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An exploration of the non-verbal therapeutic process involved in the use of sandplay with Looked After Children who have undergone a traumatic experience before the age of four.

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A dissertation submitted to Canterbury Christ Church University in part fulfillment of the degree of MA in Practice-based Play Therapy

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Abstract

This study aims to explore the non-verbal therapeutic process involved in the use of sandplay with Looked After Children (LAC) who have undergone a traumatic experience before the age of four. The sample consists of Primary school aged children, residing in the care of the Local Authority through Foster Care. It explores the hypothesis that if a traumatic experience is so unspeakable, or happened at a time when a child did not have the adequate verbal language to link to the experience, they cannot begin the process of restoration through traditional verbal interventions. Therefore they may prefer sandplay as a means to process the trauma during therapy.

Three research methods were employed:

1. Strengths and Difficulties Questionnaires (SDQs) (Goodman, 1997) pre- and post-intervention.
2. Researcher and Sandplay specialist observations of client's sandplay photographs.
3. Researcher observations drawn from clinical notes written following client's sandplay experiences.

The cohort comprised of six children: between six and nine years old; residing under the care of the Local Authority; from both genders and varied socio-economic backgrounds. By the conclusion of this study, results demonstrate a reduction in SDQ total difficulty and emotional symptom scores in all of the children as well as improved pro-social scores (kind and helpful behaviour) pointing to an increase in restoration within each child's inner self. The study's findings contribute to recommendations for future research and practice, particularly in the field of Looked After Children.

Keywords: Looked After Children, trauma, play therapy, and sandplay.

Acknowledgments

This research is dedicated to the Looked After Children, who have taught me so much about the experience of living life in the care of a Local Authority. It has been a huge privilege to walk alongside you as you all discover who you want to be and come to terms with your own individual and unique life story. I am hugely indebted to the children that participated in this study. Their unique journeys have made this research a valuable and insightful experience for me both as a researcher and as a therapist.

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Thank you all.

Cara Cramp, September 2014.

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"I am not what happened to me,
I am what I choose to become."

-Carl Yung

[1] Sand tray by Cara Cramp 2014 ' A bridge from the head to the heart'

Glossary

Abbreviations

- **LAC:** Looked After Children
- **NSPCC:** National Society for the Prevention of Cruelty to Children
- **LACYP:** Looked After Children and Young People
- **SDQ:** Strengths and Difficulties Questionnaire
- **FREC:** Faculty Research Ethics Committee
- **PTUK:** Play Therapy United Kingdom.
- **L.A:** Local Authority
- **LACES:** Looked After Children Education Service
- **PTSD:** Post Traumatic Stress Disorder.

Definitions

- **Categories of Abuse:** physical, emotional, sexual, neglect. (NSPCC, 2014)
- **Neuroscience:** Neuroscience is the study of how the nervous system develops, its structure, and what it does. (Nordqvist, 2012, p. 1)
- **Trauma-focused CBT:** Trauma-focused cognitive behavioural therapy is an evidence-based treatment approach shown to help children, adolescents, and their caregivers overcome trauma-related difficulties. (Child Welfare Information Gateway, 2012 ,p.1)
- **Personal Bias:** Lacking a neutral viewpoint resulting in a one sided representation of data. Saunders, 2011, p.6)
- **Ego:** The ego is an active complex and is the executive organ of consciousness. (Turner 2005, p.15)
- **Psyche:** The deepest order of unconscious transformation and the fullest development of human potential. (Turner, 2005, p. 9)

- **Axline Principles of non-directive play therapy**

As described by Virginia Axline as follows, (Axline, 1989, pp. 69-70).

The therapist:

1. Must develop a warm and friendly relationship with the child.
2. Accept the child as she or he is.
3. Establishes a feeling of permission in the relationship so that the child feels free to express his or her feelings completely.
4. Is alert to recognise the feelings the child is expressing and reflects these feelings back in such a manner that the child gains insight into his/her behaviour.
5. Maintains a deep respect for the child's ability to solve his/her problems and gives the child the opportunity to do so. The responsibility to make choices and to institute change is the child's.
6. Does not attempt to direct the child's actions or conversations in any manner. The child leads the way and the therapist follows.
7. Does not hurry the therapy along. It is a gradual process and must be recognised as such by the therapist.
8. Only establishes those limitations necessary to anchor the therapy to the world of reality and to make the child aware of his/her responsibility in the relationship.

- ***The 'Tool-kit':***

Defined by Play Therapy UK (PTUK) as "techniques, methods and tools employed by the

- Play Therapist which constitutes their resources" (PTUK 2007) The 'Tool-kit' includes the following:
- Creative Visualisation

- Art –Drawing and Painting
- Therapeutic Storytelling
- Music
- Talking
- Dance and Movement
- Drama
- Puppets
- Role play
- Clay
- Masks
- Sandplay figures: wild, prehistoric and domestic animals; cars, aeroplanes, Russian stacking dolls, superheroes and villainous figures etc were available to be used by the children in the sand tra

1. Introduction

1.1 General

Trauma has been studied throughout history and it was during the 19th century that terms like 'nervous shock' began to appear. We now know that this was an early description for post- traumatic stress (Webber J, et al., 2011). Around 1859 Freud and Breuer, working in Austria, concluded that psychological trauma produced altered conscious states and Freud termed this as: 'double consciousness' (Gentry and Baranowsky, 2002, cited in Webber et al., 2011, p. 17).

To date the researcher could not find any United Kingdom (UK) legislation relating to the specific reporting of childhood trauma. However there have been organisations set up in recent times specifically aimed at supporting children who are experiencing distress in some form or another. One of the leading organisations in this area is the National Society for the Prevention of Cruelty to Children (NSPCC). They provide a service known as ChildLine, a free 24 hour counselling service for children and young people up to their 19th birthday in the UK. In the UK there were 68,110 looked-after children at 31 March 2013, an increase of 2% compared to 31 March 2012 and an increase of 12% compared to 31 March 2009 (National Statistics, Department of Education, 2013).

Over the decades, an understanding of how we process difficult life experiences has evolved. Academics such as Schore (2011); Siegel & Solomon (2013); Briere & Scott (2006) and Ogden et al., (2006) have been instrumental in developing professionals' thinking in relation to a person's capacity to process trauma and how this impacts on brain development. In the UK research has shown that the brain of a newborn baby actually grows in response to nurture, love and positive touch and that this carries on well into the second year of life. (Gerhardt, 2004) Some of their

research introduces the idea of using creative approaches when helping clients to process traumatic experiences however this differs from the more traditional approach of using talking therapy[2] alone.

Cognitive behavioural therapy (CBT) is talking therapy that can help manage problems by changing the way people think and behave (NHS UK, 2014). In their paper 'The Effect of Psychotherapy on Trauma-related Cognitions', Diehle et al., (2014) conclude that "trauma-focused CBT" should be the first choice when treating patients with PTSD.[3] This study seeks to offer an alternative to that view by incorporating a more creative approach and it is from that creative stance that this research is based.

This research is an exploration into the use of sandplay by six LAC[4] who underwent traumatic a experience before the age of four. In this research, "traumatic" refers to an extremely difficult experience, such as separation from birth parents, which results in significant distress.
It will explore if LAC choose sandplay as a preferred method during a non-directive play therapy session or not. It also explores if a child who experienced a traumatic event before they had the language to explain their experiences verbally chooses sandplay in the playroom.

The rationale behind this study is an exploration of how children in therapy explore difficult and traumatic experiences in alternative ways, other than through traditional verbal interventions. The researcher is aware both anecdotally and from personal experience that the use of creative mediums, particularly sand and clay, appear to enable the process of psychological growth from traumatic experiences. In addition, this appears so even in cases where the trauma was

[2] See Glossary 'talking therapy'.
[3] See Glossary 'PTSD'.
[4] See Glossary 'LAC'.

experienced prior to the development of speech or was perceived as 'unspeakable' to the young child. The researcher has also noted that creative mediums used in therapy were more effective for those children who found words difficult than traditional talking therapies.

"When therapists are able to include these various expressive capacities in their work with clients, they can more fully enhance each person's abilities to communicate effectively and authentically." (Malchiodi, 2005, p.1)

Counselling is a form of talking therapy and is, "a special form of communication, it is confidential, non-judgemental and based on the principal of empowerment" (Hough, 2010, p.1). This type of therapy enables the counsellor to listen to the client as they explore the issues they are experiencing. The focus is upon verbal communication, "by listening attentively and patiently the Counsellor can begin to perceive the difficulties from the client's point of view and can help them to see things more clearly" (McLeod, 2009, p.5). The researcher has developed the following hypothesis:

If a traumatic experience is so unspeakable or happened at a time when a child did not have adequate verbal language to link to the experience, they cannot begin the process of restoration through traditional verbal interventions and may choose sandplay as a preference as a means to process the trauma during therapy.

This research is designed to explore that hypothesis and to understand more fully a potential relationship between the use of sandplay and children's early traumatic experiences.

1.2 Research Questions

1. Do Looked After Children (LAC) who have undergone a traumatic experience before the age of four prefer to use the sand tray in the play therapy room?

2. How might they use it to help explore their difficult experiences?

1.3 Objectives

This research has been devised to answer the above research questions through a detailed analysis of the children's sand tray photographs carried out by the researcher and a sandplay specialist along with clinical observations, children's explanations and data collected from pre and post therapy strengths and difficulties questionnaires. Specific objectives are:

- To identify whether LAC who have undergone a traumatic experience before the age of four choose sandplay as a preferred method during a play therapy session.
- To evaluate the effect of sandplay on LAC who have experienced a traumatic experience before the age of four.
- To explore whether sandplay allows LAC who have undergone a traumatic experience before the age of four to explore it in a non-verbal manner.

1.4 Design Concept

The study and proposed methodology is comprised of the four main components based on the research proposal entitled: "An exploration of the non-verbal therapeutic process involved in the use of sandplay with Looked After Children who have undergone a traumatic experience before the age of four." These components are illustrated in Figure 1.

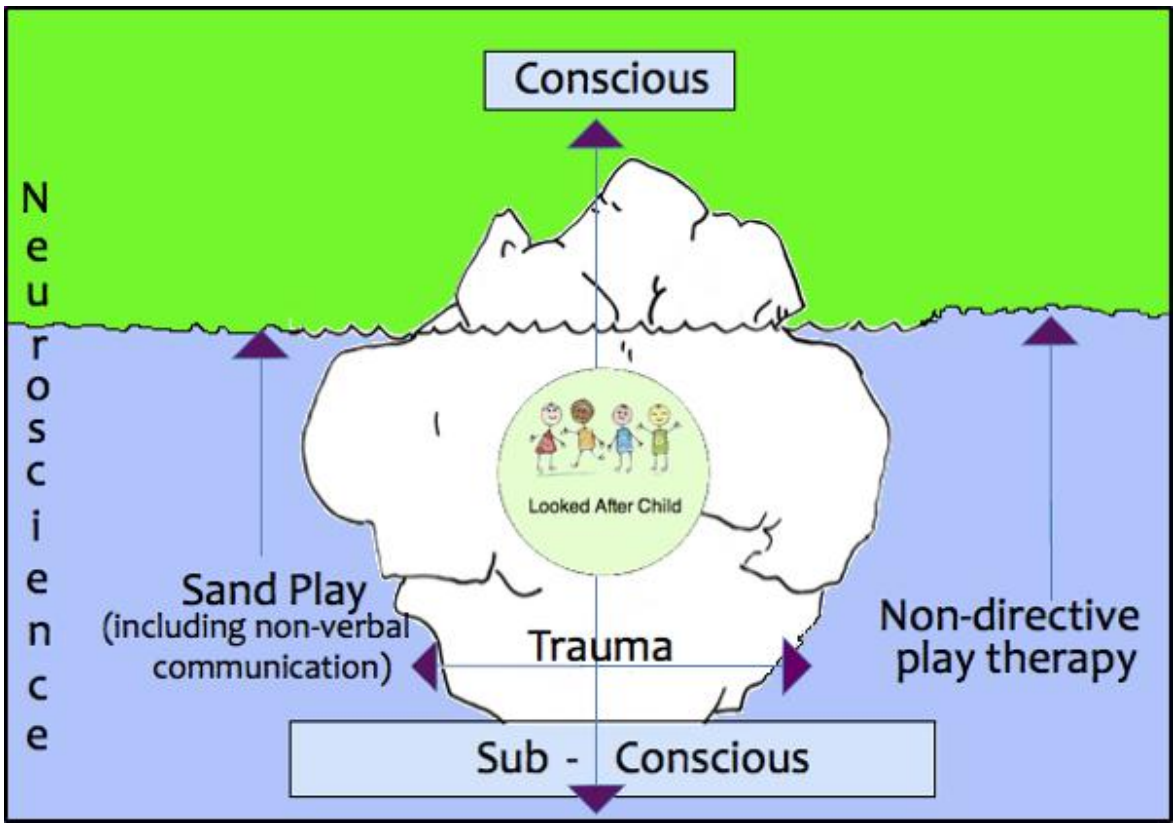


Figure 1
Research study concepts

The illustration, figure 1, is designed to show the looked after child and their related trauma from the traumatic event moving from the sub-conscious mind into the conscious mind through the use of sandplay and play therapy. The four concepts above are at the heart of this research and are examined more closely in the next chapter.

2. Theoretical Context

This chapter defines trauma, and then examines the remaining three theoretical threads that bring the research study together. These include:

- The theory of Neuroscience and the processing of traumatic experiences
- Sandplay and non-verbal communication including sensorimotor experiences
- Theory of non-directive play therapy

2.1 Defining Trauma

Baker (2010), in his paper 'The effect of Trauma on Attachment', states:

> Trauma refers to the condition whereby an individual experiences a cluster of several negative effects as a result of extremely stressful events. These negative effects may include relational and behaviour problems and psychological disorders such as depression, anxiety, dissociation and posttraumatic stress. (Baker, 2010, p.3)

Baker explains that traumatic events range from a single incident (such as a road traffic accident) to repeated stress (ongoing abuse). In this research trauma will refer to relevant life experiences affecting LAC such as:

- Witnessing or experiencing domestic violence.
- Separation from birth parents, siblings or family home.
- Categories of abuse.[5]
- Beginning a new school due to moving into care or foster placements.
- Settling into a foster care placement.

[5] See Glossary 'Categories of abuse'.

Dr. Bruce Perry is one of the leading neuroscientist specialising in the area of trauma. His clinical research over the last ten years has been focused on integrating the principles of neuroscience into his clinical practice. His work has resulted in the development of innovative clinical practices with children who have undergone traumatic experiences. In his paper, 'The Effects of Traumatic Events on Children' he describes trauma as: "A psychologically distressing event that is outside the range of usual human experience, often involving a sense of intense fear, terror and helplessness" (Perry, 2003, p.17). Symptoms and behaviour of children who have undergone a traumatic event may include any of the following:

- Insomnia or nightmares
- Being startled easily
- Racing heartbeat
- Aches and pains

- Shock, denial, or disbelief
- Anger, irritability, mood swings
- Guilt, shame, self-blame
- Feeling sad or hopeless

- Fatigue
- Difficulty concentrating
- Edginess and agitation
- Muscle tension

- Confusion, difficulty concentrating
- Anxiety and fear
- Withdrawing from others
- Feeling disconnected or numb

(Lawrence et al. , 2014)

Trauma related symptoms that are observable in children after the traumatic event has occurred indicate that it is more likely that the event has not been processed effectively. It is also worth noting that a child who has experienced trauma does not have to be consciously aware of what has occurred in order for it to still be affecting them (Van der Kolk et al., 1996). The reason for this is explored next

2.2 Theory of neuroscience and the processing of traumatic experiences

Neuroscience is the study of the nervous system concerning the biological basis of consciousness, perception, memory and learning. Neuroscience connects our observations about cognitive behaviour with the physical processes that support such behaviour. Neuroscientists focus on the brain and its impact on behaviour and cognitive functions (Nordqvist, 2012).

Academics such as Schore (2011); Siegel & Solomon (2013); Briere & Scott (2006) and Ogden et al., (2006) have provided research and literature into trauma, neuroscience and sensorimotor experiences. Schore offers insight into the theory of trauma related therapy, right brain affect regulation and its link with attachment theory, relational trauma and neuroscience. Siegel and Solomon focus on interpersonal neurobiology from the perspective of the human mind, relationships and human well-being, whereas Ogden et al., explore sensorimotor experiences through psychotherapy and how this links within a person's tolerance level and trauma history. Finally, Briere and Scott look more closely at understanding the diagnosis and treatment of trauma.

Neuroscience offers an explanation of what may be happening when a trauma or traumatic experience occurs. In a person's life trauma has a profound non-verbal effect on the brain, nervous system and body (Ogden et al., 2006). These non-verbal experiences are considered in greater detail next.

2.3 Sandplay and non-verbal communication including sensorimotor experiences

Sandplay has been used as a psychotherapeutic tool since the early twentieth century in Europe. Turner (2005, p.14) used sandplay in her work using Lowenfeld's (1929) "World Technique" as a means of communicating non-verbally with children in treatment. Turner also explains that through active play with sand and symbols "neurobiological structure growth may be triggered, mending wounded areas and allowing brain development to continue." For the purpose of this study the term sandplay is taken from Jungian Psychology. According to Perkins McNally (2001, p.14) "Jungian Psychology is the only psychological system that extensively explores the metaphoric mind". Therefore Sandplay can be described as a "second language that operates using images and symbols, which may be outside of the conscious mind" (Perkins McNally, 2001, p.11).

In order for a difficult life experience to be processed enough to live in the conscious mind, but not be traumatically triggered by the reptilian brain, it must be processed in the 'optimal arousal zone' (Wilbarger & Wilbarger (1997). Siegel (1999) later described this as the 'Window of Tolerance', which is illustrated in figure 2 (Ogden, et al., 2006 p. 27).

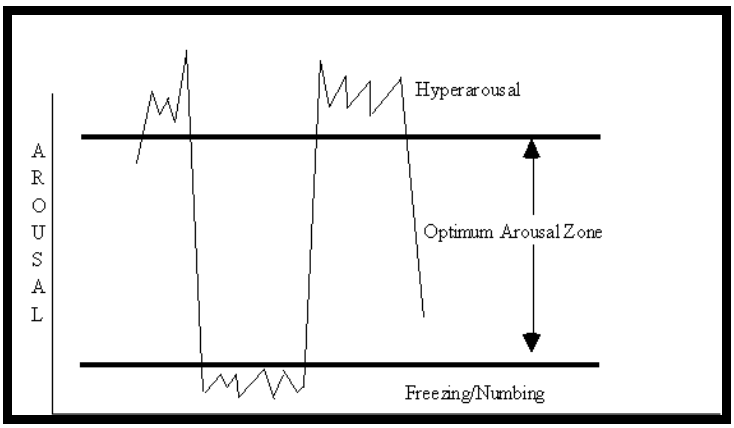


Figure 2
Window of Tolerance
http://www.sensorimotorpsychotherapy.org/images/trauma_fig2.gif

When the traumatic experience is unbearable it is possible for the body to hold the trauma for the client for many years until the mind is resilient enough to deal with the unspeakable experience (Wilkinson, 2000). "The working premise is that a significant change in the client's cognitions and emotions will effect change in the physical or embodied experience of the client's sense of self" (Ogden, et al., 2006, p.xxviii).

This is where sandplay therapy really comes to the forefront. If a trauma or difficult life experience happens at a time where language is either not fully developed, or the trauma is perceived as being unspeakable, the neo cortex, or cognitive part of the brain, struggles to process the event (Levin and Modell, 1997). New neural pathways develop as we record new experiences. "More brain centres light up in response to metaphor than any other form of human communication" (Levin and Modell, 1997, p.9). When a trauma occurs it creates neural pathways that keep the brain in a constant state of hyper arousal and out of their window of tolerance (Ogden et al., 2006, p.27).

A good understanding of Kalff's principles and theories is crucial to effective practice with sandplay within a play therapy session (Mitchell & Friedman, 1994). During sandplay the therapist will work with the child using a tray containing sand and multiple figurines (Kalff, 1980). The child will work in the sand to develop a scene inside the tray using the figurines and the sand. The therapist takes a non-directive, non-interpretive approach and supports the child in developing the tray (Turner, 2005).

In sandplay there seems to be a metaphoric or symbolic language that is similar to how we dream. Jung developed two concepts, personal unconscious and collective unconscious, found in the right hemisphere of the brain. He believed that essentially, by repression, the person

becomes conscious of something but then forgets it, finds it unacceptable or intolerable and sends it back into the unconscious mind. This is an interesting concept and may perhaps offer an explanation of how sandplay seems to connect with the unconscious mind, non-verbal and sensorimotor information.

Jung's theory can be linked to how children who have been through a difficult or traumatic life experience events. This can be either early on in their childhood, before verbal articulation has been established, or by perceiving the event as being unspeakable and therefore stowing away those memories into the unconscious mind in order to survive. Those memories may begin to surface when the unconscious mind is disturbed. This may be through either an everyday trigger or during therapy, in particular sandplay. Pearson (2013) states on the Expressive Therapies website, Australia "Over time, sandplay can facilitate a client's ability to safely access this non-verbal information, and then to integrate this with a life-affirming verbal narrative". This indicates a link between sandplay and the processing of memories in the unconscious mind. The traumatic experience is then expressed symbolically and the client is able to see the story from their mind. This then unlocks verbal articulation and makes it easier for them to attach words to an experience.

Therefore, it can be clearly seen that the majority of communication in the therapy room at the sand tray is non-verbal and it is vital that the therapist attunes these non-verbal cues in order to facilitate the child seeing and telling their story. The child may not be able to talk about the experience that has occurred but it is possible for them to express it in the sand tray using the figures and symbols, knowing that the therapist is there beside them. Stern, (1985, p.14) in exploring mother and baby interaction, gives a practical example of this whilst describing an interaction between a mother and baby. "The Mother can attune to the infant without faithfully imitating".

2.4 Theory of non - directive play therapy.

The play therapy sessions are based upon Axline's (1947) work and her eight principles[6] and she was influenced by the person-centred approach of Carl Rogers. Play therapy session took place in a play therapy room with a full 'tool-kit.'[7] Axline emphasises the importance of the therapist following the child's lead who is free to choose from a comprehensive 'Tool-kit' (Axline 1989). Within the play therapy session the play therapist and child form a therapeutic relationship, which encourages psychological growth and realisation of the child's abilities to master their own difficulties (Axline, 1989).

The response given by the therapist often mirrors a secure attachment, so that the child can begin make new connections. This relationship, within the boundaries of a play therapy session, gives the child a secure base to support them through their time in the playroom. Kalff (1980) made reference to the fact that healing happens at the psych level. Shore (1994), a leading neuroscientist found that non-verbal communication between a mother or primary care giver relationship determines the route neuro-pathways form in a child's brain during its development. The next chapter looks at past literature and research on these theoretical concepts. Further theory supporting the work of Axline (1989) is presented in Appendix 5.

[6] See Glossary 'Axline's principles of non-directive play therapy'.
[7] See Glossary 'Tool-kit'

3. Literature Review

3.1 General

This chapter defines the key concepts used in this study and explores past literature in the areas of Looked After Children; trauma; nonverbal communication and the theories of neuroscience and sensorimotor experiences. It also examines the use of sandplay as a therapeutic intervention within the boundaries of a play therapy session. These have been sourced from research articles; books; academic research journals; electronic library searches online through the Open Athens network and Internet research and are fully referenced in Chapter 8.

3.2 Works specific to study concept

Academics, including Goodyear-Brown; Green & Leblanc 2008; and Vicario et al., have examined the effect of play therapy on children who have experienced trauma and abuse (Dugan et al., 2010; Goodyear-Brown 2010; Green & Leblanc 2008; Vicario et al., 2013;). However there is limited literature about the link between sandplay, done through play therapy, and early childhood trauma, particularly with LAC before the age of four. Therefore this study will provide additional data and insights not already recorded in the field of play therapy for children.

3.3 Works relating to components of study concept

The works that relate to and examine the key concepts of the research have been gathered and they specifically examine:

- An overview of Looked After Children.
- Sandplay and non-verbal communication within the context of non-directive play therapy.
- Neuroscience and Sensorimotor experiences.

3.4 Looked After Children

The charity NSPCC [8] defines the term 'LAC' as, "those looked after by the state, according to relevant national legislation. This includes those who are subject to a care order or temporarily classed as looked after on a planned basis for short breaks or respite care" (NSPCC, 2014).
For the purpose of this research this is the definition used for participant recruitment in the study.

There have been some studies into LAC that include the use of SDQs, interventions in school to support LAC, caring for LAC who are traumatised and underachievement of LAC (Goodman & Goodman, 2012; Liaboe *et. al*., 2013; Redfern, 2013). However none of them specifically look at trauma in LAC before the age of four. The Institute of Education at the University of London published a report (Gough et al., 2010) with the aim of synthesizing the findings of research relevant to the behavioural health of LACYP[9]. The key findings of the report stated: "Overall, there is a lack of research on interventions that specifically aim to improve the emotional and

[8] See Glossary 'NSPCC'
[9] See Glossary 'LACYP'.

behavioural health of LACYP" This report reflects the researcher's experience of exploring literature for the purpose of this study.

There is one study specific to the health of LAC but it only explores their physical health and does not include the emotional wellbeing of LAC (Croft, 2014). Therefore this research study aims to specifically include research in the field of emotional wellbeing of LAC.

3.5 Sandplay and non-verbal communication and how it is used within the context of non-directive play therapy

The clients in this study have chosen to engage in sandplay as part of a non-directive play therapy session. Landreth (1991) defines play therapy as:

A dynamic interpersonal relationship between child and a therapist trained in play therapy procedures who provides selected materials and facilitates the development of a safe relationship for the child to fully express and explore self (feelings, thoughts, experiences, and behaviours) through the child's natural medium of communication.

(Landreth, 1991, p.14)

Research involving play therapy has explored its effect with individual children, groups and families for a range of social, emotional and behavioural issues. There has been specific research involving play therapy with clients who experienced trauma (Findling et al., 2006; Gil, 2011; Leavitt et al., 1996; Norton et al., 2001). Although none of this literature is specific to LAC or their traumatic experiences before the age of four it does give valuable insights into how trauma

impacts children's brain development and the effect play therapy has on social, emotional and behavioural development. This research study explores this area in greater depth and aims to close the gap. Its aim is to also provide an additional insight into how LAC use sandplay to work through their early childhood traumatic experiences within the context of play therapy.

Weinrib (2004, p1) defines sandplay as "a nonverbal, non-rational form of therapy that reaches a profound verbal level of the psych". There has been considerable research into the effects of sandplay therapy with children (Carey (1998); Rogers & Friedman (1994); Kalff (1980); Lowenfeld *(1993);* Perkins McNally (2001); Smith (2012)*;* Turner (2005); Zoja (2011) and although many of these researchers look at nonverbal expression none focus specifically upon sandplay with LAC. Lowenfeld (1993) discovered that children would spontaneously create miniature worlds in the sand trays and this aided her to develop the 'World Technique' in 1929.

Kalff (1980) connected Jungian approaches with some of the aspects that she recognised were present in Lowenfeld's 'World Technique'. This led her to believe that "Disturbing life experiences frequently defy expression in words" (Kalff, 2003, p. xii). Sandplay therefore is a medium that can be used even when words are difficult. Furthermore, Kalff (1980) and Neumann (1973) explored the link of what was being presented in the sand tray by a client with the non-verbal aspect of ego[10] and psyche[11] development. This is explored further in the discussion chapter, specifically highlighting their work on the "stages of ego and psyche development" (Neumann, 1973; Kalff, 1980 cited in Bradway and Mcoard, 2005, p. 118).

[10] See Glossary 'ego'.
[11] See Glossary 'psyche'.

The children's self-directed engagement with sandplay during a play therapy session is the focus of this research. "The sand provides a soothing medium that stimulates the sense of touch, smell, and sight…" (Lu et al., 2009, p.57). It is a tactile medium that provides a sensory experience to the body and it does not rely on verbal language for a client to be able to engage with the medium (Turner, 2005; Homeyer and Sweeney, 2011; Weinrib, 2004). To date there seems to be no published research evaluating the impact of non-directive play therapy on the non-verbal therapeutic processes involved in the use of sandplay with LAC who have undergone a traumatic experience before the age of four.

3.6 An exploration of the theory of neuroscience and its implications for sensorimotor experiences whilst using sandplay

Academics including Schore (2011); Siegel & Solomon (2013); Briere & Scott (2006) Maclean (1985) and Ogden et al., (2006) have provided research and literature into trauma, neuroscience and sensorimotor experiences. Within their literature they explore a person's capacity to process trauma and how this impacts on brain development. Some of them touch upon using creativity in therapy when assisting clients to process difficult experiences but none of them specifically focus upon sandplay with LAC.

Neuroscience [12] offers an explanation of what may be happening when a trauma or traumatic experience occurs. In a person's life trauma has a profound effect on the brain, nervous system and body (Ogden et al., 2006). Clients suffering from unresolved trauma, for example trauma that has remained in the collective unconscious, (Jung 1956; 1976) report unregulated body experiences and strong emotions (Ogden et al., 2006).

[12] See Glossary 'Neuroscience'.

It is now widely known through the work of neuroscientists Maclean (1985), Judson & Crosby (1923 & 2011) and Squire (1987) that there are three parts to the brain, which can be collectively explained as the Triune Brain Theory (Maclean, 1985) which consists of:

- The Neo-cortex
- The Limbic system
- The reptilian brain.

The illustration in figure 3 gives a visual representation of the Triune Brain.

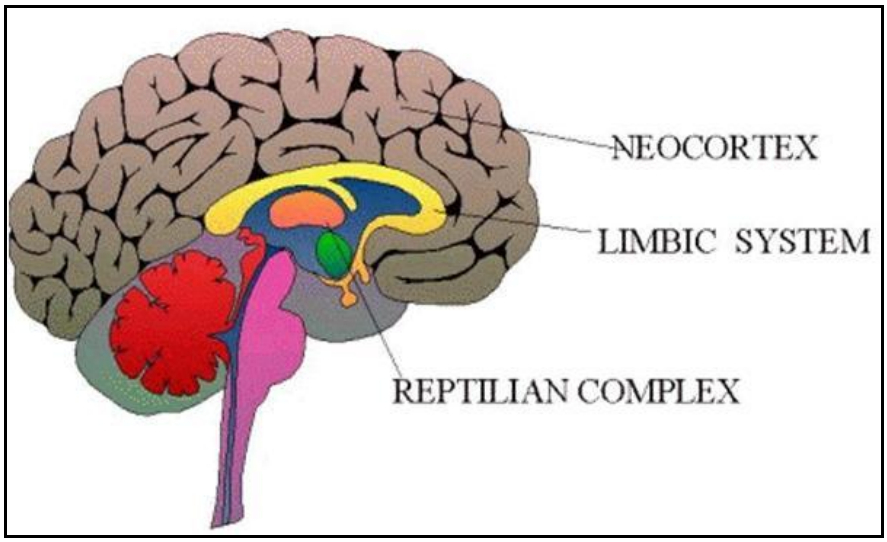


Figure 3.
Triune Brain Theory

(http://www.energeticsinstitute.com.au/page/triune_brain.html)

During the creation of sandplay, if children are not expected to explain their experiences, they will continue to use the limbic area of the brain (Badenoch, 2008). This theory was upheld by the children in this study, but in the spirit of Axline's (1947) Principles of Permissiveness they were given an opportunity to tell the Play Therapist anything they would like to about the tray after

they had finished. The Therapist then asked the child "Is there anything you want to say about your sand picture?"

In respect of processing traumatic memories it possible therefore that when the child begins to use their neo cortex, the thinking part of their brain, to explain and tell the therapist what is happening in the tray the event moves into the present and conscious memory.

> "The deeper the emotions and feelings are covered up, the more distanced from consciousness memories and a part of our personalities have become, the less likely it is that we can find the words to express them"
>
> (Boik & Goodwin, cited in Ammann, 1993).

Terr (1988) states, "all children, even those children who demonstrated no explicit memory or only fragmentary memory, demonstrated aspects of their trauma behaviorally (e.g., repetitive play, fears, and personality changes)" (Cordon *et. al.,* 2003, p.108).

In this study the play therapy sessions were conducted using non-directive principles[13] (Axline, 1947) so therefore the focus was upon communication through play, which included the Therapist observing the child's body movements and sensorimotor reactions to actions and dialogue as well as listening to verbal explanations when they arose.

There has been extensive research into how trauma affects the brain and how therapy assists the client to explore past experiences (Badenoch, 2008; Hughes and Bailin, 2012; Lee, 2010; Lubbe and Kener, 2009; Ogden et al., 2006; Teicher, 2000; Wilkinson, 2006). However there is limited

[13] See Glossary ' Axline's principles of non-directive play therapy'.

research that directly looks at LAC and the processing of pre-verbal trauma using counselling and play therapy (Green et al., 2010). This is where this research seeks to close the gap in this area.

When a client uses the sand their activated reptilian brain is soothed by the sensory experience and the use of symbols and metaphors (Turner, 2005). This could be to do with the fact that sand is derived from ground rock and so possibly the limbic part of the brain helps a client's mind and body to connect with the sensory experience of using the sand.

Rhawn explains:

> The Limbic brain is the second layer in the limbic system, which is the seat of emotions, controlling hormones that enable us to feel anger, fear, and rage as well as happiness, joy, pleasure, and the desire for social emotional contact.
>
> (Rhawn, 1999, cited in Lubbe & Kenner, 2009, p.138)

A study to support the physiological reason for this soothing of the reptilian brain was carried out by Sung-hun No (2013) in the Department of Child Welfare, Namseoul University, Cheoan, Korea. The title of the paper is 'The Effects of Sandplay Therapy on the Anxiety of University Students with ADHD Tendencies.' The research showed Cortisol levels were also significantly decreased as a result of sandplay and that it was effective in reducing the Cortisol levels of university students, as presented in table 1.

Table 3. Pre-post test scores of state-trait anxiety

Variable	Pre		Post		Z
	M	SD	M	SD	
Cortisol	1.24	0.29	0.72	0.14	-2.02*

*$p < .05$.

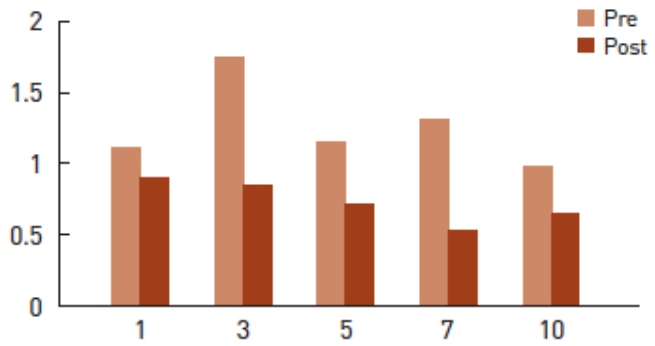


Figure 3. Each subject's pre-post test scores of cortisol.

Table 1

Pre and post test scores of state-trait anxiety

(http://dx.doi.org/10.12964/jsst.130002)

Additional information regarding the Triune Brain theory and the effect of cortisol and oxytocin levels in the brain is further explained in Appendix 5.

4. Methodology

This research employs a pragmatic approach utilising a retrospective mixed methods case study. The researcher will explore the use of sandplay with LAC who have undergone traumatic experiences before the age of four. The researcher will seek retrospective permission and consent to review the clinical data collected over a series of play therapy cases for research purposes. This will include a quantitative, psychometric measure known as the SDQ, collected before, during and after therapy along with the researcher's own detailed clinical note made throughout a child's case.

Data from these clinical notes and the SDQs will be analyzed and presented as tables, charts and graphs. Sand tray photographs with comparative observations from the researcher and a sandplay specialist will provide a qualitative perspective. Permission has been granted by the Gatekeeping organisation for the researcher to access information regarding the sample's history that may help to identity how the clients process their experiences whilst in the play therapy session. All information will be anonymised.

4.1 Methodological Rationale

There are four main approaches the researcher considered for this study. These can be seen in figure 4.

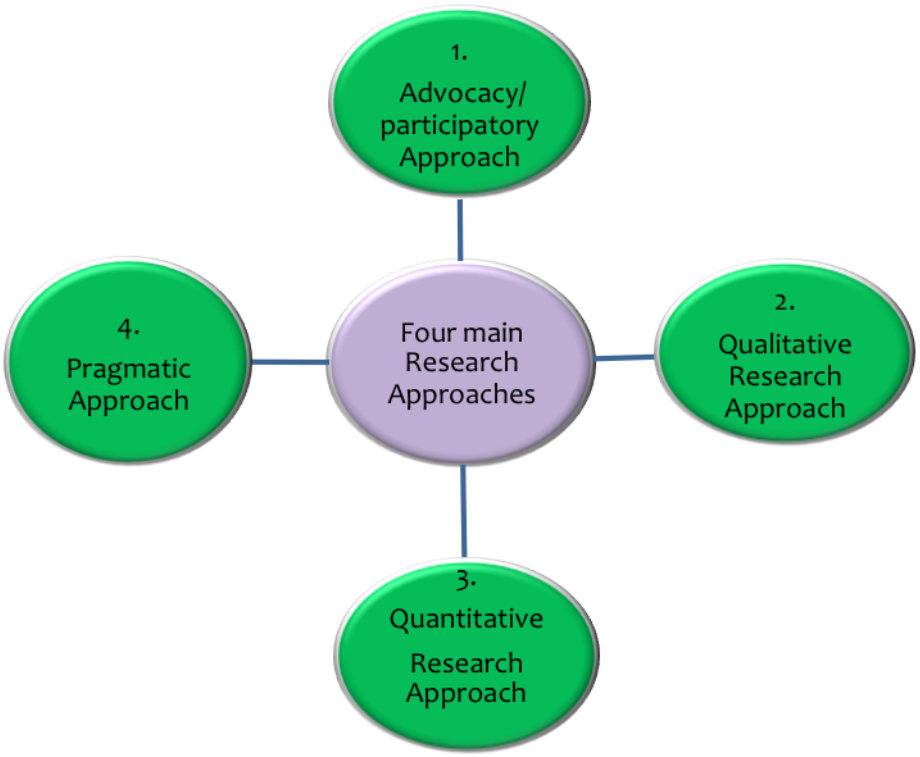


Figure 4

A visual representation of the four main research approaches

Advocacy/ participatory Approach

The Advocacy/participatory approach aims to bring out positive change in the lives of the research sample, which is why it was a consideration for this research study. However, it can be argued this approach is likely to have a "political" agenda and have less of a neutral stance (Matthews and Kostelis, 2011, p. 132). For this reason the researcher feels the pragmatic

approach gives a better opportunity to use mixed methods which helps to counterbalance any personal bias which may occur in the process of dealing with a sample research group.

- **Qualitative Research Approach**

A pure qualitative approach fits into the social "constructivist" paradigm and focuses on reality (Creswell, 2003, p.8). It explores the rationale behind human behaviour and experience. As this research study aims to investigate the nonverbal, therapeutic process of LAC and to a certain extent analysing behaviours of the sample group whilst they engaged in the sandplay process, a qualitative approach is worth considering. However the researcher required the use of quantitative data to give deductive reasoning in order to answer the research questions in full. Therefore this approach on its own would not have provided the holistic view that the pragmatic approach would give.

- **Quantitative Research Approach**

This approach is often associated with the positivist/post-positivist paradigm (Crotty, 1998, p. 6). Quantitative approaches to research include numbers and provable results, such as questionnaires. This research study adopted the use of the SDQ research method in order to gather the numerical data required to help answer the research questions. A quantitative approach will have one or more hypotheses, which fit with this research study. This is why it was considered as an approach to be used. However, because it only focuses on numerical and statistical data, using this approach alone would not enable the researcher to fully explore the research study hypothesis of "If a traumatic experience is so unspeakable or happened at a time when a child did not have adequate verbal language to link the experience, they cannot begin the

process of restoration through traditional verbal interventions and may choose sandplay as a preference as a means to explore the trauma during therapy." Therefore a pragmatic approach was chosen as the methodological approach for this research study.

- **Pragmatic Approach**

The pragmatic approach enables the researcher to focus on the research problem and "allows multiple methods to address research problems" (Creswell and Clark, 2007, p.173). It enables the research to have a mixed methods approach and this research study focuses on both numerical and statistical data alongside more subjective data. This includes observation, verbal accounts and explanations along with the interpretation this data. Quantitative representation of data is enriched by the addition of qualitative data, which captures the researcher's personal experience (Creswell et al., 2011). For this research study qualitative data is needed and reinforces the quantitative data collected from the SDQs. The pragmatic approach gives the study meaning and understanding behind the research question. Findings are then drawn from the data and conclusions discussed.

An opportunity to use mixed methods enables the researcher to develop insight and understanding which emerges from the triangulated data. Triangulation brings together quantitative and qualitative findings together in order that they may support each other in presenting the data (Bryman, 2012). This in turn enables the creation of the theory and generates the research questions:

1. Do Looked After Children (LAC) who have undergone a traumatic experience before the age of four prefer to use the sand tray in the play therapy room?
2. How might they use it to help explore their difficult experiences?

- The methods utilised in this study are:
- Strengths and Difficulties Questionnaires (SDQs) (Goodman, 1997) pre- and post-intervention.
- Researcher and Sandplay specialist observations of client's sandplay photographs.
- Researcher observations drawn from clinical notes written following client's sandplay.

Meltzer *et al.*, (2003) completed a national survey of the mental health of LAC in England. Following this research local authorities have used SDQs (Goodman, 1997) to measure the emotional and behavioural well-being of LAC. "SDQs have the potential to become an important resource for highlighting those potentially at risk of mental health problems" (McCrystal and McAloney, 2010, p.223 cited in Hastings, 2012, p.12).

In order to gather the qualitative data this study involves the researcher having a direct personal connection with the sample group. This means the possibility of "personal bias" is increased with the researcher's neutrality potentially decreasing (Dawson, 2009, p42). However, a pure quantitative or qualitative method alone would not give the researcher the capacity to have a holistic view of the research. Combining qualitative and quantitative research strategies broadens the validity of the study. It gave the researcher a more detailed and complete picture of the data collated (Tashakkori and Teddlie, 2003). It could be argued that a mixed method approach is feasible and could potentially lead to superior findings (Bryman, 2012, p. 630).

Qualitative research is more subjective, often including observation and interpretation of data and like all methods there are some advantages and disadvantages to this approach. For the purpose of this research, method 1 incorporated the use of the SDQ. This method was suitable for this research study because the validity of the SDQ compared to other behavioural

assessment measures was found to be equally valid. The Rutter questionnaires (1970) and the Achenbach child behaviour checklist (1991) for screening children's emotional and behavioural problems are well known and highly respected.

Both of these measures could have been used to collect data about the sample group and both measures were strong in identifying internal and external behaviour. However the SDQ was significantly better at detecting emotional symptoms and prosocial scores which was important to the aim of this research study. "For screening and research purposes, the Achenbach questionnaires seem less useful as it is quite long and contains many items that are not relevant to the majority of children" **(**Koskelainen**,** 2008, p. 10).

Goodman (1994), when using the Rutter parent and teacher questionnaires in an assessment battery in an epidemiological study, noticed "in a pilot study that many parents and teachers found the focus of Rutter items disconcerting" (Goodman, 1994 as cited by Koskelainen**,** 2008, p. 13).

It could be argued that this method is open to personal bias[14] due to its subjective nature. This is why both school and home SDQs alongside the qualitative data were used. Therefore it limits this bias and provides a holistic view of the child's well-being. The use of triangulation was born out of the theory that using a triangulated approach is "aimed at ridding the research of bias and finding convergence on a single reality" (Tracy, 2013, p. 236). The idea of this theory is that the research findings have a stronger validity.

[14]See Glossary 'personal bias'

The photographs, clinical notes and the Sandplay Specialist analysis from method 2 and 3 were used to gain insights into:

- What possible effects sandplay had on this sample of children who had experienced traumatic life experiences before the age of four.
- How the children used the sandplay to explore their experiences.

This forms the qualitative data and enhances the quantative data gathered from the numerical data. Mason (2006, cited in Robson, 2011, p. 166) was concerned that although mixed methods have several benefits he was concerned the research could be disjointed and unfocused.
To ensure this research study is as clear and as concise as possible the researcher has ensured they have a clear and logical purpose for the study as set out in the research questions and objectives. The following point outlines the three methods used in this research study.

4.2 Methods

- **Method 1**

The Strengths and Difficulty Questionnaire (SDQ) is a screening questionnaire for children and adolescents aged four through 16 years old. The SDQ assesses five domains, four are difficulties and one is strength:

1. Emotional symptoms.
2. Conduct problems.
3. Hyperactivity/inattention.
4. Peer relationship problems.
5. Pro-social behaviour.

- **Method 2**

The researcher has previously conducted individual non-directive play therapy sessions with each of the sample children through her role as Play Therapist. Each child was initially offered 12 sessions with the possibility of ongoing sessions. The sample children attended a series of forty-five minute play therapy sessions of which sandplay formed one element alongside other creative arts mediums. During the child's session, and with their permission, the researcher took photographs of their sand trays. After the session had ended comprehensive observational notes were made by the researcher taking into account each child's play and creative processes and forms of expression.

- **Method 3**

The researcher's clinical notes will be examined to provide observational comments. Along with those notes an independent, qualified sandplay specialist's unbiased observations of the client's sandplay photographs will be explored and presented together.

4.3 Research sample

The study will involve the retrospective analysis of clinical data from play therapy sessions of six LAC and the sample will include:

- Three boys and three girls.
- Aged between six to nine years.

These six sample children will have received a minimum of 12 individual, weekly non-directive play therapy sessions over a period of at least four months.

- **Inclusion criteria** (one or more of the following)

Sample children were included for having undergone a traumatic life experience before the age of four consisting of one or more of the following:

  - Witnessing or experiencing domestic violence.
  - Separation from birth parents, siblings or family home.
  - A category of abuse.
  - Attending a new educational establishment i.e. school.
  - Settling into a Foster Care placement.
  - Are categorised as "looked after" by the care of the Local Authority (L.A.).[15]

- **Exclusion Criteria**

Children were not considered if they had a known mental health or developmental disorder diagnosis, including learning disability.

- **Participant Recruitment**

  - The research will be based on six case studies of primary age children.
  - The gatekeeping organisation is the LAC Education Service for a Local Authority and they have either full or shared parental responsibility for the child.
  - All the children are white British and have experienced a history of possible neglect and parenting issues.

[15]See Glossary 'LA'.

- Play Therapy sessions were conducted on the same day each week, in a designated room at the child's school, with access to the same tool-kit.
- Following consent from the LACES[16] Head for the study to take place, the participants will be identified by the service manager from those children who have previously received a play therapy intervention.
- An information letter will be given to each participant's Social Worker and Foster
- Carer to provide detailed information and to seek written, informed consent to use the child's data for research purposes.
- The children will be given a child-friendly information letter and asked for their assent for their data to be used for research purposes. This will be monitored by the child's Social Worker who will send a letter to the researcher confirming they have given their consent and have established assent from the child.

This information will remain confidential under the terms of the Data Protection Act 1998.

[16]See Glossary 'LACES'.

4.4 Study design

This was an exploratory mixed methods design using existing quantitative datasets and qualitative observational and clinical notes.

Action:	Week:														
Play therapy session	**Pre**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**Review**	**Sessions Continue**
Entry interview															
SDQ questionnaire														*	
Social Worker Meeting															
Foster Carer Meeting															
Review 1															
Exit interview	An exit interview occurred at the end of each child's Play Therapy. *A review and SDQ occurred every 12 weeks and a post SDQ was also given at the end of Play Therapy.														

Table 2

Research methods and intervention schedule.

4.4.1 Social Worker and Foster Carer Meetings and Entry Interview

At entry an initial meeting occurred between the Therapist, Social Worker and Foster Carer. The Foster Carer and child's teacher completed SDQs and the Social worker offered additional referral information to assist the effectiveness of the play therapy sessions. Another meeting took place after twelve sessions and a final exit meeting occurred at the point of ending play therapy with the child.

4.4.2 SDQ Questionnaire

SDQ questionnaires were completed by the child's Foster Carer and teacher prior to play therapy beginning, after twelve sessions and again after the play therapy ended. An example of an SDQ questionnaire is presented in Appendix 1.

4.3.3 Review and Exit Interview

After session twelve, a 1st review was held with the Social Worker and Foster Carers where another SDQ questionnaire was completed to establish if the child was benefitting from the Play Therapy sessions. If it was evident from the SDQ scores completed and feedback received then additional session were offered for the continuation of play therapy. The exit meeting for the Foster Carers and Social worker occurred after the child's play therapy sessions had come to an end and a final SDQ questionnaire was completed. For the child, their exit meeting formed part of their last play therapy session where they had the opportunity to validate their experience and gain a sense of closure.

4.5 Session design and content

Every child was offered at least twelve sessions. The sessions were weekly, term time only and lasting forty-five minutes each. Children accessed a minimum of twelve sessions and missed sessions were not included. In the sample, the minimum time a child came for play therapy was seventeen sessions in a seven-month period and the maximum time was fifty sessions in a sixteen-month period. Individual sessions took place in the play therapy room, which included a full 'Tool-kit'[17] of play and creative arts materials.

Plate 1 shows an example of a play therapy room two out of the six sample children used.

[17] See Glossary 'tool-kit'

Play Room

Plate 1
Example of a play therapy room used by two out of the six children

The play therapy room varied depending on where the child was based. However, the toolkit and the room always remained the same for individual children throughout their therapy sessions. Plate 1 shows the play therapy tool-kit in one of the rooms used by a child and plate 2 gives an example of the sand trays and objects used in the play therapy sessions with all of the sample children in this study.

Sand trays and objects

Plate2

Sandplay objects and figures along with wet and dry sand trays used by all six sample children in their play therapy sessions.

The researcher, in her role as Play Therapist, offered sand play according to Axline's principles (Axline, 1947) by saying "As long as the sand stays in the sand tray you can use it to create whatever you want". A wide range of sandtray figurines[18] were offered and every child was presented with a choice as to what they would like to create and explore in the sand. Turner (2005, p.1) states, "The therapist encourages the client to make whatever they like in the sand tray and gives no further instruction." The medium of sand was presented as two trays, a dry tray and a tray to which the clients could add water, known as the wet tray. The bottom of the trays were coloured blue and could be used to represent water or sky.

4.6 Ethics

The research study design is guided by the principles of beneficence, non-maleficence, autonomy and fidelity. These are informed by The Canterbury Christ Church University Code of Ethical

[18] See Glossary. 'sand play figures'.

Practice and the United Kingdom Society for Play and Creative Arts Therapist's (PTUK) Ethical Framework.

- **Fidelity**

All participants were treated in a fair, empathetic and consistent manner. The researcher ensured that each child's session was the same length and followed the same pattern in terms of a non-directive play therapy session.

- **Beneficence and non-maleficence**

Careful consideration went into designing this study to offer a safe, nurturing and beneficial experience in the play therapy sessions. The individual experiences, fears and worries of each child were respected and opportunity was given for the child to express their views in a safe and caring way.

- **Autonomy**

Each participant's right to choose not to participate in any aspect of the research project, at any time, was fully protected. In addition to this at all times the participants' interest and right to autonomy remained paramount. The child's right to choose and direct their play remained at the centre of the therapy session.

4.7 Confidentiality, Anonymity, and Data Protection

Participants were guaranteed anonymity throughout the research process and were assured of absolute confidentiality. All data and personal information was stored securely in a locked metal filing cabinet in accordance with the UK Data Protection Act (1998) and the University data

protection requirements. All digital material was stored on a USB stick and then securely stored. Data was only accessible by the researcher and was made anonymous (i.e. all personal information associated with the data was removed). The sandplay specialist was provided with photographs of the sand trays and any client comments. Data will be stored for five years and then securely destroyed.

4.8 Supervision and Monitoring

The researcher worked with an Academic Supervisor, appointed for this specific piece of work, and also with a clinical supervisor for the purpose of clinical play therapy sessions. Supervision focused on the development of the therapeutic relationship between child and therapist, including issues of transference and counter-transference and the individual traumatic experiences of each child prior to going into the care of the local authority. It was also an opportunity for the therapist to discuss any personal emotions relating to the participants traumatic experiences so that she could continue to be the secure, nurturing base for the child during sessions.

Although the researcher was aware that of being potentially the biggest influence on the research findings, all data findings were objectively acquired and presented and potential bias explored. The researcher aimed to present an accurate exploratory study of the non-verbal therapeutic process involved in the use of sandplay with LAC who had undergone a traumatic experience before the age of four.

5. Study Findings

5.1 Results

The findings are presented in three main sections compiled to answer the research questions and meet the objectives of the study. These are:

1. Data to present the percentage of the play therapy sessions spent in the sand tray.
2. SDQ data results for total difficulty scores from foster carers and teachers.
3. The Collation of triangulation of commentary on sand trays.

5.1.1 Data presenting the percentage of play therapy sessions spent in the sand tray

Analysis of 108 sandplay trays, compiled out of 204 play therapy sessions with the 6 sample children provides data to answer the first research question: Do LAC who have undergone a traumatic experience before the age of four prefer to use the sand tray in the play therapy room? Some of the sample children chose to do more than one sand tray in a session and this is reflected in table 3.

To protect the identity of the sample children, real names have not been used in the tables throughout this research paper.

Sessions	1	2	3	4	5	6	7	8	9	10	11	12
Client												
Jenny												
Sarah					X2							
Helen	X4											
David												
Andrew												
Callum												

Sessions	13	14	15	16	17	18	19	20	21	22	23	24
Client												
Jenny												
Sarah						Sessions ended						
Helen												
David												
Andrew												
Callum												

Sessions	25	26	27	28	29	30	31	32	33	34	35	36
Client												
Jenny						Sessions ended						
Sarah	Sessions ended											
Helen									Sessions ended			
David			Sessions ended									
Andrew												
Callum												

Sessions	37	38	39	40	41	42	43	44	45	46	47	48	49	50
Client														
Jenny	Sessions ended													
Sarah	Sessions ended													
Helen	Sessions ended													
David	Sessions ended													
Andrew														*
Callum														*[19]

Table 3
Where sandplay featured in the session schedule.

[19] Andrew and Callum ended on Session fifty.

The answer to the first research question can be clearly seen from the results in figure 5. It shows that out of 204 play therapy sessions attended by the sample children 50% of them featured sandplay as a chosen medium in the play therapy session. It is worth noting that two out of the six sample children did more than one sand tray in a session.

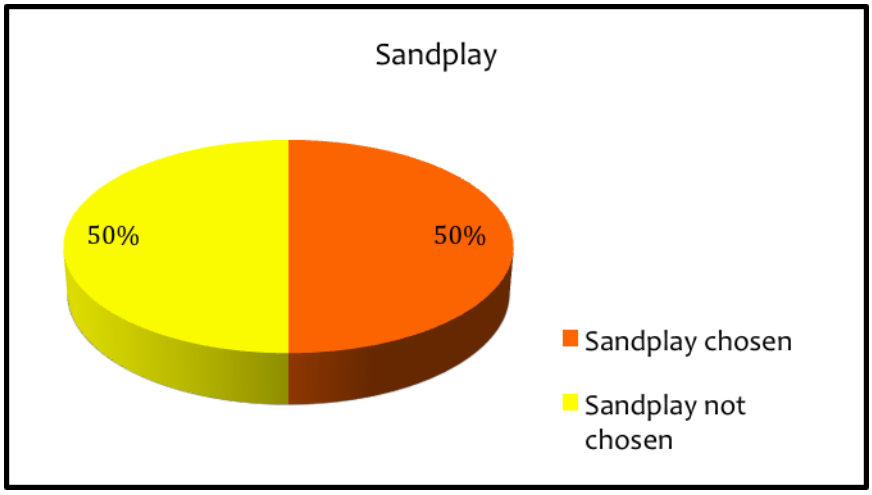


Figure 5

Percentage of sessions where sandplay was chosen

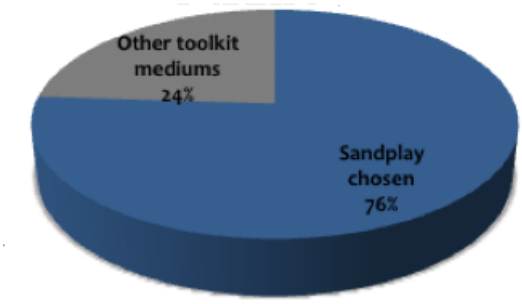
Further analysis of the sandplay the sample children engaged in during the play therapy sessions is shown next through tables 4 and figure 6.

Client	Number of sessions sandplay featured	Number of sessions other toolkit mediums featured. (No sandplay)	Total number of sessions
Jenny	22 (76%)	7 (24%)	29
Sarah	12 (72%)	5 (28%)	17
Helen	23 (72%)	9 (29%)	23
David	12 (46%)	14 (54%)	26
Andrew	20 (40%)	30 (60%)	50
Callum	19 (38%)	31 (62%)	50

Table 4

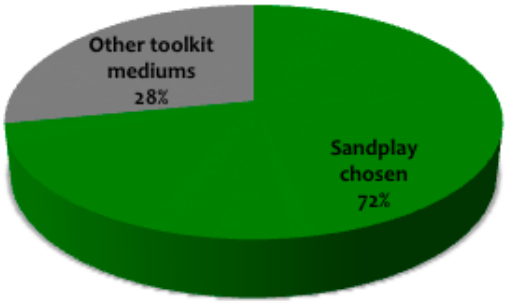
The number of sessions where sandplay feature

Jenny



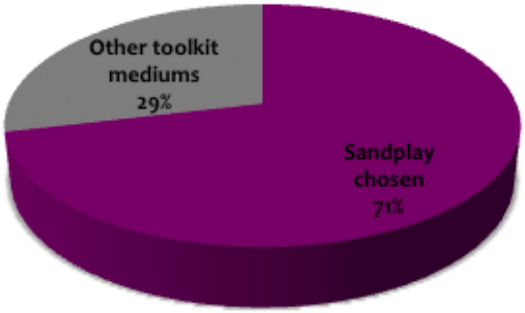
Pie 1

Sarah



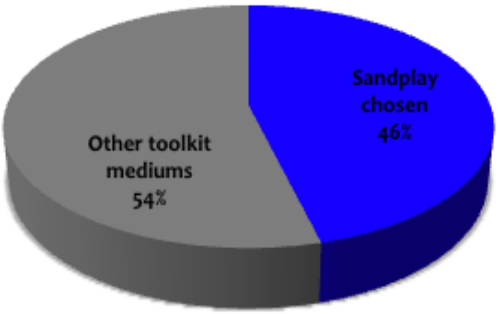
Pie 2

Helen



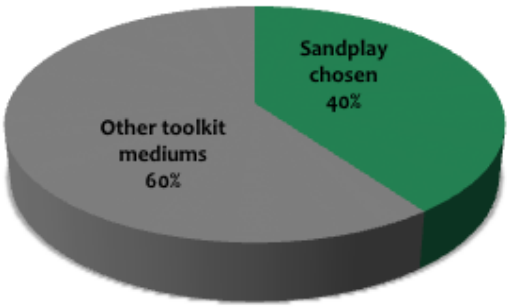
Pie 3

David



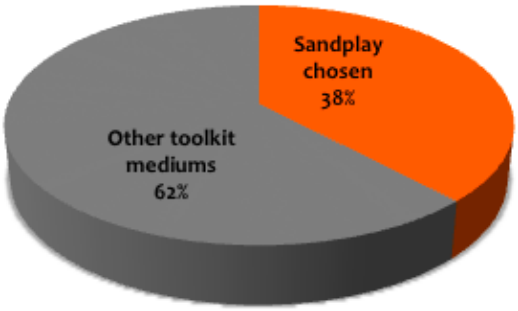
Pie 4

Andrew



Pie 5

Callum



Pie 6

Figure 6

Pie charts to show percentage of sessions where sandplay was chosen by individual children

In summary, the girls show between 71 - 76% use whilst the boys between 38-46% use and three out of the six sample children chose sandplay in more than half of their play therapy sessions. Therefore it could be argued that 50% of the sample children preferred to use sandplay in their play therapy sessions.

The SDQ data is important because it enables the researcher to observe if there has been any change from the pre-play therapy and post-play therapy SDQ total difficulty scores and the scores from the five SDQ domains.

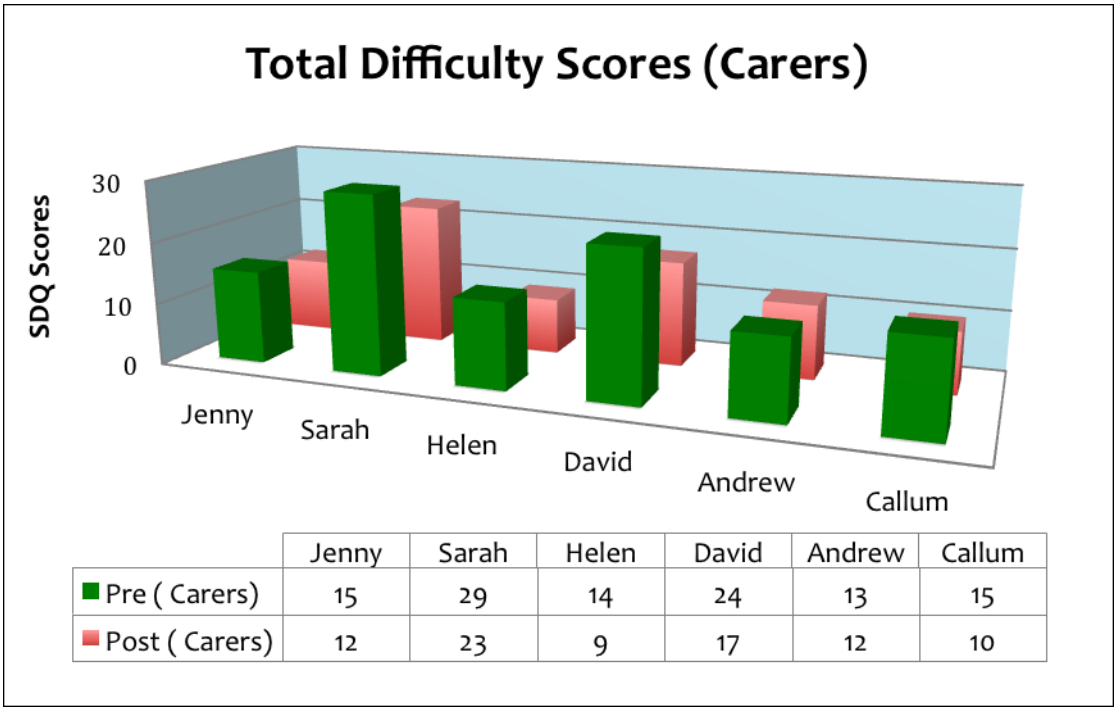
The SDQ investigates five domains through a total of 25 questions. The five domains are:

1. Emotional symptoms (5 items)
2. Conduct problems (5 items)
3. Hyperactivity/inattention (5 items)
4. Peer relationship problems (5 items)
5. Prosocial behaviour (5 items)

A copy of the SDQ is presented in Appendix 1. Alongside the analysis of the total difficulty scores, the researcher has chosen to focus upon the emotional symptoms and prosocial scales, which is explored in more detail next.

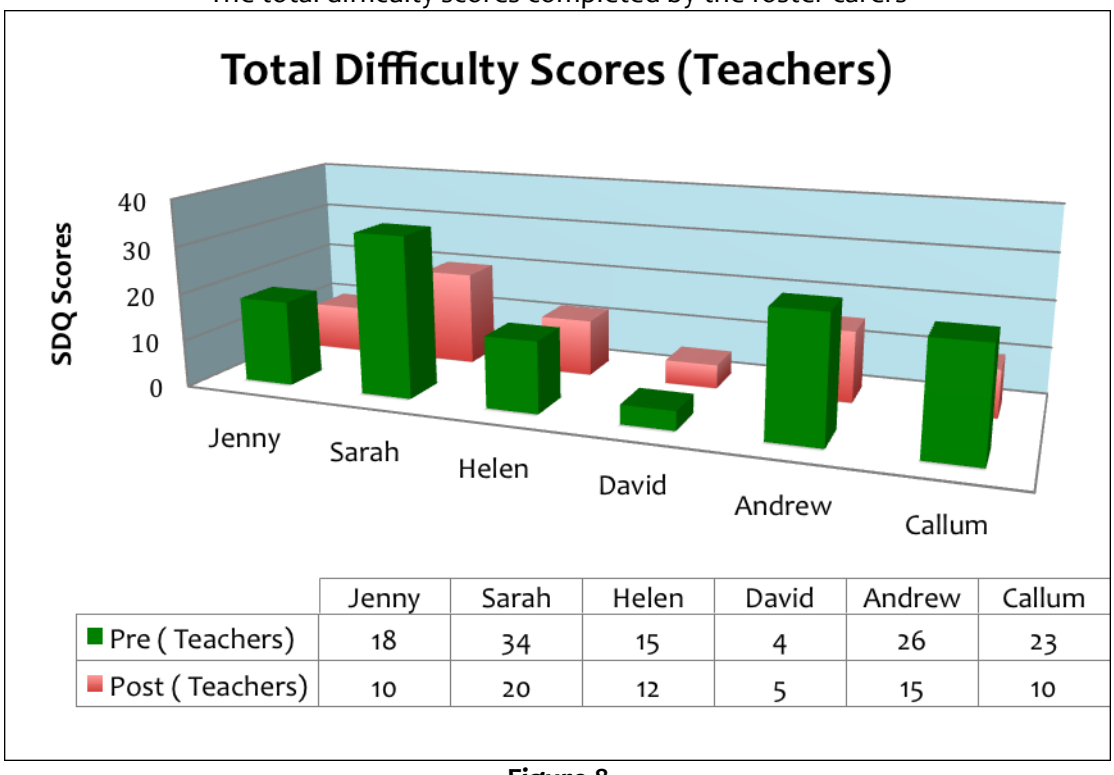
5.1.2 SDQ data results for total difficulty scores from foster carers and teachers

The aim of these questionnaires for this particular study is to observe if the child's internal stress has reduced during the time of receiving play therapy. The three specific areas highlighted in this questionnaire consist of: total difficulty scores; emotional symptoms and prosocial scores and these are presented next in the form of bar graphs beginning with foster carer's results



	Jenny	Sarah	Helen	David	Andrew	Callum
Pre (Carers)	15	29	14	24	13	15
Post (Carers)	12	23	9	17	12	10

Figure 7
The total difficulty scores completed by the foster carers



	Jenny	Sarah	Helen	David	Andrew	Callum
Pre (Teachers)	18	34	15	4	26	23
Post (Teachers)	10	20	12	5	15	10

Figure 8
The total difficulty scores as completed by the teachers

Twelve sets of SDQ scores, two for each child, pre and post SDQ were collected from home carers and school staff and then analysed. Results in figures 6 and 7 show with that the exception of David's total difficulty score from school all of the sample children's total difficulty scores reduced. David had a change of school during his therapy and so a different teacher completed his post score questionnaire. However his foster carer remained the same and a reduction in scores was seen. It is worth noting therefore that this change of school could have affected the presented results on that occasion and this is explored in more detail in the findings discussion, chapter 6.

The majority of the sample children's total difficulty scores indicated their internal stress was lower than when they first began play therapy sessions. Sandplay appeared to provide an important element in each of the sample children's play therapy sessions and so it could be argued his medium was a contributory factor in lowering their total difficulty score. Overall, these results show there has been an improvement in the sample children's total difficulty scores. This is explored further in the next chapter. The following results of prosocial and emotional symptom scales take a deeper look at what contributes to the decrease in the total difficulty scores.

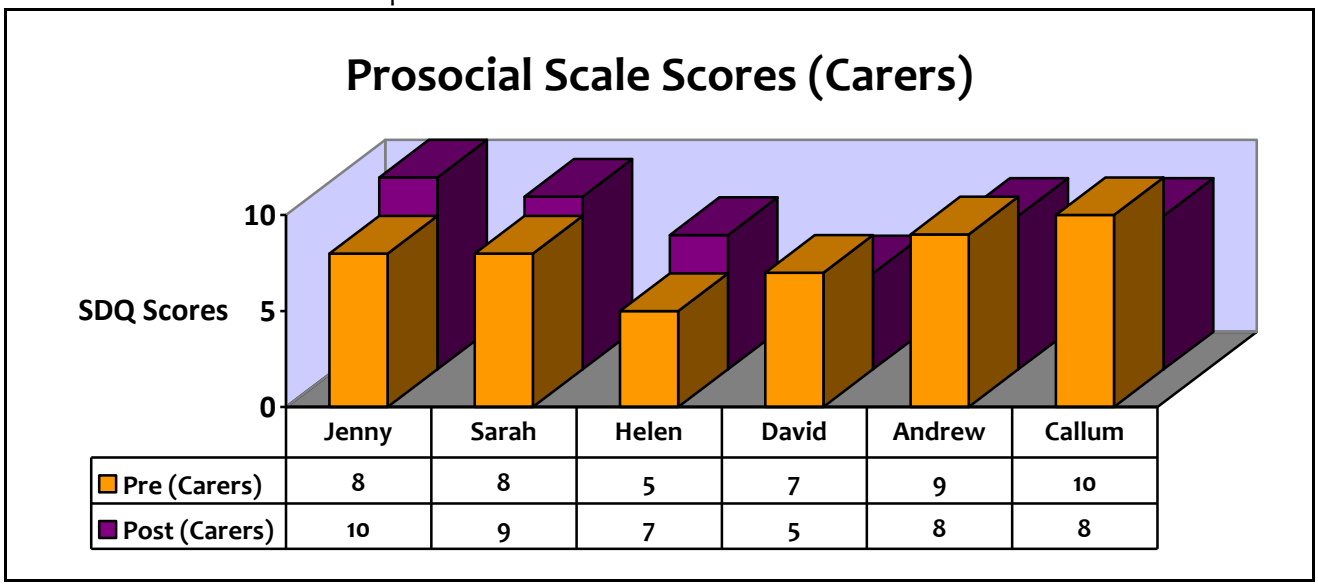
- **SDQ Prosocial Scores**

Prosocial behaviour includes interpersonal interaction and concern for others as shown in table 3. Goodman (1997) found that the prosocial scale was a distinctive dimension of behaviour and not simply the opposite of antisocial or hyperactive behaviour (Weir and Duveen 1981; Hay 1994, cited in Koskelainen, 2008).

1. Considerate of other people's feelings 2. Shares readily with other children, for example toys, food 3. Helpful if someone is hurt, upset or feeling ill 4. Kind to younger children 5. Often volunteers to help others (parents, teachers, other children)	**Prosocial behaviour**

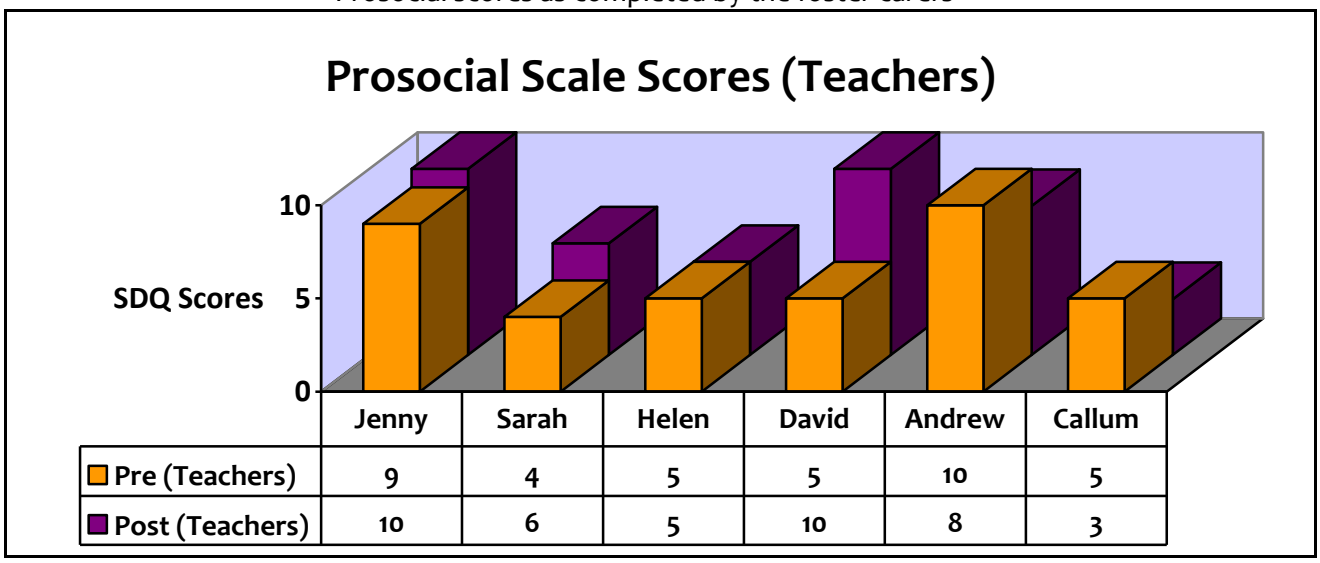
Table 5
Description of the statements taken from the prosocial section of the SDQ

Figure 9 and 10 show the prosocial scores from pre and post play therapy sessions beginning with results from the foster carer's questionnaires.



	Jenny	Sarah	Helen	David	Andrew	Callum
Pre (Carers)	8	8	5	7	9	10
Post (Carers)	10	9	7	5	8	8

Figure 9
Prosocial scores as completed by the foster carers



	Jenny	Sarah	Helen	David	Andrew	Callum
Pre (Teachers)	9	4	5	5	10	5
Post (Teachers)	10	6	5	10	8	3

Figure 10
Prosocial score as completed by the teachers

Figures 9 and 10 show Jenny, Sarah and Helen's carer prosocial scores incre

ased - the same three children who chose sandplay in the majority of their play therapy sessions. For two of these three girls, prosocial scores by teachers also showed an increase. David, Andrew, and Callum's teacher and carer prosocial scores all decreased slightly, with the exception of David's carer prosocial scores, which doubled. It may therefore be said that the three children who chose sandplay in half of their sessions showed an increase in their prosocial scores at home and two of them also showed a rise of score at school.

The majority of the sample children's emotional symptom scores decreased as a result of engaging in play therapy sessions although Helen's home scores remained the same. David's teacher results could be due to his change of school and SDQ completer as his home scores decreased potentially as a result of attending play therapy.

- **SDQ Emotional Symptom Scores**

Turner states: "The first experience of self occurs at about three years of age… Given the profound role played by emotions in brain organisation it is likely that the relational, symbolic nature of sand play operates in the right hemispheric limbic system" (Turner, 2005. p.141). Table 6 shows the SDQ questions associated with emotional symptoms scale.

1. Often complains of headaches, stomachaches or sickness. 2. Many worries or often seems worried 3. Often unhappy, depressed or tearful 4. Nervous or clingy in new situations, easily loses confidence 5. Many fears, easily scared 6. Often loses temper	**Emotional**

Table 6
Description of the statements taken from the Emotional Symptom section of the SDQ

Figures 11 and 12 show the emotional symptom scores from pre and post play therapy sessions, beginning with the results from the foster carers questionnaires.

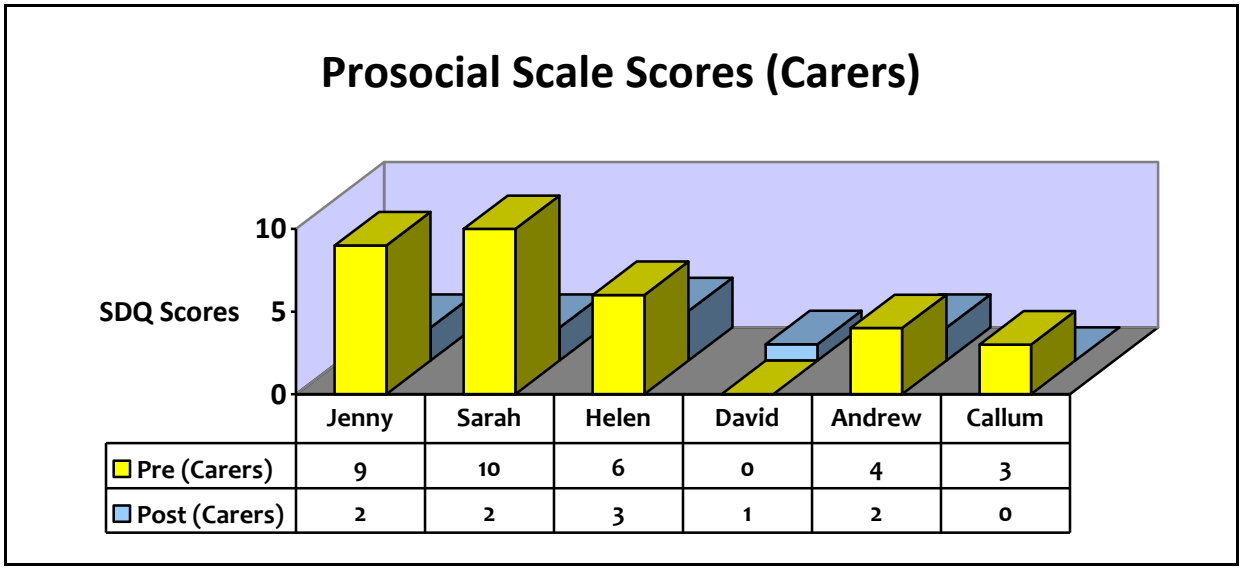


Figure 11
Emotional Symptom score as completed by the foster carers

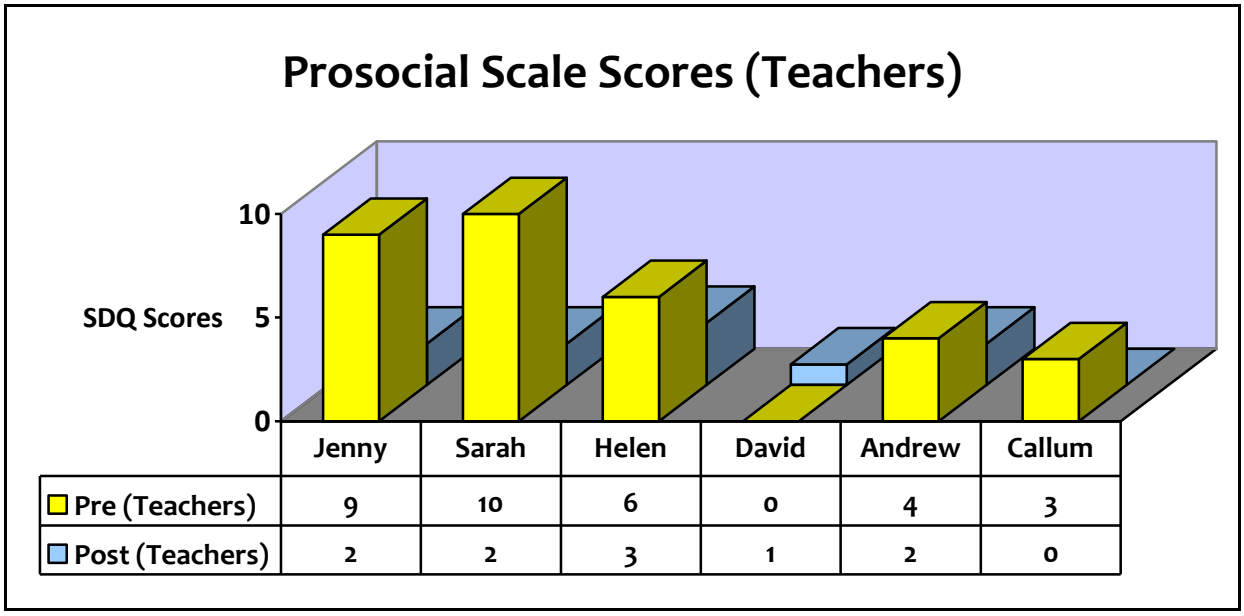


Figure 12
Emotional Symptom scores as completed by the teachers

The results in figures 11 and 12 show that with the exception of David's and Andrew's scores the emotional symptoms decreased possibly as a result of attending play therapy. Those children who chose sandplay in half of their sessions saw a bigger decrease in scores from their school environment. This is explored through discussion in chapter 6.

5.1.3 Sand Tray Analysis

An overview of the contents of the sample children's sand play expressions is explored first followed by a triangulation analysis approach. This was provided as a deeper, comprehensive analysis of the specific sand trays and to demonstrate a possible connection between what was expressed through the sand play and the sample children's traumatic experiences.

5.1.4 The Collation of triangulation of commentary on sand trays

Lowenfeld originally wanted to find a medium which would be attractive to children but that also gave them a shared language through which communication could be built (Lowenfeld, 1979). Table 7, gives an example of the possible link between what could be seen in the sand tray with the child's verbal communication or memory of an experience, which was known to the researcher to have happened before the age of four.

Name	Example of one traumatic experience before the age of four	Sand tray, which shows exploration of the experience.
Jenny	Neglect of emotional needs	Plate 3 - session 7, Table 8
Sarah	Neglect of emotional needs	Plate - session 14, Table 9
Helen	Neglect of physical needs	Plates 9 & 10 - sessions 21 & 24, Table
David	Witness to domestic violence	Plate 14 - session 5, Table 11
Andrew	Witness to domestic violence	Plate 16 - session 26, Table 12
Callum	Separation from birth mother	Plates 22 & 24 - session 31 and 41, Table 13

Table 7
Possible link between what the children said in their session
and what could be seen in the sand tray

Figure 13 focuses on the content of the sand trays.

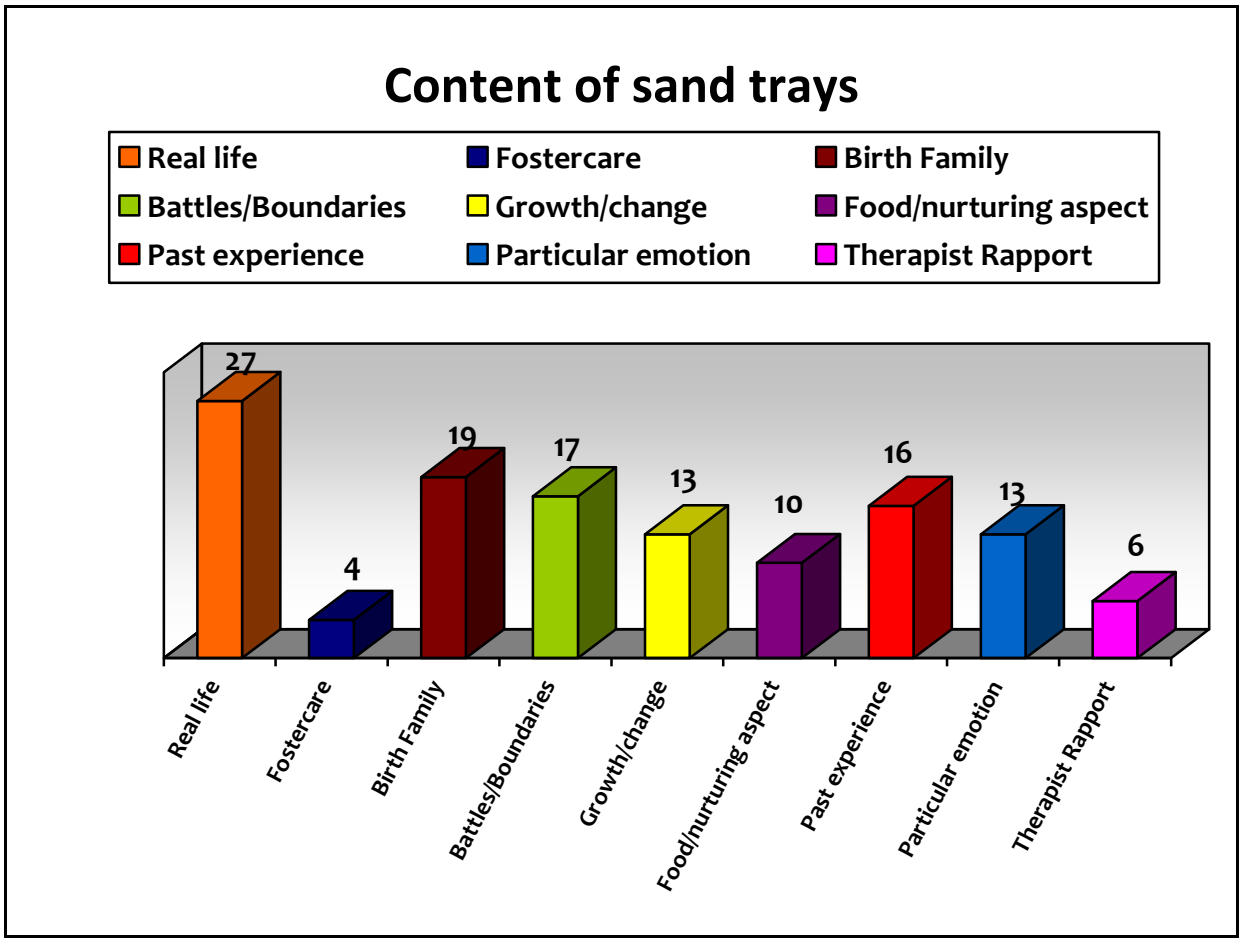


Figure 13
Contents of the verbal accounts/stories surrounding the given sand trays described by the children in the play therapy session

Figure 13 shows the main aspects that the children portrayed through their sandplay process. Out of 108 trays, 27 referenced real life events that the children had experienced or were experiencing at the time of therapy. All of the sample children used the sand tray to explore a real life experience at some point in their therapy and 19 of the trays, particularly Helen and Callum directly referenced exploration of the sample children's birth families. Three of the children, David in particular used the sand to represent food. It is possible they were doing this in a symbolic way so that they could soothe/nurture their inner selves. Figures 14-19 give a closer breakdown of the contents linked to each sample child. One topic may have featured in more than one sandtray.

Jenny

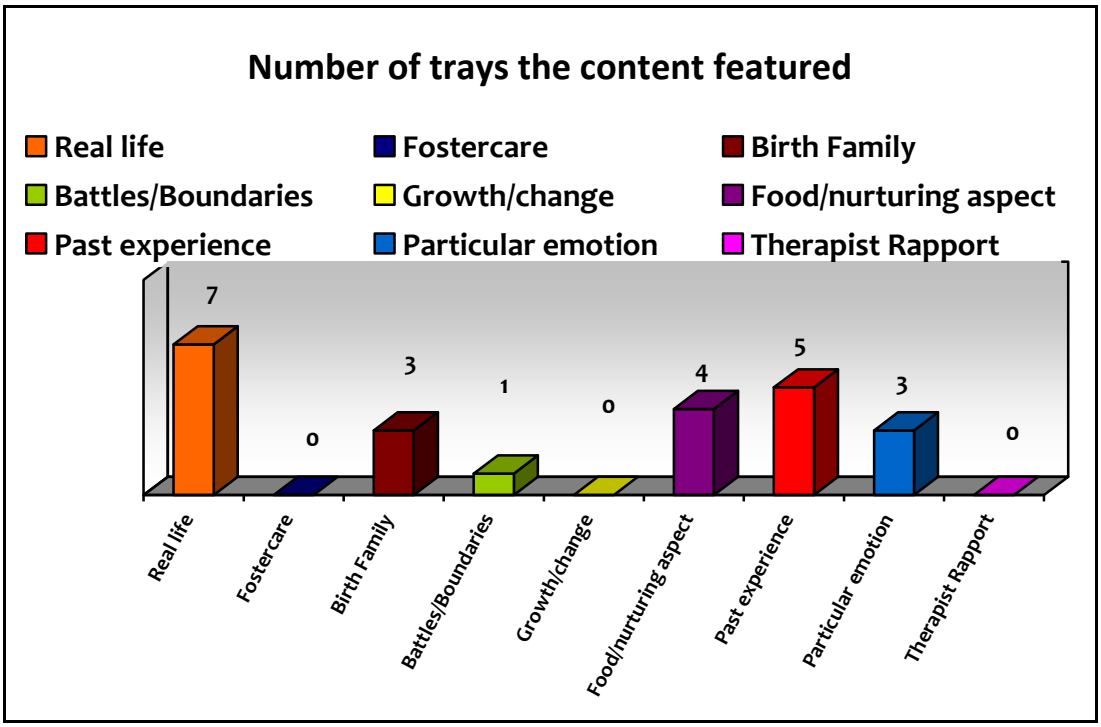


Figure 14

Contents of the verbal accounts/stories described by Jenny in the play therapy session

Sarah

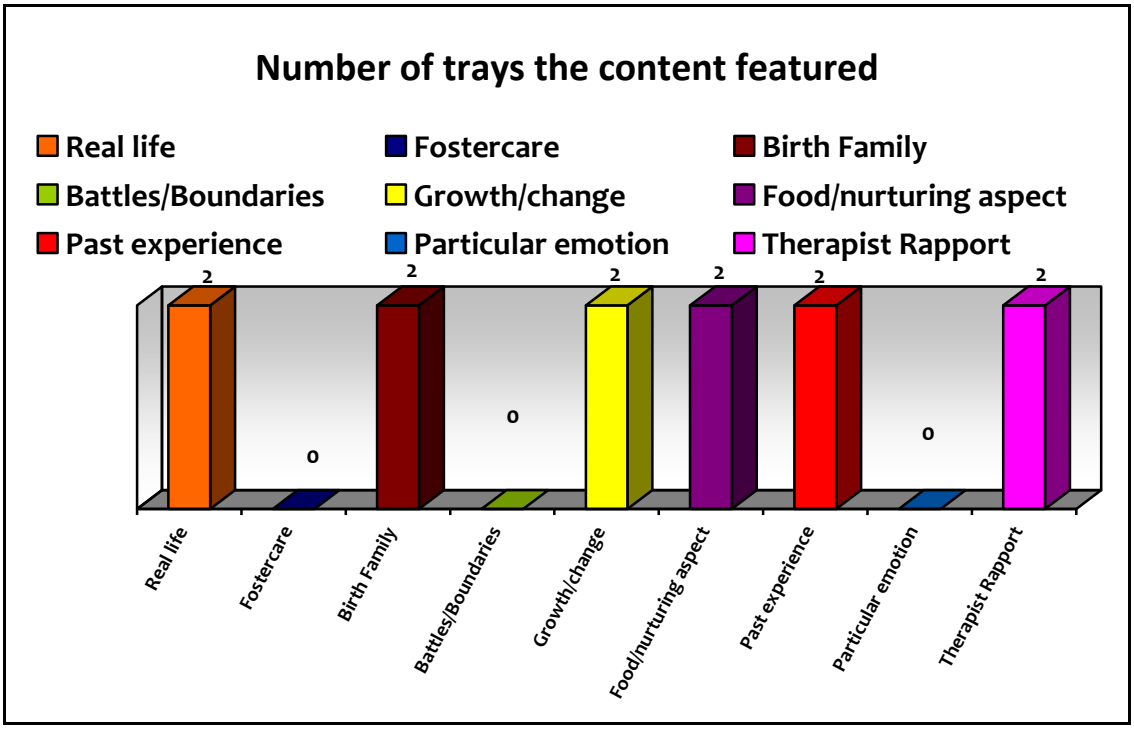


Figure 15

Contents of the verbal accounts/stories described by Sarah in the play therapy session

Helen

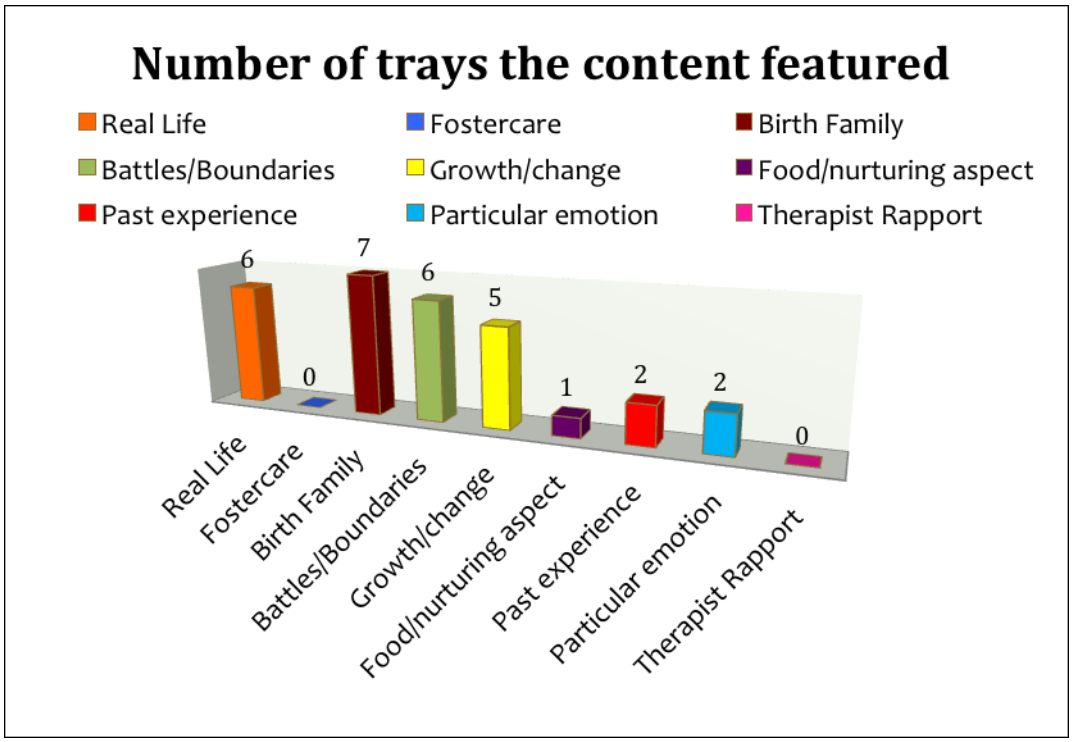


Figure 16

Contents of the verbal accounts/stories described by Helen in the play therapy session

David

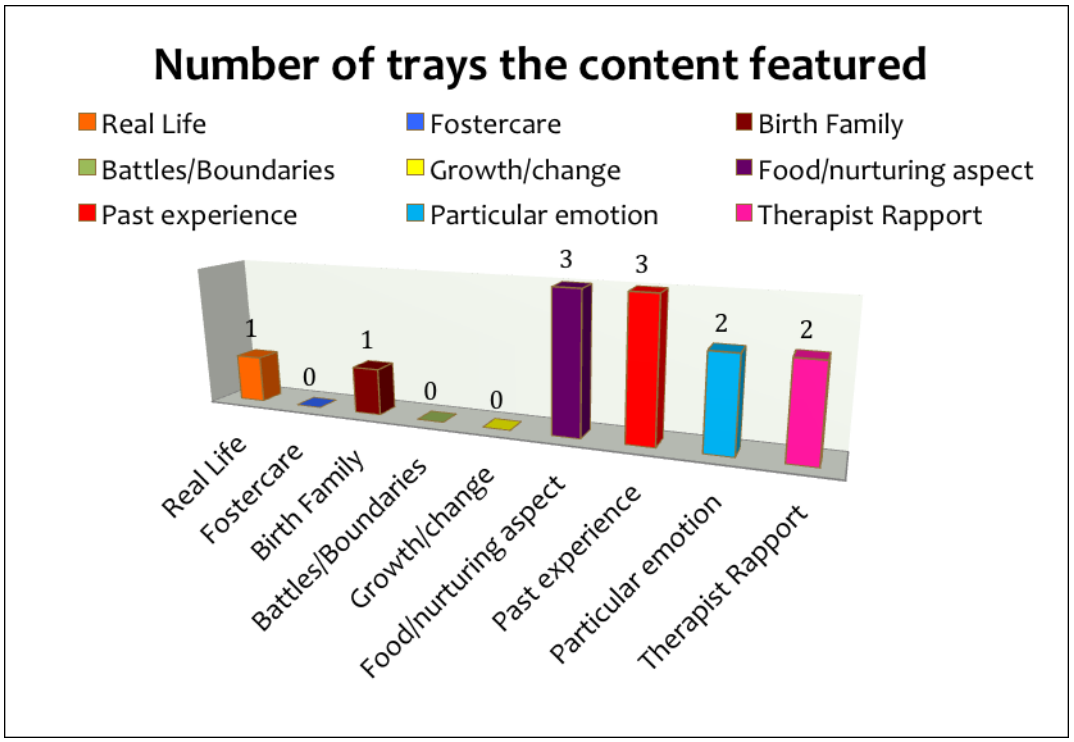


Figure 17

Contents of the verbal accounts/stories described by David in the play therapy session

Andrew

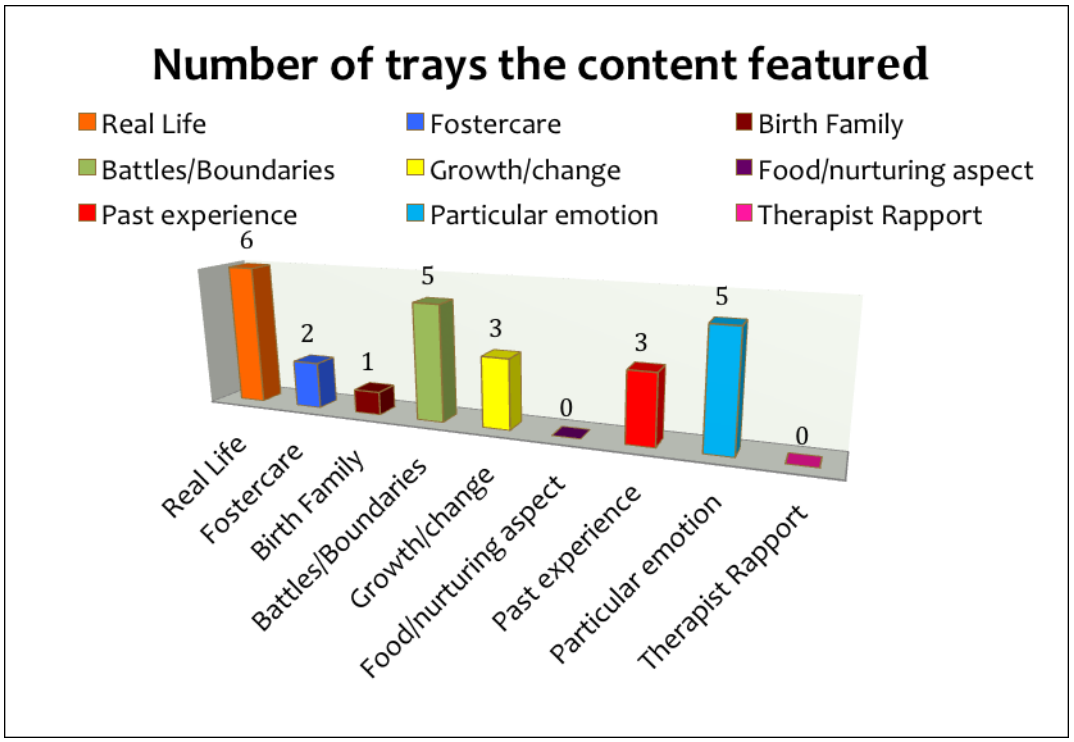


Figure 18

Contents of the verbal accounts/stories described by Andrew in the play therapy session

Callum

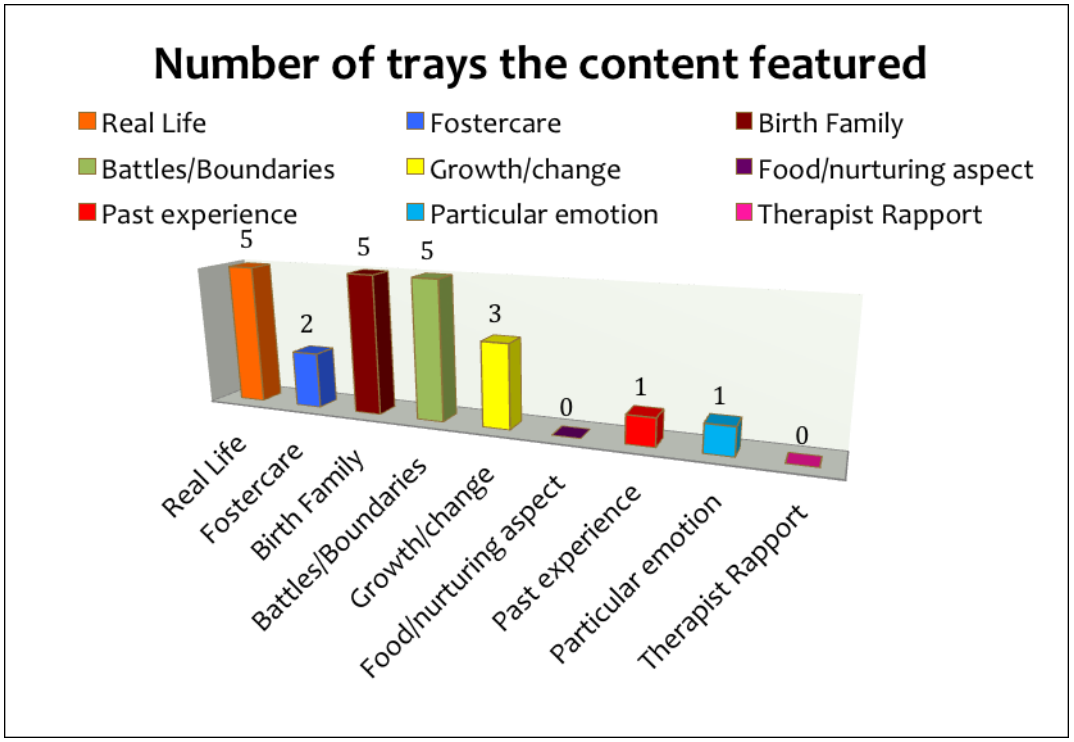


Figure 19

Contents of the verbal accounts/stories described by Callum in the play therapy session

Figures 14-19 show the direct known content of the sample children trays. This data is gathered from the children either telling the therapist the connection through verbal communication or it was easily visible by the therapist i.e. observing a battle. Results indicate that all of the six sample children made some reference in the sand tray that connects with either their current life experiences or past events. It is worth noting that some of the topics were not highlighted verbally by the child or easily seen by the therapist at the time. This does not mean necessarily the topic did not feature in the play therapy session but merely it was done through other creative mediums.

Through exploration of the metaphors used by the children in the trays the comments and observations made by the sandplay specialist on the metaphors used by the children in their sand trays support these visible reflections. These results are shown next through a sample from each child that seem to link to the children's experiences. An introduction to the sample children's referral and personal background histories can be found in Appendix 4.

A specific analysis of particular sandplay trays that seem significant in terms of linking to a child's background begins to answer the second research question; how might they use sandplay to help process their traumatic experiences? The results from the strength and difficulties questionnaires support this also.

- **Jenny, age nine.**

Table 8 and plate 3 give a detailed exploration into one of her significant sandplay experiences alongside her own comments and the observations and analysis offered by the child and researcher's commentary.

Plate 3
Jenny's sand tray - session 7

This tray seems to show that Jenny may have been using the sandplay to explore her real life experience of emotions. It may have offered her some resolution to her trauma by allowing a space to have her emotional needs met in the present, as they were not in the past. Many of Jenny's sand trays referenced the area of emotions and it is interesting to note that both her home and school emotional symptom scores reduced significantly. At the end of therapy her Social Worker and school teacher both reported her to complain less about headaches and worries, an improved sense of confidence and self-esteem and more evidence of her being happier and able to show a sense of enjoyment in social activities.

Child Action and Commentary
Previous sessions worked with a Quest theme. In this session she began exploring the theme of pyramids. Jewels buried inside and the wizard trying to get at them... She made the pyramid first and buried the wizard in the pyramid. She then placed the witch at the front of the pyramid and scattered the Indian figure. Finally she placed the shells and rabbit and the rabbit is next to the shells in the bottom right corner The seahorse mentioned in her comment relates to her drawing done prior to the tray. Jenny says: "The rabbit is me and the wizard is searching for special treasure. The seahorse feels sadness the most and it's hard for her to get to the blue place (joy)"
Researcher Commentry
Placement and positioning seem significant in this tray as and the pyramid could indicate power and control. Jenny had been identified at school as having a very low self-image and self-esteem so getting some mastery with shaping and forming the pyramid may have been part of her ego development. Jenny found it very hard to allow she to feel emotions such as joy and happiness and this seems representational of the wizard's quest and the buried treasure. There seems to be a connection between two worlds and the Wizard that is buried could possibly be trying to get to precious Jewels. Maybe he just wants to be in there next. The rabbit is buried up to her neck in sand, possibly submerged for deeper connection. It could suggest Jenny is aware of her struggles but not able to make changes yet. The wizard's search of buried treasure seems to connect to seahorse's (drawing) difficulty connecting to the emotion Joy. Jenny could either be allowing herself to search and connect with the emotion joy or feel stuck that she is at the moment unable to access it.

Table 8

Analysis connected to Jenny's sandplay process.

This tray seems to show that Jenny may have been using the sandplay to explore her real life experience of emotions. It may have offered her some resolution to her trauma by allowing a space to have her emotional needs met in the present, as they were not in the past.

- **Sarah, age seven.**

Plates 4 -6 show some of Sarah's significant sand trays.

Plate 4
Sarah's sand tray - Session 2

Plate 5
Sarah's sand tray - Session 3

Plate 6
Sarah's sand tray - Session 14

Table 9 shows a detailed exploration of some of Sarah's significant sandplay experiences.

Child's Action and Commentary
Session 2: Birth family placed in sand tray corners beginning with Sarah herself in the left corner. Sarah points and says " That's me, my sister and Mummy and it is a beach" **Session 3:** Sarah buries herself and her older sister under the sand. Sarah also requested Therapist to bury her (Sarah's) hands next to figures. Sara says "It's me and my sister" **Session 14:** Returned to the beach scene. Sarah identifies figures as her birth family. Sarah says "My family together again".
Researcher's Commentary
The beach appears to make a family reference and figures are set out diagonally. Sarah has positioned herself diagonally to the Mother figure and this positioning maybe showing tension (Turner, 2005), or longest distance between the two, particularly as the Mother has her feet turned outwards. The apparent energy centre seems to denote tensions between diagonals. In session 3 there is literally physical burying of Sarah's hands by the therapist alongside the burial of herself and sister figures. It is worth noting they are only semi buried so some acceptance of facing issues could be present. It is not clear from picture whether figures are emerging or descending but Sarah's comment seems to suggest downward movement/repression. In session 14 Sarah continued her beach theme and the family were close together, semi-buried in a sand mound. There is significant blue area exposed and suggesting delving down and the vertical height of sand mound suggests delving deeper. (McNally 2001) The overall observation of the tray is that there seems to be a connection with sand and Identification of family configurations. There appears to be evidence of possible rebuilding and a possibly start of something which is consistent with Sarah beginning to trust the space of the playroom. Sarah was very quiet in this session 3 where she seemed to be finding it hard to connect directly with therapist in real world. It appeared however she was happy to tactically connect with the therapist in the protective space of the sand tray. It is possible it felt safer for things to remain in the unconscious and containment of the sand tray so that her Ego could continue its transformation towards an individuation (Weinrib, 1983, as cited in Turner, 2005, p. 119). This is discussed further in chapter 6. The underlying emotion connected to these trays could be anger, which is noted by the diagonals and metaphoric representation of tension. In session 14 the anger was possible still in Sarah's unconscious but the exposure of the blue perhaps acted similar to a bridge and connected it to the conscious mind hence why an anger role-play followed after the sandplay in session 14.

Table 9
Analysis connected to Sarah's sandplay process

Turner states "In sandplay, to open the sand and expose the blue water below is the act of moving through what is known to that which is unknown "(Turner, 2005, p. 206). Adding of the water to the sand is connected to the client engaging with the unconscious (Turner, 2005). Sarah made reference to the blue in session 3 but began adding water to the wet tray in session 8 and then finally actively began to build and mould with figures in session 14.

After her sandplay process Sarah was also able to recognise through her choice of role-play of how a child may feel in a helpless situation. This was demonstrated by her ability to be able to direct the therapist in the role-play to respond in a certain way. Sarah's total difficulty scores did reduce significantly and a contributory scale for this total reduction was her emotional symptom scores reducing significantly, particularly from school

- **Helen, age 10.**

Plates 7 - 11 and table 10 show a detailed exploration of some of her significant sandplay experiences.

Plate 7
Helen's sand tray- The Farm - Session 1

Plate 8
Helen's sand tray - The Farm - Session 10

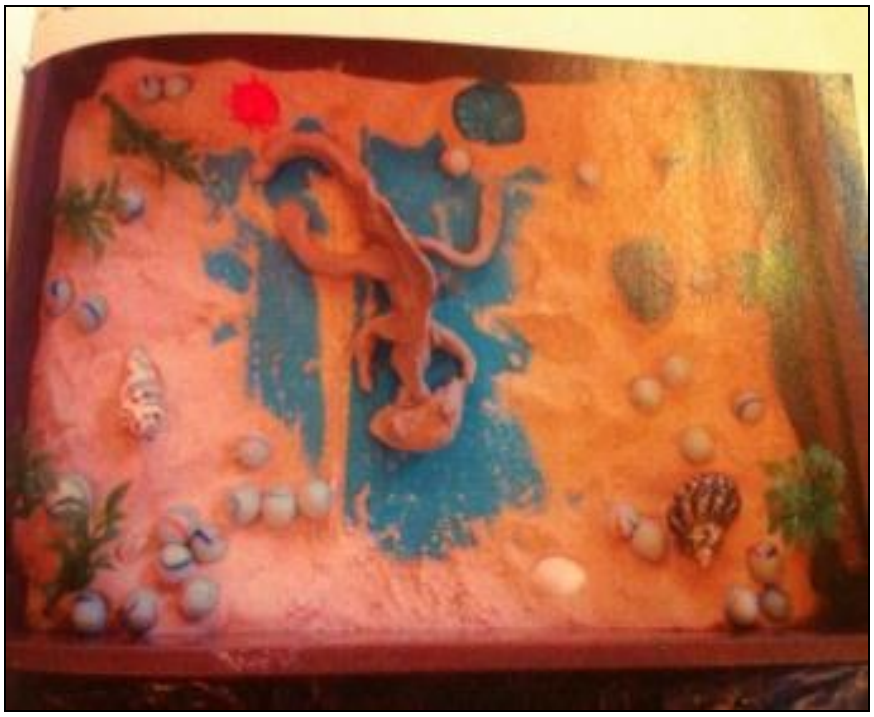


Plate 9
Helen's sand tray - Creature's home - Session 21

Plate 10
Helen's sand tray - Dino lair - Session 24

Plate 11
Helen's sand tray - Dino nest - Session 27

Helen's actions and comments followed by researcher's commentary are explained in table 10.

Child action and commentary
Session 1: Helen did four trays with no verbal explanation other than to give them titles. Farm; House; Classroom; Battle. The focus for this analysis is on tray one – The farm. **Session 10:** Helen returned to the farm theme and talked about crying as she placed animals and said, "It's only ok to cry if you are a baby" and then she physically cried. **Session 21**: Helen combined her clay model with the sandplay process. Helen said "Creatures home". Helen did talk about a family holiday whist she engaged with the sandplay process. **Session 24:** Helen created a sand tray about a mother dinosaur and gave the following description, "That hill of sand is the Mum dinosaur's lair. In the left top corner is the dinosaur's nest. Underneath the sand there are the trees and rocks to make the nest. The nest is covered in the sand so that it can't be detected. When the Mum dinosaur is hidden in its nest it is safe but is has to come out for food. It covers its nest up and places a tree there so it can be found again. The rocks (represented by hearts) are protecting the family. Rain comes and makes it all muddy, which helps to kill the fish so the dinosaur has food to eat. The mud traps the fish and the dinosaur can then eat it." This theme was continued in the session 27. **session 27**: Helen's description was similar to the above. Helen named her tray "Dino's nest".
Researcher's Commentary
Session 1: Helen appeared to be very anxious and not able to converse verbally but she responded to an open invitation to choose how she wanted to use her play therapy session. Helen spent the entire session in the sand tray and the majority of this time in was in silence. Helen completed 4 trays and after the sandplay Helen was visibly more relaxed at end of her sessions. Maybe she felt relieved at being able to express what was inside. The central cat may have connected to her recent bereavement of her pet cat and the scorpion could possibly be her shadow. The blue Indian figure seems to be casting an arrow towards the central, black dinosaur, which could denote a fragile ego. (Neumann, 1973, as cited it Turner 2005, p. 75) **Session 10**: The Scorpion was placed more centrally and may link metaphorically to a Jungian shadow (Turner, 2005, p. 23) and this could relate to the conflicting thoughts Helen had about crying. During this session Helen was beginning to check out beliefs and her explanation about crying and then physically crying seemed to support this. The central placement of the scorpion however could point to the negative thinking still present and show there is possibly still some inner conflict which maybe inhibiting the process of "individuation." (Turner, 2005, p77) **Session 21**: The creature is known from previous sessions to have a positive connotation and the nature of the tray seems to have an emerging element. The shell seemed connected to thoughts about her birth Mum. Directly after the tray came a role-play with puppets. **Session 24:** The trays seemed to have a nurturing and protective feel where Helen had control over who knows where the dinosaur nest was. There is a solution for provision of food (fish) and there is a making of the nest to be safe while there is possibly growth and transformation. There is placement of protective rocks to reinforce element of safety. Helen used water as well as blue base exposed and there was a significant importance attached to the pouring of the water, entering the tray, this may be indicative of receiving the potential of the unconscious. (Turner, 2005). **Session 27:** The tray appeared to be similar to the previous one as there was a mound of sand still in the corner signifying the dino nest. Small areas of blue were exposed which could link to delving down to unconscious material and there still seems to be a threat present, represented by the shark A presence of a bridge could be link to a connection of new thinking emerging and the shark and bridge appeared to give the tray a positive and negative energy centre.

Table 10

Analysis connected to Helen's sandplay process

In Session one Helen seemed to engage in many sandplay processes and it appeared to be similar to when a person begins "talking therapy" and they speak about their story (McLeod, 2009). During session 10 the therapeutic relationship was established and Helen was beginning to check out beliefs. Helen's explanation about crying and then physically crying seemed to support this.

- **David, age nine.**

Plates 12 – 15 and Table 11 show a detailed exploration of some of his significant sandplay experiences.

Plate 12
David's sand tray - before water - Session 2

Plate 13
David's sand tray - after water added - Session 2

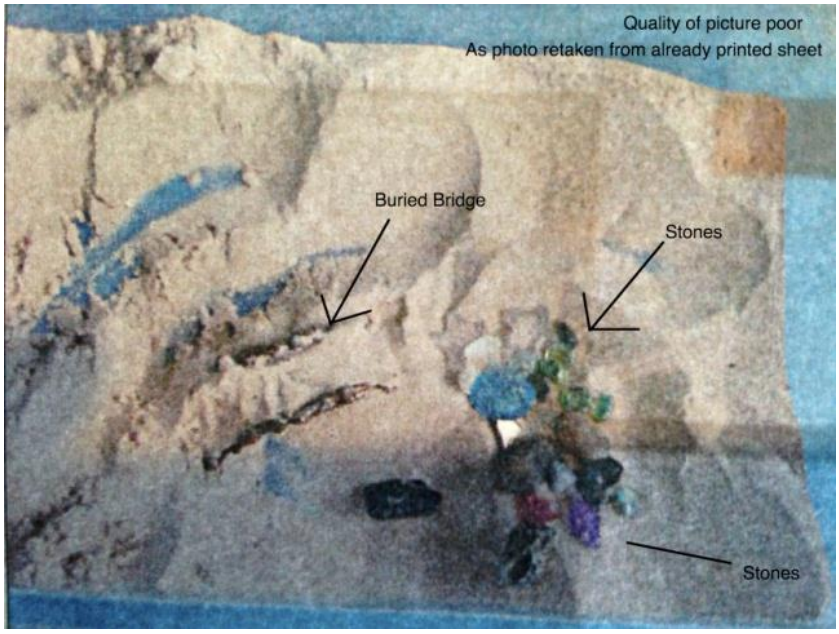


Plate 14
Buried bridge and stones in David's sandplay –Session 5

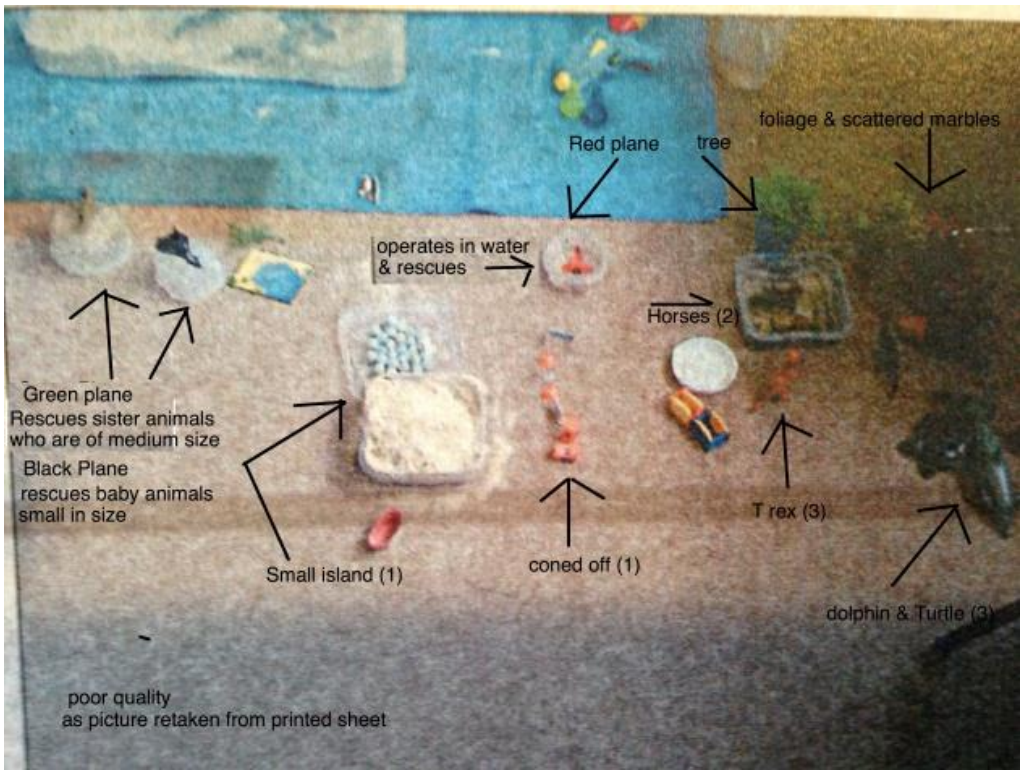


Plate 15
David's sandplay - session 5[20]

David's actions and comments followed by researcher's commentary are explained in table 11.

[20] In Plate 15 the numbers in brackets relate to the paragraph that is the 'story' given by David. This story is shown in full in Appendix 4.

Child Action and commentary
Session 2: David places the bridge first and then creates a farm scene. He buries the black frog in a mound of sand and places the red frog next to it. He says "Only the frogs can go over the bridge. After a short pause, whilst he explored other creative mediums, he crashed the plane on top of the bridge and added the water. David then explains, "The people and frogs no longer go over the bridge as it is blocked by the plane, it's crashed. The piglets have no Mummy and Daddy so the black patch pick is looking after them. The piglets are sad and angry because they are to be made into pork." David states at the end of his sandplay process that the piglets want food and need feeding. He then feeds them. **Session 5:** David buries the bridge with sand but says it is buried in water. He tips the stones out into the tray. David chose to do the rest of the work outside the sand tray. David's narrative is long and can be read for further reference in Appendix 4. David explored other creative mediums during this session also and anger was very present throughout his process.
Researcher's Commentary
Session 2: The farm animals seem to be metaphorical for his birth family and the black frog is a possible "burying" of darkness (Steinhardt, 2000, p 145). The frogs have access to bridge so possibly a tapping gateway of Self and maybe a possible metaphoric link with his bereavement of a baby sibling that occurred in his preschool years. The crash scene at the bridge could signify an "interruption in process or blocking" (McNally, 2001, p. 128). The pigs have no parents, which is a similarity to David 'losing' his own parents and the adding of water could mean descent, which could signify a further exploration of these difficult and traumatic events. **Session 5:** Clay sea horse used with the sandplay possibly connected to his birth Mum and clay snake possibly linked to the violence he witnessed towards his Mum. The burying of bridge, which David describes as being under water could be a sign of decent. There are some small blue areas exposed signifying a possible delving down to the unconscious. Other work is undertaken, not in sand and this work together with his clay creature sounds like a metaphorical portrayal of his experiences and losses.

Table 11

Analysis connected to David's sandplay process.

- **Andrew, age six**

Plates 16 -19 and table 12 show a detailed exploration of some of his significant sandplay experiences.

Plate 16
Andrew's sand tray -
Mummy and boy puppy - Session 26

Plate 17
Andrew's sand tray -
Mummy and buried boy puppy - Session 26

Plate 18
Andrew's sand tray - session 42

Plate 19
Andrew's sand tray - session 43

Andrew's actions and comments followed by researcher's commentary are explained in table 1 2.

Child Action and commentary
Session 26: Andrew placed the two dog figures and stated "Mummy and boy puppy, he is scared". He then buried the boy puppy.
Researcher's commentary
Session 26: Life story work commenced two weeks prior to this session and sandplay could be reflecting his traumatic experiences prior to coming into foster care in relation to the domestic violence he witnessed before the age of four. There seems to be an exploration of feelings with metaphor usage. There are fearful, confrontational aspects. **Session 42:** Behaviour reported in school to have regressed to earlier patterns of behaviour before play therapy. Becoming more consciously aware of Mum's difficulties in being able to care for him. David Flooded tray whilst talking about life story work connected to session with Social care representative. The flooding of the wet tray seemed to enable David to open up about his feelings towards being in foster care and not being able to live at home with Mum. It also seems to have coincided with conscious realisation that coming into care was not his fault. After exploring battles and conflict in dry tray David seemed to - return to deeper aspect of exploration of deeper content. **Session 43:** Anger seems to be generalised this week and expressed anger linked to foster care, siblings, friends, school and birth home. Sand castles and bombs seemed to be the theme and there appeared to be an emergence of 'targets' to be bombed by the marbles. This action could be helping Andrew to integrate unconscious material. This was the last sand tray Andrew chose to do and therapy ended 7 sessions later ready for new work to begin at CAMHS.

Table 12.
Analysis connected to Andrew's sandplay process.

- **Callum, age seven.**

Plates 20 -19 and table 13 show a detailed exploration of some of his significant sandplay experiences.

Plate 20
Callum's sand tray - session 3

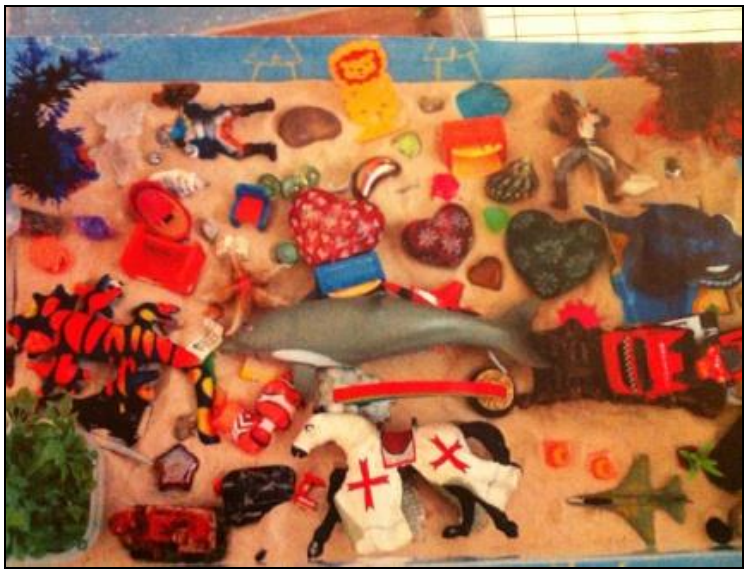


Plate 21
Callum's sand tray - session 7

Plate 22
Callum's sand tray - Princess saved - Session 31

Plate 23
Callum's sand tray - Knight, Princess and a safe place - Session 31

Plate 24
Callum's sand tray - Knight gets a hug - Session 41

Callum's actions and comments followed by researcher's commentary are explained in table 13 next.

Child action and commentary
Session 3: Spent the whole session working in the wet tray and placed the dolphin first. He spent a long time placing the animals and objects around the centre. Callum said, "The dolphin, shark and turtle are stuck and the other animals were watching." He poured water into the tray until the tray was flooded and stated, "There's a flood". **Session 7:** Callum used the puppets to act out parental arguing and fighting. At the sand tray he placed the dolphin first and said, "It's me". **Session 31:** Places bridge, house, then princess. Monster is holding her captive. David used the knight and bashes him out the way and takes princess to a safe place. He then throws the monster out the tray completely. Callum says, "The princess can't get away herself. He (monster) has got her, I'm taking her to a safe place" **Session 41:** Placed bridge first then house. Put princess in and ran the knight over excitedly for a hug.
Researcher's commentary.
Session 3: In the session before Callum talked about him and his brother flooding the birth home. Callum believed it was his fault he and his siblings had to leave his Mother. This tray appears to indicate a descent because of the additional water added to the centre. The Dolphin seems important as first placed and he may be using it as a metaphor for himself. Callum seems to have engaged deeply with the process considering it is early in his play therapy. This is representational of the amount of water used. The creatures seem to have descended further than before as there is more water present. **Session 7:** Callum has stated the dolphin; turtle and shark are metaphorical of himself and his siblings. In this session he talked about his Mother and her 'poorly mind' and it seemed he was trying to get a sense of what this meant for him. The St George's cloth on the horse could possibly depict "ego reformation" where the ego dies ready for the new one to emerge and form (Turner, 2005, p. 299). There appears to be several positive/supportive symbols such as foliage and hearts so could be representation of growth and change. It feels an ordered tray. **Session 31:** At this point in his play therapy Callum had received life story work from social care for about a month and it seemed the sandplay involving the princess, Knight and the monster linked with his experience at home before foster care. Callum's verbal comments support this also. There seems to be a Feminine/masculine aspect to the sandplay shown through his use of a damsel archetype figure. The bridge is central and is the channel whereby the knight is allowed to deal with the shadow material (monster), and rescue the damsel. Bridge seems to allow an energetic connection. **Session 41:** Returned to where he left the thematic work earlier reinforcing the successful integration and removal of shadow. Seems to be continuing to explore his attachment with his birth Mother. There could be a possible ego-reformation denoted by the absence of the monster figure. (Ibid)

Table 13

Analysis connected to Callum's sandplay proces

6. Discussion of findings

The following four key elements for discussion are extracted from the data analysis:

1. The connection of traumatic experiences and the choice of water, sandplay figures and objects.
2. The improvement of SDQ emotional symptom and prosocial scores in five out of the six sample children.
3. The sample child whose sandplay did not demonstrate an improvement in the school SDQ scores and the external circumstances affecting these scores.

The chapter closes with a consideration of data sensitivity

6.1 The connection of traumatic experiences and choice of sandplay figures and objects.

All of the sample children made verbal references to connect some of their sand play to actual past experiences. This supported their non-verbal, metaphorical story in the sand tray that linked to their traumatic experience before the age of four. Therefore this series of non-directive play therapy sessions, with the use of sandplay, indicated that children do use the sand play to express real life experiences. The analysis of the particular trays equally supported this, as set out in table 4 in the Findings chapter, and the use of animals in sandplay is discussed next.

Animals in the sandplay worlds are known as being representative of instinctual and emotional urges (Turner, 2005). Perkins McNally states "Animals can represent poorly integrated aspects of the self, old memories" (Perkins McNally, 2001, p. 121). Four out of the six sample children used animals as their preferred figures in the sand tray. Perkins McNally (2001, p. 122) explains that

animals if used with great intensity, especially if they are a "totemic" animal and used in nearly every tray, should be taken notice of in particular. This is because the child may identify with the characteristics that are normally associated with that particular animal which is significant to them.

In fifty percent of Jenny's sandplay she included a rabbit as her "totemic" animal and also identified this animal as representative of herself. An example of this use is shown in plate 1. Jenny presented as an intellectual, polite, conforming child, who lacked confidence in her own ability. She also struggled to accept the 'shadow' side of herself and the emotion most often expressed was that of sadness. Jung (1956) felt the 'shadow' to be an appropriate term for the "disowned sub personality" (Stevens, 1994, p.64). McNally suggests the use of the rabbit in the tray to represent charm, beauty and femininity that is more likely to flight rather than flight. This suggestion fits with Jenny's personality as observed in the therapy room.

Plate 25
Jenny's use of the rabbit, watching from a far - session 7

Jung (1956) believed the human psyche has the ability to regulate its own path toward wholeness. He discovered that when confrontation happens between the conscious and unconscious it can result in the emergence of new symbolic material, which leads to a greater

psychic wholeness. The individuation comes from the deep level of the psyche rather than from an external source, so the making of the tray is itself healing (Jung, 1957). The unconditional positive regard from the therapist together with the opportunity for the sample children to express their difficult experiences in the sand tray seemed to support Jung's theory of individuation, which showed in their improved SDQ scores.

Plate 26 gives an example of Andrew's sandplay in which he appears to explore the "depths of the psyche" with a possible connection to "unconscious" material. (Turner 2005, pp. 203-204)

Plate 26.
Andrew's possible connection with unconscious material through wet tray sandplay

Five out of the six sample children used the bridge as an object in their sand trays. Bradway and McCoard (1997, p. 94) state "Sandplay is a collaboration between unconscious and conscious." Opposites occur in sandplay often good/bad, past/future, negative/positive and when a bridge is used in sandplay it is often there to unite the two opposites (Turner, 2005). Sometimes, as is seen in Plates 27 and 28, the bridge seems to be 'floating' and not connected to anything however, its value as a connector is still valid and an important aspect to the tray (Perkins McNally, 2001). The bridge, in this instance is also blocked and therefore it could be significant of a disorientation of the psyche with the orange cone depicting a block in the process.

Plate 27
David's tray – blocked bridge - session 2 (Before water)

Plate 28
David's tray – Bridge block shifted - session 2 (After water)

In the next session David's bridge reappears but the orange cone has shifted which could be a sign of 'opening up'. The water denotes a possible descent into the unconscious and the bridge is

connecting play (active) to sleep (stillness). This appears to be consistent with Bradway and McCoard's (1997) suggestion of connecting opposites. For David, part of his history included bereavement, and the buried bridge could be seen as a metaphorical portrayal of hurt and loss.

The use of water appears consistently in all the sample children's sandplay process. Turner (2005, pp.206-207) says "To add water to the sand is too engage with the unconscious in an immediate and intimate way… Water is present in sandplay when the unconscious is being accessed directly."

Plate 29
Andrew's tray – Appearing to delve down and open up the unconscious material-session 42

Plate 30
Andrew's tray – Appearing to integrate unconscious material

Plate 29 shows Andrew's use of sandplay to access unconscious material. In plate 30 is used through the' bombing of targets' to seemingly reach " integration" of the unconscious material (Turner, 2005, p. 304) After these trays Andrew spoke much more clearly about his experiences whilst living at home.

It seems exposure of the blue in the sand tray and the delving down either through use of water of physically digging down appears to have helped the children to express their conscious experiences and possibly unconscious material too. This appears to be supported though the improvement in the emotional and prosocial SDQ scores in five out of six of the sample children. This is explored in further detail next.

6.2 The improvement of SDQ emotional symptom and prosocial scores in five out of six of the sample children.

- **Total Difficulty score.**

All of the sample children's overall total difficulty scores reduced significantly both at home and in school. The SDQ scoring range is between 0-40. On an individual basis a score of 10 or below is normal and 17 and above is a cause of concern (between 14 -1 6 is borderline) (Goodman, 1997). As the prosocial scores are separate to this figure this leaves the other 4 domains; emotional symptoms; hyperactivity and inattention; conduct problems and peer relationship issues as contributory factors in the change of this score.

For the purpose of this study, as outlined in the results chapter 5, the researcher has focused on the emotional symptoms score. When viewing, in particular, Jenny, Sarah's and Callum's scores the reduction in their emotional symptom's scores were fundamental in enabling a drop in their total difficulty scores. Without a change in this area for these three children it is possible that their reduction in score would not have been as significant as it was. In a guidance paper produced by the Department of Education (2012, p. 12) about the use of SDQs it states, "Over time SDQ records can show a child's progress"

- **Emotional Symptom score.**

With the exception of David's school scores, all of the children's emotional symptoms scores improved. David's scores are explored in more detail later in this chapter. Both Jenny and Sarah had a significant improvement of scores, between 6 - 7 points, whereas the other children's scores moved between 1 - 4 points. The researcher found it helpful to consider the stages of ego

development that were developed by Neumann (1973) and Kalff (1980) because it assisted in the process of linking what was visibly happening in the sand tray with theoretical understanding. This then enabled the researcher to take an objective observation of the sand trays during analysis. Table 14 shows the ego development stages (Neumann, 1973; Kalff, 1980, cited in Bradway & Mcoard, 2005, p. 118).

Neumann	Kalff
Phallic - chthonian	Animal - vegetative
Phallic - magic	
Magic- warlike	Fighting
Solar- warlike	
Solar - rational	Adaption to the collective

Table 14
Ego Development stages by Neumann and Kalff.

Neumann (1973, cited in Bradway and Mcoard, 2005, p119) describes the Phallic-chthonian and Phallic-magic stage as "vegetative and animal form... moving onto the Phallic-magic stage where the ego begins to have considerable activity of its own of its own." There appeared to be some shift in ego transformation or adjustment in Jenny's, Helen's and Callum's sandplay process and their entire emotional symptom SDQ school scores also increased. Jenny, Callum and Sarah also had an increase with their home SDQ scores.

The common denominator of four out of the six sample children is that their sandplay process seemed to show evidence of going through the animal - vegetative and fighting stages of the Ego development stages (Kalff, 1980). Plates 31 -33 (Vegetative stage) and 34 - 37 (Battle/fighting stage) support these findings.

- **Vegetative Stage Examples.**

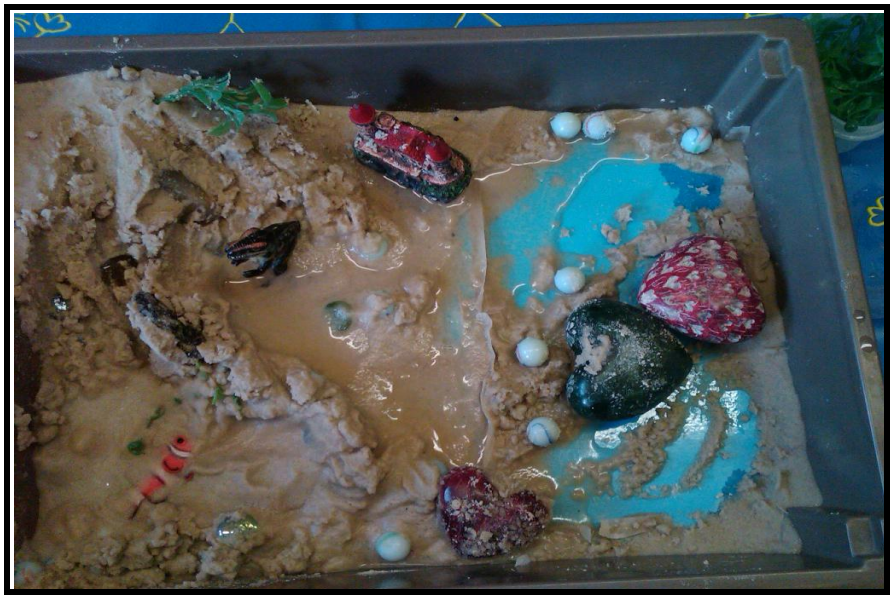


Plate 31
'Dino Lair' Vegetative stage example – Helen

Plate 32
'Sand castles' Vegetation stage example – Callum

Plate 33
Vegetation stage example - Sarah

- **<u>Fighting stage examples.</u>**

Plate 34
'The battle' Fighting stage - Callum

Plate 35
'Dragons and Dinosaurs Fighting' Fighting stage – Helen

Plate 36
'The Quest between good and bad choices' Fighting/ conflict stage - Jenny

Plate 37
'A fight' Fighting stage – Andrew

- **Prosocial Scores.**

Mixed results in the area of prosocial improvement were found when analyzing the results. The two children who showed the most improvement with their prosocial skills in school were Jenny and Helen. These were the same two children whose sandplay appeared to show the most working through of ego development. Sarah's prosocial scores both at home and school also improved but not as significantly as Jenny and Helen. A suggestion for this could be that both Jenny and Helen engaged in the sandplay more frequently than Sarah. They were also observed to use the water and delving down process increasingly more compared to Sarah. Therefore it is possible they accessed more unconscious material thus maybe enabling the individuation and ego development.

There seems to be no explanation available as to why Callum's prosocial scores would have reduced. A possible reason could be down to the view of the SDQ completer and the daily events affecting his behaviour at the time the SDQ completer filled out the questionnaire. The LAC in this research study have had to deal with the practical reality of a variety of experiences such as neglect, abandonment and abuse of which hurt and loss could have featured significantly. Through the therapeutic relationship the hope is that the child's inner self begins to feel acceptance provided by the therapist and trust begins to develop. However, if the use of these "defense mechanisms are prolonged the ego functioning can fail" (McNally, 2001, p.11). This could be a contributory factor as to why David's SDQ scores did not improve as expected.

The possible improvement in the sample three girl's ego development may suggest that this enabled them to be in a much stronger psychological position to be able to consider other people's feelings hence why their prosocial scores improved.

6.3 The sample child whose sandplay did not demonstrate an improvement in the school SDQ scores and the external circumstances affecting these scores.

David's SDQ scores from school were within the usual range for his age and development (Goodman, 1997) when he began play therapy however the SDQ report from his foster carer and verbal comments from his social worker were concerning. David's outward behaviour at school was reported to show no concerns; he followed instructions and had good levels of prosocial behaviour and concentration. However, school reported that when David thought he was not being observed he had been found to be quite spiteful to other children, physically hurting them and had also been seen to harm small animals and insects when he thought he was alone. This together with his social worker's concerns for David's lack of emotional expression and the high SDQ scores reported by his foster carer was the reason why he was accepted for play therapy.

For David, a change in school happened half way through his therapy therefore a different teacher completed the post SDQ compared to when he began play therapy. With the exception of David's emotional score at home, which increased by one point, the rest of his home scores improved significantly. It could be argued that his home scores are more reflective of what really occurred internally for David because home was stable and his foster carer knew him well.

David's school total difficulty scores improved slightly, however his school emotional symptom score did not. His school prosocial score increased significantly but this score is not included in the total difficulty score. The teacher that completed the post- therapy questionnaire may have received David differently compared to his previous teacher. In five out of the six sample children it was the emotional symptom scores that were a significant contributory factor in the improvement of their overall SDQ score. This change of person and change of school could have affected the validity of David's school scores. Tables 15 and 16 show a full view of David's school SDQ scores compared to his home SDQ scores.

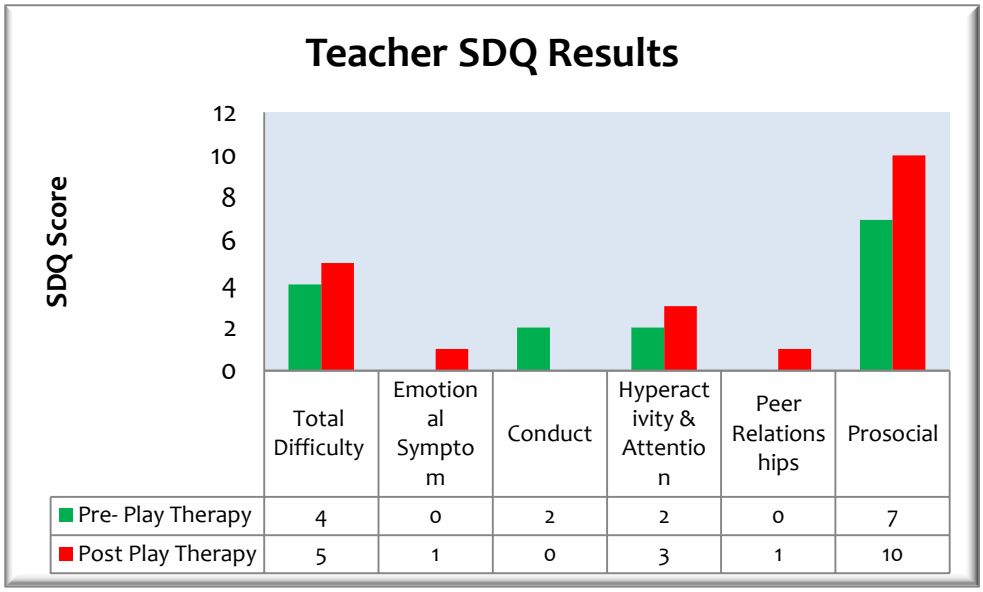


Table 15
Full school SDQ profile pre and post play therapy - David

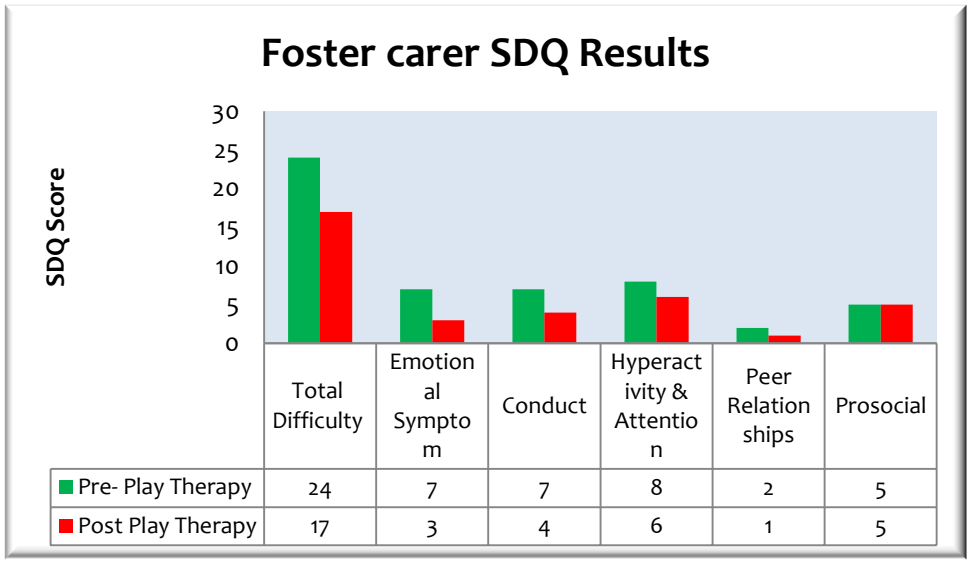


Table 16
Full home SDQ profile pre and post play therapy – David

Part of David's history involved him witnessing domestic violence and his social worker reported that when David perceived himself to be in danger in his birth home he would either fight back to protect his family or hide to protect himself. It is possible that David's hyperactivity levels at home and school could be related to his level of hyper - arousal, which can be seen in people who have experienced a traumatic event. Ogden et al., (2006, p. 27) describe the following symptoms as part of the "Hype-arousal Zone":

- Emotional reactivity
- Hypervigilance
- Disorganised cognitive processing.

It could be argued that the observed level of hyperactivity could be connected to David's traumatic history and the fact that David's school emotional symptom score rose but his conduct score reduced seems to be reflective in how David perceives danger and reacts to change.
It could be possible that David's prosocial behaviour improved and his conduct was seen to reduce at school because he maybe wanted to be seen as being good in order for him to feel safe and accepted in his new school. David's total difficulty SDQ score from home didn't reduce and a contributory factor for this seems to be his raised level of hyperactivity and attention score.

In conclusion, David's reduction in total difficulty and emotional symptom scores from home are consistent with the evidence from the other five sample children in the study and so offer some substantiation of the validity of the SDQ. However his results from his school SDQ seems to provide a negative analysis of the findings (Creswell, 2003 cited in McMurray et al., 2004, p. 414). Factors that could potentially affect the data validity and findings are discussed in the following paragraphs.

6.4 Data sensitivity.

The research sample was small and due to this size there are a few factors that could potentially affect the sample group findings. These include:

- Change in school or foster placement during the study.
- External events occurring at home or school at the time of completing the SDQ.
- Health and wellbeing of the sample child or SDQ completer pre and post play therapy.
- Observation and analysis of the sample children's sand trays.

In order to strengthen the study's overall findings and counter bias:

- Two SDQ completers for each sample child were included so as to provide a mixed representation of how the child's emotional wellbeing was at the time of beginning and ending play therapy.
- A sand play specialist was asked to provide an external insight into the analysis of the sample children's sand trays.
- The non-directive quality of the sandplay enabled the children to lead and direct their own sandplay process.
- Triangulation of data, methodology and theory was employed (Creswell and Plano Clark, 2011, p. 77-78)
- Presence of a negative case analysis (David) counters researcher bias (Creswell, 2003 cited in McMurray et al., 2004, p. 414)

The value of this research lies in its exploration in the use of sandplay with LAC who have undergone a traumatic experience before the age of four. An external life event highlighted a negative case analysis in terms of affected SDQ scores in the fifth sample child.

These contribute to future recommendations and are summarised in the concluding chapter.

7. Conclusions

This chapter summarises the findings of this study and concludes with recommendations for future research and clinical practice.

- Three out of the six sample children preferred to choose the sandplay in their play therapy sessions.
- All of the children used the sandplay medium to explore at least one traumatic life event that happened to them before the age of four. This was validated by a verbal comment, by the child, given to the therapist at the time of the sandplay experience that linked the two together.
- A correlation between emotional expression and SDQ scores were seen.
- The connection of traumatic experiences and the choice of water, sandplay figures and objects was observed in all of the sample children's sandplay experiences
- It was recognized that the three children who chose sandplay in the majority of their play therapy sessions were also girls.
- The extent to which the sample children used water or delved down into the tray to expose the blue bottom seemed to have an impact on the emotional symptom scores and prosocial behaviour in five out of the six sample children
- The amount of play therapy sessions did not appear to affect the preference of choice in terms of choosing the sandplay.
- The level of engagement in the sandplay process seemed to affect the extent to which the process of individuation occurred.

This study has strived to develop research further and contribute to new knowledge in the following areas:

- The study has provided an alternative exploration into the use of sandplay with LAC who have experienced a traumatic event before the age of four.
- It has evaluated the use of sandplay within a non-directive play therapy session and has sought to do so in an empathetic way through unconditional positive regard for each of the sample children involved in the study.
- It has given additional insight into the use of sandplay and the exploration of difficult life experiences of LAC.
- It has aimed to give an alternative method of expression and communication for LAC who have experienced a difficult early childhood to enable them to explore and journey forward in their life.
- Above all, it has strived to give professionals involved in children's lives an opportunity to journey into the unspoken world of sandplay in the hope that it will provide an alternative means of both communication and expression between child and adult.

This study proposes the following recommendations in terms of future research and clinical practice.

7.1 Recommendations for future research.

- Research investigating the gender difference and the choice of creative mediums within a play and creative arts session.
- Research looking at the connection between sensorimotor experiences whilst engaging in a sandplay process.
- Research into the possible use of sandplay after a child has experienced a traumatic event to aid communication later when the need arises for them to give a verbal account of what happened.

7.2 Recommendations for clinical practice

- For talking therapy counselors to consider using sandplay, with appropriate training alongside their current counseling modalities to aid the process of helping the client explore difficult experiences whilst in the counseling room.
- For play and creative arts therapists to use separate wet and dry sand trays when working with clients within a play therapy session.
- It would benefit LAC to have access to a variety of therapeutic interventions as well as continuing to give opportunity for talking therapy counseling. Such interventions that may be considered would be Individual and group play therapy, sandplay therapy and sensorimotor psychotherapy.

The researcher has found it an absolute privilege to walk alongside the looked after children in this research study. It has deepened her understanding and passion for supporting all children who, for whatever reason, have found themselves needing therapeutic intervention. The researcher has been invited by the Looked After Children Education Service, for which she works part-time, to continue to provide play therapy within her role in supporting LAC who require additional support from their service. This is an exciting venture and it is hoped that it will shape the future creative therapeutic support made available to children who are looked after by the Local Authority.

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Appendix 1

Sample research tools

- **Original Session sheet**
- **SDQ – Teacher template**
- **SDQ – Foster Carer template**

Session Sheet.

Client ID …….. Session No; ……. Date ……

Client's presenting concerns:

What happened in the session:

Tick appropriate columns	**Entire** Session	**Most** of Session	**Half** ½ Session	**Quarter** ¼ Session		Comment
(Guide percentages)	100%	75%	50%	25%	Less Than 25%	
Drawing and Painting						
Clay / Play Doh						
Creative Visualisation						
Dance & Movement						
Drama / Role Play / Dressing Up						
Games						
Masks						
Music						
Puppets						
Sand Tray						
Story Telling (Therapeutic)						
Talking						
Others - please note						

How did the session end:

Further work areas:

Therapist notes

Teacher

Strengths and Difficulties Questionnaire

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain or the item seems daft! Please give your answers on the basis of the child's behaviour the **last six months or this school year.**

Child's Name……. Male/Female

Date of Birth …….

	Not True	Somewhat True	Certainly True
PS. Considerate of other people's feelings	☐	☐	☐
H. Restless, overactive, cannot stay still for long	☐	☐	☐
E. Often complains of headaches, stomach-aches or sickness	☐	☐	☐
PS. Shares readily with other children (treats, toys, pencils etc)	☐	☐	☐
C. Often has temper tantrums or hot tempers	☐	☐	☐
PP. Rather solitary, tends to play alone	☐	☐	☐
C. Generally obedient, usually does what adults request	☐2	☐	☐
E. Many worries, often seems worried	☐	☐	☐
PS. Helpful if someone is hurt, upset or feeling ill	☐	☐	☐
H. Constantly fidgeting or squirming	☐	☐	☐
PP. Has at least one good friend	☐2	☐	☐
C. Often fights with other children or bullies them	☐	☐	☐
E. Often unhappy, down-hearted or tearful	☐	☐	☐
PP. Generally liked by other children	☐2	☐	☐
H. Easily distracted, concentration wanders	☐	☐	☐
E. Nervous or clingy in new situations, easily loses confidence	☐	☐	☐
PS. Kind to younger children	☐	☐	☐
C. Often lies or cheats	☐	☐	☐
PP. Picked on or bullied by other children	☐	☐	☐
PS. Often volunteers to help others (parents, teachers, children)	☐	☐	☐
H. Thinks things out before acting	☐2	☐	☐
C. Steals from home, school or elsewhere	☐	☐	☐
PP. Gets on better with adults than with other children	☐	☐	☐
E. Many fears, easily scared	☐	☐	☐
H. Sees tasks through to the end, good attention span	☐2	☐	☐

Do you have any other comments or concerns?

Signed: ----------
Print Name: ----------
Job Title: ----------

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Carer.

Strengths and Difficulties Questionnaire

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain or the item seems daft! Please give your answers on the basis of the child's behaviour the **last six months or this school year.**

Child's Name……. Male/Female

Date of Birth …….

	Not True	Somewhat True	Certainly True
PS. Considerate of other people's feelings	☐	☐	☐
H. Restless, overactive, cannot stay still for long	☐	☐	☐
E. Often complains of headaches, stomach-aches or sickness	☐	☐	☐
PS. Shares readily with other children (treats, toys, pencils etc)	☐	☐	☐
C. Often has temper tantrums or hot tempers	☐	☐	☐
PP. Rather solitary, tends to play alone	☐	☐	☐
C. Generally obedient, usually does what adults request	☐2	☐	☐
E. Many worries, often seems worried	☐	☐	☐
PS. Helpful if someone is hurt, upset or feeling ill	☐	☐	☐
H. Constantly fidgeting or squirming	☐	☐	☐
PP. Has at least one good friend	☐2	☐	☐
C. Often fights with other children or bullies them	☐	☐	☐
E. Often unhappy, down-hearted or tearful	☐	☐	☐
PP. Generally liked by other children	☐2	☐	☐
H. Easily distracted, concentration wanders	☐	☐	☐
E. Nervous or clingy in new situations, easily loses confidence	☐	☐	☐
PS. Kind to younger children	☐	☐	☐
C. Often lies or cheats	☐	☐	☐
PP. Picked on or bullied by other children	☐	☐	☐
PS. Often volunteers to help others (parents, teachers, children)	☐	☐	☐
H. Thinks things out before acting	☐2	☐	☐
C. Steals from home, school or elsewhere	☐	☐	☐
PP. Gets on better with adults than with other children	☐	☐	☐
E. Many fears, easily scared	☐	☐	☐
H. Sees tasks through to the end, good attention span	☐2	☐	☐

Do you have any other comments or concerns?

Signed: ----------
Print Name: ----------
Job Title: ----------

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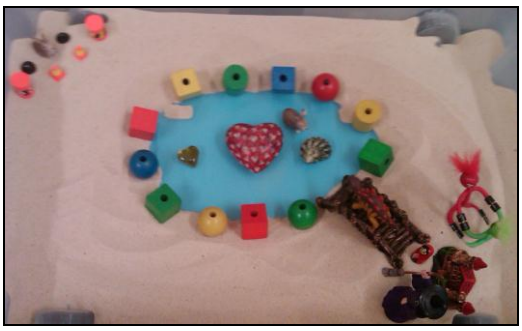
Appendix 2

- **Social Worker/ Foster Carer/Teacher information sheets and consent form**
- **Children's information sheet and assent form**

SOCIAL WORKER & FOSTER CARER INFORMATION SHEET

An exploration of the non-verbal therapeutic process involved in the use of sandplay with Looked After Children who have undergone a traumatic experience before the age of four.



This research study is being conducted at Canterbury Christ Church University

by Cara Cramp of the Looked After Children Education Service.

Background

The study is an exploration of the non-verbal therapeutic process involved in the use of sandplay with Looked After Children who have undergone a traumatic experience before the age of four. It is a retrospective study and I plan, with appropriate consent to analyse data gathered from the participant's previous Play Therapy sessions. This data will consist of photographs of sand trays done by the participant as part of their usual session, clinical notes written by the Play Therapist after the session and comments made by the participant about their sand tray. All data collected will be anonymised and personal details will be kept confidential.

Why has this child been asked to take part in this study and what will I be required to do?

As it is a retrospective study all I require is consent given from you as the child's Social Worker/foster carer and assent from the child to use the above data for research purposes in the study.

To participate in this research the participant must have undergone a traumatic experience before the age of four years old (see criteria below).

- Witnessing or experiencing domestic violence.
- Separation from birth parents, siblings or family home.
- Identified as experiencing a form of abuse including neglect.
- Attending a new educational establishment i.e. school.
- Settling into a Foster Care placement.

The participant must have also have been categorised as looked after by the care of the local authority at the time of their original Play Therapy sessions. Please sign and return the Consent form and child-friendly Assent page attached to this information letter.

How will the child's be identity be protected?

All information about the child (e.g. what s/he does in the sessions etc) will be kept confidential. Any information containing identifying details, such as name, age, school, will be removed and an anonymous code will be used so that the child cannot be identified. All information is encrypted and kept securely locked in a metal filing cabinet at Cara's private practice. According to the Data Protection act (1988) all information will be securely destroyed after five years (2019).

Information gained from the research project will be submitted to Canterbury Christ Church University where it will be stored in accordance with the Data Protection Act (1988) and the University's own data protection requirements. A copy of the data held about the child is

available on request. In an anonymous form the research findings may also be submitted to academic journals with the possibility of publication and for use in training with other professionals interested in supporting Looked After Children (LAC) therapeutically.

Deciding whether to participate

If you have any questions or concerns about the nature, procedures or requirements for participation do not hesitate to contact me on the details below.

Should you decide to participate, you will be free to withdraw before the 1st May 2014 without having to give a reason.

Contact details:

Cara Cramp

APAC (Academy of Play and Child Psychotherapy)

The Coach House, Uckfield East Sussex. TN22 1BP

Tel: 0182576143

Complaints Procedure:

As a member of PTUK Cara works according to their Ethical framework and she is fully supervised and CRB/DBS checked. This research has been approved by Canterbury Christchurch University. If you have any concerns or complaints about the research study please do contact Cara in the first instance, the school's Head or the Academic Supervisor. Contact details for Cara are as above and contact details for the PTUK supervisor are below.

Research Supervisor:

APAC (Academy of Play and Child Psychotherapy)

The Coach House, Uckfield East Sussex. TN22 1BP

Tel: 0182576143

CONSENT FORM

Title of Project: An exploration of the non-verbal therapeutic process involved in the use of sandplay with Looked After Children who have undergone a traumatic experience before the age of four.

Name of Researcher: Cara-Louise Cramp

Contact details:

Cara Cramp

APAC (Academy of Play and Child Psychotherapy)

The Coach House, Uckfield East Sussex. TN22 1BP

Tel: 0182576143

1. I confirm that I have read and understand the information sheet for the above study and have had the opportunity to ask questions.	☐
2. I understand that participation is voluntary and that the participant is free to withdraw before 1st May 2014, without giving any reason.	☐
3. I understand that any personal information that I provide to the researcher will be kept strictly confidential.	☐
4. The participant has agreed to take part in the study and has given me assent (child-friendly assent form attached).	☐

_____ _____ (Child Assent form given to SW)
Name of Participant Date

_____ _____ _____
Name of Person acting on Child's behalf. (Social Worker) Date Signature

Cara-Louise Cramp _____ _____
Researcher Date Signature

Child-friendly Information Page

Who I am and what I would like to ask you.

- My name is Cara Cramp and you may remember me as your Play Therapist who saw you for play therapy sessions.
- During your play therapy session you had lots of toys to play with which included a sand tray (see picture above).
- You used the sand tray during your time in play therapy and you might remember we took photographs of some of your sand trays.
- You had a copy of that photograph to keep in your special box and you allowed me to keep one in my play therapy folder on you.
- I would like to ask you to use the photographs and what you said about your tray in my project (known as research.)
- I would like to write something about you including why you went into foster care. However, I will change your name so that nobody will know I am writing about you.

Why am I doing this project (research)?

- I am doing the project to help other social workers, therapists and professionals to learn more about how children think about difficult (traumatic) things that have happened to them.

- I am really interested in what happens when those difficult (traumatic) things occurs when at child is really little, before they are four years old.

- I think that the sandplay in play therapy helps a child to sort out those difficult things without having to talk about it if they don't want to. I believe your story and sand play photographs can help me to understand this better.

So, what do you think? Can I please I use your story and sandplay photographs in the project?

- If yes tell your social worker/foster carer and they will give you a form to sign.
- If you want to say no and that is also okay. No one except your social worker, foster carer and I will know you said no.

CONSENT

Canterbury Christ Church University

 Child Assent form

Today my Social Worker talked to me about the project (research) that I am being invited to take part in.

- Yes you can use the photographs of my sand trays and what I said about them.
- I know Cara will write about my sand trays and what I said about them but no one will know my name.
- I know that the project (research) is to help other professionals like therapists and social workers find new ways to help children like me who have been through some really difficult (traumatic) times.
- I want to take part and know that if I change my mind, as long as it is before 1st May 2014 by telling my Social Worker.
- I know that by writing my name below next to the smiley face it means that I am happy to take part.

 ----------

Print Child's Name: ----------

Date: ----------

Appendix 3

Faculty of Health and Social Care Research Ethics Committee

(FREC) approval letter

7 August 2014 Ref: 14/FHSC/027

Ms Cara Cramp
c/o Looked After Children Education Service

Dear Cara

Project Title: ***"An exploration of the non-verbal therapeutic process involved in the use of sand-play with looked after children who have undergone a traumatic experience before the age of four."***

Your application was reviewed by the Faculty of Health and Social Care Research Ethics Committee on 30 April 2014. The Committee agreed that final approval could be given once certain issues – as set out in the Secretary of the Committee's email of 4 June 2014 – were clarified.

The Chair of the Committee is content that there has been full clarification of the issues raised, and I am writing to give formal confirmation that you can commence your research. Any significant change in the question, design or conduct of the study over its course should be notified to the Research Office, and may require a new application for ethics approval. You are also required to inform me once your research has been completed.

With best wishes for a successful project.

Yours sincerely

Roger Bone
Research Governance Manager
Research Office, Eg21
Tel: 01227 782940 ext 3272 (enter at prompt)
Email: roger.bone@canterbury.ac.uk

cc: Ms Lara Kasza

Research Office
Research and Enterprise Development Centre

Canterbury Christ Church University
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Tel +44 (0)1227 767700 Fax +44 (0)1227 470442
www.canterbury.ac.uk

Professor Rama Thirunamachandran, Vice Chancellor and Principal

Appendix 4

Information regarding the background and sandplay of the research participants

- **Background information on the Looked After Children in this research study.**
- **Additional child commentary from David's sandplay in Session 5.**

In this research study the sample children's names have been changed to protect their identity.

Jenny

Jenny, age nine has been in care since the age of 4 years old and she was placed under a care order for neglect of her emotional needs. There are periods of time when Jenny lives with her Father then with her foster carers. She was referred for play therapy following a looked after children's review meeting at which a learning and behavioural support assistant was concerned about her emotional well-being, resiliency and the impact this would have on her mental health as she got older. Jenny had previously been referred for talking therapy counselling but was unable to engage in the sessions as would not talk and found it really difficult to talk about emotions and feelings. The learning support assistant described her as "shutting down" both visibly and emotionally at the first sign of anyone wanting to talk to her about how she was feeling.

Sarah

Sarah, age seven years and has been looked after under a care order for neglect of her emotional needs since she was three months old. She was placed in care through a family carer foster care placement and was then moved into a non-family foster care placement at age six years due to the placement not being able to meet or protect her emotional and physical needs. It was this placement she resided in at the time play therapy took place.

Sarah has been in care since she was 3 months old and she was referred for play therapy by her primary school Learning Mentor, who was concerned about Sarah's level of self-esteem. Staff at her school were also concerned about the level of sexualized behaviour they had observed towards her peer group and adults.

Helen

Helen is a girl of 10 years and has been looked after under a care order for neglect of her emotional and physical needs since the age of three. During receiving play therapy she resided with maternal Grandparents through foster care. At the time of therapy her family circumstances were such that she had no contact with her birth Father and saw her Mother once a month. As therapy was beginning Helen had a new baby sibling and at the same time as the birth it was reported that her elderly cat died.

David

David, age nine came into a foster care at age seven, under a care order for neglect of his physical and emotional needs. His social worker reported that whilst David lived at home with his birth family there were times when he witnessed and experienced occasions of domestic violence. Before coming into foster care David also experienced the bereavement of a younger sibling

Andrew

Andrew, age six lives with his foster carers under a care order for neglect of his emotional and physical needs and has been in care since the age of 4. At the beginning of coming to play therapy Andrew believed he was in care because he and his brother flooded the house and that meant they had to leave Mum. His social worker reported that a contributory factor in Andrew needing to come into foster care was the difficulty his Mum, who had mental health issues, had to be able to care for him and his siblings adequately enough. It was also reported by Social Care that whilst Andrew lived at his birth home there had been occasions where he had witnessed domestic violence

Callum

Callum, age seven years has resided in foster care since the age of five and he came into care under a care order for neglect of his emotional and physical needs. His younger brother Andrew is in the research study also and at the beginning of coming to play therapy he and his Brother believed they were in care because they flooded the house and that meant they had to leave Mum. His social worker reported that a contributory factor in Callum needing to come into foster care was the difficulty his Mum, who had mental health issues, had to be able to care for him and his siblings adequately enough. It was also reported by Social Care that whilst Callum lived at his birth home there had been occasions where he had witnessed domestic violence

- **Additional child commentary from David's sandplay in Session 5.**

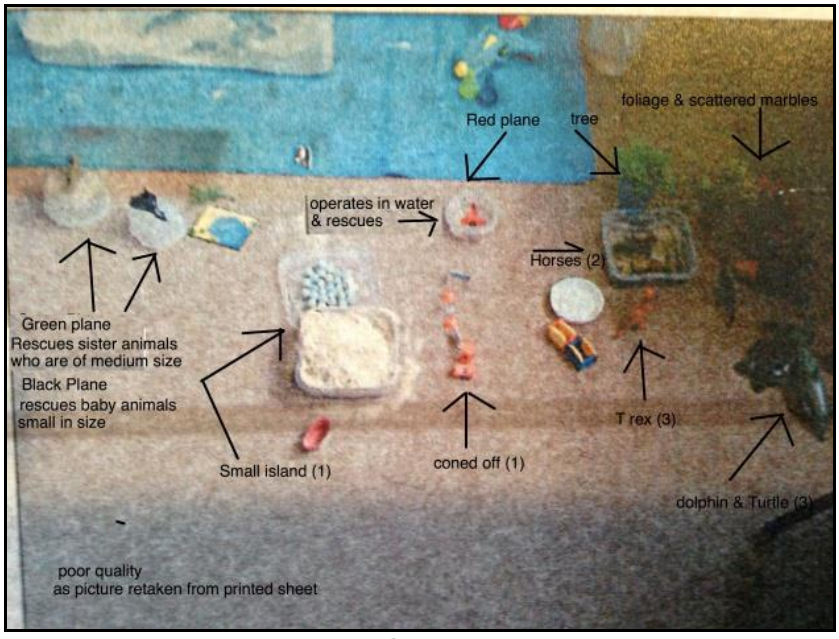

Plate 13
Session 5
Brackets in plate 13 relate to the commentary below.

Planes: Red Operates in water & rescues horses

Black: Rescues baby animals small in size

Green: Rescues sister animals who are of medium size

(1)Small island (in plastic container) sharks eggs (marbles) are stuck in the sand and a man pulls them out and is awarded £1000; he sails away in a boat and dies. His friends miss him and they have a funeral for him. Island is then coned off because of what happened.

(2)Horses – Swim out to sea, they swim too far and get stuck. They are stranded in the water but on an island (different to shark egg island) they don't like it at first because they don't know the place and are scared. There are Mummy horses, baby horses and sister horses. A vet comes to visit to make sure they are ok.

(2) & (3) People come to the island and take photos but the horses don't like it. They are angry but they don't tell the vet. The mummy horse gets swept away but is rescued by the red plane and the vet brings her back. The other horses thought she was dead but she wasn't. It happens again, but the next time the dolphin rescues the mummy and the dolphin takes her to the 'vetinarium' where sick animals go.

The dolphin tells its friend the turtle to take the horse there because the dolphin knows the turtle can because the turtle rescued the dolphin. The dolphin knows how the mummy horse feels. The mummy returns to the other horses and babies are happy but then a T Rex comes and eats the mummy and some babies

Appendix 5

Additional theory relating to the research study

- **Triune brain theory**
- **The effect of cortisol and oxytocin levels in the brain.**
- **Additional theory of non-directive play therapy.**

The Triune brain theory

The Triune Brain Theory (Maclean 1985) suggests the reptilian brain is the oldest part and controls basic survival functions. This theory is supported by Lubbe & Kenner (2009, p.138) when they state; "The primitive brain is responsible for reflexive, instinctive behaviour, such as self-preservation and reproduction." It can be said, therefore, that the reptilian brain works well in times of danger but it is unable to distinguish from actual threat and perceived threat.

Whilst the reptilian brain is the active the thinking part of the brain, known as the Neomammalian, Neo-cortex brain shuts down (Maclean 1985). The Neomammalian is the brain of reason and is made up of two hemispheres that are responsible for language, thought, consciousness and imagination. It is the part of the brain that helps a person to learn new things. In humans it is also responsible for language, planning, introspection, and self-awareness (consciousness) (Maclean 1985).

The effect of cortisol and oxytocin levels in the brain

When the reptilian brain perceives a threat it signals the Hypothalamus to produce the hormone Cortisol. "The concentration of cortisol in blood actually increases when we suffer severely from anxiety and depression due to stress and this keeps the reptilian brain hypersensitive, so in a state of fight-flight-freeze." (Sung-hun No, 2013**,** p.11). In play therapy the therapeutic relationship and attunement with the child during their sandplay process helps to elicit the production of the hormone Oxytocin.

In writing about sandplay, Bradbury & McCoard (1997), cited by Robinson, 2011, p.213, suggest that this connection can be explained in terms of "The unconscious forces of therapist and client becoming aligned." Souter-Anderson (2010) explains the same phenomenon scientifically in the context of working with clay. She states, "This attunement releases opioids and oxytocin, which produce feelings of well-being." It can be suggested then, that attunement with the therapist in the sandplay process facilitates Oxytocin, thus reducing the levels of Cortisol in the blood and helping to sooth the reptilian brain.

In a study[21] on 'The Effects of Sandplay Therapy on Cortisol of University Students with ADHD Tendencies' (Symbols and Sandplay Therapy, 2013) it was concluded that Cortisol levels dropped after the students engaged in the sandplay. Most healthy adults have a high Cortisol level first thing in the morning and a low Cortisol level at night. But when feeling stressed, the body secretes more Cortisol, which in turn can affect the Neomammalian part of the brain.

Additional theory of non-directive play therapy

According to Perkins-McNally (2001), play therapy dates back to the 1920s where Hermine Hug-Hellmuth began using play for 'diagnosis and treatment of emotionally disturbed children' (p.2). She goes on to explain that Anna Freud (1997) had the belief that small children could not verbalise their own conflicts, but often presented them though their play. This seems to connect with the work of Virginia Axline (1947) and Violet Oaklander (1978).

[21] (www.cortisol.com/the-cortisol-stress-connection/, 2012 – 2014)