DHK, the local press have supported her as 'charity of the year' and demand for her programme is growing. Tracy's ambition is to see a dog in every school, which she maintains would be 'good for the children and great for the dogs'. By being exposed to the potential of dogs earlier, Tracy feels that fewer children might find themselves excluded from education; a bold claim. She is clearly motivated by the impact on the dogs also. She feels that to provide good training for the dogs allows them to have brighter prospects and happier lives.

7.10.2 A Mainstream Secondary School Setting

CW school, a secondary mainstream school has an extensive working farm on site. The farm has existed since the founding of the school in the late 1960's and was and is integral to the tuition of rural science and land-based studies, subjects for which the school has national repute. CW differs from other schools however in that the Assistant Headteacher, a longstanding member of staff at the school has developed the programme to ensure that all children and young people at the school gain access to the animals, by developing the environment of the school and the programmes available.

I met with Simon, Assistant Headteacher and Head of the Rural Science Faculty and a young person working with Simon who asked to be interviewed, in September 2009. The interview was semi-structured according to the FANI approach (see 4.5.5).

CW is a secondary school with multiple separate buildings. When entering the campus, it is immediately apparent that the space between each building has been fenced in order to houses an animal or two, or to grow vegetables and flowers. Every space, however small has been furnished with a flowerpot or a cage or small paddock for an animal. This environment, says Simon, is paramount to the success of the programmes in place at the school and the overall excellence of the school. Simon is passionate about his subject. His vision was that more than those who elected to study rural science would be exposed to the benefit of animals and nature at every opportunity. With this layout, every adult and child at the school comes across nature and animals if only passively. Simon started at CW as a rural science teacher in 1971.

The impact, says Simon, has been larger than contact with nature. Having introduced the concept, children now have become better behaved, more respectful of their environment and subsequently one another, evidenced by the schools own data tracking systems of behaviour and anecdotal data. The animals are popular with the majority of students, and attainment in Science for the school is significantly better than schools of similar demographic. For some young people, Simon believes, specifically those with social or emotional challenge, the impact is greater still. In stating this, Simon introduced me to Ron, who was keen to share his own experience.

7.10.2.1 Ron

Ron, a fifteen year old student at CW, asked to speak with me to relay his story of work with the animals at CW. Ron told me how he was 'different' from other students, meaning that he had few friends and found academic subjects difficult. Ron told me that he was persistently bullied at school in his earlier years and 'things got so bad, I wanted to end it'. Ron told me that the only thing he enjoyed at school was his science lessons, where he got to interact with the animals. Ron started to spend his break times and lunchtimes with the animals to avoid his peers. He would then visit the school farm after school to avoid bumping into other children on the walk home and come in early for the same reason. Staff welcomed the support. Quickly, Ron was allocated jobs to care for and feed the animals, and to tend the plants. Ron started to visit the animals not to avoid things, but because he felt responsible. He did this with such enthusiasm and reliability that the school offered Ron payment for his work. His responsibilities extended to weekends and holidays and in caring for the animals, Ron's knowledge of them grew rapidly. Ron now had a position of strength with other pupils. He was able to be a guide, a teacher; support for younger and less knowledgeable students. Ron stated bluntly, 'the animals saved my life'. Ron talked of his future career prospects and how he was 'training seriously and studying hard' to go on to work at a farm, or a zoo or another animal related industry.

As with the recount of B and the school dog, there are multiple factors in play to support the change in Ron. Nevertheless, Ron is clear that the change in him to a happier, more successful student can be attributed to contact with animals.

7.11 Summary and conclusions

The purpose of the case study was to follow a group of four secondary aged children from a residential school for children with BESD, over the course of two years and reflect on their interactions with the school farm.

The highlighted aims for the school included support for the science curriculum, as a means to consider future employment and for social and emotional benefit, though the latter was little prescribed.

There was little evidence to indicate specific improvement over time, but the children reflected that the intervention with animals was enjoyable and helped them learn. Whilst with the animals, emotional and behavioural changes could be observed. The farm cannot be isolated as responsible for these behaviours in this context, but it is not clear whether over time, these behaviours transfer or pervade other areas.

The observation revealed that the environment provides opportunity for positive learning experiences, with explicit learning about animals, people and interview revealed that the environment also provided children with opportunity to reflect on and learn about themselves.

The impact of the animals on the children was generally favourable. Aside from one young person who declined to participate in the research, specific oversight of the animals enabled the children to feel responsibility, inhabit a position of trust, and learn about relationship.

The interviews revealed that individual children gained very different things from the visits. Overall themes included children's relationship with and preferences for different animals, group culture, responsibility, purposeful activity and enjoyment. Again in this context, each of the young people referred to experiences they knew of involving animal cruelty or death (see 4.5.3).

Supporting interviews report complementary data highlighting improved engagement in learning and greater resilience towards more academic studies.

I conclude that there was a largely positive impact at the case study context from the intervention. However, without a planned and formal programme bringing children and animals together for specific purpose on a regular bases, there is little evidence to support the specifics of this positive reflection. Questions remain as to the transferability of the skills gained into the classroom, over time, or the depth of the learning.

Analysis of the data demonstrates that there was again social and emotional impact, reported by the staff and the young people participating in the research. Academic impact, particularly in terms of the Science curriculum was explicit and reported in this context. Staff expressed that the animals support the children, but it was the young people themselves in this context that reflected on the therapeutic impact of the animals at the school.

Chapter Eight

The Therapeutic Potential of Animals for Children

"Animal contact opens up small fissures in the armour of defences in which the small child cowers. Through the cracks, the child's 'issues' bubble up. The darkness made visible becomes an opportunity for therapeutic intervention"

~ Melson, 2001, p.101

8.0 Introduction

This chapter brings together the issues, themes and findings emerging from each of the case studies and the supplementary case studies. According to the analysis of findings in this research, the chapter summarises the impact on the development of children and young people with BESD of participating in planned activities involving interaction with animals in an educational context. In summarising and discussing this analysis, reference is made to contributing theories, which underpin effective work with children with social, emotional and behaviour difficulties. These theories, introduced in Chapter Three are expounded further here in order to underpin the analysis. One such theory, *Attachment Theory* (Bowlby, 1969) is key in explaining the outcomes of the study. A proportion of children with BESD participating in this study also carried a diagnosis of an *Attachment Disorder.* This diagnosis is common to many children with BESD (Cole and Knowles,

2011). Characteristics of this disorder, as previously stated include a very low sense of self-worth and self-esteem, an inability to trust, a lack of empathy, a tendency to hyper-arousal, to become quickly stressed and anxious and therefore an inability to focus and concentrate, or to form or maintain lasting reciprocal relationships (Perry, 2010). The rationale for this theme and the supporting sub-themes explored here are a result of thematic analysis and triangulation of the qualitative data. The data was collected through each of the case studies and from supplementary interviews in light of the research aims. Initial themes began to emerge from an initial analysis of the observations at each of the case study contexts. These elements were explored further, reviewed, refined, evaluated and affirmed using interview and a visual ethnography to elicit greater clarity (see 4.7).

The various contexts employed for this study differed due to factors such as the variations in the age of pupils, differences in the settings within which interactions with the animals took place, location within the country, facilities, number of animals available as well as the level of directed intervention from adults. The differences are highlighted within the findings of each case study (Chapters Five, Six and Seven). The themes represent summaries of the findings common to each context. These are correlated here with findings from supporting interviews. Supporting the analysis of findings at the main case study contexts, each of the additional settings indicate positive outcomes through ventures initiated for reasons generally, other than therapeutic.

Research suggests (Beck and Katcher, 1996; Melson, 2001) that working with or alongside animals in an educational context, may support the relearning of skills that contribute to the development of *secure attachments* (Bowlby, 1965). Whilst supporting this finding, this study also found that working with animals also promotes social, emotional and academic improvement and in some cases also health and language

development for children with BESD, where certain factors, including a safe and nurturing environment, purposeful tasks and staff committed to the intervention, exist.

Overall, the study indicates that environments promoting interventions between children with BESD and animals, therapeutically benefit children in terms of their social and emotional difficulties, at least whilst involved in the interventions. Outcomes show that improvements are evident in children's behaviour, emotional literacy, and their ability to form and maintain relationships. Attachment Theory helps explain why specifically children with BESD are positively supported in this way.

8.1 Chapter Synopsis

The chapter begins with the key theme; Attachment Theory and the associated neuroscience, in order to offer an explanation why interventions such as those studied within the research may be able to offer positive affect for children and young people who experience and create significant challenge. Relationship building with the use of animals as a conduit, is subsequently explored, before disaggregating this theme into an exploration of animals as social facilitators using the concept of 'the common third' (Cameron and Moss, 2011) alongside some counter arguments. The development of eight relational skills that the analysis of data identifies as present for participants within the case study contexts are summarised. Certain environmental factors were found to be necessary for children and young people to maximise the benefit of the interventions such as a natural environment and purposeful activity. These factors are considered before looking at the overall range of impact on the children and young people in terms of educationally, socially, emotionally and otherwise. This is considered in terms of how this impact might support associated attachment difficulties and contribute towards rebuilding secure attachments.

The final sections of the chapter review the main areas covered by the thesis with a consideration of the theoretical implications of the study. The chapter concludes with a discussion of implications and recommendation with suggestions for further areas of enquiry arising from the research.

8.2 Brain Development and Attachment Theory

"Optimal Sculpting of the pre-frontal cortex through healthy early relationships allows us to think well of ourselves, trust others, regulate our emotions, maintain positive expectations and utilise our intellectual and emotional intelligence in moment to moment problem solving. We can now add a corollary to Darwin's survival of the fittest: Those who are nurtured best, survive best…" (The Social Brain, Louis Cozolino in Psychotherapy in Australia Vol. 12, 2 Feb 2006)

Research in Neuroscience (Perry, 2011) shows that a healthy brain develops as a result of forming relationships without which, the brain does not learn how to respond to signals which challenge the most basic responses in each of us, such as the need for safety, to have one's needs met and to feel special (Thrive[ftc], 2012). These fundamental lessons, taught through appropriate responses in the first three months of life, are the building blocks of healthy brain development.

The second layer of the brain; the limbic system develops at around six to eighteen months old (Perry, 2011). This area of the brain is responsible for creativity, curiosity, initiative and sensory experiences. Following this, the frontal cortex responsible for thinking, rationalising and understanding feeling develops. For a child who has experienced inconsistent care giving in his/her early years either through interruptions or

through trauma, separation or abuse, this development can be significantly impaired. This is explored in greater depth also in Chapter 3.2.

Children with a diagnosis of BESD as a result of social and emotional trauma and/or deprivation may have experienced interruptions in the key stages of brain development. Consequently, among other difficulties they can struggle to understand, form and maintain appropriate relationships; struggle with higher order skills such as abstract thinking and rationalising and may experience threat (perceived or actual) from straightforward interactions, responding more quickly than their counterparts with anger, rage and the most primitive and instinctual survival responses. Bowlby (1969) described this interruption to consistent care giving in a child under 36 months of age as an *attachment disorder*. Interruptions may take the form of maternal ambivalence towards pregnancy, in-utero trauma, substance abuse, physical, emotional or sexual abuse, neglect, sudden separation from a primary caregiver, painful illness, maternal depression, repeated moves or placements or unprepared or poor parenting (Howe and Fearnley, 1999). This essentially means that such children struggle with making good *attachments*; presenting an inability to form and maintain a healthy relationship, or attachment, with a parent or significant caregiver initially, resulting later in poor relationships more generally.

Symptomatic of children with attachment disorders is a difficulty in cultivating the set of skills required for relationship building; skills such as identification, empathy, tolerance, listening, understanding, self-esteem, self-control resilience, trust and acceptance (Howe and Fearnley, 1999). Experience of nurture, touch and understanding may have been absent or ambivalent and therefore their understanding of such is minimal. The result is a group of children who frequently experience conflict, anxiety and rejection and the consequent reinforcement of a poor self-worth.

Attachment Theory has been both researched and supported widely (e.g. Barrett and Trevitt, 1991; Howe and Fearnley, 1999; Allen, 2005; Geddes, 2006; Prior and Glaser, 2006). There are other theories, explanations and responses to BESD (3.2.3) but in the context of the analysis of the findings of this research, attachment theory and the associated neuroscience, explain and address the complexities of a child's behavioural, social and emotional difficulties. Attachment disorders manifest in children in many ways. Sometimes these children present as social isolates, withdrawn and unable to adequately express or communicate emotions; sometimes as children who crave attention, those who reject social interaction, those who both reject and dismiss the same person on different occasions. There are children who express little empathy towards others and try hard to make friendships using learned antagonism or aggression. Children may respond to stress with hyper-arousal or by dissociating entirely. Children often develop an unrealistic idealised view or fear of reality (Geddes, 2006). Inevitably, these young people find it almost impossible to trust, to form and maintain relationships or see themselves as worthy of companionship and love (Prior and Glaser, 2006). Many children with BESD are culturally, socially and emotionally disadvantaged (Garner, 1999, p.18). In some cases, children who have experienced such deprivation, develop obsessive-compulsive behaviours, others remain chaotic and fragmented (Perry, 2011). Their social future is far from promising.

Howe and Fearnley (1999) identify a number of developmental stages involved in the attachment process. These include the development of a core identity, regulation of feelings, empathy and impulses; social learning, including social acceptability and patterning which leads to developmental thinking. This is in line with the healthy development of the three interlocking systems of the brain. Erikson's crucial development tasks (1956) *figure 6* outlines the ages at which a child with a healthy attachment

discovers and learns about key emotional skills. A child with an attachment disorder, as a result of his/her trauma may not have developed one or more of these skills, the result being the converse as listed. Crucially, the development continues throughout childhood.

0-13months	• Trust vs Mistrust
1-4 years	• Autonomy vs Doubt/ Shame
3-6 years	• Initiative vs Guilt
5-12years	• Achievement vs Inferiority
11-16 years	• Identity vs Role confusion
15 years +	•Intimacy vs Isolation •Generativity vs Self-Absorption •Integrity vs Despair

Representation of Erikson's Crucial Developmental Tasks (1956)

Emerging from the case studies was clarity that symptoms of attachment disorders such as those outlined above, were both directly and indirectly addressed in the environments in a constant, but non-threatening way. Elements highlighted in *figure 6*, including trust, autonomy, initiative, achievement and identity were issues explored within the case study settings (see Appendix Three, [3:1]) and commented upon by staff [3:2]. The fundamental key skills of relationship building, essential for the development of healthy attachments were explored as children naturally *drawn* to the animals, began carrying out tasks such as feeding, cleaning and caring. Children were placed in a position where they both needed support and felt needed by the animal and began to explore and develop the skills

necessary to participate and build firstly a connection, then an attachment and subsequently a relationship with an animal (see 8.3) utilising and practising various skills.

8.3 Animals as a Conduit for Relationships

In the case studies, animals were found to be a conduit for relations with peers and others facilitating the exploration of relationship and socialisation skills. Such skills are the facilitator or inhibitor to the success of many learning experiences, socially and educationally with children and young people with BESD. This is explained in two elements, that of *The Common Third* (Cameron and Moss, 2011) and in their role as social facilitators.

8.3.1 The Common Third (see 3.5)

In the study, the common third is a useful description to explain the situations where adults and children worked in a shared space, with animals facilitating the formation of relationship bringing the child and practitioner together on equal terms.

The animal in the case study contexts enabled child and adult to share an activity and or conversation and in so doing, have something in common. This in effect put the animal as the Common Third. The situation, acted as an equaliser, enabling the child to develop a relationship without intensity, scrutiny or dominance. The power differential was removed whist the children were new to the experience and transferred, with children becoming dominant, with a little knowledge; and thus, relationships built more easily. Examples in some case study settings include work with the school dogs [3:3]. Children have been seen to frequently engage in conversation around the dog with a child or adult they may not normally converse with. Often brief, occasionally more so, and on one occasion,

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between adults with a patent dislike of one another; the dog in just its presence facilitated conversation and the beginnings of relationship.

Key to the concept of the common third is that a teacher or supporting adult, (or within social pedagogy, 'a social pedagogue') is authentic in all interactions and self-reflective in order to ensure a child-centred approach and full participation of the child. In this study this was made possible in two ways; in one setting, by the acute psychotherapeutic awareness and sympathy of the practitioners who knew the animals (as in Great Oak Stables). In another, by those practitioners accompanying the children from school, who though child-centred, were ignorant of the intervention and environment, and were thus able to experience and participate alongside the children in a genuine learning situation (as in Wildwood School).

8.3.2 Social Facilitators

Four processes of relationship emerged through the findings suggesting animals had a clear role as social facilitators:

- **Child to animal**: This initial relationship, sometimes one of mastery, sometimes one of companion, sometimes beginning with a fearful interaction, but almost always attractive and compelling for the child to explore; allowed children to come alongside the animals, learn about them, care for them, ultimately in some circumstances, utilise them as a conduit for the understanding of their own feelings.

"There is a great deal of resemblance between the relations of children and of primitive men towards animals. Children show no trace of arrogance, which urges adult civilized men to draw a hard-and-fast line between their own nature and that of all other animals. Children have no scruples over allowing animals to rank as their full

equals. Uninhibited as they are in the avowal of their bodily needs, they no doubt feel themselves more akin to animals than to their elders, who may well be a puzzle to them." *(Freud, S. 1913, Totem and taboo. SE, 13,1461)*

- **Child to adult** (within the context): Children were observed to swiftly initiate contact and relationship with those adults unknown to them, responsible for the animals. While there was a recognised inequality in these relationships, with the adult having a greater understanding of the animals and task, conversations easily began around the animals and their care. On more than one occasion, expressions of affection for these relative strangers were observed. e.g. Paul the Groom [3:4]. Levinson (1997) considered that animals could help to "break the ice" and be of assistance in developing a relationship with some children. He writes, "A child who finds it most difficult to tell us how he feels about his dreams and relationships finds his tongue when he has to discuss his problems with a dog...When the child plays with the dog, he establishes his own world, the boundaries of which he himself prescribes" (p.40). Levinson famously demonstrated the use of the common third in his psychotherapy sessions with his dog. Discovered accidentally, Levinson went on to write prolifically about the impact of a third member of his psychotherapy group.

- **Child to adult** (beyond the context): The extension of these relationships then becomes possible. Creating a situation within which a child feels on equal terms with an adult, both learning, both exploring, the animal plays the role of *the common third*, providing a common potential for learning (Stevens, 2010). With the strength of these relationships, children began to develop confidence in wider

social settings, discussing the experiences of being around the animals. The animals therefore acted as a conduit for the opportunity for wider conversation.

- **Child to child**: Initially observed as camaraderie between children sharing the same experience. In each of the contexts studied, relationships between children who visited the stables/ farms together grew with a common talking point. At William's school in particular, children who would not otherwise have formed friendships, being very different in personality and popularity, showed strong allegiance for one another, built through shared learning and experience of the animals together. This was further enhanced whilst in the presence of the animal.

In all contexts, children's attraction and apparent 'innate connection' (Wilson, 1984) and desire to be with the animals enabled the commencement of the experience. The interventions studied in this research, whilst not intended as therapeutic, engaged children none-the-less, presenting data which reinforces a view of social benefit manifested in behaviour such as, reduced inhibitions, free flowing conversation, cooperation, kindness and empathy, along with the expression of feelings towards and about the animals where they had not been previously evident [3:5]. Were this practice to be made explicit, with staff facilitation working reflexively and consciously to learn and build such skills, the impact may be even more dramatic.

If there is a social impact for all children in simply being alongside animals, this impact is greater still in considering interventions for children with BESD. Being alongside the animals offered children opportunity to discuss and learn about the consequences of their own behaviour. 'Safety' rules concerning how the animals should be cared for in each of the settings, enabled discussion at different informal intervals about their own self-care

and experiences of care, or otherwise [3:6]. When stroking the animals, whether guinea pigs or racehorses, the children were met with, (and taught to recognise) responses of affection. Equally, they learned about what might happen if they mistreat an animal. The animal in effect, helped children to be involved in a relationship that will teach lessons for life. This impact was explored by George (1988). His research, mainly with family pets, extended to an exploration of how animals can help children learn about suffering and death and deal with the realities of death when they see animals experience pain, preparing a child for such experiences later in life.

8.3.3 Counter Arguments

Levinson (in Melson, 2001), though an advocate for animals as a therapeutic adjunct, cautioned against simply providing an animal to substitute human companionship. He noted that animals are 'no panacea for the pain of growing up' (p.117) and his so named 'Pet-Therapy' was not for every child. Not all children are enamoured with animals, and some even express fear, worsening their symptoms of anxiety and distress. This was the case in this study in two contexts, one where a child would not participate due to his fear of animals and the other, whose pre-occupations would not allow him to immerse himself in the experience, resulting in him feeling left out and subverting to the point that he was asked to leave the group [3:7].

Levinson's counterparts also argued that children might substitute the affections of animals for human as a defence mechanism, which in turn might develop a pathological disorder. One child at Wildwood School reported that he preferred animals to humans. He claimed that he did not want human friends; rather, he would just have animals substituting these relationships [3:8]. This is reflective of his experiences with adults thus far. This child was neglected, mistreated and abandoned. His mistrust of people is

understandable. Yet, by initiating an animal intervention (horse-riding), he has been supported in his interests and enabled to achieve, by humans, with whom he must work in order to make success of the intervention. K now successfully has several friendships.

Melson too, in discussing the multi-factorial nature of the intervention, questioned the reliability of such interventions. Whilst an intervention with animals does in many contexts address issues with self-concept such as changes in behaviour, esteem and engagement, she noted that 'other areas of self-concept, including acceptance of physical appearance, popularity with other youngsters and overall happiness did not improve' (p.119). In this study, such measures were not explored. The psychosocial approach to the study explored instead the short-term impact, both good and bad, and the individual and group story contributing, indicating areas ripe for further qualitative and quantitative research.

8.4 The Development of Key Skills

The study showed that animals provide a secure training ground for the fundamentals of relationship and are capable facilitators. They act as guides for learning about relationships. For those children who in other circumstances have failed to develop good social relationships, animals may provide a forum for retraining or catching up on those skills and thus addressing the symptoms of a child's attachment issues. Relationships for young people can be profound and lasting. Layard and Dunn, (2009) talk about reliable relationship as one of the fundamentals of a happy childhood, and warns against dismissing a child's seemingly unimportant relationships, as sudden separation can replicate, reinforce or induce a level of trauma. Key skills were addressed within each of the case study contexts including identification, trust, nurture, touch, understanding, empathy and self-regulation. These are all skills that children with BESD struggle with (Geddes, 2005) (see chapter 3.4.1). Providing a context for the skill, enabled children to

'play' with the idea, begin to understand its significance for them and to practice the skill without fear of rejection or criticism. This playing, often took the form of anthropomorphism. Whilst not a skill in itself perhaps, watching and learning from animal behaviours and interpreting them to human qualities enabled further, the exploration of relationship building abilities.

8.4.1 Identification

To describe relationship *with* an animal as opposed to an interaction, suggests a different quality of connection. In this context, I have defined relationship as 'the possibility of establishing an emotional connection with an animal.' Children can find approaching an animal easier than approaching a person [3:9]. This was the case for some participants of the research in each context. Children in Wildwood School, given responsibility for a particular animal, quickly talked of animals as 'their own' [3:10]. This identification with the animal moved the animal in their care from object to subject and this sense of ownership, endeared the child to find out as much as possible about their care and invest in developing an attachment to the animal. Children began to think about the animal, exploring feelings, consequence, role and relationship, skills of a higher order, requiring the firing of synapses through the neo-cortex.

Animals may provide a greater level of predictability for children than humans. "Animal behaviour conveys authentic data about mental states, unmuddied by pretence, metaphor, deception or irony" (Melson, 2001, p.93). What Melson describes is the security in relationship building with animals. There is no ambivalence of response, rather a string of reactions based upon behavioural characteristics and responses to them. This provides much assurance and comfort for a child who can learn to read and understand an animal and learn how to engender appropriate responses and affection.

Children cited examples of characteristics that they found in the animals, which supported the building of relationship [3:11]. These include their apparent loyalty and dependability, or perhaps their constant availability to the young person, the appearance that they are 'never too busy to listen', as perhaps adults may have been or appeared to be to some young people. The reciprocity of relationship, not available with a toy, or indeed an interactive game, as animals respond as living things allowed the child to explore the experience of ever present and consistent care-giving. Equally significant was the enthusiasm with which they discussed these relationships. Children at Wildwood talked of their 'favourites'; children at Great Oak used names and described endearing features of their favourite animals [3:12].

Levinson (1997), found that animal-assisted psychotherapy worked *best* with children who are perhaps nonverbal, inhibited, withdrawn, obsessive-compulsive, or culturally disadvantaged; all traits commonly found in children and young people with BESD. He maintained that these children in particular, are helped by animal oriented psychotherapy because the animal strengthens their contact with reality (Levinson, 1964 in Cusack, 1988). As in the study, Levinson found that withdrawn children who would not talk to adults would often talk to animals, as in the example of B [3:13] and in several of his cases, this led to more normal relationships with people (Wishon, 1987).

As the interventions progressed, the animals were referred to increasingly by name, or attributed ownership e.g. 'Kevin's Ducks' [3:14]. In Wildwood school, this sense of belonging, familiarity and trust, not only endeared the children to the animals, but enabled them to begin each week with a familiar and 'safe' interaction, during which the farm staff were able to explain the next task or development of the intervention.

8.4.2 Trust

Each of the contexts immediately placed children in a position whereby they needed to consider their ability to trust and be trustworthy. Children were entirely trusted with the animals, given small animals to hold [3:15], or allowed into a stall with a horse, given a job of responsibility; trusted to feed, clean, care for the animals, trusted with autonomy over their tasks. Melson (2001) and Geddes (2006) note that responsibility training is a key skill for access to education for children with BESD and maybe therapeutic in process, allowing the children and young people to explore nurture alongside and through responsibility. The animals, due to their domestication, allowed the children to approach and work with and around them. The children were placed in a position where they *needed* to trust the adults putting them outside of their comfort zone into a position of possible threat. Additionally, they needed to trust that the animals would not hurt them. Such direct exposure to experience trust may in other circumstances evoke a defensive, avoidant or aggressive response by a child with a reflex to fight or flee (Geddes, 2006). In these cases, it did not.

The issue of trust is pertinent to relationship building. In infancy, children are entirely dependent. The development of trust is based on the dependability and quality of the child's caregivers. If s/he is inconsistent, emotionally unavailable or rejecting, this will contribute to feelings of mistrust in the child. Trust, or rather difficulty in trusting is therefore a common symptom of a child with an attachment disorder (see 3.3). When a child successfully develops trust in a given person, context or situation, he or she is more likely to feel safe within that context and able therefore to access thinking and learning and perhaps ultimately trust in other areas (Geddes, 2006; Sunderland, 2007; Perry, 2011).

Children within the contexts were able to overcome initial fears, trusting that the animal would not hurt them. They were trusted with the responsibility of caring for the animals, and this offered trust engendered a sense of responsibility in the children [3:16].

A further dimension of trust, again exemplified by 'Kevin's ducks' [3:14] is that which research shows children place on animals by sharing their 'secrets' with them. Melson (2001) describes a further securing of a bond through this.

8.4.3 Nurture

The animals provided outlets for nurturance for the participants at the case study contexts, defined in this context, as the opportunity to care for the basic physical needs of the animal, such as feeding and cleaning. The need to understand how an animal may be feeling, to consider its needs, in turn supporting the development of empathy and ultimately relationship. This is evidenced by examples such as Billy who nestled a guinea pig in his arms telling it that he would protect it [3:20]. A strong sense of ownership, protection and responsibility was apparent throughout. The animals served as surrogates, players in acting out a secure relationship.

The physical act of providing nurture through activities such as stroking a dog, holding and stroking a guinea pig in their hands, or grooming a large horse [3:21], sought to soothe and engender a nurturing response in the children. The dogs responded with affection on stroking, the guinea pigs apparent vulnerability, so tiny in the children's hand and the horses which stood still, leaning into the children apparently enjoying the grooming. It is these subtle, but important responses that enabled the beginnings of relationship. The observations within the study suggest that the beginnings of empathy were observed and expressed [3:22]. Melson (2001) supports this suggesting that the sense of calm and

reassurance pets provide may enable them to act as surrogate *parents* for children. The plasticity of roles an animal may play in the feelings projected onto them, enable them to feel, think and be whatever the children want them to feel, think and be, enabling quickly cemented relationships to form.

This is particularly significant for the boys within the study in the development of touch, affection and identity. Beck and Katcher (1996) reflect on this importance. 'A pet may be the only being that a man, trained in the macho code, can touch with affection' (p.89). Mallon and Wishon support this notable impact. Mallon (1993) noted that whilst children are traditionally thought of as recipients of nurturance and not as nurturers themselves, companion animals can assist in developing appropriate nurturing behaviours. Because animal care is predominantly gender-neutral, it can serve as a training ground for the development of nurturance in boys. Wishon (1987), describing the caring for, feeding, watering, tending and protecting of an animal and the resultant feeling of being needed; concludes that the act of feeding an animal may be one of the first connections that a child makes with the natural world, establishing himself as caretaker.

The story of Ron (Chapter 7.10.2.1) confirmed exactly this. He relayed a story of depression, non-attendance and bullying before he was able to connect with the animals at the school. His strategy for escape from the challenging relationships at secondary school was to arrive early at school and help feed the animals. Here he could share his difficulties with the animals who 'understood him' unlike his peers. Through the experience of caretaking for the animals, Ron was able to achieve at school, focus on a vocation with animals and feel good about himself.

8.4.4 Touch

The theme of affection and touch resonates for all children, but in particular for this client group. The human need for touch and comfort is essential, but especially for the child who may have experienced inadequate or harmful parenting, often resulting in a paucity of contact comfort. Opportunities within an educational environment with strict safeguarding boundaries, which restrict physical adult-child contact, mean that the essential experiences of touch and affection are sometimes limited. Children with BESD have a strong need for physical contact, but often give signals rejecting human contact, perhaps because they have been hurt once or often by people or because they do not know how to engage at this level. Occasionally, this manifests with children driven to physically control this desire to be held by disrupting to the point of restraint. The reluctance for touch is not generally however associated with the animal. Equally, an animal be controlled or manipulated by the child as a person can be, therefore in touching an animal, contact conflict may be resolved. If a child permits an animal to approach them, it is likely that the child will then touch the animal. In some circumstances, animal touch can again become a substitute for other human relationships in meeting their need for safe touch without demand or criticism. When a child needs to love safely, without fear of losing the loved object or being themselves harmed, animals and in particular mammals can supply this need. An example of this is B [3:24] who both in horse riding and with the school dogs appeared relaxed, smiled and demonstrated visible pleasure. He appropriately caressed the animals and the animals responded with affection towards him.

Tactile stimulation has a chemical response in both humans and animals. The role of Oxytocin within mammals enables the development of relationships and resilience (Perry, 2011). The action of stroking, or grooming, stimulates a release of the hormone Oxytocin in both humans and other mammals. Oxytocin, best known for its role in childbirth and

breast-feeding, acts as a neuromodulator, soothing and comforting, enabling bonding, and relieving pain and stress. Children may not be able to rationalise these chemical explanations for their empathic development, but research shows that levels of Oxytocin in a person rise after stroking a dog, and a dog's levels of Oxytocin multiply dramatically. This is reported to be similar for all mammals (Daley-Olmert, 2009). This indicates that an isolated connection with an animal acts as a stress relief, calming and soothing enabling a child to think more clearly, concentrate, focus and relax. More than this however, after repeated contact the bond between human and animal will strengthen, facilitating relationship leading to the development in the person of some empathy for the animals (Moberg, 2003).

8.4.5 Understanding

Animals provide an apparent non-judgemental response. In the study, they were often described as 'friends' [3:25], supporting the developing ego strength of the children by offering an overarching 'understanding', a feeling projected onto the animal as the animal providing affection on demand held no judgement and were ever present friends, more-so than some children had experienced prior to these interactions. Teachers reported the transference of these skills between the children experiencing the interventions and with peers shortly after [3:27]. Dialogues, both audible and silent went on between child and animal. Staff, at each context reported that children talked to the animals when they were angry or upset, and children described this experience as satisfying indicating that the goat, guinea pig, dog or horse was a 'good listener' [3:28].

8.4.6 Empathy

Empathy, the capacity to understand another person's feelings as they might experience them, is a key factor in a person's emotional development (Perry, 2011). Crucial to healthy

social and emotional development, and a missing characteristic of those with antisocial personality disorder, as well as many children and young people with severe attachment disorders (Van Ijzendoorn, Schuengel and Bekermans-Kranenburg, 1999) the development of empathy, compassion and social connection begins with very young babies in the bond they develop with their parent (Perry, 2011). Hormones Oxytocin and Dopamine, with appropriate caregiver touch supports a child to develop a bond and a healthy stress system (Daley-Olmert, 2009). For those children who experienced interrupted, ambivalent, neglectful or chaotic parenting, these bonds are not securely developed. Over time, a baby gives up trying to reconnect or bond and a part of his/her brain shuts down (Prior and Glaser, 2006). Rather than find comfort in people, a child may turn to objects or self-reliance, and the development of empathy is lost. Perry (2011), exemplifies the dangers associated with a lack of empathy including, a lack of resilience and an inability to deal with stress or to function socially and even sociopathy at worst.

In the study, the need to communicate with the animals, and in some cases (for example when faced with a very large racehorse), to estimate an animal's feelings for reasons of safety and wellbeing, engendered a necessary projection of feeling onto another. Melson (2001) supports this data. She recorded that children who own pets in particular express greater empathy and are more skilled in reading other people's feelings. She reported that 'Pet-involved children express more empathy and are more skilled in predicting how others would feel in different situations' (p.50). Further research has explored this impact. Daly and Morton (2006) explored the significance of empathy in relation to children and dogs, cats and horses. Their findings indicated that for many girls in particular, but also significantly for boys, having a dog, a cat or a horse present at home, or significantly for this study in a classroom setting; resulted in increased empathy.

The question remains as to whether the presence of an animal means that those children with BESD who may have failed to fully develop empathy still can. At all of the case study contexts in the study, staff commented on an increase in cooperation, consideration, collaboration and social engagement where groups of children were occupied in tasks to do with the animals. All factors which infer some degree of empathy [3:30].

8.4.7 Control (Self-regulation)

An essential ingredient for children who exhibit aggressive behaviour, or have phobias of animals, is the ability to control and regulate one's own behaviour. Additionally, children learn from a young age to regulate their excitement when faced with animals and instructed to be calm, gentle and quiet. This regulation of impulses enables children to develop greater focus and confidence for those activities and challenges they may have previously found unmanageable.

The collective histories of participants in the study suggested that as a response to their social and emotional difficulties, the children and young people frequently displayed behavioural difficulty including a lack of self-regulation, the need for regular physical restraint, verbal challenge, oppositional behaviour, non-compliance, disengagement and hyper-vigilance. This however, was not the case whilst the research was being conducted. There were no instances of aggressive behaviour in any of the contexts. The reported atmosphere was one of acquiescence and calming behavioural changes in the presence of the animals, and confidence and optimism on their return to class [3:31]. There was on no occasion a need for restraint, for the child who struggled to engage with the intervention, (perhaps expressing anxieties around the impending interaction, [3:32]), or for the other participants. Despite one child unable to make full use of the experience, there was no oppositional behaviour expressed to staff or animal. This represented, at a

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superficial level that there were positive behavioural impacts to the intervention demonstrating some self-regulation in the context with the animals.

Research of a similar nature supports this claim. Katcher (in Fine, 2010) reports that in research with companionable zoos and troubled adolescents over six years and in three locations, there was no requirement for restraint. This is remarkable for this population of children, who are often defined by their impulsiveness and inability to contain strong feelings, which manifest in negative behaviours representing their complex and often negative experiences. Behavioural changes are the outward expression of internal emotional changes, and these results suggest development in the children's internal locus of control and their command over the self-regulation of emotions; a particularly challenging skill for young people with BESD to master. Children at each context demonstrated both excitement and restraint, and given a degree of freedom in how they interact, were able to explore the use of power and control [3:33]. Feelings of anxiety and the necessity of trust were imposed upon them. This barrage of emotions, again supported within a context of emotional safety, necessitated the subconscious processing of feeling, which was externally observed and manifested in behavioural change. Other settings confirm this trend. Sarah Kreutzer, of *Learning to Listen*[22], interviewed for this study, runs a small BESD provision working with out of school adolescents and horses. She reported that in her then six years of running a school for BESD adolescents, she had had no incidences of restraint whatsoever.

The additional contexts revealed that each intervention demanded routine and reliability. This inevitably may have supported children and young people with the discipline of routine, thus promoting emotional safety and positive behaviour. This was reported

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[22] www.learningtolisten.co.uk

specifically by DHK (7.10.1). A general outcome of these additional case studies and for B and the dog (5.9.1) specifically was Improved behaviour and respect for the environment. Arguably, for children with BESD to participate in and maintain a course of learning without incident in any context, represents a behaviour change if only momentarily.

8.4.8 Anthropomorphism

Anthropomorphism (Gould, 1980), (see also Chapter 1.6.5 and 3.7.1) though not perhaps a 'skill', is used to develop the ability to identify, empathise and escape into fantasy and humor. For children and young people lacking in empathy and longing for escapism from their sometimes difficult realities, it is a useful social tool.

Within the case study contexts, children were observed to anthropomorphise or project human feelings onto the animals with whom they worked [3:17]. This may have been in order to move an interaction to 'relationship' by defining a sense of belonging and kinship. Comments such as 'he feels sad when I leave', 'You are scared aren't you, I will keep you safe' and 'He doesn't like me' suggest an element of relationship for good or otherwise.

At William's School, young people were not as quick to anthropomorphise. The boys understood the function of the animals and did not build relationship to the same extent. One child enjoyed de-stressing with the goats because 'he's just a goat, you can't get angry with a goat'.[3:18]. The adolescent young person understood animals to be just that. Where this was the case, there was little emotional impact reported by the young people, instead more of a pragmatic reasoning to the animals place and function [3:19]. This may suggest therefore that a degree of anthropomorphism supports a stronger attachment to animals. Peculiar to the William's School context, the animals were assigned according to jobs needing doing, identified *for* individuals and therefore not 'owned' by the children.

The impact on them therefore was observable only whilst the young people were present with the animals.

Children demonstrated a fondness towards the animals, which grew over the time of the intervention. The animals represented a safety, a familiarity with the environment a *transitional object* (Winnicott, 2005) perhaps providing opportunity for touch, the projection of feeling, mirroring the comfort seeking behaviour of an attachment relationship in what may have been for the children a mildly stressful situation. By definition, a transitional object is used to confer comfort, psychological or physical when a child is in an unfamiliar or uncomfortable situation (Winnicott, 2005). Often, the object described is a blanket, or a soft toy, perhaps as a child begins school. In older children within BESD settings, examples can include any items of sentimental value from home or school, such as watches, belonging to a trusted person, electronic games from home, pieces of equipment from school and so on. Winnicott describes that often, when a child introduces a transitional object, it is an indication that he/she is feeling insecure or unsafe.

8.5 Environmental Factors

Fundamental to the development of secure attachments and healthy brain development, are certain environmental factors. A loving and safe environment within which an infant can explore offers opportunity for learning and development. Conversely, those who have experienced unsafe or restricted environments physically or emotionally will inevitably not thrive as successfully as those who develop a healthy stress response supported by a loving and nurturing environment (Barrett and Trevitt, 1991).

Environmental factors were identified through the research mirroring these early learning factors, which contributed to the impact of the interventions. A natural environment,

offering the opportunity to learn outside the classroom provided breadth and extension to the children's learning opportunities. The provision of purposeful activity provided structure and safety (physically and emotionally) and the support of positive staff facilitation provided the responses from which children could reflect and learn about themselves.

8.5.1 A Natural Environment

A significant contributing factor to the engagement, the motivation and the impact of the interventions, was the change of environment, taking children into the outdoors to be in a *natural environment.* Children expressed this enjoyment of the outdoors frequently and openly at each context, despite comments referring to adverse weather [3:35]. Some children expressed this pleasure of nature as synonymous with freedom [3:36], a little felt and much-expressed goal for children with BESD who struggle with rules, restrictions, boundaries and containment.

Recently the national press published recommendations following a report by the National Trust (Moss, 2011) highlighting ways in which children have lost contact with nature, suggesting fifty easy remedies [www.50things.org.uk, accessed 18/08/13]. Where there is concern for children's disconnection with nature, therein lays a concern for children's disconnect with anything that can be described as an integral part of nature; namely animals. The National Trust along with the current Government are presently seeking to redress this disconnection through initiatives including Learning Outside the Classroom (LOtC), Learning In the Natural Environment (LINE), and the new National curriculum (DFE, 2014).

Observations showed a change in demeanour and attitude of the young people in the case studies once outside and amongst the animals [3:37]. As stated earlier, the environment was, in each case study context slightly different. At Wildwood, the farm was nestled amongst a housing estate, opening out surprisingly to expanses of green and woodland. At Great Oak, children travelled on a minibus, leaving the inner city, through rolling green fields to the rural idyll of a wealthy stables located outside a Cotswold village. William's School farm was located at the back of the school in what is already a fairly rural area. The farm however, looks out over seemingly endless green fields. In each context, the environment surprised the children and differed to that which they were used to. Taking them away from their familiar comfort zone into a natural space did not seem to stress, rather to reassure and to comfort in readiness for the activities with animals, which in some cases presented some emotional challenge. Not only did the children observably seem to relax, but additionally, they were enthused and stimulated by the multi-sensory nature of the environment [3:38]. Smells that challenged and appealed, things to touch and explore, equipment not used before, and the impact of the weather, both good and bad and so on.

Recent research (e.g. Louv, 2006; The National Trust, 2012; FCFCG, 2011; www.lotc.org.uk, [accessed 06/10/12]) suggests significant importance for children and young people, in reconnecting with the natural environment. The Report to Natural England on Childhood and Nature (2009) suggests that contact with nature may improve pro-social and pro-environmental values and behaviour. The report, which explores the relationship adults today had with nature as children states that 'It is a recognised fact that contact with Nature can play an important role in the educational and social development of children' (p.3). Moss (2012) in his report to the National Trust reported that significantly fewer children in current society have contact with nature in an exploratory sense than did

their parents a generation ago recommending in list form of how parents may wish to address this.

In interviews discussing the experiences of the contexts with animals, children used words such as 'freedom' and 'play' [3:39]. The children participating in this research were predominantly those from urban environments with a lesser of experience of nature in their home environments than perhaps their peers growing up in more rural contexts. In some cases, these young people who may also be suffering from deprivation in attentive parenting are at further risk of this disconnection from nature. This is not a new phenomenon however; Wilson's (1984) Biophilia hypothesis suggests similarly, that without contact with nature (including animals and the wider natural environment), a person may become emotionally and mentally unwell. In each of the case studies, this change of environment from classroom to 'nature' had an impact on the children and young people were visibly calmer, more coherent in speech and thought and focus [3:40].

8.5.2 Learning Outside the Classroom. (LOtC)

At Wildwood, the children were 'Volunteers'. Having bestowed on them a sense of belonging and responsibility, the children felt able to offer opinions and contribute to the running of the farm [3:41]. This ability to affect their learning enabled the children to develop a sense of autonomy, a key skill for developing secure attachment (Erikson, 1956). A key finding from a study of the value of community farms and gardens (Quayle, 2007), found that it was not enough to simply be exposed to pleasant environments, there was also a need for the ability to *change* one's environment for impact on emotional well-being (see Chapter 3.6.4). This, in conjunction with social engagement with other people or with animals, was found to have greatest impact.

Children in the study described LOtC as synonymous with 'freedom and fun' [3:42]. In each context, carefully planned sessions led to positively reported outcomes whereas, more organic unplanned opportunities had the potential to be less significant [3:43]. This also supports the importance of purposeful activity (8.5.4).

The Government's *Learning Outside the Classroom Manifest, (LOtC)* published in 2006, was designed to promote engagement for children in education with the world beyond the classroom as 'an essential part of learning and personal development' (p.1). The document highlights and supports recent trends in education to focus on achievement, and advocates exploration of the world outside of their usual environment to stimulate curiosity and imagination as a method of engaging learners. The Office for Standards in Education (Ofsted) evaluated LOtC in 2008, and described outcomes such as 'better achievement, standards, motivation, personal development and behaviour' for the general population (Ofsted, 10/2008, p.4). Importantly, they also recognised positive effects of learning outside the classroom on young people who were hard to motivate. The report commented that LOtC was most successful, when 'it was an integral element of long-term curriculum planning and closely linked to classroom activities' (p.5) suggesting that the environmental experience alone may have *some* impact, but for greatest educational impact, the experience should fuse with careful planning and preparation. Within the research, this planning and preparation was varied. At Great Oak, a detailed and continually evaluated programme complete with objectives and outcomes was planned, prepared and delivered. At Wildwood, the need for planning became evident through the process. The intervention started with no defined outcomes for the sessions, allowing children to dictate the process. This proved unsettling however, and teacher planning was subsequently put in place, involving desirable learning and planned activities. This was noted by the staff to support the routine and the enjoyment of the experience [3:34]. At

William's school, the process included both planned Science lessons utilising animal contact and spontaneous contact driven by the young people experiencing or exhibiting behaviour and emotional challenge. The latter was reported to be cathartic in regulating emotions and impacted on emotional learning, whilst the lessons impacted on the young peoples scientific understanding [3:43b].

The Case Studies showed that some of the participating children reputed as 'hyperactive' and 'socially delinquent' became quietly engaged and focussed on the tasks with the animals [3:44]. They absorbed a significant amount of knowledge and understanding of the animals and tasks, as evidenced in the example of the recall of the children in Chicken Club, in response to the 'Golden Egg' question each week [3:45]. Congruent with these findings, a report from Learning in the Natural Environment (LINE) in April 2011 further outlines the benefits of being outside amongst nature. The report highlights educational, health and psychological benefits as well as 'indirect benefits ranging from social to financial' (p.1). In particular, the report reveals that 'Hands-on contact appears to be a means of enhancing mental health and wellbeing of children and adults alike' (p.2). With reference to pupils who struggle to engage with learning in classrooms, the report reveals that exposure to the natural environment can lower the effects of various mental health issues that can make it difficult to pay attention in class.

8.5.3 An Environment with Animals

When presenting oppositional behaviour Children with BESD are often communicating discomfort since they lack the skills or opportunity necessary to reconcile their difficult feelings in alternative ways, such as confiding in a loved parent, sibling or friend. These children and young people, find it difficult to build friendships, bombarded by emotional complications, which negate their best efforts. In this study animals fulfilled this vacancy

for the majority of children, if only temporarily. Animals with predictable acceptance allowed children to feel needed, offer interactions allowing them to feel loved, heard and understood, counteracting loneliness, being a confidante, and play companion [3:46]. Melson (2001) describes this is as 'a non-judgmental outlet for the uncensored expression of feelings' (p.50). In the presence of animals at each context, there was no apparent need to express strong and negative feelings. The negativism expressed was low-key, and isolated to individuals and their mismatch with the experience or the timing of it [3:32]. Not only was there a relative absence of negative behaviours, but conversely, the presence of positive behaviours. By far the majority of children walked and talked with confidence and optimism, pride in their understanding of the animals and processes, in some cases taking on the role of tour guide *(As at Wildwood School)* or describing their role as 'staff' *(As at William's School,* [3:47])*.* For the time of the experience, these children and young people were effervescent with positive self-regard, eager to share their learning. Children were mesmerised by large racehorses, or baby farm animals, silenced by the experience of horse riding and facing a task with an animal for the first time [3:48].

Increasingly, organisations within larger movements, such as the School Farms Network, and the Care Farms initiative are realising and promoting the associated benefits of animal connection within the environment. Ofsted (10/2008, p.14) in reporting on the impact of LOtC noted that 'pupils in one school were 'awestruck' as they watched chicks hatching'. The Federation of City Farms and Community Gardens (FCFCG) in an evaluative report (Quayle, 2007) along with the national press report on increasing numbers of primary schools keeping chickens, the reintroduction of the class pet and the benefits of animal contact for in particular children who are socially isolated and failing to

engage with schooling[23] Whilst the nature of such reports may represent bias or be questionable in validity, as they are commissioned by those organisations wishing to promote such ventures, they nevertheless highlight the current social popularity, and reflect a movement advocating a 'return to nature'.

The question remains. Would a natural environment without animals provide the same impact? Subtle additional impacts were observed during observation as a result of an environment *with* animals. At Wildwood school, 'Bear' the farm's pet Kunekune pig who, large as a small car has abundant character and personality. His 'humanness' allowed children to laugh outrageously and indulge in anthropomorphism and learn about their own feelings from those they projected onto Bear [3:49]. Kruger et al. (2004) noted that animals above and beyond nature can help support a person's emotional experience of themselves providing a dimension of spontaneity and laughter.

8.5.4 Purposeful Activity

A prevalent theme within interview, referenced fourteen times and of particular importance to the adults supporting the ventures, was that of purposeful and engaging activity. All adults felt that the experiences given to the children and young people were successful and an essential factor in the success of the intervention as they provided a job, a focus, an activity, a purpose [3:50]; something which is important in all areas of educational activity for children and young people with BESD. In this respect, the task supported the development of relationship and the exploration of roles and skills safely between the child and the animal initially, and subsequently the child and the adult (See 8.3.2).

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[23] (*Dogs Helping Kids*, Dogs Today, 10/2011; *How Chickens Transform Children*; Your Chickens 06/12; *The Winning Circle*, TES, 07/2007; *In the Dog house*, www.bbc.co.uk, 04/2007).

This correlates with neuroscience that asserts that 'doing' is the fundamental building block from which an individual is able to progress to 'thinking' (Thrive[ftc], 2012). After the interventions, children were able to articulate greater knowledge and understanding of animal care, demonstrate improved relationships with the animals and reflect on improvements in themselves as a result of the jobs allocated to them [3:51]. Adults noted that the continued engagement with the intervention was supported by the children's feeling of being needed by the animal, and the belief that without their support, that animal may suffer, or have to go without [3:52]. Research shows that our most basic needs include both the need to feel special as well as to have our needs met (Erikson, 1956; Prior and Glaser, 2006; Thrive[ftc], 2012) correlating with these two feelings of the interventions. This empathic involvement with the animals, may have allowed the children to examine their own experiences of such needs. Mallon (1992), in reviewing literature involving studies of children and animals, concluded that such an intervention, promoted the development of responsible independent behaviour.

Observations revealed that 'jobs' kept the children and young people occupied and busy and served as a focus for their attention [3:53]. There was never an animal who did not need something, whether clean bedding, feeding, grooming, or simply attention and affection. Children found purpose in each of these activities and despite initial disgust at defecation or fear of interaction; with support they embraced the experience in order to fulfil a need for the animals in their care. Tasks at each setting, acted as a conduit for the exploration and development of feelings such as pride, achievement, responsibility, trust, vulnerability, independence, communication and confidence, such as the experience of grooming the ponies at Great Oak, where children immersed in the detail of the careful use of the tools were also able to discuss how well a job they were doing, and as they perfected the skill, began to brim with confidence [3:54]. Melson (2001) reported that in

research with teachers, they reported an array of benefits associated with purposeful activity from a greater sense of responsibility, to a greater appreciation of nature (p.76).

Teachers interviewed in this study, including those not necessarily advocates for animal assisted intervention, acquiesce [3:55]. Geddes (2005) in talking of children with attachment difficulties believes that the most successful way to engage a child is to clearly define the purpose. Children with attachment difficulties have an understandable pre-disposition to suspicion, which combined with a heightened anxiety and history of failure, often results in non-engagement. It is this non-engagement that has historically led to challenging behaviour exhibited alongside their mainstream counterparts, and in many circumstances ultimately led to failure, exclusion and a placement within an alternative provision for children with BESD. Therefore purposeful engagement is crucial to the success of every activity. This study has shown that harnessing the natural or innate attraction of animals to children as discussed previously, and combining this with a task or meaningful activity, results initially in engagement, and subsequently, greater social and emotional outcomes.

8.5.5 The Social Support of Staff Facilitators

In each setting studied, and evidenced through interview and personal stories; the staff attitude, knowledge, belief and commitment to the respective interventions had a knock-on impact on the relative 'success' of the intervention. There is abundant anecdotal research recording the 'magic' of animal assisted therapy and activities, undertaken by those who 'believe' it to be true. It was important within this research to examine the place of the provider, his or her personal 'story' and the impact on the intervention and crucially, whether this has an impact on supporting attachment. Three key positions were identified:

- Those unable to see any flaw in the processes, adamant that there would be transformative impact for every child. These staff hold strong opinions on how the child's experience should happen often in an attempt to replicate (or compensate) for their own experiences, which ultimately runs the risk of restricting the freedom of the intervention, undermining the organic nature of relationship building, leading to lesser impact.

- Non-Committals: Those who quietly maintained a neutral position. These staff who acknowledge their own weaknesses, but inevitably hold considerable knowledge of the animals (if not the children) are supportive facilitators, evidenced by positive reflections in children's interviews; allowing children to build their own relationships and experiences with the facilities. These staff, facilitate individualised and meaningful impact for the children. They do not interfere in the relationship between the child and animal, and in so doing reaffirm trust in adults. Their own experiences often include positive and personal liaison and experiences with animals in their own childhood. Examples include the staff at Great Oak with whom, unsurprisingly children expressed fondness which may infer attachment.

- Negativists: Some adult support, directed to interventions whilst holding a fear of a particular animal or function of the context, negatively influence the children's engagement with the intervention, by for example drawing attention to the inclement weather, adverse risks or unpleasant emotions of the adult. This seeks in some cases to undermine the impact, reinforcing the child's anxieties and disorder. These staff usually, have had little experience with animals in their own childhood. This was evidenced in interview.

In each case, children interviewed commented upon the role of the adult in the intervention [3:58]. Children who were initially reticent about the animals appreciated the support of what as a result became a trusted adult, those who had no fear or reserve on

approaching the animals gleaned knowledge and understanding about the care and communication of the animals. Others still commented on relationships built by trust either afforded them by said adults or built through the continual support for the intervention. Opportunity to spend time with children away from other distractions proved in all cases to support the accelerated building of trust and therefore relationship such as Harry [3:59] who became quite proud of his responsibility as a trusted mentor for his teacher with a phobia of chickens. Both he and his teacher reported improved relationships, which subsequently transferred back to the classroom.

In one study of an Equine Facilitated Learning Intervention (Ewing, Macdonald et al., 2007) the organisation mandates that in all interactions, an adult volunteer is 'matched' to the young person participating in the therapy to support the young person's understanding as well as his/her safety. The outcome of this is that young people in the programme benefit in the areas of 'interpersonal communication, sensitivity towards others and relationship building' (p.61). Studies reflect that social support is implicated in stroke recovery, cancer, heart attacks and children's recovery from abuse, as well as a person's ability to weather stress generally (Levinson, 1997; Melson, 2001; Foster and Smith, 2010).

One adult in the case studies phrased this social support as 'Positive regard for young people' [3:60]. This description and attitude ensured a positive and supportive atmosphere was presented and maintained by those leading the young people. This directed positivity, coupled with the work with the animals, influenced the conversations and social dynamics and led to experience of and opportunities for role modelling, teamwork, collaboration, and relationship as well as, in some cases, a platform for individual analogous conversations,

such as the race horse who was a 'loser' but equally a loyal friend [3:61]. Each of these opportunities promoted the development of relationship and therefore attachment.

Emotional support is paramount for those children with a diagnosis of emotional difficulties. Without adequate emotional support, children and young people with BESD often fail to engage in educational activity (Geddes, 2006). As has been discussed, contact with animals provides emotional safety and therefore emotional support allowing those who may be physically isolated, depressed or withdrawn, anxious, insecure, or have communication problems to engage with learning activities, at least whilst animals are present. An example of this would be Frank, at Great Oak [3:62] who blossomed through the intervention with animal and adult contact.

It could be argued that given the right adult support; children may make these social developments irrespective of animal presence. Teaching staff responsible for the children and young people however reported that the progress observed in social development, was facilitated and accelerated by the animals' presence [3:63]. Melson describes the animal in this context as a 'social lubricant' (2001, p.130), enabling 'decreased arousal and sustained attention' i.e. a state of relaxation as a platform for therapeutic conversation. Katcher (2002) uses this same phrase, citing research that shows strangers are more readily accepted if with an animal e.g. in a park, a person with a dog is more likely to be approached than one without a dog; we perceive that a person may be more sociable or trustworthy than a person without.

This was a consideration by the staff supporting six children in a therapeutic horse-riding intervention connected with Wildwood School; four of whom could be described as

'withdrawn and/or depressed. For a number of sessions, the children would not interact with supporting staff, nor the guides leading them on the horses. The place of the adult became apparent however, some weeks into the intervention, when B began to struggle. The silent guide approached B, having had little conversation with him other than gentle prompts while leading his horse week-on-week, was able to facilitate B to re-engage with the intervention, by suggesting what his horse may think or feel about him. The other children began also to debrief with staff, exploring what their animals may think of them, their riding and so on [3:64].

Dickinson and Eva (2006), in discussing anxiety and depression, consider it likely that given our ancestry, we are genetically predisposed to want and need connection with other people. Anxiety and depression, both prevalent in children and young people with attachment disorders lead a person to feelings of isolation (p.796). Dickinson and Eva consider that these feelings act as a negative reinforcer, encouraging socialisation. If this is the case, then utilising people as facilitators to a therapeutic experience becomes not only supportive, but also necessary.

8.6 Impact

Analysis of the data shows five common areas of impact, each of which can be related back to attachment theory. These include educational impact, impact on social and emotional functioning, on group culture, on language and communication and on health.

8.6.1 Educational Impact

Many children with attachment disorders suffer from depressed academic attainment and an inability to fully access educational opportunities, inhibited by their limited social and emotional skills, or the manifestation of complex behaviours. Achievement, for such

children and young people is essential in rebuilding their view of themselves as learners, therefore providing motivation to continue to learn and engage with education.

Motivation is crucial to success in education and was a noteworthy facilitator of success in the study. The animals themselves were the main motivation. Without them, children may have been less likely to engage with the unfamiliar settings. The experience of being alongside, stroking, grooming or simply watching the animals was a powerful motivator for all participants of the study, providing an impetus to attend, participate in animal care tasks for the animals, and in completing academic related activities about the animals such as writing, or knowledge based activities. In one setting, the experience was also used as a motivator throughout the week [3:65] and in reports from supporting settings and studies, animal experiences had provided motivation to attend school, participate within a group, speak aloud and to achieve behavioural targets in those children who were otherwise reluctant to do so [3:66]. This motivation was harnessed by supporting adults sensitively to enable anxious and fearful participants to access the settings, while the environments themselves supported a sense of calm enabling deeper interaction.

Absorption.

Children's learning remains grounded in sensory experience. Children commented on enjoyment of the intervention with words such as 'I liked it because I got to do *real* things with animals' (Sian, Wildwood School, [3:67]), reflecting both the engagement, a sense of purpose and the immersion of senses in the experience. The time did not drag for any child such was the absorption of the children in their activity. Learning from the touch of a soft mammal, or feathery duck, the sight of animal antics and the smells of each of the animal enclosures brought about stimulus in a multi-sensory way. Coupled with this, the

sensory alertness of each participant in the study, whether through excitement, caution, or both, engaged and enabled learning in a streamlined focussed way.

Wilson's Biophilia Hypothesis (1984) asserted that humans have an innate connection with animals and other species, a *need* to observe the natural world and the animals within it. It is this fascination and absorption that is prevalent throughout the findings. Like or dislike, confident or fearful, new to animals or experienced, girl or boy, child or adolescent, most participants in the study recorded interest and engagement at some level with the animals described in the study[24] [3:68]. Animals were the conduits for absorption in various experiences. Absorption being a preface to learning (Goleman, 1996) enables the interventions therefore to be catalyst for learning. Melson describes this learning experience.

> "Wherever they meet animals, children make more than cognitive distinctions among humans, animals and objects. They laugh, clap, shriek, worry and yelp with fear. They are stopped cold in their tracks by the slither of a garden snake…they stare intently as a caterpillar crawls from hand to hand"
>
> (Melson, 2001, p.89).

Positive engagement

All five additional settings reported positive engagement, increased participation, a reduction in stress, enabling children and young people to relax and participate with enjoyment.

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[24] Even the young participant at Wildwood School who was ultimately asked to leave the group expressed enthusiasm for the venture.

Happiness

In two cases, the horse riding and for B, parents reported increased happiness and willingness to attend school.

Absorption of Information and Learning

In some cases, in those additional case studies, children absorbed and retained deep knowledge of the animals. In some circumstances, this transferred to children's general engagement and improvement in learning [3:68b]. Engagement and enjoyment does not mean impact. Consider however, Maslow's hierarchy (1952) and the building blocks of neurodevelopment. Until a child feels safe and happy, learning and progress will be difficult. Optimal performance is related to optimal arousal, that is, to do something well, a person needs to be engaged and alert (Gosling, 2009). The context itself then, stimulates an environment in which learning for the majority of young people becomes possible. Those who could not participate, remained at the lower level of Maslow's hierarchy, concerned with their basic safety in the face of an overwhelming animal presence.

In interviews with teachers around interventions such as those reported on, a visible anxiety presents itself. 'Ah yes, but what about the curriculum?' Current political focus in schools on achievement and progress has left teachers feeling the pressure of academia and structure versus less defined more 'therapeutic' experiences. My experience and interviews with teachers throughout the course of this study leads me to believe that animals in the curriculum are much talked about predominantly for the very young, classroom pets are less and less common as a result of fear brought about by overzealous health and safety legislation, and school based animals are often thought of as the domain of the special school or class.

There is research however to suggest that the presence of animals in the curriculum may enhance educational development. Montagner (in Melson, 2001), a French psychologist who studied animals in classrooms over a period of ten years reported that vocabulary was richer and speech more grammatical, when children spoke about animals, than when speaking about other subjects. Levinson (1997) advocated the presence of animals in a carefully planned curriculum could enhance both the engagement of children with their education and also their achievement. Recent studies (e.g. Foster and Smith, 2010) equally support the assertion, quoting importantly the findings of the Office for Standards in Education. 'Learners of all ages…said that they enjoyed working alongside animals and away from the classroom. They found it 'exciting', 'practical', 'motivating', 'refreshing' and 'fun' (Ofsted, 2008, p.10). Examples of this were evident in the study. T, a horse-rider a bright and articulate, but normally very introverted child, found that on his first lesson, he couldn't help himself and became effervescent with questions and the desire to learn as much about the horse as possible. His guide told us that after the hour, she was exhausted. T went home and returned to school with three library books on horses, which he began to read avidly [3:70].

Explicit Learning

Aside from the positive engagement represented both in research and through the study, there is evidence to suggest that the intervention impacted educationally both implicitly and explicitly. Implicitly, in that as discussed, the interventions fostered the development of skills such as responsibility, respect, curiosity, questioning and reasoning, as discussed earlier in the chapter as well as a multitude of social and emotional and group skills. Explicitly, whilst with the animals, children learned knowledge and understanding in Life Processes; a key strand of Science, concepts in English; including the development of an emotional vocabulary and specific technical language skills, ICT skills; such as the use of

recording equipment to capture and reflect on their experience and practiced Mathematics skills; for example in measuring and feeding the animals. Once away from the animals, the excitement and engagement fostered an enthusiasm, enabling children to consolidate skills such as writing about their experience [3:72]. Charles, the science teacher at William's school, based the construct of his curriculum on this engagement. His belief that connection with nature and animals stimulates creativity was evidenced in each context [3:73].

Philosophy

The children and young people were invited to consider thoughts and processes, relationships, ethics and life; philosophically challenging concepts. Conversations such as 'What does he think?' in relation to an animal requested participants to consider identity and thought [3:74]. Consideration of the process of farm animals at Wildwood left children nurturing lambs with ethical questions, exploring concepts of death, purpose, attachment, and loss [3:75]. This led to questions such as 'How should I treat humans, animals and things?' fundamental questions, which in ordinary contexts are difficult to simulate.

Memory

Further related educational benefits include enhanced memory, and attention span such as L, who during the Chicken Club [3:45] demonstrated the almost word perfect absorption of information from week to week, during the 'golden egg question' session at the end of each lesson. Arkow (1987) supports this assertion describing impact that continues over time.

8.6.2 Emotional Impact

'Emotional impact' was a frequently commented upon theme both for children and adults, within interview. A spectrum of emotional attributes, including the development of confidence, self-esteem, risk and resilience, trust, self-awareness, vulnerability, responsibility and empathy were referenced as a result of the interventions. [3:77]. Children and adults talked in terms of 'moving out of the comfort zone', 'playfulness' and 'enjoyment' communicating the intervention was an emotionally based experience [3:78]. Adults reported observing serenity, gentleness, nurture, cooperation, trust and confidence during the interactions and shortly afterwards [3:79].

Engagement with animals provides a level of emotional safety for children and young people. During the study, one teacher of Wildwood school, not a usual accompanier of the pupils to the farm reported his fascination with the children's responses to the environment. He reported "It was incredible. Once they were at the farm, anxiety and hyper-vigilance just disappeared" [3:78b]

The ability to feel, understand and express emotion is a significant skill, requiring use of both the limbic system (feeling) and the frontal cortex (expressing) of the brain, demonstrating some movement in the development of the children. This is frequently prevented in those children whose anxieties and hyper-vigilance result from a constant state of stress (Geddes, 2006; Cooper, 1999). The exploration of this area therefore was pivotal in understanding the therapeutic impact of the interventions. What became apparent after the initial fear and anxiety of an interaction; was that most children and young people demonstrated an ease of engagement with animals [3:80]. Davis (1986 in Nebbe, 1991) observed that children with BESD become *emotionally* involved more

readily with animals than with people or tasks. Kidd and Kidd (1984 in Arkow, 1993) concur.

> "Emotionally disturbed persons who are unable to relate adequately to normal people often are able to relate to animals, probably because they have had happy past experiences with pets, or possibly because the type of unhappy interactions they had experienced with other humans was absent from the fun and games with animals" (p. 40).

This engagement with the experience at an emotional level was reflected in interview where participants talked about how the experience felt before relaying any connection to the educational impact [3:81b]. Children talked of connections and positive regard for the animals from the outset; staff talked of observed changes in pupils' behaviour, such as uncharacteristic quietness, laughter, focus and attention. [3:82]. Wilson (1984) confirms this instinctive fascination of children for animals in his *Biophilia Hypothesis*. Utilising this attraction, Levinson (1997) encouraged schools working with children and young people with BESD to make a more systematic effort to include animals in the therapeutic milieu. He suggested that pets in residential contexts could:

> "…reduce children's anxiety in going to sleep; diffuse the resentment of parents who see staff members as competing with them for the child's affection; ease the transition from home to school environment; be a stabilizing factor; be a source of constant stimulation for children facing undeviating school routines; and be ego-strengthening, reality-orienting, decision-making devices". (p.85).

Engagement with the animals was reported on as essential by the staff working with the racehorses at Great Oak [3:83]. At this context, the emotions were in contrast to other locations - more about awe and respect. Such voluminous animals instinctively present a

sense of physical fear due to their size and magnitude. Moreover, an instinctive sense of awe accompanied this, and together with supportive nurturance and instruction from staff, and physical interaction with the animals, children were able to feel emotionally safe.

The skills discussed earlier involving the development of self, and relations with others were prevalent throughout the study and contributed to the development of secure attachments. The ubiquitous presence of animals throughout the intervention served to offer multiple opportunities for the exploration of attachment. The environment with natural stimulation and fascination with the animals served as a 'Holding Environment' as described by Winnicott (1965) for the consideration of difficult emotions. The use of animals as a metaphor provided opportunity to engage children in the discussion of less comfortable topics, enabling children to learn to make sense of their environment, their relationships and even, for the teenagers in the study, to give thought to future careers, such as discussions at Great Oak around what it takes to be a Jockey [3:84].

> "Animal contact opens up small fissures in the armour of defences in which the small child cowers. Through the cracks, the child's 'issues' bubble up. The darkness made visible becomes an opportunity for therapeutic intervention" (Melson, 2001, p.101)

Confidence, Kudos and Esteem

The children and young people reported on in supporting contexts and interview were believed by their supporting staff to have gained and demonstrated increased confidence resulting from achievement both in terms of the skills acquired, their knowledge and understanding and the opportunity to pass this knowledge on [3:84b]. This too in the case of Ron, B and the Chicken Club provided opportunity for kudos amongst peers [3: 85b].

8.6.3 Group Culture

Group relations were central to the interventions with animals. Children and young people participating in the study were part of three distinct groups, all bearing group identities. The experience for each individual was significant, but equally significant as part of the whole and as a contributor to the impact on relationships. Threatening concepts described by Erikson (1956) as key to the development of a healthy attachment such as recognition, affirmation, acceptance, empathy, assertiveness, eliciting responses from another, the exploration of autonomy and attunement with another, were explored within the safety of the tasks of the intervention, and their challenge lessened by the presence of the animals. In all contexts, children and young people remained hyper-vigilant to the responses and behaviours of their peers, *until* they came into contact with the animals, where this contact for many, superseded important peer relationships, and promoted an atmosphere of cooperation and collaboration. [3:85]

Each group observed, changed in dynamic when in the company of animals [3:86]. Perhaps because here, the animal took the role of the 'common third' (Cameron and Moss, 2011), facilitating a different connection, perhaps children ascribed the status of a group member on the animal, or perhaps the 'task' of working with the animals was attractive enough to place assumptions and preoccupations as secondary.

Harris (1999) advocates that healthy attachments, previously thought to depend upon parental figures, may actually be more dependent on good peer relationships. She considers that the impact of peer pressure is relative to the experiences of the children within the group and more dependent on the context and environment in which a young person finds themselves, than on parental relationships. Docker Drysdale (1990) also talks about the importance for children and young people of *Group Culture.* She

emphasises the importance of the group in forming opinions and beliefs, in expressing personality, and in learning about oneself, as mirrored within the group. This, also in part relating to peer pressure, which more specifically focuses on a child's influences within the group has been discussed through child development and education for decades in the formation of policy and practice. Both theories have a common mid-ground, in which consideration of the impact of the peer group is important for any intervention.

Complimentary to these theories, is Bion's theory of Group Dynamics (1998). Bion's theory advocates that every group has two dynamics, that of the task of the group and what he defines as 'basic assumptions' (p.66). These basic assumptions determine the behaviour of the group and can undermine the task. Bion outlined three basic assumptions: *dependency*, that is, the search for security within the group; *pairing*, the search for a partner within the group and *fight-flight*, where self-preservation takes precedence and the response is one of fight or flight. Understanding of these, according to Bion is key to the facilitation of a successful group. In this instance, the dependency for the children and young people was lessened as animals fulfilled a role of allowing the children to feel needed. Pairing became less of a preoccupation as children paired themselves with the animals. The fight-flight instinct, the need for self-preservation was of course present in the face of the unfamiliar, however as has been shown, as the groups progressed and became more familiar and therefore safe within the settings and animals, children's responses to one another took on a more collaborative and less antagonistic stance [3:85].

8.6.4 The Development of Language and Communication

Unexpectedly, the study revealed indicators that interventions with animals may support the development of language and communication. Children were observed talking and

communicating with animals and reflected on this communication with their chosen animals in interview, whether verbal or non-verbal [3:87].

Cross-species communication requires sophisticated non-verbal skills. Children are required to decode body language, gesture and sound and interpret alongside behaviour patterns to fully understand what the animal is trying to communicate. The child must learn how and what to communicate to persuade the animal to behave in the way the child wants, thus learning to apply a range of communication skills.

Throughout the study, the children talked to the animals [3:88]. This is not surprising. Melson (2001) noted that 66 percent of adult dog owners and 95 percent of children and adults that she surveyed spoke regularly to their pets. Children and adults alike, we are drawn to speak with some animals with the high-pitched, soft toned, exaggerated inflections that a mother may use to talk to a small baby. This exaggerated pitch and tone inevitably is responded to with gestures and gazes from some mammals, such as cats, dogs, goats and horses, with ear twitching and other animated responses, allowing the child to feel heard and understood. Animals sense body language and respond intuitively. This behavioural reflection promotes and affirms intimacy allowing the child to communicate across species boundaries. Further to this, is the tendency to draw close to the animal when speaking with it. Children and young people in the study were observed to put their heads close to the animals head, nuzzle and stroke [3:88] and in doing so combine touch and talk. This is something, equally possible with an inanimate stuffed toy, often a child's choice of confidante outside of a parent, a sibling or a friend. However, the response from a living animal, whether indifferent or energetic, will be greater than that of a toy, causing children to examine, to try to interpret and understand. This communication teaches children about the importance of tone, gesture, pitch, facial expression, as well as

whole body language as part of communication and contributes to the development of emotional intelligence (Goleman, 1996).

One recent study surveyed high functioning professional adults in Australia. The research reported that 100percent of dog owners believed that their dog understands them (Bennett, ISAZ, 2012). In another study, over 50percent of pre-school aged children surveyed believe that animals can speak back (Melson, 2001). Certainly, the child may act as the animals' interpreter, and on many occasions in my own experience in schools animals have been utilised effectively as a conduit for conversation, with a child, de-personalising the difficult feelings of the conversation. An adult may use the animal to suggest how a child is feeling, projecting the feeling onto the animal in place of the child. Equally, a child may use an animal to talk about how he or she is feeling, projecting those difficult feelings onto the animal again supporting the development of relationship building skills.

Specifically, some studies have found explicit impact on vocabulary and grammar. Montagner (in Melson, 2001) found that children's vocabulary was richer with more diverse grammar when talking about animals; Richards (in Melson 2001) noted that there are four categories of interaction with animals from which children learn communication skills. The categories include: Interactive conversation to the animal, nurturing conversation about its care, learning conversation, generated by the curiosities and questions evoked with an animal, and social conversation, where animals are the focus of interaction with others (p.85). Examples of these four aspects are prevalent throughout the findings in this study [3:89].

The level and content of language may depend upon the species and relationship that the child has with the animal. Mammals generate greater conversation than insects or poultry (Beck and Katcher, 1996). There is power in question generation when facing a child with a living creature that he/she has not previously encountered. Children begin to form and ask questions that they did not know they had, as in the previous example of T [3:70]. Children without such stimulus are unable to ask the diversity of questions and do not require the sophistication of vocabulary.

During interview, children's images of the animals provided them with the stimulus for the interviews to become significantly more, free flowing, with frequent use of emotive language [3:90]. Children with BESD, commonly have speech, language and communication difficulties, (Tommerdahl, 2009) further inhibiting their access to learning. This may be for abundant reasons, and affect individuals in very different ways from syntax to pronunciation to more complex receptive language abilities. Nevertheless, common to all, is the need for opportunities of uninhibited expression. Overall, the greatest influence on the development of speech and communication is enthusiasm. When fascinated and enthused or excited, children began to talk to, about and around the animals, with peers, with teachers, with new vocabulary, developing questions, ideas and philosophies, learning the language of feelings, talking on subjects ranging from care and nurturance to ethics and philosophy [3:91].

Levinson, 1964 in Cusack, 1988) found that withdrawn children who would not talk to adults would often talk to pets, and in several of his cases, this led to more normal relationships with people. This then, again supports the impact for children with attachment difficulties.

8.6.5 Health Impact

It is difficult to evidence the impact of the interventions on health from this study due to the complex nature of this dimension and in particular, the short time frame in which the interactions were studied. Nevertheless, it is possible to demonstrate impact on health as it relates to broadly two categories: physical impact, and the impact on emotional/ mental health.

8.6.5.1 Physical impact

The physical impact of the environment which required children to be outdoors, exert effort and participate in exercise and play with the animals, in itself had a physical impact. More than this, the sensory stimulation enabled children to operate at their most alert, enabled concentration, energy and absorption in the task, each, physical indicators [3:91b]. Observations demonstrated a change of dynamic in the behaviour of the children and interviews revealed that children viewed being outside as 'free' [3:93]. Drawing on research on oxytocin and animal touch benefits (Daley-Olmert, 2009; Beck and Katcher, 1996) behavioural indicators suggest that blood-pressure, anxiety and stress were lowered [3:92]. Comments such as 'It just chills you out' [3:92b] support this.

Studies in pet ownership have shown that touching and talking with animals reduces the risks of heart attack, lowers blood pressure, alters the course of heart disease, promotes relaxation and aids in extending the lives of cancer patients (Beck and Katcher, 1996, Serpell, 1996). Beck and Katcher found that even passive observation of animals had stress reducing benefits. Other studies (Wilson, 2003) noted that merely observing fish swim in an aquarium for ten minutes was as effective as hypnosis in relieving anxiety and discomfort in adult patients awaiting dental surgery. Wilson refers to this effect as an

example of *Heraclitean Motion (see Chapter 3.4.1);* research into the hormone Oxytocin (*see Chapter 10.4.5*) provides further explanation.

Some studies suggest that simply being in the presence of an animal reduced levels of distress during mildly stressful activities (Friedmann, 1983; Wells, 1998). Research also points to animals as contributing to the reduction of anxiety and offering both physiological and psychological benefits (Kruger, Trachtenberg and Serpell, 2004). This research conducted in hospitals also found a range of benefits when looking at the potential health impact of animals in adolescent mental health. Among other findings, they identified that over time, those adolescents who had contact with animals throughout a period of treatment showed improved rapport and communication with other patients and therapists. In addition, they recorded that the presence of animals bolstered staff morale, which itself impacted on the quality and continuity of patient care.

8.6.5.2 Emotional/ Mental Health Impact

Children at each context demonstrated visible exhilaration and/or calming behavioural change when in contact with the animals in their environment [3:94]. Physical contact with the animals, the chemical response of Oxytocin reducing anxiety, had both a physical impact and a subsequent emotional impact, enabling continued engagement with the intervention and therefore resilience for it.

Studies such as Wishon (1987) and Mallon (1994) have examined the potential healing properties of animals for children with BESD and advocate mental health benefits. Green Chimneys Children's Services, in New York State exists to support the mental and emotional health and wellbeing of children with BESD, and refers to the animals as *healing partners*, participants in the therapeutic process [www.greenchimneys.org,

accessed 07/2012]. Their work over sixty years has grown from a small school of a dozen pupils with mild symptoms of BESD to supporting over one hundred children and young people, many of whom exhibit psychiatric disorders. Fundamental to their treatment programme is the pairing of a child and animal at the centre.

The presence of an animal has been shown to encourage mentally ill patients to participate in group therapy sessions (Melson, 2001) and in both the USA and in England, in special education, teachers are incorporating animals in the classroom to help children with an ever increasing diagnosis of children with attention-deficit problems (ISAZ, 2012). Levinson (1997) talks about animals having helped children with severe emotional disorders speak their first words and interact with adults for the first time. The positive impact on mental health is dependent on and a result of the positive engagement and fascination expressed by the children. The increasing prevalence of Animal Assisted Activities (AAA) and Animal Assisted Therapy (AAT) within England, and an increasing fascination within the media in the last five years suggests that this is an area ripe for research within the field of emotional and mental health.

8.7 Summary and Conclusions

Returning to the initial research question, *What if anything, is the social, emotional, academic, and behavioural impact of integrating animals into education and/or as a therapeutic intervention?*

The study indicates that environments working on interventions between children and animals provide positive affect for children with BESD and associated attachment difficulties. The difficulty arising from any study addressing human development which of necessity draws evidence over a limited period of time means that inevitably, further

research is required to evaluate lasting and transferable impact. There is evidence from the study nonetheless, that short-term intervention with animals for children and/or young people with BESD may positively impact on their associated attachment difficulties.

The purpose of the contexts was to identify a range of provisions, which may correlate with the finding of the case studies. The settings selected including individual provision, group interventions, young people not in education and a mainstream context in order to broaden the perspective of the study slightly. Though impacts are merely those reported by those with investment in them, and are therefore potentially subject to bias, the analysis of the findings correlate with those found within the case study contexts.

The intended aims for three of the additional settings were for educational benefit rather than therapeutic. Only the horse riding intervention was intended to affect children socially and emotionally. The fifth, an individual story was to an extent an unplanned intervention based upon the need to engage a child socially and emotionally with learning. Themes suggest that animals in the context of education, support access, confidence and esteem issues, enabling a platform for learning. This further adds weight to the emerging hypothesis that animals as an adjunct to learning may have positive educational and therapeutic impact for children and young people with BESD.

Kruger, Trachtenburg and Serpell's (2004) considered this impact therapeutic, highlighting means by which animals support the therapeutic process, each relating to findings discussed within the study. These include the utilisation of the animal as a symbolic vehicle for the expression of emotional subjects; as a focus of attention and agent of de-arousal; as an object of attachment; a source of social support; and as an adjunct for learning new skills and ways of thinking and behaving.

Relationship building was both a factor in the success of the intervention and an outcome of it. Animals as a conduit to relationship and relationship with an animal, was prevalent throughout the study. The absence of a relationship with an animal, as exemplified in the study with older adolescent boys, does not negate the impact absolutely. Findings from William's School, supports some impact of the intervention without relationship as a factor.

Key skills were developed which support the development of relationships and each of these was evident in each case study context. These skills include identification, trust, nurture, touch, understanding, empathy and self-control. The exploration of anthropomorphism enabled the use of the animal as a *transitional object* (Winnicott, 1991).

The study found that contact with the animals specifically is therapeutic, in that the elements are curative of the difficulties faced by children challenged with BESD as relates to their attachment difficulties. However impact was dependent upon certain factors present within the contexts studied. These include the environment in which these interventions take, namely outdoors and amongst nature and engaging in purposeful activity alongside the social support of a key adult. In some instances, for children and young people, particularly those unable to access social support due to trauma, or another underlying cause of BESD, an animal has begun to be either a conduit for this or a substitute. This is *enhanced* with the support of an understanding and supportive adult guide.

The perceived benefits of the interventions include educational and social and emotional impact. This is pertinent for children with BESD, showing that the skills gained may begin to address and support children to overcome barriers to education and social engagement.

There is impact evident on groups, language and communication and on health, though limited data means that a more prolonged period of study would be necessary to generalise.

For the young people within the study, the interventions have ended. Some were brief, lasting only a few weeks, others continuous for over a year. What is evident is that children able to initiate and pursue an initiative until its natural conclusion became more emotionally involved with the animals. The positive impact on these young people was evident in behaviour, emotional capacity on social skills and in engagement with their education generally.

8.8 Implications and Recommendations

This final section begins with an overview of the main areas covered by the thesis. The limitations of the study are considered, before an outline of the theoretical implications of the study and a consideration of what it adds to current understanding of education for children and young people with BESD. This is followed by a summary of the implications of the study and recommendations.

8.8.1 Overview of thesis

This thesis summarises a case study exploration of the therapeutic and/ or educational impact of integrating animals into settings with children described as having Behaviour, Emotional and Social Difficulties (BESD). The central research question was: *'What, if anything is the social, emotional, academic, and behavioural impact of integrating animals into education and/or as a therapeutic intervention*?'

The study employed a qualitative methodology and made use of a visual ethnography at a range of case study contexts, which included observation and biographical narratives from repeated free association narrative interviews.

My approach towards data analysis was to draw out themes from observation and interview and question these themes with the use of reflexivity and repeat FANI interviews. Drawing together these themes and testing them against existing literature supported the process of establishing where my findings added to the existing body of knowledge.

The analysis of the findings demonstrates that in an educational context, interventions with animals can support children and young people with BESD to develop the skills required to better relate socially and emotionally and to 'rebuild attachments'. The study shows that most participants, through the interventions, developed some skills in building relationships. Behaviourally, children found a strategy for allaying stress and anxiety and whilst present with the animals, this was especially the case.

In order to impact change for the participants, three contributing factors were found to be significant. These were the presence of a positive, natural and outdoor environment; the planning for and provision of purposeful activity and the presence of supportive facilitative adults.

The thesis demonstrates that within an increasingly academic climate focussed on knowledge acquisition, there is a need to acknowledge that in providing for children with BESD, alternatives approaches to learning including access to animals and interventions involving animals in the context of nature, may support the development of relationship skills and thus enhance children and young people's opportunities to learn and thrive.

Putting children and young people in situations where they are faced with unfamiliar tasks and creatures provided both challenge and a context in which children could learn, fail, test out and develop key social and emotional skills.

There is a paucity of literature evaluating interventions such as those represented within this thesis. Where provision exists for children and young people with BESD, institutions themselves question the importance and purpose of the interventions alongside the unquestionable importance of the formal academic curriculum. My work confirms the validity of such interventions and within the wider context of formal classroom settings supports an alternative or additional approach for teaching and learning for those pupils who have inevitably failed within traditional methods of schooling warranting their 'label' of BESD in the first instance.

I have achieved what I set out to do to the extent that I set out to explore the impact present for interventions working with children and young people with BESD and animals. There was in all settings a positive impact, which can be summarised as contributing to the development of social and emotional learning, and rebuilding 'attachments' (Bowlby, 1969). In supporting this social and emotional development and relieving traits of social difficulty, the interventions may be described as therapeutic.

8.8.2 Limitations

It is important to highlight the constraints of the study. The strength of a case study approach is the ability to make comparisons (Stake, 1995) and triangulate with theory. The limitations include the subjectivity of the data. However, as Garner (1999) notes, the data from one individual represents a truth from that person's perspective 'and should be recognised and valued as such' (p.xi). Collectively, case study has been recognised as a

valid and transparent method of study for providing reliable and transferable findings (Yin, 2004).

Evidence of improvement over time would require further data. However, in each case a positive, enjoyable outcome during the venture was reported. These include positive engagement, increased confidence and in some cases improvements in learning and behaviour. The settings cannot be isolated as responsible for change entirely, but it is clear that there has been a contribution in each case. Questions again remain as to the transferability of the skills gained over time and across contexts.

The choice of research topic reflects my own interests. As with all research, there was some bias at the beginning of the study. Key strategies were employed to enable a distant and more objective role within the study and to examine the interventions from the point of view of observer rather than practitioner. The merits and issues of this role are discussed in Chapter 4.6 and 4.9.8.

8.8.3 How this research contributes to our understanding of BESD

Initially, I set out to explore the impact of interventions as a therapeutic adjunct. The thesis supports the Biophilia Hypothesis (Wilson, 1983), that there may be, an 'innate connection' and therefore value in connections with animals and other species for emotional and mental health. The study has shown that within a certain context, children and young people with typecast modes of behaviour and presentation can and do change and moderate their behaviour. More than this, those symptoms with which children with attachment disorders struggle, such as a lack of empathy, an inability to trust and relate; build friendships, sustain attention, concentration and focus on learning (Perry, 2011) were lessened within this context, to the extent that change was observed, admired and

commented on by a range of professionals. Over the period of the case studies, changes were observed and reported on including reduced stress and anxiety, increased cooperation, the development of social and relational skills and greater motivation impacting on improved academic outcomes.

8.8.4 Implications of the Research

The findings of the study have a number of important implications for future practice. There is a definite need for the provision of animal assisted interventions and activities for children with BESD including those with an attachment disorder. Within this provision, there is the need for:

- A positive outdoor environment, taking children away from the classroom, addressing children's disconnection with nature (Louv, 2006) and aspects of physical wellbeing (see 8.6.5) which additionally lends benefits to emotional and mental well-being (Moss, 2011)

- Planned and prolonged opportunities in interventions with animals for the development of skills, knowledge, relationship and responsibility within purposeful tasks on a regular basis (see 8.5.4).

- Good reflective and supportive staff facilitation. Those that know the children and those that know the animals and where possible, both. The ability to use metaphor to engage children with their own difficulties (see 8.5.5).

- Space and time for the children to develop at their own pace, so enabling the potential of anthropomorphism and relationship rather than merely 'function' (see 8.4.8).

- Opportunity to self-select the animal with which the children work. A recent study (Bennett, ISAZ, 2012) asserted that whilst dogs have a reputation for the decrease of stress in the owner, there are also examples of owners increasing stress

responses. The conclusion of Bennett's study was that for therapeutic benefit, the animal should be matched to owner need, temperament, personality and lifestyle. This supports the findings of this study, where children and young people expressed preference for one animal or another and gravitated towards them, resulting in no quantifiable difference in impact or outcome. One child expressed a preference for the ducks, with little or no handling opportunities, another for the large racehorses, an intimidating and awesome experience; a third for the small guinea pigs, handle-able and vulnerable to the care of the child. My conclusion therefore would be that to have a variety of animals available for contact, from small invertebrates and creatures, to large mammals, provides opportunity for maximum impact for all preferences.

8.8.5 Suggestions for Further Research

There continues to be a deficit in empirical long-term research within the field of animal assisted therapy generally and in particular with children with BESD. The nature of the research design meaning that sample sizes were small, the collection of and volume of data varied between contexts and no control group was possible. There is a need for a longitudinal study as an extension to this work, in order to better explore the transferability of the study to different settings and to establish whether the changes were maintained over time. This would additionally lead to further information on the impact over time, across contexts and on academic, social and emotional development away from the intervention. As Kruger, Trachtenberg and Serpell, (2004) note:

'If AAIs are going to succeed in moving away from the fringes of clinical practice and into the mainstream, rigorous efficacy and effectiveness research conducted by individuals trained in clinical research and program evaluation is needed. In the

absence of such research, the scientific and medical communities will continue to assume little or no long-term beneficial impact of these interventions.' (p.30).

The study was not able to consider significant cultural differences in attitudes towards animals and therefore may have revealed additional supportive or contradictory data. Further study could include this and responses for those children and young people not currently in a BESD specialist setting. Additionally further research might consider the specific impact of individual animals. An interesting consideration would be why certain children express preferences for different animals.

The study was not able to include those children for whom associations of animals can be stress inducing. One pupil on the fringe of the research at William's school expressed a phobia of animals and was supplied with a similar intervention programme utilising plants (see 7.7.5). The impact of this programme in comparison is not known and would be an interesting further study.

8.9 Concluding Comments

The thesis is entitled An Exploration into the Impact of Animals as a Therapeutic Adjunct in Education for Children with Behaviour, Emotional and Social Difficulties: A Biophilic Philosophy For Education. The Biophilia Hypothesis (Wilson, 2001) asserts that contact with nature and animals, promotes emotional and cognitive well-being. This study then is concerned with an exploration of the application of this theory to education for children and young people with BESD.

The provision of animals as a therapeutic adjunct, as an intervention within education for children and young people with BESD has significant social and emotional benefits. The use of animals is not a panacea for all difficulties, but indeed a complement for the

development of relationships and relationship building skills, in particular within the context of developing the ability to build attachments. The study has shown that in differing contexts, animal assisted interventions are securing change in confidence, esteem and motivation, which in my opinion are significant precursors to successful learning. My original contribution to knowledge in this respect is to present data which supports a radical alternative to traditional classroom based learning for a more practical and purposeful 'Biophilic' curriculum which this study has shown, therapeutically supports children and young people with BESD thus enabling greater chance of success in learning.

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Appendix One

Ethics Statement Presented to Participants

- In approaching the research, my intention is to be open and transparent with all participants. Having no specific and direct intervention, I will ensure that children and adults are fully informed of the process and purpose of the research throughout.

- The welfare of the children about whom the research is conducted is paramount. Anonymity, confidentiality will be assured. No specific intervention is planned. Where the research may be considered to be intrusive, an alternative approach will be put in place. This said, informed consent will be confirmed before any data gathering

- Issues of confidentiality and anonymity will be discussed at each of the places to be studied. For the purposes of this research no individual needs to be identified and the utmost of confidentiality in terms of individual's sensitive histories and data will be respected. For the purpose of objectivity in terms of the general nature of the study, it will not be necessary to identify any individual establishment by name.

- Within my role, I am subject to an enhanced Criminals Record Check and therefore able to work alongside children and young people with appropriate permissions, which will be sought from venues, staff, parents and the child/young person themselves.

- Consideration of the potential impact of the research will be given before embarking on interview or observation, and in the analysis of the data. Access to the data and analysis will be available for all participants

- Data will be recorded during observation and interview. Permission will be sought before the use of electronic equipment is employed and both recordings and transcripts will be returned to individuals following the conclusion of the research.

- BESD children are complex. Any change in nature, behaviour or attitude will be temporary and multi-factorial. Observation and case study over a period of time in a number of locations will minimise the risk of momentary

judgements as well as my experience and knowledge of BESD children. Careful and sensitive inquiry into additional factors affecting children and young people will help isolate data.

- In the event of disclosure from an individual, the researcher will remain impartial and seek the guidance of safeguarding officers responsible for the child's immediate welfare. Confidentiality will be maintained and such information will not be used for the research.

- In observation, my intension is to be non-intrusive. In all cases, I will prepare for and ensure that the 'normal' context is preserved. This may mean repeated observations.

- Privacy of respondents will be preserved. They will be kept informed of the research throughout and given full access to all analysis.

- The use of animals in an intervention raises ethical questions of animal welfare. The use of animals in any intervention is questionable, and less so with children with emotional and behavioural difficulties. In my research however, I am investigating an intervention that currently exists and not proposing any additional intervention. Questions will be asked of the venues to establish treatment and care of the animals and their consideration for animal welfare.

- Data around BESD children can be sensitive and harmful in the wrong hands. It will be important to preserve confidentiality and seek appropriate consent from all parties concerned.

Appendix Two

A. Explanation of Wildwood School's register of Complexity of Need

On Admission to the school, the Local Authority (LA) prepares consultation paperwork including the child's statement of Educational Need and a chronology of difficulties and challenges resulting in the child needing a specialist provision. From this paperwork, the LA calculates appropriate funding provided to recognise a hierarchy in the child's complexity of needs. These are known as 'LMSS (Local Management of Special Schools) Bands'. This is represented as understood by the researcher in the table below. Each child's needs and difficulties are represented to a panel who decide on appropriate funding individually. Bands often change at annual review. The children selected for the Farm intervention were from the highlighted group.

LMSS Band	Description	Provision
1	Child displays some difficulties within a mainstream context. Additional funding requested to support small group work	Mainstream School
2	Child requires higher level of support and/or supervision. Funding for attached Learning Support Assistant (LSA) time.	Mainstream School with LSA support
3	Child has a statement for BESD. Mainstream Provision is not adequate to meet child's needs due to levels of behaviour or emotional complexity	Day Special School for children with Behaviour, Emotional and Social Difficulties
4	As above. In addition, child may be experiencing or exhibiting difficulties in the home and/or community, struggle with groups or have a mild additional learning need requiring greater support than those at Band 3.	Special School Provision including additional small group support and intervention time e.g. Farm group, social skills group etc.
5	Child has BESD needs and additional learning needs such as speech and language difficulty or Moderate Learning Difficulty.	Special School provision. 1:1 learning support time within the timetable. Learning Mentor

		support.
6	Child has or is displaying complex mental health difficulties and requires intense emotional and behavioural support from school and other professionals, e.g. CAMHS service. Problems arise in home and school environment.	Special School provision. 1:1 counselling support, Family and child supported by Learning Mentor.

B. Sample Boxall Profile Assessment
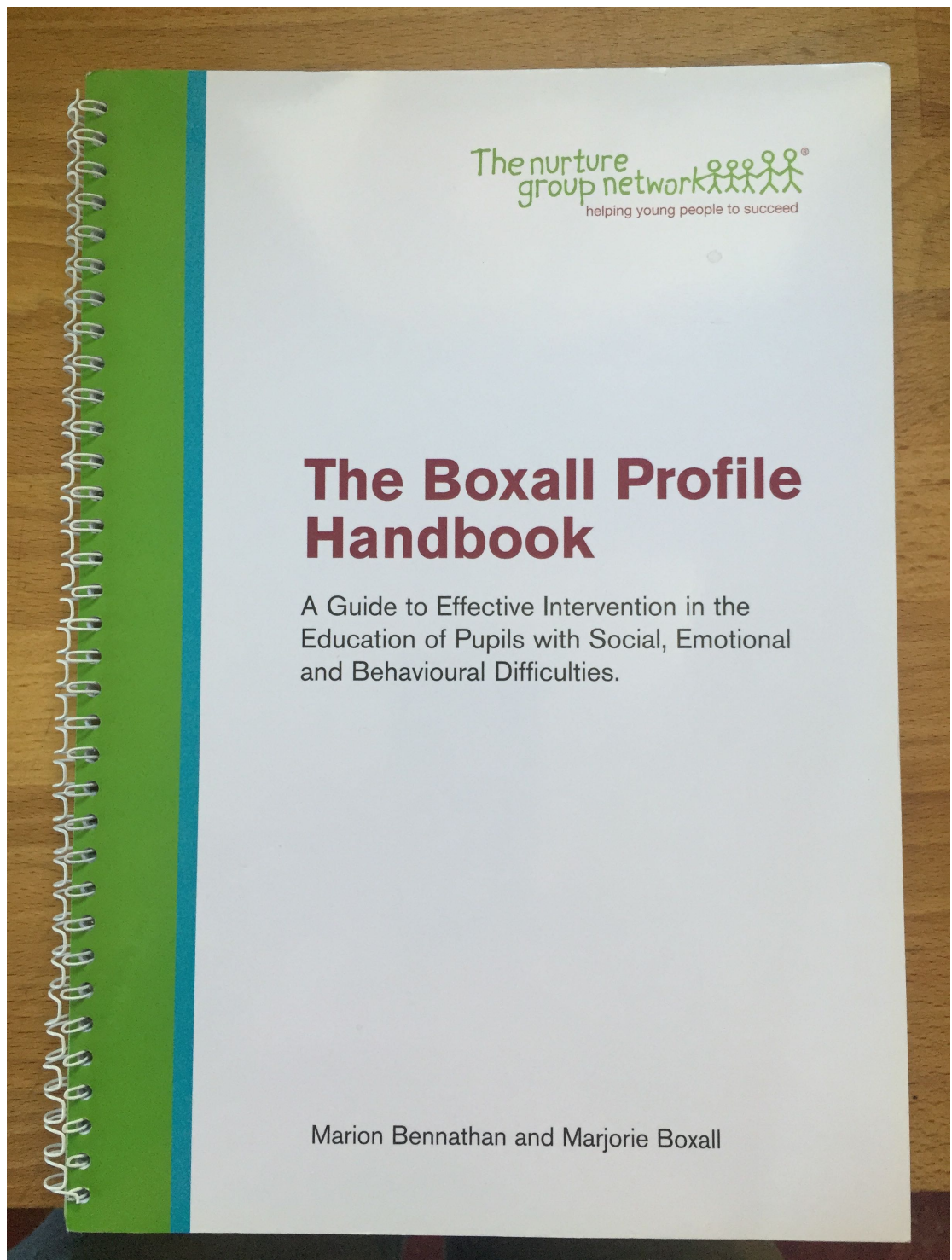
The Boxall Profile

CONFIDENTIAL

For the structured assessment of the developmental progress of school-age children/young people.
The Profile should only be used in conjunction with the Boxall Profile Handbook.*

Child/Young Person's name:	Assessment completed by:
Date of Birth:	Age at assessment:
Relationship to the child/young person (teacher, youth worker etc)	How long have you known the child/young person?
Establishment:	Date of Assessment

Situation in which assessed
(Nurture Group, Class, Children's Unit, Youth Group etc.)

Attainments/Achievements to date

SUMMARY RECORD: After completing the Boxall Profile and reflecting on the needs of the child/young person, please identify the priority areas for intervention:

SECTION	CLUSTER	SUB-CLUSTER		Agreed Priority Area (✔)
Developmental Strands	Organisation of Experience	A	gives purposeful attention	
		B	participates constructively	
		C	connects up experiences	
		D	shows insightful involvement	
		E	engages cognitively with peers	
	Internalisation of Controls	F	is emotionally secure	
		G	is biddable, accepts constraints	
		H	accommodates to others	
		I	responds constructively to others	
		J	maintains internalised standards	
Diagnostic Profile	Self-limiting Features	Q	disengaged	
		R	self-negating	
	Undeveloped Behaviour	S	undifferentiated attachments	
		T	inconsequential behaviour	
		U	craves attachment, reassurance	
	Unsupported Development	V	avoids/rejects attachment	
		W	insecure sense of self	
		X	negativism towards self	
		Y	negativism towards others	
		Z	wants grabs disregarding others	

Notes/Interventions/Ideas/Strategies to develop Individual Behaviour Plan:

Section I
DEVELOPMENTAL STRANDS

Enter scores for Section I items in the appropriate column of Section I histogram

Score each item in turn according to the Key below
4 Yes, or usually
3 At times
2 To some extent
1 Not really, or virtually never
0 Does not arise, not relevant.
(Refer to page 9, 2nd bullet point, of Handbook for discussion.)

		Score	column
1	Listens with interest when the teacher explains something to the class		A
2	Takes appropriate care of something s/he has made or work s/he has done *investment of feeling in his/her achievement is implied, and self esteem*		F
3	Appreciates a joke or is amused by an incongruous statement or situation *disregard lack of appreciation of a joke which is at his/her expense* *disregard amusement that is clearly inappropriate*		D
4	Begins to clear up or bring to a close an enjoyable work or play activity when the teacher, with adequate warning, makes a general request to the group *score 2 if a personal and specific request is needed*		G
5	Makes and accepts normal physical contact with others *e.g. when holding hands in a game*		H
6	Makes appropriate and purposeful use of the materials/equipment/toys provided by the teacher without the need for continuing direct support *disregard repetitive activity which does not progress*		A
7	Maintains acceptable behaviour and functions adequately when the routine of the day is disturbed *e.g. when there are visitors in his/her class, or the class is taken by a teacher s/he does not know well*		H
8	Makes an appropriate verbal request to another child who is in his/her way or has something s/he needs *disregard situations of provocation*		H
9	Complies with specific verbal prohibitions on his/her personal use of classroom equipment *score 2 if s/he complies but often protests or sulks*		G
10	Abides by the rules of an organised group game in the playground or school hall *interacts and co-operates and continues to take part for the duration of the game*		J
11	Accommodates to other children when they show friendly and constructive interest in joining his/her play or game		H
12	Listens, attends and does what is required when the teacher addresses a simple positive request specifically to him/her *e.g. to get out his/her work book*		A
13	Works or plays alongside a child who is independently occupied, without interfering or causing disturbance		G
14	Shows awareness of happenings in the natural world, is interested and curious, and genuinely seeks explanations		B
15	Of his/her own accord returns to and completes a satisfying activity that has been interrupted *e.g. s/he finishes a painting or carries on with a written story later in the day or the following day*		C
16	Is adequately competent and self-reliant in managing his/her basic personal needs *i.e. clothes, toilet, food*		A

17	In freely developing activities involving other children s/he constructively adapts to their ideas and suggestions		I
18	Turns to his/her teacher for help, reassurance or acknowledgement, in the expectation that support will be forthcoming *disregard occasional normal negativism*		F
19	Accepts disappointments *e.g. if an outing is cancelled because it is raining, or s/he is not chosen for favourite activity s/he does no more than complain or briefly moan*		J
20	Takes part in a teacher centred group activity *e.g. number or language work, or finger games* *score 2 if s/he does no more than try to follow*		A
21	Shows genuine interest in another child's activity or news; looks or listens and gains from experience *does not intrude unduly; does not take over*		B
22	Shows genuine concern and thoughtfulness for other people; is sympathetic and offers help		I
23	Recalls information of relevance to something s/he reads or hears about and makes a constructive link		C
24	Makes constructive and reciprocal friendships which provide companionship *score 3 if the friendship is with one child only* *score 2 if no friendship lasts longer than a week* *score 1 if the association is fleeting, albeit constructive and reciprocal*		D
25	Contributes actively to the course of co-operative and developing play with two or more other children and shows some variation in the roles s/he takes *e.g. in the Play House, other free play activities, or improvised class drama*		E
26	Is reasonably well organised in assembling the materials s/he needs and in clearing away *reminders only are needed*		B
27	Communicates a simple train of thought with coherence *e.g. when telling or writing a story or describing an event*		C
28	Responds to stories about animals and people with appropriate feeling; appropriately identifies the characters as good, bad, funny, kind etc. *disregard response to nursery rhymes or fairy stories*		D
29	Makes pertinent observations about the relationship between two other people; appropriately attributes attitudes and motives to them		D
30	Engages in conversation with another child *an interchange of information, ideas or opinions is implied*		E
31	Looks up and makes eye contact when the teacher is nearby and addresses him/her by name *i.e. heeds the teacher; does not necessarily pay attention*		F
32	Sits reasonably still without talking or causing disturbance when the teacher makes a general request to all the children for their attention		G
33	Gives way to another child's legitimate need for the classroom equipment s/he is using by sharing it with him/her, or taking turns *no more than a reminder is needed*		H
34	Shows curiosity and constructive interest when something out of the ordinary happens *is secure enough to accept a change or the introduction of something new, is alert to the possibilities of the event and gains from it*		D

Any additional comments to amend or extend the information provided by the Profile?

20	Can't wait for his/her turn or something s/he wants; plunges in or grabs	Z
21	Functions and relates to others minimally, and resists or erupts when attempts are made to engage him/her further	V
22	Self-disparaging and self-demeaning	R
23	Attention-seeking in a bid for recognition or admiration	W
24	Disparaging attitude to other children; is critical and contemptuous	Y
25	Listless and aimless; lacks motivation and functions only with direct and continuing support or pressure	Q
26	Sulks when disapproval is shown, or when attention is withdrawn, or when thwarted	X
27	'Is into everything'; shows fleeting interest, but doesn't attend to anything for long	T
28	Remembers a real or imagined offence, bears a grudge and determinedly takes his/her revenge	Y
29	Clings tenaciously to inconsequential objects and resists having them taken away	S
30	Sullen, resentful, and negative in general attitude and mood	V
31	Can't tolerate even a slight imperfection in his/her work and is upset or angry if s/he can't put it right	W
32	Feels persecuted; imagines that others are against him/her, and complains of being 'got at' and left out	X
33	Restless and erratic; behaviour is without purposeful sequence, continuity and direction	T
34	Determinedly dominates or persecutes by bullying, intimidation, or the use of force	Y

Any additional comments to amend or extend the information provided by the Profile?

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Section I
DEVELOPMENTAL STRANDS

The scores for the items in Section I are entered in the histogram below in the column indicated by the relevant letter (A, B etc... J). The outline is irregular because the number of items varies from column to column.

The shaded green areas indicate the range of average scores in a sample of competently functioning children in five age groups from 3 years 4 months to 8 years.

Section II
DIAGNOSTIC PROFILE

The scores for the items in Section II are entered in the histogram below in the column indicated by the relevant letter (Q, R etc... Z). The outline is irregular because the number of items varies from column to column.

The shaded green areas indicate the range of average scores in a sample of competently functioning children in five age groups from 3 years 4 months to 8 years.

Factors Likely To Affect The Scores Obtained

A number of factors may be affecting the overall development of the child/young person who is being assessed. Please use your judgement to give a score for each factor below according to the following key:

3 = considerable
2 = to some extent
1 = no, or not evident
0 = not known

	Score	Additional information / Description of Difficulties
Diagnosed conditions e.g. DCD (Developmental Coordination Disorder / Dyspraxia), Dyslexia, ASD (Autism Spectrum Disorder), ADHD (Attention Deficit Hyperactivity Disorder), etc		
Health issues including mental health e.g. Physical impairment, asthma, diabetes, self harming, OCD (Obsessive Compulsive Disorder) etc.		
Overall learning difficulties		
Sensory impairment		
Bereavement or trauma		
Attendance/timekeeping issues		
Bullying issues		
English as an Additional Language (EAL)		

Additional notes including any relevant history and information not included in the above e.g.family issues, Young Carer, involvement from other agencies etc.

Current provision and support in place:

D

C. Sample Interview Transcripts

Students at William's School.
Interview Question: Tell me about you, your school, the animals…

James (aged 13)
Interview 1: May 2010
I just likes coming down ere when I'm moody and that. Stressed like. It chills me out
You gotta ask first to come outta lessons, but then you're usually ok.
And if you're stressed, you come down ere, stroke 'em and and feed 'em and that helps. I've been here 4 years and it helps a lot. It gets rid of problems at home. I like all the animals. Pedro the goat eats my sweatshirt. I get on with them all, except ducks and swans 'cos I got attacked before. I like everything at the school. You can come down on your own or with staff and do jobs. When I leave school, I'm not really fussed what I do. I like bikes though.

Jason (aged 12)
Interview 1: July 2010
I'm a boarder. I've been at the school for a year. Its OK. 'Cos I'm naughty. I have problems at school and home. School helps a little bit. I go and see the animals a lot. Not every day. Sometimes we choose. I play with the goats and cuddle the rabbits. I feel happy. I mostly go there when I'm stressed and that. They're playful so they cheer me up. I go to the farm with other kids mostly. When I'm there I feed 'em and clean the rabbits. Its good to have animals.. I took pics of goats and rabbits on the camera. I'd like more dogs, one in each classroom. I take [the school dog] for a walk. I have a dog of my own, he's called Schmaekal. I picked him. Dogs are my favourite animal, but I have 6 hamsters too. When I leave school, I want to be a builder 'cos I like Lego. I also water the plants at school. I'm not allowed down there with the plants and animals on my own.

[the dog] is my favourite' cos he's playful. I take him for a walk. The animals help me if I'm in a bad mood 'cos I can play with them. I like the guinea pigs too. I would like to see chickens cos they lay eggs and they're funny. When I do work with the animals, I like it, don't know why. I like all the jobs. I have a dog at home, a Rottweiler that I play with.

Student at Great Oak Stables

Transcript of 2nd Interview with X, Stables
March 2010.
(LSA also present)

Interviewer: (shows photo's) Do you remember any of these photos?

Child: I didn't get to do that (points to picture of child with wheelbarrow of hay)

I: Moving the Hay?

Child: Yeah, everyone had to do it. I had to do cleaning out the bowls 'cos I didn't want to do

that, so em… I did the mucking out of the goats twice (points at picture of self with goats).

I: When I came to your session and watched, I saw you working hard at mucking out the goats

Child: yeah, but em when I did it, I didn't exactly do anything really. I didn't get to put the hay bales in at all. I just had to do that (points to picture) sweeping and forking all the time except for one time when I had to do the bowls

LSA: We took it in turns to do things didn't we?

Child: mmm but I didn't wanna do bowls, (laughs) I wanted to do the hay bales

I: Would you like to tell me some more about your visits to [the stables]

Child: I didn't even know we were going (laughs)

I: You didn't know you were going?

Child: yeah

I: so what did you think when you got there?

Child: Cool. It was fun and stuff stroking the goats and the animals and stuff. I loved it.

I: How about the horses?

Child: I've ridden a horse before, once on the back of a horse. Someone else was riding, I was just on the back, and it was cantering

LSA: Did you not feel scared?

Child: No, I even slid off the back of it

Child: We look after animals (gets distracted by pictures) There's me! There's me again, there's me, there's me, there's me again, there's me. Um…no where else

I: you were telling me about the animals you look after?

Child: um, yeah, dogs and stuff

LSA: Do you take them for walks?

Child: yeah

LSA: Help bath them?

Child: No. They are someone else's animals, we just look after them

I: Was there anything about the stables that you didn't like so much?

Child: I liked it all, I just wish I could have done the hay bale thing

I: would you go back if you could?

Child: (gets very excited) yeh, yeh, yeyeyeyeyeyeh

I: and what would you do?

Child: uh, be with horses more cos they're friendly, cute and stuff. I love [the stables] It didn't

teach me much, I already know all that and I already know how to walk a horse and the first time, you couldn't (weren't allowed to) walk a horse! (with surprise) I've done that loads though and I'd still go back cos it's excellent. Can I go back? (turns to LSA)

LSA: don't you think you were lucky, because you were the only class that got to go?

Child: mm

LSA: you were very lucky

I: Do you have any problems with your behaviour?

Child: Not really

I: What helps you with your behaviour/ stops you from learning?

Child: Uh, people who annoy me

I: and what helps you learn?

Child: nothing, I just do it. I've been good for like about 29 years or days. I should have had a reward. Can I keep these pictures? Are we done now? Can I go please?

I: Yes, of course, thank you.

Appendix Three

Table of Cross Reference with Chapter Eight and Data Chapters

Reference	Comment within Chapter 10	Location within Case Study Chapters
3:1	Trust, autonomy, initiative, achievement and identity were issues explored within the case study settings	Examples include 5.4.1, 5.8.2, 6.11, 7.9
3:2	..and commented upon by staff	5.7.2, 6.8.1, 7.8.1
3:3	Examples in settings of work with school dogs	5.9.1, 6.5.1, 7.8.2, 7.10
3:4	Expressions of affection for relative strangers were observed (e.g. Paul the Groom).	6.6.1.2
3:5	Behaviour such as, reduced inhibitions, free flowing conversation, cooperation, kindness and empathy, along with the expression of feelings towards and about the animals	5.4.1, 5.4.2, 6.5.1, 7.5.1, 6.12
3:6	'Safety' rules concerning how the animals should be cared for in each of the settings, enabled discussion at different informal intervals about their own self-care and experiences of care, or otherwise.	6.5.2.2, 6.11.5, 5.4.3.5, 7.5
3:7	Not all children are enamoured with animals. This was the case in this study in two contexts..	5.6.5, 7.7.5
3:8	One child at Wildwood School reported that he preferred animals to humans.	6.12
3:9	Children can find approaching an animal easier than approaching a person. This was the case for some participants of the research in each context.	e.g. 5.6.4
3:10	Children in Wildwood School, given responsibility for a particular animal, quickly talked of animals as 'their own'.	5.4.2
3:11	Children talked about loyalty and dependability, availability of animals and the appearance that they are 'never too busy to listen'.	6.7.3
3:12	Children at Wildwood talked of their 'favourites'; children at Great Oak, used names and described endearing features of their favourite animals.	5.4.3, 5.6, 6.7.4
3:13	Levinson found that withdrawn children who would not talk to adults would often talk to animals, as in the example of B	5.9.1

3:14	The animals were referred to increasingly by name, or attributed ownership e.g. 'Kevin's Ducks'… …sharing their 'secrets' with them	5.6.1, 5.6.2, 7.7.3
3:15	Children were entirely trusted with the animals; given small animals to hold or allowed into a stall with a horse, given a job of responsibility trusted to feed, clean, care for the animals.	E.g. 5.4.1, 5.8.2, 6.11, 7.9
3:16	They were trusted with the responsibility of caring for the animals	5.9.2, 6.5.2.5, 6.11.3, 7.5.2.3
3:17	Comments such as 'he feels sad when I leave' along with 'You are scared aren't you, I will keep you safe' and 'He doesn't like me' suggest an element of relationship for good or otherwise.	5.4.1, 6.5.1
3:18	'He's just a goat, you can't get angry with a goat'	7.0
3:19	Where this was the case, there was little emotional impact reported by the young people, instead more of a pragmatic reasoning to the animals place and function.	7.2
3:20	Outlets for nurturance for the participants at the contexts, which in turn supported the development of empathy and therefore relationship as evidenced by examples such as Billy who nestled a guinea pig in his arms telling it that he would protect it	6.4.1
3:21	The affection of a dog, the vulnerability of a guinea pig, the grooming of a horse, sought to soothe and engender a nurturing response in children,	5.9.1, 6.5.2.4, 6.11.2
3:22	The observations within the study suggest that the beginnings of empathy were observed and expressed.	5.4.3.2, 5.8.4, 6.5.2.6, 6.11.4, 7.8.4
3:23	At a secondary school a young man interviewed confirmed exactly this.	7.10.2.1
3:24	An example of this is B, who both in horse riding and with the school dogs appeared relaxed, smiled and demonstrated visible pleasure.	5.9.1, 6.12
3:25	Animals provide a non-judgemental approach and in the study, were often described as 'friends'.	7.7.4
3:27	Teachers reported the transference of these skills between the children experiencing the interventions and with peers shortly after.	5.6.1, 5.8.1
3:28	Dialogues, both audible and silent went on between child and animal. Staff, at each context reported that children talked to the animals when they were angry or upset, and children described this experience as satisfying indicating that the goat, guinea pig, dog or	6.7.3

	horse was a "good listener."	
3:30	At the contexts in the study, staff commented on an increase in cooperation, consideration, collaboration and social engagement where groups of children were occupied in tasks to do with the animals.	5.4.1, 5.4.3.2, 6.8.1, 7.8.1
3:31	The reported atmosphere in all contexts was one of acquiescence and calming behavioural changes in the presence of the animals, and confidence and optimism on their return to class.	5.4, 6.5.1, 7.5.1, 7.8.1
3:32 3:32b	The child who experienced difficulty with the intervention The negativism expressed.	5.6.5, 6.7.1, 7.7.5
3:33	Children at each context demonstrated both excitement and restraint, and given a degree of freedom in how they interact, were able to explore the use of power and control.	5.3.3, 5.4.1, 6.4.1, 7.8.1
3:34	Planning was noted to support the route and enjoyment of the experience.	5.9.2
3:35	Children expressed this enjoyment of the outdoors frequently and openly at each context, despite comments referring to adverse weather.	5.6.2, 6.6.1.1, 7.7.3
3:36	Some children expressed this pleasure of nature as synonymous with freedom,	5.6.1, 7.7.4
3:37	Observations showed a change in demeanour and attitude once outside and amongst the animals.	5.4.1, 6.5, 7.5
3:38	Not only did the children observably seem to relax, but additionally, they were enthused and stimulated by the multi-sensory nature of the environment.	5.4, 6.4, 6.6.1.4, 7.5
3:39	'Freedom' and 'play' were specific words expressed in interview with children when discussing the experiences of the contexts with animals.	5.6.4, 6.7.3, 7.7.2
3:40	In each of the case studies, this change of environment from classroom to 'nature' had an impact on the children and young people were visibly calmer, more coherent in speech and thought and focus.	5.4.1, 6.5, 7.5
3:41	At Wildwood, the children were 'Volunteers'. Having bestowed on them a sense of belonging and responsibility, the children felt able to offer opinions and contribute to the running of the farm.	5.8.3
3:42	Children in the study described LOtC as synonymous with 'freedom and fun'.	5.6.4, 6.7.3, 7.7.2

3:43	In each context, carefully planned sessions led to positively reported outcomes whereas, unplanned opportunities had the potential to be less significant.	5.3.3, 5.4.1, 6.4.1, 7.8.1
3:43b	Spontaneous contact was reported to be cathartic in regulating emotion and impacted on emotional learning and scientific understanding.	7.8.1, 7.9.1
3:44	The Case Studies showed that children reputed as hyperactive and socially delinquent became quietly engaged and focussed on the tasks with the animals.	5.4.1, 6.5, 7.5
3:45	As in the example of the recall of the children in Chicken Club, in response the 'Golden Egg' question each week.	5.9.2
3:46	Animals in the study for the majority of children fulfilled this vacancy, if only temporarily, animals with predictable acceptance allowed children to feel needed, offer interactions allowing them to feel loved, heard and understood, counteracting loneliness, being a confidante, and play companion	5.6 6.6.1
3:47	Children walked and talked with confidence and optimism, pride in their understanding of the animals and processes, in some cases taking on the role of tour guide (As at Wildwood School) or describing their role as 'staff' (As at William's School)	5.6.3, 7.7.3, 7.10.2.1
3:48	Children were 'awestruck' by large racehorses, or baby farm animals, silenced by the experience of horse-riding and facing a task with an animal for the first time	6.5.1, 6.12
3:49	At Wildwood school 'Bear' the farm's pet Kunekune pig who, large as a small car has abundant character and personality. His 'humanness' allowed children to indulge in anthropomorphism and learn about their own feelings from those they projected onto Bear.	5.8.1
3:50	All adults felt that the experiences given to the children and young people were successful by their definitions, as they provided a job, a focus, an activity, a purpose; something which is important in all areas of educational activity for children and young people with BESD	5.7, 6.8, 7.8
3:51	Children were, after the interventions, able to articulate greater knowledge and understanding of animal care, demonstrate improved relationships with the animals and reflect on improvements in themselves as a result of the jobs allocated to them.	E.g. 5.9.2
3:52	Adults noted that the continued engagement with the intervention was supported by the children's feeling of being needed by the animal, and the belief that without their support, that animal may suffer, or have to go	6.5.1

	without.	
3:53	Observations revealed that 'jobs' kept the children and young people occupied and busy and served as a focus for their attention.	5.4.3.2, 6.5.2.4, 7.5.2.3
3:54	..and as they perfected the skill, began to brim with confidence	5.4.1, 5.6.2, 5.6.6, 6.3.1, 6.8.1
3:55	Teachers in this study acquiesce	5.4.2
3:58	In each case, children interviewed commented upon the role of the adult in the intervention	E.g. 5.6.4, 6.7.4
3:59	..such as Harry who became quite proud of his responsibility as a trusted mentor for his teacher with a phobia of chickens.	5.6.3
3:60	One adult in the case studies phrased this social support as 'Positive regard for young people'	6.11.1
3:61	A platform for individual analogous conversations, such as the racehorse who was a 'loser' but equally a loyal friend.	6.8.1
3:62	An example of this would be Frank, at Great Oak who blossomed through the intervention with animal and adult contact.	6.7.3
3:63	Teaching staff responsible for the children and young people however reported that the progress observed in social development, was apparently facilitated and quickened by the animals' presence.	7.8.2, 7.8.3
3:64	The place of the adult became apparent however, some weeks into the intervention, when B began to struggle. The volunteer was able to facilitate B to re-engage with the intervention, by suggesting what his horse may think or feel about him.	6.12
3:65	In one setting, the experience was also used as a motivator throughout the week	6.11.13
3:66	In reports from subsidiary settings and studies, animal experiences had provided motivation to attend school, participate within a group, speak aloud and to achieve behavioural targets in those children who were otherwise reluctant to do so	5.9.1, 5.9.2, 6.12, 7.10.2
3:67	'I liked it because I got to do real things with animals' (Sian, Wildwood School,),	5.6.4
3:68	Most participants in the study recorded interest and engagement at some level with the animals.	5.4, 6.5, 7.5

3:68b	In some case studies, children retained deep knowledge of the animals	6:12, 5.9.2
3:70	Examples of this were evident in the study such as T, a horse-rider.	6.12
3:71	Where participants talked about how the experience felt	5.6, 6.7, 7.7
3:72	Once away from the animals, the excitement and engagement fostered an enthusiasm, enabling children to consolidate skills such as writing about their experience	6.5
3:73	Charles, the science teacher at William's school, based the construct of his curriculum on this engagement. His belief that connection with nature and animals stimulates creativity was evidenced in each context.	7.8.1
3:74	The children and young people were invited to consider thoughts and processes, relationships, ethics and life; philosophically challenging concepts. Conversations such as 'What does he think?' in relation to an animal requested participants to consider identity and thought.	6.5.1
3:75	Consideration of the process of farm animals at Wildwood left children nurturing lambs with ethical questions, exploring concepts of death, purpose, attachment, and loss	5.4.2
3:77	A spectrum of emotional attributes, including the development of confidence, self-esteem, risk and resilience, trust, self-awareness, vulnerability, responsibility and empathy were referenced as a result of the interventions.	5.4.3, 5.7, 6.8.1,7.8.1
3:78	Children and adults talked in terms of 'moving out of the comfort zone', 'playfulness' and 'enjoyment' communicating the intervention was an emotionally based experience.	5.4.3. 5.7, 6.8.1, 7.8.1
3:78b	During the study, one teacher of Wildwood school, not a usual accompanier of the pupils to the farm reported fascination himself with the children's responses to the environment. He reported, "It was incredible. Once they were at the farm, anxiety and hyper-vigilance just disappeared" (Teacher, Wildwood School, March 2011. 3:78)	5.4.3
3:79	Adults reported observing serenity, gentleness, nurture, cooperation, trust and confidence during the interactions and shortly afterwards.	5.7, 6.8, 6.9, 7.8.1

3:80	What became apparent after the initial fear and anxiety of an interaction; was that most children and young people demonstrated an ease of engagement with animals	5.4, 6.5, 7.5
3:82	Children talked of connections and positive regard for the animals from the outset; staff talked of observed changes in pupils' behaviour, such as uncharacteristic quietness, laughter, focus and attention.	5.4, 6.5.1, 7.5.1, 7.8.1
3:83	The emotional engagement with the animals was reported on as essential by the staff working with the racehorses at Great Oak	6.8.1
3:84	The use of animals as a metaphor provided opportunity to engage children in the discussion of less comfortable topics, enabling children to learn to make sense of their environment, their relationships and even, for the teenagers in the study, to give thought to future careers, such as discussions at Great Oak around what it takes to be a Jockey.	6.5, 7.6
3:85	In all contexts, children and young people remained hyper-vigilant to the responses and behaviours of their peers, until they came into contact with the animals, where this contact for many, superseded important peer relationships, and promoted an atmosphere of cooperation and collaboration.	5.4, 6.5.1, 7.5.1, 7.8.1
3:86	Each group observed, changed in dynamic when in the company of animals.	5.4, 6.5.1, 7.5.1, 7.8.1
3:87	Unexpectedly, the study revealed several indicators that interventions with animals may support the development of language and communication. Children were observed talking and communicating with animals and reflected on this communication with their chosen animals in interview, whether verbal or non-verbal	5.4.1, 5.4.2, 5.6.1, 7.7.3
3:88	Throughout the study, the children talked to the animals Nuzzle and stroke	5.4.1, 5.4.2, 5.6.1, 7.7.3 6.5.1
3:89	Examples of these four aspects are prevalent throughout the findings in this study.	(See Chapters 5-7).
3:90	In the study during interview, children's images of the animals provided them with the stimulus for the interviews to become significantly more, free flowing, with frequent use of emotive language (3: 88).	5.5, 6.6, 7.6,
3:91	When fascinated and enthused or excited, children began to talk to, about and around the animals, with peers, with teachers, with new vocabulary, developing questions, ideas and philosophies, learning the	5.6.1, 5.6.3, 5.9.2, 6.5.1, 6.7.2, 7.7.3, 7.8.1

	language of feelings, talking on subjects ranging from care and nurturance to ethics and philosophy.	
3:91b	More than this, the sensory stimulation enabled children to operate at their most alert, enabled concentration, energy and absorption in the task, each, physical indicators.	5.4.1, 5.6.3, 5.7.1, 5.7.3, 6.5.1, 6.7.4, 6.11.5, 7.5.2
3:92	Behavioural indicators suggest that blood pressure, anxiety and stress were lowered.	5.4, 6.5.1, 7.5.1, 7.8.1
3:92b	'It just chills you out'	5.6.2
3:93	Outside as 'free'	5.6.4, 6.7.3, 7.7.2
3:94	Children within this research study, demonstrated visible exhilaration and/or calming behavioural change when in contact with the animals in their environment	5.4, 6.5.1, 7.5.1, 7.8.1