DEVELOPING AND EVALUATING AN ARTS THERAPIES PROGRAMME FOR CHILDREN WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADHD) IN PRIMARY SCHOOLS IN THE KINGDOM OF SAUDI ARABIA (KSA)

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Abstract

Purpose – The overall aim of the research is to develop a culturally sensitive arts therapies programme for children with Attention Deficit Hyperactivity Disorder (ADHD) in primary schools in the Kingdom of Saudi Arabia (KSA). This research adapted the UK arts therapies practice to fit these cultural requirements.

Design/methodology – The study is a mixed methods design, carried out in two stages. The first stage was to identify the current provision and cultural issues in conducting arts therapies intervention for children with ADHD in KSA. Data was collected using interviews from twelve arts therapists from the UK and nine informants from KSA. The information obtained assisted in the development of culturally sensitive guidelines for the delivery of an arts therapies programme, which was conducted in stage two of the study. The second stage involved a pilot randomised control trial design that took place in an identified school in KSA. This stage involved 12 children aged 6-12, randomly allocated to either the intervention or the control group, with six participants in each group. The programme was carried out three times a week over a period of eight weeks. Data was collected using pre and post-tests (SDQ and ADHD scales) and from interviews of the parents and teachers of the children from both the experimental and control groups.

Findings – The findings demonstrate that art therapists in KSA focus on behaviour modification while arts therapists in the UK focus on improving emotional wellbeing. Art therapists in KSA used more structured approaches which are less effective for children with ADHD. There may be cultural problems in using arts therapies in KSA, particularly music and dance. Safety, routine activities and ground rules were adopted from the current practices in the UK and adapted to be appropriate for the cultural context in KSA. A culturally sensitive arts therapies programme may be an appropriate and valuable intervention for children with ADHD. Qualitative and quantitative findings indicate that the intervention of this study achieved specific benefits such as; decreasing hyperactivity/ impulsiveness and inattention. Moreover, this intervention improves relationship/social skills and emotional wellbeing.

Practical implications – This programme is found to be beneficial and it may have a significant impact on the treatment of ADHD in KSA. Understanding cultural issues by the therapist increases the value of arts therapies interventions.

Value – This study has many benefits as a contribution to knowledge and for the development of services in KSA for this client population. Since children with ADHD currently have minimal access to therapy of any sort, and very limited access to arts therapies, this research has a key role in developing culturally sensitive arts therapies programme for children with ADHD.

Key words – Attention Deficit Hyperactivity Disorder (ADHD); Arts therapies; art therapy; music therapy; dance movement therapy; drama therapy; culturally sensitive, Saudi Arabia; mixed methods.

Dedication

This work is dedicated to my mother, the greatest teacher of all, who is always in my memory at all times. It is also dedicated to my father, who has always helped and supported me. To my lovely wife, kids and all members of my family who have made a lot of sacrifices during the years of my PhD period.

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ADHD: Attention Deficit Hyperactivity Disorder.

ADMP UK: the Association for Dance Movement Psychotherapy UK.

BAAT: the British Association of Art Therapists.

BADth: the British Association of Dramatherapists.

BAMT: the British Association for Music Therapy.

CAPE: Children's Assessment of Participation and Enjoyment.

CAT: Creative Art Therapy.

CPSM: Council for Professions Supplementary to Medicine

DBC-P: Developmental Behaviour Checklist - Parents.

DBC-T: Developmental Behaviour Checklist – Teachers.

DMT: Dance Movement Therapy

FEATS: Formal Elements Art Therapy Scale.

GDP: Gross Domestic Product.

KFMC: King Fahad Medical City.

KSA: The Kingdom of Saudi Arabia.

MTA: Multimodal Treatment Study of Attention deficit Hyperactivity Disorder.

MOH: Saudi Ministry of Health.

MOE: Ministry of Education.

MOFA: Ministry of Foreign Affairs.

MRC: Medical Research Council

NHS: National Health Service.

NIMH: National Institute of Mental Health.

QMU: Queen Margaret University

SDQ: Strengths and Difficulties Questionnaire.

SI: Sensory Integration.

Chapter 1: Introduction and Overview of the Study

1.1 Introduction

This chapter explains the importance of this study and locates the reader in the study area. Thus, this chapter starts by examining the background of this research, and goes on to justify the necessity of the present study by showing its importance. It also provides information about Saudi Arabia, the country in which this study is conducted, before reviewing the sensitivities of Saudi culture, and the impact of its cultural strictures on the use of arts therapies in the region. Further, it clarifies the study problem, highlighting the purpose of the current research. Finally, this chapter outlines the scope and the structure of this research thesis to the reader.

1.2 Research Background

Attention deficit hyperactive disorder (ADHD) refers to three main behavioural symptoms; (i) inattention, which manifests itself in having a short attention span, getting easily distracted, being unable to concentrate, difficulties in listening and following instructions as well as organising tasks; (ii) hyperactivity, which can consist of being unable to be calm or sitting still in quiet environments, talking and moving excessively, fidgeting constantly and being unable to focus on tasks; (iii) symptoms of impulsiveness that involve an inability for children to wait their turn, and a tendency to act without thinking as well as interrupting conversation, breaking rules and having no sense of danger (Brue and Oakland 2002; NHS 2011). There are three subtypes of ADHD: predominantly inattentive type, predominantly hyperactive-impulsive type and a combination of both types (NHS 2011). The most prevalent subtype, according to one extensive study, was the combined type (Skounti et al. 2010).

Children with ADHD are at risk of developing a broad range of difficulties such as cognitive, emotional, educational and social issues (Tsal et al. 2005; Lavoie 2008), while adolescents with ADHD are at risk of substance abuse, underachievement, demoralisation and low self-esteem (Waite and Ivey 2009). The economic cost, as a result of lost work days associated with ADHD, was estimated as equivalent to 19.5

billion dollars in 2005 in the US (Kessler et al. 2005; Kessler et al. 2009) and the direct cost of treatment for ADHD was estimated around €2040 per patient per year in the Netherlands (Hakkaart-Van et al. 2007).

In the United Kingdom, ADHD affects approximately 3-9% of children and teenagers in schools (Dulicai 1999; NHS 2011). According to Holowenko and Pashute (2000), ADHD is likely to be under-represented in the UK, due to the discrepancies in reported cases. Globally, there are great variations in the prevalence of ADHD, from 2.2% to 17.8%; according to Skounti et al. (2007). The prevalence of children with ADHD in Saudi Arabia is high (Al-Haider 2003; Al-Habeeb et al. 2012). According to some estimates, the prevalence of children with ADHD in the KSA is between 11.6% and 13.5% among male and female children (Abdur-Rahim et al. 1996; Abu Taleb and Farheen 2013; Homidi et al. 2013), and 16.4% among male primary-aged children (Al Hamed et al. 2008).

However, despite these levels of need, there is a nationwide lack of treatment for children with ADHD in Saudi Arabia; for example, there is only one specialist school in the country and as a private school, access to it, is limited by financial factors. In addition, teachers are not aware of the necessity of early diagnosis, nor of the symptoms of attention deficit hyperactivity disorder, because there is a lack of awareness and training about how to deal with children with ADHD.

1.3 The Value of Arts Therapies for ADHD

The arts have a long history of therapeutic and healing properties. However, it was not until the middle of the 20th century that the term 'art therapy' was coined and formally recognised. Since then, there has been a growing trend in research into the separate disciplines of art, dance and music therapies in all areas of healthcare. According to Jones (2004), Pratt (2004), and Karkou and Sanderson (2006), arts therapies have an important role to play in the modern healthcare system. Arts therapists attend specialised training courses and receive robust professional development. As a result, there is growing recognition of the valuable contribution to well-being that arts therapies make.

Currently, there are various treatments for children with ADHD in the UK, including pharmacological and/or therapeutic. Depending on the severity and subtype of ADHD, the literature suggests that pharmacological intervention combined with behavioural psychotherapy in succession has had the most effective, long term degree of success and appropriate intervention based on early diagnosis can alter the possibility of a negative behaviour (Magyary and Brandt 2002). The MTA Cooperative Group (MTA) demonstrated a 14 months efficacy of pharmacotherapy and behaviour therapy for 579 children with ADHD aged 7 to 10 years. The children were assigned to four groups; medication management (titration followed by monthly visits); intensive behavioural treatment (parent, school, and child components, with therapist involvement gradually reduced over time); the two combined; or standard community care (treatments by community providers). All four groups showed sizable reductions in symptoms over time, with significant differences among them in degrees of change. For most ADHD symptoms, children in the combined treatment and medication management groups showed significantly greater improvement than those given intensive behavioural treatment and community care. However, psychotherapy approaches alone, such as arts therapies; i.e. dance movement, music, drama and art, may constitute an avenue of alternative treatment depending on the severity of the disorder (Remschmidt 2005).

There is still no agreed definition for all arts therapies, with a number of definitions being used in each discipline. Because arts therapies include four different professional bodies, the definition has to be general enough to incorporate their differences, but specific enough to distinguish arts therapies from other disciplines. Furthermore, as the area continues to develop, these definitions are dynamic and subject to ongoing change. Nevertheless, according to Karkou and Sanderson (2006):

> Arts therapies are the creative use of the artistic media as vehicles for non-verbal and/or symbolic communication, within a holding environment, encouraged by a well-defined client-therapist relationship, in order to achieve personal and/or social therapeutic goals appropriate to the individual (Karkou and Sanderson 2006, p. 46)

Karkou and Sanderson (2006) further acknowledge that ADHD is one of the many conditions addressed by arts therapists, next to other learning disabilities, mental health and social problems. They suggest that most arts therapists tend to work with a number of different clients who have different types of difficulties and/or comorbidities at the same time.

According to the seminal work of Feder and Feder (1981), there are four functions of arts therapies; Diagnoses, Interpersonal relationship, Catharsis and Personal integration. Diagnoses in mental health are a subject that should be approached with considerable care by any therapist, verbal or non-verbal. Interpersonal relationship is a major function of all art therapies, by the encouragement and development of better interpersonal relationships and the sharpening of interpersonal communication skills. Catharsis is a common function of art and dance movement therapies; it centres on the need of individuals to release tension and to express their emotions rather than the need to communicate with others. Personal integration is a psychoanalytic term that has gained wide acceptance among humanists; it can perhaps be best understood by contrasting it with dissociation.

Arts therapies have been shown to be effective for a range of disorders in clients of different ages, from children to the elderly (Pratt 2004; Karkou and Sanderson 2006). Research on arts therapies, mostly shows a positive effect on behavioural symptoms such as those found in children with ADHD. Several authors have conducted research on different arts therapies and have shown various degrees of improvements in symptoms such as inattention, hyperactivity/impulsivity, anger management, sleep disorders, wellbeing and social behaviour (Henley 1998; Novy 2003; Kearns 2004; Majorek et al. 2004; Grönlund et al. 2005; Cope 2009; and Hamre et al. 2010). As these are defining symptoms of ADHD, such studies indicate the value that arts therapies may have in ameliorating the symptoms of the condition.

1.4 Research Context

This research was carried out in Saudi Arabia. Saudi Arabia is located in the Middle East region, comprising around 80% of the Arabian Peninsula. As Figure 1.1

indicates, Saudi Arabia borders Jordan, Iraq and Kuwait from the north; Bahrain, Qatar, United Arab Emirates and Arabian Gulf Coast from the east; Yemen and Oman from the south; the Red Sea Coast from the west. Its landscape is primarily desert, with a coastal plain running along the western coast, and a mountain range running parallel. The country's population has increased rapidly, at a current rate of 2.7%, according to the Central Department for Statistics and Information (2010). In September 2013, the population of the KSA stood at 29.9 million.

Figure 1.1 Physical map of Saudi Arabia (Google map 2014)

As the Saudi Ministry of Foreign Affairs (MOFA 2014) indicates, the Kingdom of Saudi Arabia invites a variety of perspectives, and plays a number of different roles on the world stage. Containing the holy cities of Makkah and Medinah, it is a crucial religious site for Muslims worldwide, viewed as the Holy Land, and the destination for pilgrimage. On a secular level, expatriates from across Europe, Asia and the USA live and travel there to access employment opportunities. However, the KSA is perhaps most significant globally for its oil.

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This wide range of identities for Saudi Arabia is a fairly recent phenomenon. The modern Kingdom of Saudi Arabia was founded by King Abdulaziz Al-Saud in 1932. At this time, the economy hinged on income from pilgrims, commercial exports and agriculture. However, the discovery, soon afterwards, of significant oil reserves enabled commercial production to begin within six years, permitting the KSA to accelerate towards industrial modernisation. This effect was compounded by the mid-1970 boom in the price of oil, transforming the KSA into one of the world's most rapidly expanding economies. At present, the Saudi Arabian economy comprises 25% of the total GDP of the Arab region, and is stable both politically and economically.

Despite the speed of this commercial and industrial modernisation, however, the Kingdom of Saudi Arabia remains in other respects highly conservative. Above all, its religious traditions, culture and social codes have remained largely unchanged over the last century.

Since the introduction of formal primary education in the 1930s, girls' schools had been founded throughout the country by the end of the 1990s. Currently, over half of the students in Saudi schools and universities are female. The KSA's education system is open to every citizen, providing free books, education and health services to all students (Royal Embassy of Saudi Arabia 2013).

Medical technology is a priority in the KSA, with services now extending even to the most remote regions. Saudi Arabia trains its own medical staff, to the extent that it is rare for its citizens to travel abroad for healthcare. The private healthcare sector has also grown over the last ten years, and operates several clinics and hospitals (MOFA 2014).

1.5 Understanding Cultural Sensitivity in Saudi Arabia

As one of the most prominent Arab countries, Saudi Arabia has a significant impact on the global economy and occupies an important place in the Islamic and Arabic world (Al-Rasheed 2013). A country's culture is usually shaped by multiple factors like religion, economy, race, environmental factors and educational level. In the case of Saudi Arabia, however, Islam plays the primary role in forming the culture, with other factors less significant (Janin and Besheer 2003).

The culture in Saudi Arabia is highly sensitive to many social and behavioural factors. It is this cultural sensitivity that needs to be addressed when living in Saudi Arabia, mainly because the legislation in Saudi is also bound by these cultural aspects (Buchele 2008).

According to the basic doctrines of Islam, its followers believe in predestination and consider the incidence of disease as the will of their god 'Allah' and punishment for one's sins. However, this belief in predestination does not tend to stop Saudi people from taking medical treatments or directly available preventive services such as immunisation programs for children (Buchele 2008).

According to Islamic laws, having sexual relations outside the marital bond is regarded as illegal in Saudi Arabia, and if found to be involved in any of those activities, people may be rejected socially. Thus, it is highly recommended that health care professionals should consider this cultural sensitivity (Al-Shahri 2002).

In general, females in Saudi are protected by familial social security as custom dictates that a male relative is lawfully responsible to meet her fundamental needs like clothing, food, shelter etc., even if the female is richer than the male. This social convention, which is part of Saudi culture would reduce independence and autonomy among females (Arebi 1994). Moreover, enquiries about the drinking habits and usage of illicit drugs, or even asking about any history of extramarital sexual activities, might be considered highly offensive to the majority of Saudi people (Al Mutair et al. 2014).

Even though medical science has advanced in Saudi Arabia, the culture still values traditional medical practices and spiritual healing methods. These are widely practiced in Saudi Arabia to combat an array of diseases, with particular emphasis on diseases without any complete cure in medical science. For health professionals, it is advisable to show respect to spiritual healing modalities as it will foster the relationship between health professionals and patients and families (Almutairi and McCarthy 2012).

In Saudi Arabia, the culture insists on treating the elderly with a high degree of respect and, consequently, they usually have authority over younger family members (Cordesman 2003). According to Islam, before entering a room, permission must be

sought from the inhabitants (Al-Shahri 2002). Therefore, if a health professional does not seek permission before entering the room of a patient, he or she may feel disrespected.

Modesty is considered very important among Saudis and is more valued in females (Buchele 2008). It is difficult to examine a female patient, as the female patient may become shy and resist revealing parts of her body for examination (Al-Shahri 2002). As a male health professional, communicating with female patients, it is advisable to avoid eye contact. Under no circumstances must a male health professional attempt to interview or examine female patients without the presence of a female staff member or her relatives. Unnecessary touching between non-related adults of opposite genders is forbidden in Islam. This should be given consideration especially when a male health worker is caring for a female patient (Al Mutair et al. 2014). It is a common custom in Saudi hospitals to have separate wards for males and females as it is not acceptable to mix patients or bystanders of opposite genders in a room.

Despite of the conservatism of Saudi culture around health care, the first art therapy service was recently found in a physical rehabilitation hospital in Riyadh, Saudi Arabia (Alyami 2009). In line with this flexibility around healthcare, art therapists should understand cultural and religious issues to increase the value of interventions (Koepfer 2000).

1.5.1 Music in Saudi culture

In Saudi, traditional music contains poetry and is sung as a group, where instruments like 'Rababah' and few percussion instruments, like drum and tambourine, are used. As per the Quran's directives, music is not usually allowed for religious services, and is not usually a part of private life (Long 2005). In Islam, one does not sing or play music when praying as it is prohibited.

The reasons Saudi scholars consider that music is prohibited can be supported physiologically (Ali 2014). Research suggests that music not only affects the brain, but many other organs, due to the close link between music and body movement (Long 2005). While listening to music of even a moderate rhythm, an individual's heart rate is elevated, and listening to rock music increases the heartbeat even further.

According to preachers, the treatment of music as a harmless pastime is therefore misguided (Ali 2014).

Much modern music is also a matter of concern for mainstream Saudi culture, due to its prevalent themes of love, drugs, or fornication. Songs which encourage freedom of movement or speech may also be viewed as antithetical to the cultural mores of Saudi Arabia (Palmer 2012). Thus Saudi Arabia does not promote modern music, considering it contrary to Islamic values.

However, with the influence of television and radio, the role of music as part of Saudi entertainment is growing, and musical instruments are used across the KSA (Cordesman 2003). Moreover, the issue of music in Islam is subject to interpretation. One belief suggests that Islam does not prohibit all music, only songs which involve sexual suggestion from the performers, such as those practised by Arabs before Prophet Muhammad. The latter did not want Muslims to be present in areas where these types of music are played, on the grounds that it may lead an individual into sinful activities (Long 2005). These subtleties are significant when investigating the potential constraints on arts therapies practice in a conservative Muslim country such as the KSA.

1.5.2 Dancing in Saudi culture

The performing arts are also limited in Saudi Arabia. Dance is permitted in the country, in the form of Arabian traditional dance called "Ardha". This dance features traditionally dressed men wielding swords, dancing to the beat of tambourines and drums. Women may dance in front of other women, as long as they show good manners, and do not behave in such a way as to stimulate physical desire (Janin and Besheer 2003). However, programs in which women dance are not televised in the KSA (Palmer 2012). In addition, the culture is wholly against women and men dancing together, a practice regarded as unambiguously '*Haram*' (i.e. not allowed among strict Muslims) due to the potential for arousing body contact (Arebi 1994) and un-Islamic behaviour (Palmer 2012). This belief is analogous to that held historically by many American Christians, who viewed dancing as the creation of the devil (Doumato 2000). However, this opposition to mixed dances in the KSA contrasts with practice in the area, for example, Yemen; whose culture permits certain

couple dances (Palmer 2012). These religious strictures have had an impact on the law; in 2010, the Saudi Ministry of Education issued a circular prohibiting any music or dances from being used in colleges during graduation ceremonies (Freemuse 2010).

1.5.3 Visual art in Saudi culture

Representational visual art forms are not promoted in Saudi Arabia. This is mainly because the Quran lays down clear rules against creating images, which includes photographs and painting. The Quran does not favour images of real objects and hence Saudi culture tends against painting naturally occurring entities such as animals and people (Alfozan and Aljebreen 2008). This belief derives from the possibility that statues or images may be worshipped, or at least idolatrously admired; in this case, the sculptor, buyer, deifiers and worshippers will all be deemed to have sinned (Janin and Besheer 2003). All scholars oppose the building of full-figured statues, even if they are not used for the purpose of worship or to show respect, since there is always a future possibility of worshipful practices developing, as, for instance, the Quran describes Noah's people as doing (Alfozan and Aljebreen 2008). Creating images of beings which are already revered – for instance, angels or prophets – is considered particularly problematic, as it puts the monotheism of Islam at risk (Alfozan and Aljebreen 2008). Due to this religious prohibition, there are few paintings, sculptures or photographs in Saudi culture; however, scenery and calligraphy are the primary art forms.

Nevertheless, according to Broberg (2003), this tendency is changing. Two female artists, Mounirah Mosly and Safiya Binzagar, have reported success while introducing their art works to Saudi. The scope of visual arts is further being extended to outlets that make illustrated and geographic designs behind Arab architecture. Scholars also agree that statues can be made to serve training purposes and used as toys for children. For example, dolls are not prohibited (Abdulhadi 1999, p.187). However, some disparity exists between scholarly views. The majority claims that incomplete and defaced statues are allowed as long as they are not worshipped. The minority, however, considers that statues should be strictly prohibited, and does not encourage their use for any purpose. They believe that the very act of creating figures is sinful, since it imitates the act of creation by Allah.

1.5.4 Summary of the impact of cultural norms on arts therapies

It is clear that the cultural and religious situation in the KSA imposes limitations on the growth of arts therapies practice in the country. The use of dance movement therapy, music therapy, and to an extent dramatherapy, would raise questions around the exhibition of the body in a prohibited manner. Similarly, the limitations on artistic depiction constrain the activities which can be used in art therapy. These factors have decelerated the growth of arts therapies in psychotherapy treatments, especially for people with learning difficulties. Further, because the arts therapies profession is new in Saudi Arabia, many people are not familiar with what the practice entails, nor of its therapeutic value; as a result, they may be suspicious.

Art therapy was not widely known in Saudi Arabia and there are no art therapists working in schools (Alkhenaini 2013). Nevertheless, in 2000, the first therapeutic treatment clinic was granted permission to open, specifically to practice art therapy in the capital city of Saudi Arabia (Riyadh). This step was a historical shift for art therapy in the Arab world, especially in the KSA. A few years later, the Saudi Ministry of Health (MOH) approved art therapy as a specialised field of psychotherapy (Saudi Ministry of Health 2014).

However, as Alyami (2009) recounts, the process of founding art therapy in the KSA was highly challenging, and involved a flexible and adaptive attitude. This was especially the case due to the lack of precedent for arts therapies in the nation. According to Alyami (2005), art therapy in the Arab world must be designed in line with the social and religious cultures of the communities it serves. Nevertheless, he was successful in running a private clinic limited to art therapy. In addition, Mohamed Bin Naif Counselling and Care Centre, founded in 2006, is a correctional rehabilitation institution which now provides art therapy among other means of rehabilitation support.

1.6 The Research Problem

As this overview has suggested, arts therapies provision for ADHD in Saudi Arabia is currently very limited (Eisa and Abdulrashed 2010), despite the extremely high rates of the disorder in the country. Intervention for ADHD that is carried out tends to be in

the form of medication, rather than the humanistic and child-centred therapies which are increasingly gaining recognition in the UK. In particular, the cultural sensitivities of the KSA impose significant constraints on the use of standard arts therapies with this client population, despite the value that they can have in moving beyond behavioural symptoms to counter the underlying emotional dysregulation and anxiety associated with ADHD. Understanding cultural and religious issues by the therapist are important variables when treating children (Koepfer 2000).

Therefore, the purpose of this study was to introduce, conduct and evaluate a culturally sensitive programme of arts therapies for children with ADHD in Saudi Arabia. The study recognised the current provision regarding support for children with ADHD in the KSA and learned from arts therapists practising in the UK with this group. Subsequently, a culturally sensitive programme of arts therapies was developed for children with ADHD in the KSA. Finally, this programme was evaluated from the perspective of the children themselves, their parents and their teachers.

1.7 The Importance of the Study

This study has benefits, not only as a contribution to knowledge, but also as the groundwork for further development of services in the KSA for this client population. Since children with ADHD in Saudi Arabia currently have minimal access to therapy of any sort (Eisa and Abdulrashed 2010), this research has a key role in developing a culturally sensitive arts therapies programme for children with ADHD, with the aim of improving emotional wellbeing, social skills, and increasing emotional regulation. These outcomes would, in part, be indicated by reduced hyperactivity/impulsiveness, and increased concentration. If this programme is found to be beneficial, it may have a significant impact on the treatment of children with ADHD in the KSA. On the whole, these interventions are not regarded as highly invasive, and the potential to benefit children is particularly high. The data collected during the first stage of the research found that reported benefits for children taking part in arts therapies in the UK include increased concentration, decreased aggression, decreased hyperactivity, better social skills and improved emotional wellbeing. In the KSA, such intervention

is greatly needed, and will only be accepted if it is sufficiently researched, sensitively designed, and appropriately evaluated, in the way that this study is proposing.

Chapter 2:   Literature Review

2.1 Introduction

This chapter presents the literature review relating to this research. The most relevant journal articles, books, conference proceedings and other printed materials have been covered in this chapter. Where appropriate, the literature is presented descending according to the publication date; beginning with older publications and finishing with newer publications.
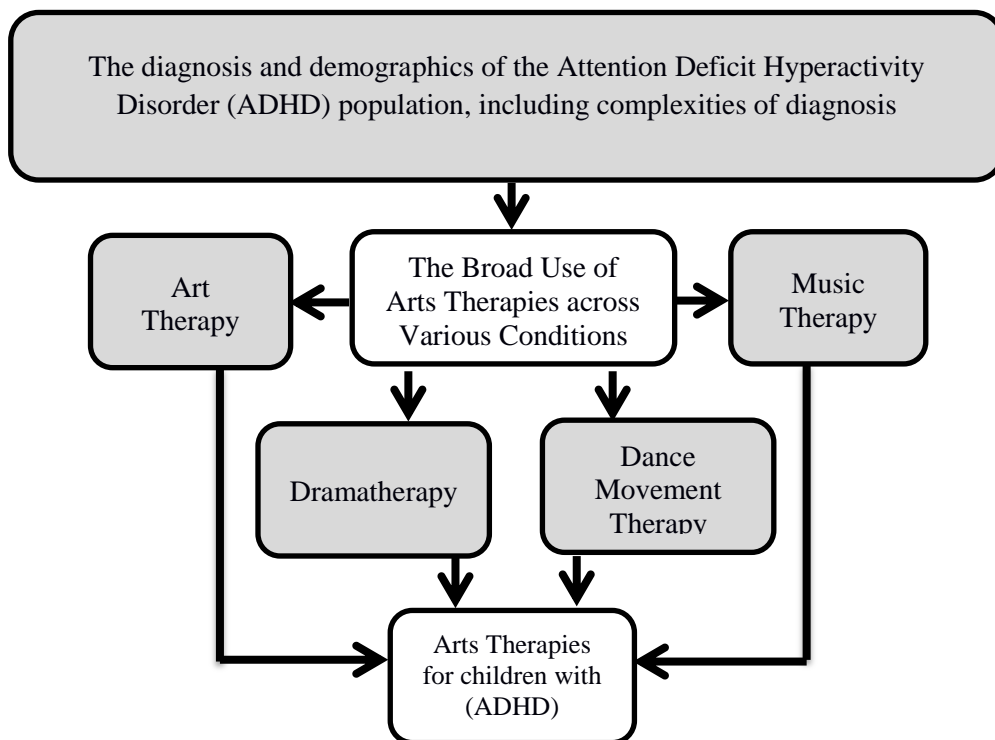
Figure 2.1 The structure of the literature review

As seen in Figure 2.1, this chapter progresses from a wide to a narrow focus. Due to the lack of studies in the main research area (Arts therapies for children with ADHD), this chapter begins with an overview of diagnostic and demographic issues surrounding the condition of ADHD. It then moves into a discussion regarding arts therapies for children with a wide variety of difficulties, especially when this particular client group comprises participants of the study. This section also reviews

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the literature dealing with the current usage of arts therapies in the KSA. Subsequently, the chapter introduces specific disciplines found within arts therapies (i.e. art therapy, dance movement therapy, music therapy and drama therapy) and the main interventionist approaches which are used in each discipline, before focusing on studies in which children with ADHD have been treated with arts therapies. This chapter concludes by examining the limited number of studies on the use of arts therapies with children with ADHD.

2.2 Attention Deficit Hyperactivity Disorder (ADHD)

Attention Deficit Hyperactivity Disorder (ADHD) is characterised by impulsivity, lack of attention and hyperactivity (Shimoni et al. 2010). These symptoms cause behavioural disorders and can become apparent from early childhood (Abikoff et al. 2002) and surface during childhood and continue into adulthood (Dulicai 1999). This disorder can interfere in a person's activity at home, school, the workplace and other social environments (Abikoff et al. 2012). According to Grönlund et al. (2005), there is a strong association between ADHD and motor perception dysfunctions; hence movement interventions, especially dance therapies, can be an effective mode of treatment for the condition. This literature review will therefore focus on arts therapies as an interventionist approach in the treatment of ADHD.

In order to establish that a person is suffering from ADHD, the symptoms of hyperactivity, inattention and impulsivity must be diagnosed as very apparent and persistent (Abikoff et al. 2012). ADHD can be categorised into three types, namely ADHD predominantly inattentive type, ADHD predominantly hyperactive impulsive type and ADHD combined type (Redman 2007).

The statistics for ADHD rates in a population vary significantly across the world. These statistics can be affected by methodological features, assessment tools used, population characteristics, cultural and ethnic differences and diagnostic criteria involved in studies. The true prevalence of ADHD may only be known when standardised assessment leads to firm conclusions (Ibid). Faraone et al. (2003) conducted a worldwide study to determine the prevalence of children with ADHD.

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Their findings showed that prevalence was higher when the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) diagnostic criteria were used. Worldwide, the overall prevalence of ADHD in children is approximately 5.29% (Polanczyk et al. 2007). Al Hamed's study in the KSA, which placed ADHD rates in male primary-aged children at 16.4%, collected data using the modified Arabic version of the Attention Deficit Disorders Evaluation Scale (ADDES) school version, and a parents' questionnaire to diagnose the three main subtypes of ADHD: hyperactivity/impulsivity, inattention and combined ADHD (Al Hamed et al. 2008). Moreover, Abu Taleb and Farheen (2013) evaluated the proportion of ADHD positive students among primary school children in the KSA. A total of 200 pupils (100 boys and 100 girls) randomly selected were included in this study, which uses the Arabic version of the ADHD rating scale that covers the three components of ADHD, i.e., inattention, hyperactivity and impulsivity. Around 13.5% of the selected children were positive regarding ADHD.

According to Landgren et al. (1998), ADHD is a common neuro-behavioural disorder in children. In all diagnoses of child neuropsychiatric disorders, boys are over-represented, with more destructive and aggressive behavioural problems which generally do not receive continuous treatment (Grönlund et al. 2005; Abikoff et al. 2012). Traditionally, therefore, boys are more frequently diagnosed with ADHD than girls, with ratios from 4:1 to 9:1 depending on the population, i.e. ethnic background studied (Holowenko and Pashute 2000). According to studies carried out by Ramtekkar et al. (2010), females are possibly under-diagnosed. One possible explanation for this is that boys have a tendency to display hyperactive and disruptive behaviour which is more noticeable, whereas girls demonstrate internalising characteristics, such as depression or struggling to pay attention, which can go unnoticed or at least undiagnosed (NHS UK 2011). As a result, males are more frequently referred for an ADHD diagnosis (Gimpel and Kuhn 2000; Abikoff et al. 2012), a situation that is mirrored in the KSA (Abu Taleb and Farheen 2013; Homidi et al. 2013). This unequal representation of the disorder across gender signifies that all children should be assessed and properly diagnosed by qualified professionals, who need to be aware of the potential under-diagnosis problems (Cuffe et al. 2005).

In addition, ADHD is more common in younger children than older children and adolescents (Skounti et al. 2007; Eapen et al. 2009). Certain studies show incidence rates peak at the age of 9 (year 5 in school) and then decline steadily (Holowenko and Pashute 2000). However, this could be because of an illusory developmental trend as children outgrow the diagnostic threshold. Other research, in fact, shows ADHD to be a chronic condition with large numbers of adolescents continuing to meet ADHD criteria when age related adjustments are made (Barkley et al. 2006).

Individual children can present ADHD symptoms differently, and as they grow, the symptoms might become less apparent (Palili et al. 2010). The studies by Abu Taleb and Farheen (2013) and Homidi et al. (2013) found similar results among students in primary schools in the KSA. There is evidence which indicates a role for genetic factors in ADHD, as well as suggesting that environmental factors play a role (Grönlund et al. 2005). Landgren et al. (1998) found that socio-economic factors (e.g. maternal smoking during pregnancy) are also linked with ADHD.

ADHD affects the most sensitive aspects of a child's life, such as psychology, emotions and behaviour and hence treatment methods have been strongly criticised (Redman 2007). For disorders like ADHD, psychodynamic treatment modes with extended long term therapies have been widely used for the past few decades (Lundy and McGuffin 2005). However, nowadays, despite the fact that more resources are mainly restricted to short term therapies, children continue to have complex problems. According to Erfer and Ziv (2006), to meet the challenges of ADHD, modes of treatment must be adapted towards the environmental situation in which the child lives and targeted towards the individual needs of the child. Paediatric and adolescent psychiatry are therefore beginning to use eclectic approaches, where they combine medical treatments and various psychotherapy modes (Bower et al. 2001).

Shimoni et al. (2010) undertook detailed research on 50 young boys aged between 8 and 11 years in the north of Israel. Among them, 25 participants had ADHD using Conner's Parent Rating Scale-revised (CPRS-r) and the remaining 25 participants did not meet the ADHD criteria. Before the researchers carried out their assessment on the boys, they had to complete the Children's Assessment of Participation and

Enjoyment (CAPE). The CAPE version included 49 activities (e.g. art or dance lesson, reading and playing cards), drawn on cards. The research examined various aspects of these activities, such as; enjoyment, partners and intensity. According to the study's findings, boys with ADHD were significantly lower than their peers in participation intensity in most of the activities. Additionally, the participants with ADHD showed less interest in formal activities and a higher interest in diverse activities. However, in regard to place and partners, not much difference was found. Therefore, from the findings of the study, it can be inferred that high importance must be given to less formal and structured activities after school, as a means of providing suitable therapies for children diagnosed with ADHD.

In general, children with ADHD attend mainstream schools and they are expected to fare normally like other children. They are also, like their classmates, expected to participate in activities (Abikoff et al. 2012; Landgren et al. 1998). However, studies have shown that children with physical disabilities should be able to access extracurricular activities that are tailored to them personally, rather than using the same activities used for normal children. Here, the children are given social, spontaneous and informal activities as a platform to express themselves (Eapen and Jairam 2009). It should also be noted that children with ADHD have difficulty in obtaining good grades, academic excellence and even to adjust within the school environment (Abikoff et al. 2013). Abilkoff et al. (2013) conducted a randomised control trial on 158 children divided into three groups; an organisational skills training group, a performance-based intervention group and a wait-list control group. The interventions were conducted at New York University over 10-12 weeks (20 sessions). The results show that the interventions were promising of clinical utility in children with ADHD.

As the literature demonstrates, there is no standard, universally accepted intervention procedure to follow when treating children with ADHD. However, a literature study review by Grönlund et al. (2005) highlights that research in the ADHD sector nowadays focuses more on deficient self-regulation and poor inhibition as the centre of this disorder. This is a significant shift, implying a shift from medication as a first port of call, towards therapies which seek to rebalance a dysregulated child. The

humanistic and creative potential of arts therapies, which can tackle this lack of emotional regulation at its core, has therefore led to a growth of interest in their application in treating ADHD.

From a research perspective, most studies demonstrate an overall reduction of ADHD symptoms with the exception of the study by Rickson and Watkins (2003). This study was conducted on fifteen boys (aged 11-15 years), enrolled at a special residential school in New Zealand. The boys were randomly assigned to two music therapy treatment groups (n = 6, n = 5), and one waitlist control group (n = 4). The results reported that children participating in the music therapy showed no noticeable improvements in ADHD behaviour compared to the control group. Rickson and Watkins (2003) attributed this outcome to the study having too many participants and the intervention being too unstructured. This finding should be considered when designing an arts therapies programme for this condition. This example of a low level of responsiveness to music therapy by children displaying ADHD symptoms may also demonstrate how certain conditions may not be effectively treated by various arts therapies (Mrázová and Celec 2010).

2.3 The Broad Use of Arts Therapies across Various Conditions

Throughout the ages, art, in one form or another, has been used as a healing treatment. An evolution of thought within the western world and particularly prominent in ancient Greece is the idea of the strong interdependence and integration of the body and mind and also between medicine and music. During the twentieth century, the field of 'arts therapies' developed significantly, however the idea of involving arts in the healing process has a substantial history (Karkou and Sanderson 2006). The emergence of 'art therapies' was the culmination of various changes in various related areas. In the beginning of the twentieth century there were continuous revolutionary steps taken in the developing relationship between mental health and the arts. During the same time period, the founding of psychoanalysis and the writings of Freud, in particular, led to the emergence of psychotherapy as a distinct field (Karkou and Sanderson 2006).

Freud's writings and analysis challenged the Aristotelian discourse, which had thrived in the preceding centuries and represented a confrontation to rational materialism. Art therapies developed out of the new perception of unconsciousness, allowing new connections to be made between art and the mind. The psychoanalytic tradition has been linked by associated thinkers, academics and practitioners with the advancement of art therapies in practice (Karkou and Sanderson 2006). Differences between research and clinical practices means that it is challenging to conduct research in the field of arts therapies. For instance, research often sets out to achieve specific aims or address predetermined questions, adopting a more narrow focus than the more open ended style of arts therapists in practice. Art therapies are much more qualitative and subjective than specific research methodologies. This leads to obstacles when the two need to be linked together (Cattanach 2008).

Under the 1960 Act, art therapy became a state registered practice supplementary to medicine CBSM, under the 1960 Act. Additionally, 'arts therapies' as a term was included by the NHS within the portfolio of health services as opposed to the inclusion of the individual terminology of drama, art or music therapists (Marham 2008, p.198).

Since 1993 there has been an increase in interest in arts therapies research, such as Master dissertations at the Roehampton Institute and the University of Hertford (Meldrum 2008, p.186). Cattanach (2008) discusses the requirement on therapists to be proficient in both the particular art form, both as a therapist and as a practitioner. Dance movement, drama and art therapies all have similar structures and processes. (Cattanach 2008).

A central debate within art therapies focuses on whether it is necessary to departmentalise into separate professions and services the various art forms and processes, with each having its own separate ways of working and identities. The other side of the argument would suggest that a more appropriate direction of travel would be to develop a singular discipline that would adopt, where necessary, various processes and forms of working (Jones 2005).

The combination of different disciplines within various art forms has a long tradition within numerous cultures around the world (e.g. Massey and Massey 1996).

Furthermore, the different expressive forms are not generally distinguished, from one another, by children, arguing that the expressive nature for children does not suit such distinctions and separation (Matthews 1986, cited in Jones 2005, p.52). Dance movement therapists use music to facilitate the movement process through rhythm, or a drama therapist may ask a client to produce images. Despite this, within the European discourse and traditions of practice and education, dance, drama, art and music are separated in various ways. One explanation for this lies in the fact that a therapist in one particular art therapy would not be qualified to practice therapy in the other art form as well as the cultural difference between the East and the West (Jones 2005). Nevertheless, numerous attempts to combine various art therapies have been made over the years (Karkou 2012).

Often it is the need of the client that determines the art forms involved in the program of art therapies (Jonse 2005). The theory of expressive arts is primarily founded in the ability of arts to address aspects of human distress rather than particular techniques. Appropriate media are determined by expressive art therapists to achieve various therapeutic goals (Levine and Levine 1999). Understandably, there is a tendency amongst those art therapists who combine a number of art forms within their therapeutic work to share the opinion that various arts therapies are interconnected and stress that a primary concern within the process of art therapies, is that of creativity. This emphasis on creativity is perceived to be more important than dividing up what should be a holistic process into separate areas (Jones, 2005).

Despite the development of the field of art therapies in the UK, it is difficult to offer an adequate description or definition of the process. This is due to the often intricate and complex makeup of the various core components and features of the different specialisations that are utilised in practice. Thus the exact landscape of the profession is often rather opaque (Zubala and Karkou 2015).

In order to examine the literature regarding the four common disciplines of arts therapies in more detail, particular studies have been chosen for their relevance, in some aspects, to the current research project, for instance, number and age of participants, length of intervention, methodology chosen and practices to improve on or avoid.

Following a brief overview of methodologies across the arts therapies, these studies are outlined below according to their discipline.

2.3.1 Overview of the research methods employed in the evaluation of arts therapies

Art therapies have been proven in numerous research studies (including a selection which used randomised controlled trial RCT designs) as effective in treating a wide range of subject groups including those with severe learning difficulties, ADHD, Asperger's syndrome, autism and subjects displaying a wide range of various mental health issues. Additionally, studies have shown that people suffering from dementia, people who have suffered trauma, people who self-harm and people who have experienced emotional, sexual and physical abuse can benefit from art therapies. The benefits of art therapies in treating people struggling from anxiety and low self-esteem have been found in a range of studies. It is thus apparent that art therapists tackle multiple issues and subject matters in their work (Karkou and Sandorson 2006).

Researchers have evaluated arts therapies intervention in clinics (Grönlund et al. 2005), paediatricians' surgeries (Majorek et al. 2004), classrooms (Kearns 2004; Henley 2000), primary care practices and outpatient clinics (Hamre et al. 2010) and psychiatric hospitals (Novy 2003). From this, it is clear that there is no standard setting to carry out the intervention.

According to the literature, the intervention period for each arts therapies study differs in total length, number and duration of sessions per week, as well as the number of participants. Session sizes range from one child (Tortora 2004) to sixty-one children (Hamre et al. 2010), while session frequency varies from 10 sessions over 3 months (Grönlund et al. 2005) to over 2 years (Hamre et al. 2010). The length of each session varies too, from 20 (Kearns 2004) to 45 minute periods (Novy 2003). Most interventions showed improvements in ADHD symptoms, regardless of the length or intensity of sessions.

Due to the complex nature of ADHD symptoms, group therapy is not an option for treatment as the clients can be very hard to handle. As a result, intervention is often carried out on a one-to-one basis. However, socialisation is an important aspect of the treatment and therefore pair groups have the advantage of allowing cooperation and

other social skills to be developed. Safran (2003) argues that art therapy can provide particular benefits to children with ADHD, whether in group setting or individually. However, art therapy groups may be more effective and successful than individual treatment for children with ADHD. Grönlund et al. (2005) went as far as to use two dance therapists to help with their pair group, arguing that not only would this make the job easier for the therapists, but also gave the researcher two perspectives. However, this has clear implications for cost and practicality.

2.3.2 Art Therapy

In the fourteenth century 'Opicinius de Canastrius' wrote about healing himself from illness using artistic images, demonstrating that art therapy is not necessarily a new concept. Art therapies in the modern day are a result of the development and innovation in both the arts and healthcare (Jones 2005, p.11). According to the British Association of Art Therapists (BAAT 2014);

> Art therapy is a form of psychotherapy that uses art media as its primary mode of expression and communication. Within this context, art is not used as diagnostic tool but as a medium to address emotional issues which may be confusing and distressing.

Through reviewing 17 published studies in the literature of art therapy, Reynolds et al. (2000) found that the three types of study designs (single group with no control group, controlled clinical trial, and randomised controlled clinical trial) all produce very similar results regarding the positive effect of art therapy for children with ADHD in particular, however their conclusions may appear very different. According to Dilawari and Tripathi (2014), art therapy may enhance and improve the emotional wellbeing of individuals of all ages.

Kearns (2004) investigates its application and effect on a 5-year-old male having Sensory Integration (SI) difficulties. Kearns uses a quasi-experimental, single-case study design over 10 weeks, limiting her research to one child. The direct relation between art therapy and SI is illustrated as art therapy and pre-art activities can give sensory stimulation to the children. The study uses art therapy treatment with the help of FEAST (Formal Elements Art Therapy Scale) to quantitatively analyse pre- and post-test drawings. A total of 12 control sessions, 10 easel-painting sessions, 9 clay

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sessions and 8 finger painting sessions were carried out, all being employed in a special order with a random introduction of control sessions. The data shows that the introduction of art activities in the morning sessions resulted in positive behaviour and also decreased the amount of overall negative behaviour. All of the activities that the child carried out were observed to assess if art therapy increased the student's ability, investigating the impact of three multisensory art activities in particular. Kearns' (2004) results indicated art therapy as a useful intervention.

Although the sample size does not allow inferences to be made, Kearns (2004) concludes that art activities in the morning for children with SI difficulties and ADHD are more effective compared to no art activities. Sensory integration in Kearns' study is of significant importance as its dysfunction can be seen in children with ADD, autism spectrum disorders, foetal alcohol exposure and ADHD (children of particular interest in this study). Kearns (2004) highlights some of the problems arising due to SI difficulties, such as poor class performance in the long term and the inability to grow out of it.

Creative Art Therapy (CAT) is quite new and is more culturally adaptable in western countries (Hartshorn et al. 2001). The effectiveness of CAT on children suffering ADHD has been researched widely (Safran 2002), mainly in school settings (Bower et al. 2001). A study on a young boy suffering ADHD and dyslexia indicated the efficacy of using multi-modal interventions such as meditation, pottery, relaxation, sculpting and expressive movement to minimise impulsivity and enhance attention, emotional expression and thereby improving self-esteem (Workman 2001, cited in Redman 2007, p. 20). The rejection cycle can be distorted by using expressive art therapies. This could enhance and increase the impact of other kinds of interventions (Kennedy et al. 2014). Arts therapies like dance, drama, music and art can offer parents with options for treatment (Grönlund et al. 2005).

CAT is effective for treating children who are at risk of developing anxiety and depression and those with lowered self-esteem (Bojner-Horwitz 2003); in the healthy development of children (Hartshom et al. 2001); in improving emotional well- being and self-control in children (Bojner-Horwitz 2003); in treating mental disorders in children (Bower et al. 2001). The main advantage of CATs with reference to

therapeutic properties lies in the distancing properties that it provides (Hartshom et al. 2001). As CAT do not deal directly with individuals' unconscious and inner conflicts and feelings, the challenges could be explored in a more comfortable way for the individuals, thereby giving them increased access to hidden and inner emotions and feelings (Bojner-Horwitz 2003).

Coholic et al. (2012) used arts based methods to develop resilience and facilitate social and learning skills, mindfulness and emotional awareness in children in care, age 8 to 15. Emphasis was placed on the importance of group therapy to practice interpersonal skills, cooperate toward a shared goal, and alleviate isolation, which is relevant to children with social and/or behavioural problems. Another dimension of this study was the focus on strengths, having fun and, the creative, experimental element of the programme. Two inclusive group programmes were designed with the number of participants corresponding to the children's needs. The higher the challenges, for example children diagnosed with the hyperactive subtype of ADHD, a smaller group size was considered. Interestingly, children also preferred smaller group sizes as they felt they remained more on task. In one group, HAP, there were 4 participants and 2 facilitators while the ECHO (Effective, Comprehensive, Holistic & Objective) had 6-8 children with 4 facilitators. ADHD was a common factor in the diagnosis of the children but criteria for participation was based on referral and on a voluntary basis.

The HAP programme involved weekly sessions lasting 2 hours over a 12 week period and focussed on arts and mindfulness based methods. Children were transported to a University where the sessions were video and audio recorded as well as being supervised through a two-way mirror.

The ECHO programme on the other hand, involved 2-hour sessions twice a week over 8 weeks and focused on cognitive, affective, and psychomotor activities to assist young people to develop their resilience within academic and social settings and took place in a local elementary school. The Strength and Difficulties Questionnaire (SDQ) was used to assess the children. The results were positive and the children's feedback of the programmes was that they had enjoyed the activities and felt the programme

had been beneficial. A further point was the accessibility of this type of programme to child welfare practitioners.

Kennedy et al. (2014) stated that children are more comfortable in expressing their difficulties about ADHD via art therapies instead of being given school punishments or medications. This kind of intervention requires involving the child's parents and teachers, such as showing them the child's art work to understand the underlying emotions. Art therapy is a medium through which children exhibit their emotions, and their struggle to deal with ADHD (Redman 2007). Through this method, the parents and teachers can actually understand the child's feelings. Art therapies act like windows to children's minds and aid in facilitating the assessment and treatment of the child (Kennedy et al. 2014).

Redman (2007) conducted a mixed methodology study on five male children with ADHD ranging from 6 to 11 years old. The children were randomly divided into two groups; one assigned to a dance/movement therapy and another group was only observed while they continued with their regular services. Teachers were instructed to complete two pre-tests, two interim test and two post-tests at the beginning, middle and end of the eight-week dance/movement therapy sessions. The children in the treatment group had shown an improvement or had no change in their symptoms related to ADHD while the children in the control group had shown no improvement or a decline in progress. In this study, the treatment and control group were not equally matched in term of age, developmental level or social/emotional functioning.

Art therapy in the KSA is growing in a slow base with the support of the government. Art therapists are optimistic, but are finding it difficult to recruit new students to study art therapy who would then go on to become art therapists. The art therapy approach used in the KSA follows the American art therapy approach, where eclectic use of theories dominates their practice (Alyami, 2009).

In KSA, Eisa and Abdulrashed (2010) conducted a study to evaluate the effectiveness of an art therapy programme. The programme was designed for children with ADHD in Saudi primary schools (8-10 years-old). The programme aimed to increase students' attention and reduce their hyperactivity. The sample size was 22 students divided into two groups (i.e. experimental and control). Eisa and Alrashed (2010)

used three techniques to conduct the study; (i) a locomotor hyper-activity scale and (ii) an attention deficiency scale. These two scales were developed by the researchers based on a literature review. Moreover, they applied (iii) Raven's intelligence scale. This test has been used to measure intelligence and was codified by Qurashi in 1987. It is a non-verbal scale used to measure general mental ability. The researchers measured the reliability by testing and re-testing the sample after 15 days. The validity has also been measured by internal consistency.

The researchers conducted counselling art programme. The programme consisted of 39 sessions across 13 weeks. Each session lasted 90 minutes, with different art activities for the students with ADHD. These activities could be completed by the students as individuals or as work-groups. For example; the researchers asked students to refrain from moving except in the case of necessity, in order to reach the aim of the session, which is to reduce movement. However, in order to train the students to concentrate, the researchers asked the children to create a model using a range of materials, for example: ceramic, clay or paper. The researchers also used paper and colours to draw several faces with different expressions. They then asked the students to compare the differences between the faces and interpret the meaning of them. While the students in the experimental group did these activities, the students in the control group did the usual school activities. The researchers tested the students in both groups before the programme (i.e. pre-test), after the programme (i.e. post-test) and after 60 days of the end of the programme.

The results suggested that there were statistically significant differences between the experimental and the control groups, as there were improvements in the post-test of the locomotor hyperactivity scale and the post-test of the attention deficiency scale in the experimental group ($p < 0.01$). The results also suggested that there were statistically significant differences between the pre-tests and the post-tests of the locomotor hyperactivity scale and the attrition deficiency scale in the experimental group towards improvements in the post-tests ($p < 0.01$). These results indicate the effectiveness of the suggested art therapy programme. However, the result suggested that there were no statistically significant differences between the follow-up tests and the post-tests of the locomotor hyperactivity scale and the attention deficiency scale in the experimental group, which indicates the effectiveness of this programme.

The dominant approach in art therapy practice is behaviour modification, but the literature indicates that there are other approaches (Alyami 2008; Alyami 2009; Alyami 2015). Using an exploratory research design, Alyami (2015) investigated the role of art therapy on the reintegration of ex-terrorists into Saudi society. The study presents an extensive review of the art therapy programme at the Mohammed bin Nayef Center for Counseling and Care in Riyadh, KSA. The outcomes of art therapy on 2,918 male Saudis between the ages of 18 and 40 at the Mohammed bin Nayef Center for Counseling and Care were presented alongside the treatment and reconstruction of their extreme ideologies through art production. The results indicated an 86.2 per cent success rate, with a 13.8 per cent recidivism rate. Alyami (2015) concluded that a successful art therapy programme is necessary within the overall approach to counter terrorism. However, this kind of therapy requires a strong understanding of the cultural backgrounds of the subjects.

This article presents an approach of art therapy with a Saudi population who share cultural background as the population used in the research study. It may help in understanding tha stand point of view on basic cultural issues towards the use of art in therapy.

2.3.3 Dramatherapy

Drama therapy is a unique form of psychotherapy in which dramatisation, creativity, storytelling, movement, performance arts, voice and play have pivotal roles in the therapeutic relationship (Karkou and Sanderson 2006). Novy (2003) studies the use of dramatherapy with four pre-adolescent boys aged between 10 and 12 in the child psychiatry unit of a large inner city psychiatric hospital whose diagnosis included a personality disorder as well as ADHD. The aim of the intervention was to provide an environment which promotes positive personal identity for the children to experience success. Twenty-five sessions took place in total, once a week in the evening over two semesters of 10 and 15 weeks respectively. Two boys at a time attended the 45 minute dramatherapy sessions while the other two boys attended pet therapy.

Novy (2003) focuses on one pair of boys in particular, who showed more difficulties than the other two boys, such as school expulsions, fear of intimacy and a general lack of trust. As a result of their issues, Novy (2003) argues that what they achieved in

dramatherapy appeared even more significant. However, their hyperactivity was not addressed and there was no attempt to meet the boys in action. Initially art–based methods were used to involve and calm the boys, which could be argued to be a behavioural approach that attempted to change the behaviour directly rather than attempt to understand any underlying issues leading to hyperactive behaviour. This then progressed to model making and finally drama and role play as the boys' confidence grew. The introduction of a movie camera to film the boys was a very significant point in the intervention with the boys showing increased enthusiasm and motivation. When the filming was finished there was a review meeting attended by members of the project team, the child and his family where two documents were presented to each child, a certificate and formal letter both praising and congratulating their individual achievements.

Before the intervention, both boys had difficulty putting their feelings into words, they became angry quickly and found it hard to cooperate with other children. By the end, the boys had a strategy to manage their anger, had better negotiating skills and showed more respect for one another in general. Novy concluded that drama enabled the boys to separate themselves from their problems through storytelling and as a result were in a better position to address these problems. The aim was to enhance strengths and not focus on weaknesses.

Novy also emphasised the importance of an audience for the boys' work. However, due to hospital privacy regulations, the film was not allowed to be shown and the written, detailed documents were the only evidence of their achievements available to the public. While this work is clinically rich, from a research perspective it could have been further improved if pre and post testing had been included to identify the degree to which qualitative observations of changes could also be confirmed using quantitative measures. For example, improvements in confidence and behaviour were based on unstructured observations only.

Another research study conducted by Chang and Liu (2006) examined the effectiveness of applying dramatherapy in a resources room for ADHD students. During the study, the researchers used qualitative research methodologies to collect data. Assessment of social status was conducted on all ADHD diagnosed students, in

order to compare their changes in social status both in resource room classes and regular classrooms. Social Preference Ranking was completed to determine the social abilities of ADHD students. The findings of the study indicated that the dramatherapy produced positive results for the curriculum used in the resource room classes. The study also highlighted that applying dramatherapy treatment in group lessons increased the social abilities among ADHD diagnosed students in the resource room classes.

Furthermore, Al Mulla (2008) conducted a study on ADHD children in a Dubai kindergarten, which evaluated the effectiveness of psychodrama programs. The researcher argues that there is an increased prevalence of ADHD in Dubai and even though many of the schools are providing two teachers in every classroom, it is still proving difficult to deal with, and control, children with ADHD. The researcher performed a 'Psychodrama Program' as a part of the curriculum and used an IQ test by Jodanv Harris and another test for the attention of children developed by Al Mulla (2008). The study found that 'Psychodrama Program' helped to minimise hyperactivity symptoms in classrooms.

2.3.4 Music Therapy

Not one approach on its own is able to define the complex and diverse subject area of music therapy. Within this discipline, there is a variety of training programmes, practitioners, settings, subjects, methods, moods and approaches. Attempting to develop a definition for music therapy based on a single particular term or practice would thus be would erroneous (Bruscia 2014). In ancient Egypt, chant therapies were often included by priests when conducting medical 'procedures' (Forstig and Essex 1998). Music therapy has been found to stimulate the spheres of higher emotional creativity and memory, cortical and subcortical attention, visual-motor and acoustic integration in children with minimal cerebral dysfunction. (Herinková 1980). Music can be used more efficiently to treat behavioural disorders when it is used with movements (Rickson and Watkins 2003). This could improve the achievement of behavioural aims as it works with, not against, the tendencies towards hyperactivity in students with ADHD (Kennedy et al. 2014).

Rickson and Watkins (2003) carried out research to see whether or not music therapy could promote social behaviour in aggressive adolescent boys with, emotional, social and learning difficulties. Fifteen participants, aged between 11 and 15, attending a special residential school were randomly assigned to two music therapy treatment groups of six and five in each group with a control group of the remaining four. Observations and a modified Developmental Behaviour Checklist (DBC-P & DBC-T) were used to collect data. The results did not detect any significant effects resulting from the intervention and the conclusion drawn was that the study may have benefitted from being more structured with smaller group numbers. This comment has been taken into consideration when deciding on numbers of participants and study design for the current research. The relatively high age of the participants in Rickson's study is also worth noting.

Rickson (2006) compared improvisational and instructional approaches in music therapy on the degree of the motor impulsivity shown by adolescent males with ADHD. In his comparison, it was found that there were incidents which showed a reduction of restlessness and impulsive behaviour in classrooms due to this instructional approach. According to the author, music therapy can be associated with the improvement of various developmental areas.

Moreover, Chen et al. (2012) investigated the effects of music therapy on children with ADHD in order to improve behavioural control. A total of 24 children aged between 5 and 10 years were recruited in this study, and were divided into an experimental and a control group. Members of both groups continued their original rehabilitation programme, while those in the experimental group received an additional 12 sessions of 40 minute music therapy over 6 weeks. Results show that there was no significant difference between the experimental group and control group in their total scores on the ADHD checklist before intervention. However, after 6 weeks of intervention, there were statistically significant improvements ($p < 0.05$) in terms of a lowering of hyperactivity and total scores within the experimental group. These results suggest that music therapy establishes significant positive effects on children with ADHD.

2.3.5 Dance/Movement Therapy

The roots of Dance/Movement Therapy (DMT) date back to ancient times of tribal dance, which was used to define individual or group identity, as expressions of celebrations and crises, and in rituals of death and exorcism (Forstig and Essex 1998). The development in the UK of DMT was pioneered in part by Payne who co-established the professional Association for Dance Movement Psychotherapy in the UK 'ADMT UK' (Payne 2006). Although a relatively new field, DMT is developing quickly in the UK and is regulated by the ADMP UK (Karkou 2012; Zubala and Karkou 2013). The UK professional association defined DMT as; "a relational process in which client/s and therapist engage in an empathic creative process using body movement and dance to assist integration of emotional, cognitive, physical, social and spiritual aspects of self" (ADMP UK 2013). It consists of light warm up exercises and music and sensory stimulations (Meekums 2002). DMT involves movement techniques to increase self-control, to manage the expression of feelings and to encourage social interaction (Erfer and Ziv 2006). This therapy has been used widely to treat children who have problems like psychiatric disorders, trauma, developmental pervasive disorders, aggression and those who have experienced sexual abuse (Redman 2007). For children with communication and emotional issues, DMT is often considered as an appropriate method of therapy (Karkou and Sanderson 2000). It is increasingly common for people displaying a range of various symptoms to receive DMT treatment by therapists in group settings and environments (Karkou 2006; Tortora 2009). According to Marian Chace (cited in Chaiklin 1975, p. 23);

> Dance sessions are useful to patients who are over-active and who have short spans of attention and consequent bursts of impatience. Dance sessions furnish an acceptable medium for release of their nervous energy and the possibility of functioning with other people harmoniously.

Erfer and Ziv (2006) state that when a child's movements are enhanced, the child is more capable of using their abilities to manage their environment. Solsvig (2010), in her thesis, combines Chacian dance/movement therapy and Responsive Classroom

techniques, which were developed by teachers in 1981, to prevent and confront violent and aggressive behaviour in children within the classroom and the school. However, as the intervention involved only 8 sessions over a 4 week period, Solsvig presents her research as an inquiry rather than a case study, without data analysis or results.

As ADHD-diagnosed children suffer problems associated with both adults and children, they require help forming relationships. According to Siegel (1995), children suffering with early disturbances will have strong movement urges. Dulicai (1999) suggested that, as a discipline, DMT should be aware of the developments in ADHD treatments and diagnosis to be able to critically analyse the relationship between their work and the new information emerging in the field of ADHD treatment. As argued by Meekums (2002), DMT is related to both the transformation and expression of emotion. Goodill (2005) focuses on the need for emphasis on an individual's healthy body parts, as he states that the ability to resist stress relies on a sense of internal and bodily coherence.

In the case of mental disorders, there may be disconnection among the cognitive, emotional and physical aspects of an individual, where according to the severity it will be more difficult for individuals to recognise the disintegration. According to Goodill (2005), dance and movement, as a mode of psychological intervention, can influence an individual emotionally, socially and physically. DMT interventions help to reintegrate mind and body. This could encourage participants to become more open towards a holistic mind and body experience of emotions or situations, rather than restraining such experiences to only the psyche or body (Meekums 2002). As it affects both mind and body, DMT is not just a one-dimensional therapy; rather, it is a holistic therapeutic intervention (Van der Merwe 2010).

A meta-analysis by Ritter and Low (1996) showed that DMT is a significant intervention to treat a wide range of symptoms, including those associated with mental disorders and anxiety reduction. The meta-analysis supports the effectiveness of DMT with various groups of clients including mentally challenged children, adult psychiatric patients and those with physical disabilities (Koch et al. 2014).

As per the study carried out by Koshland et al. (2004), DMT can be used as a tool to reduce violent behaviour in children. The researchers assessed a prevention of violence program through a pilot research which evaluated the use of a 12 week of DMT intervention. The 54 participants were all children from a multicultural school. The study aimed at developing critical thinking and conflict-resolving techniques among children, focusing on self-control, emotional control and problem solving. Koshland's research involved the use of special structures of movement that regulated skills integration through physical actions to understand physical, cognitive and emotional/social behaviour. A pre and post assessment were conducted depending on a student response form developed from Goldstein (1999) and were compared using a dependent t-test. The study found that the intervention by DMT reduced the hostile behaviour in children to a large extent. However, not much reduction was recorded in terms of other negative behaviours. This study was limited by the lack of a suitable control group to compare with the dance movement therapy group.

The effect of creative movement therapy on 38 autistic children ranging from 3 to 7 years old was studied by Hartshorn et al. (2001). The study conducted two sessions (30-minute sessions) per week for two months. The behaviours (e.g. making eye contact, social-relatedness towards teacher and responding to touch in a negative manner) of the children were recorded for each child every minute. The results from the study signified that movement therapy had had positive effects ($p < 0.05$): the children had developed better attentive behaviours and had reduced anxiety behaviours. The participants in the study spent time productively by demonstrating on-task behaviours, with less wandering and resistance towards teachers than the control group. Therefore, the study signified that movement therapies can have a positive impact and enhance interaction and attention.

Lanzillo (2009) conducted a quasi-experimental intervention on 2 boys, aged 8 and 9; within a group of 5 children who as well as being diagnosed with ADHD were also diagnosed with comorbid Learning Disorder and Oppositional Defiant Disorder. Both quantitative (the Child Behaviour Checklist) and qualitative data (using field notes) were collected pre and post-test, revealing a decrease in Total Problem Behaviours for children as well as improved self-awareness and group cohesion. Each of the four one hour group sessions, which took place over eight weeks at a special education school

for emotionally disturbed and behaviourally challenged children, focused on spatial awareness, safe distancing between self and others, stress management, self-control, modulation of energy, coping skills, awareness and responses to dangerous situations for aggression, anger management, and building empathy. Limitations included the small number of participants as well as the short duration of the intervention.

An investigation on the effects of DMT on children in the age group of 5 to 8 years was carried out by Erfer and Ziv (2006) in an in-patient short term psychiatric unit of a hospital. It was argued by the researchers that DMT is a very important intervention to treat ADHD, and is highly capable of creating stability in children suffering from chaotic and disorganised behaviour. According to the researchers, such stability and cohesion can create an atmosphere that is non-judgemental and safe wherein children can achieve therapeutic targets. The study focused on developing body image and self-awareness, primarily through DMT sessions. These factors were considered the foundation for developing cohesion. In this case study, effective changes in behaviour were recorded in the unit and study group, including delayed gratification, tolerance of frustration, impulse control and improved social abilities.

Qualitative aspects of body movements, which could distinguish agitated children from those of normal children, were explored by Goodman (1991). The researcher framed a model to differentiate on the grounds of stylistic and contextual features of activities, such as situational intensity and appropriateness, which is considered significant, in contrast to quantified features, such as frequency and duration. In the study, children who are hyperactive showed unexpected strength and transitions and higher episodes of intensity. The level of inappropriateness and intense behaviour was higher in boys who were hyperactive when compared with normal boys.

Grönlund et al. (2005) conducted a pilot study on the effect of dance/movement therapy on two young boys with ADHD symptoms, employing multiple methods to collect data, including Strength and Difficulty questionnaires, socio-demographic questionnaires, the Movement ABC motor-test and a self-administered behaviour scale. There was no control group but triangulation was adopted to increase validity by the use of multiple methods to collect and interpret data. The treatment illustrated

the differences between pre and post-test measurements. Data also included observations, videotapes and interviews with the parents.

There were ten DMT sessions in the study which were carried out once a week over three months. During the study period, the children were kept away from medications and any other interventions. The results were mixed and were different for each child. For one, although there was no difference pre-test and post-test in Strengths and Difficulties Questionnaires (SDQ), there were significant changes in the total score of the Movement Assessment Battery for Children (ABC motor test). The other child showed clinically significant positive changes in SDQ Total difficulties results as well as Movement ABC motor test results, which were not as pronounced as the former's pre-test. Interviews with their parents concluded that DMT had been extremely beneficial, especially for socialisation issues; a friendship developed between the two boys which enabled them to play together. The findings from the interviews with the parents and teachers showed positive changes in the child's quality of life. DMT gives boys with ADHD a probability to have an activity outside school. This study was limited by using the parents' version questionnaires to collect quantitative data.

The study generated two hypotheses that DMT given in paired groups for a period of ten weeks could not only positively affect motor functioning, but could decrease the emotional and behavioural symptoms shown in boys aged between 5 and 7 years. The study found that the children also suffered from problems related to their distorted body image, inconsistent body tensions and disjointed movement patterns, along with the usual ADHD symptoms like inattentiveness, hyper activeness and impulsiveness. The researchers concluded that DMT can be effective for addressing ADHD symptoms and body related issues. However it can be argued that the study only focused on treating the destructive and aggressive side of children with ADHD symptoms by establishing links between motor dysfunction and ADHD. Nevertheless, based on the findings of the study, it could be said that kinaesthetic coherence and motor coordination have potential in the treatment of ADHD symptoms.

The limitations of the study are that it only focused on boys. The sample size of two is also very small, preventing the findings from being generalised. There is a possibility that having a large sample size could influence the findings, as more children means

more chance for interaction; this complicates the dynamic while implementing DMT sessions. Although, in a large sample size there is the possibility that the group will be heterogeneous. In addition, the treatment of ADHD children is a combined effort of parents and teachers (Meekums 2002); this study is limited in that the researchers had no contact with the boys' teachers. They relied on interviews with parents, regarding how the boys are managed at school. Even though the study suggested that DMT is effective in treating ADHD symptoms and motor coordination is the key building block in ADHD treatment, the researchers could not specify the role DMT played in determining progress in the boys.

Corteville (2009) carried out a mixed methods research to examine the effectiveness of using DMT along with counselling among high school girls struggling with relational issues with fathers and challenges with self-esteem, communication skills and disturbed body images. The main objective of the study was to decrease low self-esteem feelings and disturbed body image awareness among high school girls, by using DMT. Over a period of two months, eight DMT sessions were conducted. Three students with the above mentioned challenges were recruited for the study which used Morris Robinson Self-Esteem self-completed questionnaire (16 items, four-point Likert Scale). Both quantitative and qualitative evaluations of the data was conducted through pre-tests, post-tests and observations to find out if DMT reduced perceived low self-esteem, relationship issues with father and body image. DMT interventions were evaluated using the Rosenberg Self-esteem Scale. The findings show that DMT is an effective therapeutic mode as it offers opportunities for containment, exploration and emotional expressions through movement metaphor. However, one of the drawbacks of this study is that the DMT sessions and recording were conducted after school time, which could have affected the samples' mind set as they might be eager to return home after a day at school. A small sample size might have helped the group gain cohesiveness quickly; however, it reduces the generalising potential of the study. Another limitation of the study is the fact that the researcher was a counsellor of two among the three participants. This could have resulted in those two sharing a more trusting relationship with the researcher than the third participant, with an overall possibility of biasing the results.

Another longitudinal study by Grönlund (1994, cited in Grönlund et al. 2005, p.65) evaluated five years DMT treatment with an emotionally challenged class of school children. The researcher claims that DMT was found successful by concurrently processing both body and emotion (Grönlund et al. 2005). The study gave emphasis on turning points which have contributed to positive changes in emotionally disturbed school children's treatment and to identify significant curative factors. DMT enables them to understand themselves in a logical and positive way. Redman (2007) states that DMT can help children with ADHD to connect themselves with their inner senses. This helps to form a ''sense of self'' by improving control on impulse, integrating physically and psychologically and safe expressions of emotions. Van der Merwe (2010) conducted a quasi-experimental research study to evaluate the effect of a series of dance and movement intervention sessions (forty-five minutes a session, six times a week for two weeks) within the clinical setting on the perceived emotional well-being of 10 adolescents (six participants in the control group and four in the experimental group). The study compared between the pre and post-tests scores of the 'positive and negative affect scale' and the 'Rosenberg self-esteem scale' for the two groups. The findings show that DMT promotes autonomy building and gives individuals an opportunity to take part in a process of self-discovery, thereby fostering development of significant social skills and providing a platform to build relations with their peer group. According to Goodman (1991), DMT interventions could improve a sense of achievement in individuals, thereby holding significant benefits to develop self-esteem.

Regev et al. (2012) conducted a quantitative methodology study in Israel. The study examined the influence of the participation of mothers in a children's movement therapy studying a group which included 26 children, 17 boys and 9 girls, 6–8 years old. A randomised control trial was utilised in this study and involved a total of 16 sessions of therapy. There were 14 children in the experimental group and 12 in the control group. The experimental group's mothers were involved in the intervention while mothers in the control group were not involved. Seven questionnaires were used; Personal Data Questionnaire, The Perceived Competence Scale for Children, Pictorial Scale of Perceived Competence, Social Acceptance for Young, Child Behaviour Checklist, Parental Satisfaction and Efficacy Scale, Index of Parental

Attitude and Relations with Father/Mother Questionnaire. The conclusions of the study highlighted an increased level of confidence in the children's perception of self-image in both the experimental and control group. In the experimental group (mothers involved in the intervention) the behaviour of the children statistically improved ($p < 0.05$) to a greater degree than the behaviour of the children in the control group (mothers not involved in the intervention). Although the functioning and efficacy of parental functioning improved in both groups, the experimental group witnessed a greater statistical improvement ($p < 0.05$).

Alotaibi (2014) examined how emotional wellbeing and perceptual-motor abilities were affected by movement therapy in children in Saudi Arabia who displayed mild learning difficulties at primary school. The study consisted of 60 male children aged between six and nine taken from primary schools in Saudi Arabia. All the children in this randomised controlled trial had mild learning disabilities. The children were randomly placed into control and intervention groups. The Purdue Perceptual-Motor Survey and Goodman's (SDQ) Strength and Difficulty Questionnaire measured the changes in both perceptual-motor abilities and emotional wellbeing both before and after the intervention. The study collected qualitative data via open-ended questionnaires for the parents and teachers of the children involved in the study (both before and after the movement therapy intervention) and collecting the drawings of the children. The emotional wellbeing and perceptual-motor abilities of the children assigned to the experimental group displayed significant statistical improvement following the study compared with the control group. The feedback offered by the teachers and parents regarding the value of the intervention on the participants also supports the improvement findings. Additionally, an analysis of the participants (assigned to the intervention group) pre-test scores and their post-test scores revealed an improvement in the relationship between perceptual-motor ability and emotional wellbeing.

2.4 Art Therapy in Saudi Arabia

By reviewing the literature, it is emerges that there are limited studies that adopt or adapt an arts therapies programme to be appropriate for a culturally sensitive society.

Moreover, there are limited studies that identify the differences in practice of arts therapies between the Western countries and the Eastern countries such as KSA. As outlined above, most studies into the use of arts therapies in general, and with clients with ADHD, have been conducted in Western countries. To date, there is a lack of studies which have been conducted in Middle-Eastern countries such as Saudi Arabia (KSA). It is widely accepted that there are cultural differences between Western countries and Middle-Eastern countries; even more so in countries such as the KSA where religion plays such an important role (Jones 2005). Cultural differences have an impact on the intervention, particularly arts therapies for children with ADHD. For example, some art forms such as dance and music are not allowed to be practiced in the KSA due to religious beliefs that regard these art forms as haram, i.e. not allowed among strict Muslims (Van Nieuwkerk 2008).

As a result, in KSA, arts therapies are still in the early stages of development. For example, art therapy was introduced by Alyami through a private clinic. It was the first clinic specialising in the field, and the license was issued in 2000. In addition, the profession of 'art therapy' became state registered with the health professions in 2000 as a part of their health services portfolio. Since then, art therapy was practised only in a private clinic run by Alyami himself. However, in 2005 he introduced art therapy to the King Fahad Medical City (KFMC) Rehabilitation Hospital (Alyami 2009), making King Fahad Medical City (KFMC 2010) the first hospital that adopted art therapy in its rehabilitation programme in the KSA.

According to King Fahad Medical City (KFMC 2010)

> Art Therapy is a form of rehabilitation treatment that uses art as part of the therapeutic process. Similar to psychotherapy, the therapist determines the framework for the therapy, assesses and helps the client set treatment goals, and offers a reparative therapeutic relationship to the patient. In addition, the art therapist has specialised training and provides the necessary art materials to help the client engage in the production of art and to derive meaning from art via therapy. Internal imagery and external processes become visible within an art therapy session.

This definition covers only one of the four arts therapies, which is art therapy. While there are some similarities to Karkou and Sanderson's (2006) definition mentioned above, i.e. the therapeutic element and the relationship between client and therapist, there are also many differences. For example, this definition talks about rehabilitation and also compares art therapy with psychotherapy possibly due to the hospital environment. Another important difference is the actual purpose of the art being produced that focuses on 'deriving meaning'. The type of meaning that the client may search for, and the type of guidance that the therapist may offer to facilitate the making of meaning, remains unclear.

Thus far it also remains unclear whether other types of arts therapies are used in the KSA and whether any form of arts therapies are used for ADHD. Furthermore, there are limited existing treatment options in the KSA for ADHD, specifically for children of primary school age. This suggests that there is an urgent need for the development of suitable therapeutic interventions. Arts therapies may offer a useful type of treatment for this group of children. However, so far there is no guidance on how to implement arts therapies in a culturally sensitive way in a country like the KSA. According to Alyami (2009) the challenges of local culture are a frequent occurrence when art therapy is used within hospitals.

This study will provide an opportunity for an exchange of information and knowledge regarding similarities and differences in arts therapies for children with ADHD in the UK and the KSA, two countries with a different culture and belief system. Furthermore, it is hoped that the results obtained will contribute to an understanding of the phenomena under study. The study may support the development of an intervention framework for children with ADHD that will be useful to policy makers and health professionals in the KSA. Furthermore, it is hoped that if the intervention developed is of value to the participating children with ADHD, emerging clinical guidelines may be adopted by health professionals, arts therapists and teachers who work in hospitals and schools in the KSA.

These identified gaps in in the literature will feed into the aim and design of this research project as it will be presented in the next chapter. The aim of this research is

to develop a culturally sensitive arts therapies programme for children with attention deficit and hyperactivity disorder (ADHD) in primary schools in Saudi Arabia (KSA). This chapter examined? the literature on the topic of Arts Therapies for children with a wide variety of difficulties, especially ADHD. The next chapter discusses the research methodology for this study, which follows the mixed methods design.

Chapter 3:   Methodology

3.1 Introduction

This chapter discusses the methodology used to approach this study, and the issues related to the selection of the most appropriate research methods for developing, conducting and evaluating a culturally sensitive arts therapies programme. During this discussion, the research methodology for this study is defended in terms of its appropriateness to answer the study research questions. The procedures that were taken to address the research design, data collection and analysis methods are demonstrated. Therefore, this chapter involves the methods for the two stages that cover the questions of the study. The first stage is to develop a culturally sensitive arts therapies programme. The second stage is to evaluate this programme. The procedures of sampling, data collection and data analysis were discussed for each stage.

3.2 Research Aim and Questions

The overall aim of the research was to develop a culturally sensitive arts therapies programme for children with attention deficit and hyperactivity disorder (ADHD) in primary schools in Saudi Arabia (KSA). Since activities, such as dance and playing musical instruments are taboo, and forbidden in schools, in the KSA, this research adapted UK arts therapies practice to fit these cultural requirements.

Two main questions were asked:

1. **How can Arts Therapies be introduced for children with ADHD in primary schools in the KSA in culturally sensitive ways? This question incorporates the following:**

   - What is the current provision in the KSA regarding support for children with ADHD?
   - What are the lessons that can be learnt from arts therapists practising in the UK with this group?

2. **What value can culturally-sensitive provision of arts therapies have for children with ADHD, from the perspective of the children themselves, their parents and teachers?**

The study involved two stages. Stage one attempted to answer question one, while stage two focused on addressing the second research question.

3.3 Research Framework

Arts therapies, as body–mind treatments, are considered to enable social and emotional development in adults and children. This research develops and evaluates a culturally sensitive arts therapies programme for children with ADHD. The first stage is to develop a culturally sensitive arts therapies programme. The second stage is to evaluate this programme. Therefore, this research follows the recommendations of the Medical Research Council 'MRC' framework (a framework for developing and evaluation of RCTs for complex interventions to improve health) in its use of qualitative research as a precursor to experimental research (Craig et al. 2013). Figure 3.1 illustrates MRC framework.

Implementation   Developing an
                                   Intervention

Reporting   Piloting and
                                   Feasibility

              Evaluating
                 the
              Intervention
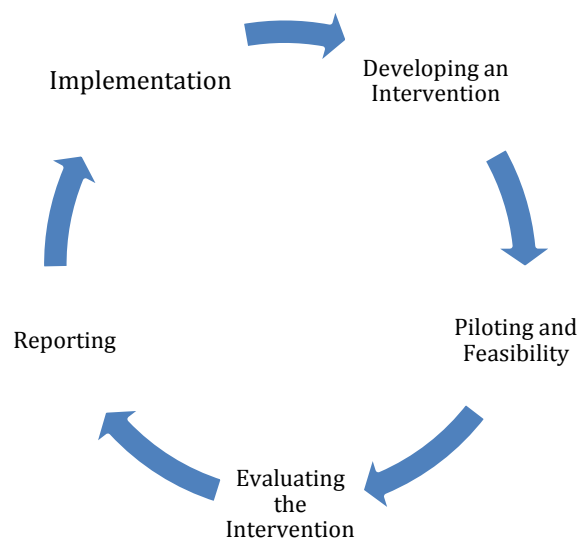
Figure 3.1 MRC framework (Craig et al. 2013)

The MRC framework is the most widely applied guideline for developing complex interventions (Corry et al. 2013). According to Craig et al. (2013), the development-evaluation-implementation process comprises five steps, which are; developing an intervention, piloting and feasibility, evaluating the intervention, reporting and implementation. By following the MRC framework, the researcher seeks to obtain facts on how to develop and evaluate an art-therapy programme, whilst attempting to minimise any human bias. This study followed the first three stages of the MRC: development, piloting and evaluation.

3.4 Research Philosophy and Methodology

It is commonly accepted that for research in social science to be comprehensive and insightful it is essential to adopt appropriate paradigm, methodology, techniques and methods (Jonker and Pennik 2010). Different philosophical assumptions pertaining to the nature of society and, also, to the nature of social science are reflected in the context of social science. The researcher's philosophical orientation heavily influences the nature of any research work conducted by the researcher, specifically determining the paradigm of the research.

The methods of collecting data, the processes through which data is examined and analysed and then ultimately interpreted is determined by the research philosophy. Creswell (2009) highlighted the importance that a research philosophy plays in the research process and identified issues that need to be considering within the concept. Creswell (2009) puts forward the argument that there are three main reasons why an appreciation of philosophical assumptions is important in the research process. First, he argues that by understanding philosophical assumptions researchers are able to clarify issues contained within their research design. For example, it forces the researcher to consider the type of evidence needed, how it should be collected and interpreted, alongside assisting in developing answers for the research questions. Second, such an appreciation of philosophical assumptions can aid researchers in determining the appropriate measures required to reach their research objectives. Third, by understanding the research philosophy, researchers are better equipped to identify and create innovative research designs in their substantive field.

Burrell and Morgan (1979) argue that there exist multiple philosophical assumptions which have a direct effect on the adoption of various research methodologies and the decision to adopt selection processes within an appropriate research paradigm. These assumptions are;

i) views about the nature of reality (i.e. Ontology) which answers the question of "what is reality?";

ii) views about the nature of knowledge (i.e. Epistemology) which is concerned with the nature of the relationship between the researcher and what is being researched;

iii) the theory of methods (i.e. Methodology); and

iv) views about human nature.

Thus, different viewpoints and paradigms determine the approach taken by research in social sciences, resulting in different methodologies. Researchers have demonstrated how research philosophy is interconnected with the development and nature of knowledge. Consequently, studies in social science inevitably reflect the philosophical assumptions on the nature of social science and the nature of society itself. Hamlyn (1995, cited in Crotty 1998, p.8) holds the position that epistemology is concerned with "the nature of knowledge, its possibility, scope and general basis". Additionally, Maynard (1994, p.10) suggests that, "epistemology is concerned with providing a philosophical grounding for what kinds of knowledge are possible and how we can ensure that they are both adequate and legitimate". Thus, epistemology is related with ontology, which is itself concerned "what kinds of things really exist in the world" (Hughes and Sharrock 1997, p.5). Furthermore, Crotty (1998, p.3) offers a definition of epistemology as "the theory of knowledge embedded in the theoretical perspective and thereby in the methodology".

When considering methodology, a useful definition is offered by Sarantakos (2005, p.30), who explains methodology as 'the theory of methods'. It is the process through which a research is able to understand the focus of the enquiry. Robson (2002, p. 549) defines methodology as "the theoretical, political and philosophical backgrounds to social research and their implications for research practice and for the use of particular research methods".

When selecting the methodology to be used in a research study, there are three main possibilities; (i) quantitative methods, (ii) qualitative methods and (ii) mixed methods (Creswell 2009). It is important to understand these three methods in order to select the most proper approach for the research.

1. **Quantitative methods**

Quantitative methods draw upon statistical analysis within a research study to test hypotheses and reach conclusions within a study (Romeu 2006). Creswell (2009) highlights how the quantitative methodology of positivism deconstructs concepts into smaller ideas and then employs hypothesis testing. Quantitative methodologies are generally able to prove or disprove a specific tested theory. The benefits of quantitative methods include the ability to produce standardised numerical data alongside the ability to develop relationships, both in terms of explanation and prediction, for a large population sets with a reasonable degree of reliability (Holland and Campbell 2005).

2. **Qualitative methods**

In contrast to quantitative methodologies, qualitative research develops the understanding of a particular research topic by focusing on discussions, thinking and knowledge (May 2011). Qualitative methods use strategies of inquiry such as narrative, phenomenology, ethnography, grounded theory and case studies (Bryman 2012; Creswell 2009). Qualitative research is not employed to produce generalisable results as "unlike quantitative researchers who seek causal determination, prediction, and generalisation of findings, qualitative researchers seek instead illumination, understanding, and extrapolation to similar situations" (Golafshani 2003, p.600). Qualitative methods are inherently descriptive and exploratory in their nature, and a generally not employed when the researcher in concerned with specific research testing (Babbie 2013).

3. **Mixed methods**

It is the nature of the data collection which distinguishes quantitative and qualitative research approaches. The analysis of the data is also approached in different ways by the different methodologies. Both approaches have their limitations in offering

comprehensive conclusions on a given research topic. On solution to address the shortcomings of adopting either a quantitative or qualitative research methodology is to combine both approaches in a 'mixed methodology'. This approach offers a useful strategy to develop more comprehensive answers to given research questions. Mixed methodologies utilise both quantitative and qualitative methodologies when collecting, analysing and interpreting data (Driscoll et al. 2007). Mixed methods are not appropriate for all studies however and come with their own set of limitations. For example, adopting a mixed methodology approach is both costly and time consuming. Additionally, adopting such an approach may result in the need to analyse and decipher potentially conflicting quantitative and qualitative data sets.

By considering these assumptions, Creswell (2009) highlighted four paradigms of research (worldview). Table 3.1 presents these four paradigms adopted from Creswell (2009).

Table 3.1 Research worldviews

Post-positivism	Constructivism
Determination	Understanding
Reductionism	Multiple participant meanings
Empirical observation and measurement	Social and historical construction
Theory verification	Theory generation
Advocacy/Participatory	**Pragmatism**
Political	Consequences of action
Empowerment issue-oriented	Problem-centred
Collaborative	Pluralistic
Change-oriented	Real-word practice oriented

Table 3.1 shows the post-positivism is characterised by a deterministic philosophy where outcome and effects are most likely determined by causes. Within the post-positivism paradigm research questions and hypotheses are tested by breaking down initially big concepts into smaller ideas which can then be tested (Creswell 2009). Post-positivists maintain that the world is governed by laws and theories, and that

only by examining these theories by testing, verifying and then refining them, we can gaining an insight into the true dynamics that shape different environments.

Alternatively, social constructivism suggests that individuals, in seeking an understanding of the world and environment in which they live, devise subjective meanings and understandings to their experiences. Understandably these meanings are varied and numerous which leads social constructivists to focus on complexity and intricateness of such views. They seeks to develop an understanding of the participants understanding of the situation being studied, rather than focusing on minimal ideas and categories which are limited in their scope.

The advocacy/participatory paradigm focus on the need for the research topic to be considering in relation to politics and political agendas. This paradigm presents the position that contained within the research being conducted lies an agenda for action which could potentially change the lives or environment of the participants, the institutions or processes under which individuals live or work within, and indeed the worldview of the researcher (Creswell 2009). This paradigm holds that with the intention to avoid the marginalisation of the participants of the study, the researcher adopted a collaborative approach. With this in consideration, there is the potential for the participants of the study to aid in designing the questions to be posed by the study, the collection of the data, the interpretation of the data collected and even to enjoy the benefits from the research being conducted.

Lastly, pragmatism sees environments formed from action, situations, and consequences rather than antecedent conditions (Creswell 2009). The pragmatic paradigm is concerned with workable solutions to problems (Patton, 1990). Researchers adopting a pragmatic paradigm tackle research questions by using all available approaches in the field and appropriate. Tashkkori and Teddlie (1998), Morgan (2007) and Patton (1990) have all highlighted that as an underpinning paradigm for conducting a mixed methodology study, a pragmatic paradigm focuses attention on the various research questions in the field of social science and then adopts multiple approaches to develop the knowledge base surround these research questions.

3.5 The Selected Research Methods

From the above argument, it is hard to claim that there are perfect methodologies which can be applied for all studies, as each research methodology has its own strengths and weaknesses (Amaratunga et al. 2002). When choosing the applied methodology, Babbie (2013) highlights that the research topic, objectives and questions are the key determinants. The main aim of this study is develop a culturally sensitive arts therapies programme for children with ADHD in primary schools in the KSA. In line with this, the main reason for choosing a mixed methodology for this study is the fact that, to comprehensively address the research question, two different questions need to be asked. These two research questions require different methodological processes. For example, the first question tries to identify existing developments in the field, while the second attempts to implement some first findings and evaluate them thoroughly. Due to the topic and the objectives of this research, there is a need to ask "How" questions to identify the current provision in the KSA regarding support for children with ADHD and the lessons that can be learn from arts therapists practising in the UK. Moreover, "What" questions are needed to evaluate the provision of arts therapies for children with ADHD. Both "How" and "What" questions require the use of a mixed methodology.

According to Seligman (1995), an efficacy study is not the best way to empirically validate psychotherapy, as it limits too many crucial elements. These elements include the fact that psychotherapy in practice is not of fixed duration; self-correction is common to change interventions or modality to suit the presenting clinical need of the patient; psychotherapy patients often select their own modality and therapist, especially in private health care; most psychotherapy patients present with co-morbidity and therapy aims at addressing interacting and parallel problems; practically, there is an issue for development in quality of life issues and general functioning, rather than a single emphasis on symptom reduction of a disorder.

Thus this research is conducted by adopting 'pragmatism' as the key philosophical paradigm and was used to underpin the mixed methodological nature of this study. This philosophy focuses on the need to find solutions to the problems raised by particular studies. Nevertheless, this approach allows enough methodological

flexibility to employ and engage with different perspectives (Biesta and Burbules 2004: 108). Thus the choice of methodology by the researcher lays the foundation for achieving the best possible answer to the research question. As pragmatism "accepts both objective and subjective points of view" (Giatsi-Clausen 2010), to reach meaningful conclusions, the researcher was required to constantly engage in the process of reflexivity (Tashakkori and Teddlie 1998) during this study.

There are many strengths and limitations in using either a quantitative or qualitative methodology. As Creswell and Clark (2011) argue, each individual methodology is associated with different theoretical concepts and philosophical ideas on how knowledge can be obtained for the purpose of the study (epistemology). Moreover, the suitable methodology is governed by the nature of the study itself. Researchers, including Tashakkori and Teddlie (1998) and Creswell (2003), have argued that using different methods in the same study minimises potential limitations. In other words, using both quantitative and qualitative methods allows the researcher to justify and discover the model components within one research. According to Greene et al. (1989 cited in Creswell and Clark 2011), there are five reasons for combining qualitative and quantitative in one single study. These are:

i) Triangulation: when convergence and corroboration of results is needed.
ii) Complementary: when clarification of the results from one method with the results from the other method is needed.
iii) Development: when the one method is used in order to help develop the other method.
iv) Initiation: where contradictions and fresh perspectives emerge.
v) Expansion: wherein the mixed methods add scope and breadth to a study.

Two of these reasons were addressed in this study and are presented in Table 3.2. This research focused more on qualitative methods to achieve its aims as due to the complex subject matter and nature of the investigation quantitative and qualitative approaches were seen as complementary. A mixed-methodology approach will help to minimise inaccuracies make an important contribution to the final interpretation of the result attained through this study into a complex and intricate social phenomenon (Byrne and Humble 2007).

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Table 3.2 The reasons for choosing mix methods design in the study

Rationale	Benefits to this research
Development	The information obtained in Stage One was used to develop an intervention programme which was conducted during Stage Two of the study.
Expansion	Mixed methods in this study allowed for both an understanding of the impact of an arts therapy programme and deeper understanding of the results.

As a mixed-method study, it combined both qualitative and quantitative tools of data collection (Byrne and Humble 2007). The qualitative approach is represented through the use of semi-structured interviews and field observations to generate data that served to aid the exploratory nature of the research. The quantitative approach is incorporated by using two questionnaires SDQ scale and ADHD scale. However, the semi-structured interview remains the main method of data collection.

The limitations of using a single methodology with its associated restrictions to understanding the complexity of human behaviour (Creswell 2009), leads researchers to combine or to build a bridge between the qualitative and quantitative research paradigms. This study is considered as a multi-phased mixed methods study with two stages. In the first stage, the researcher explored how experts in arts therapies describe arts therapies programmes. This stage was mainly conducted through qualitative methods, namely interviewing experts from both the UK and the KSA. Then the information was analysed and the findings used to develop a cultural-sensitive arts therapies programme for children with ADHD in the KSA. This programme, in turn, was administered to a sample of 12 students with ADHD to see if the qualitative findings can be generalised. According to Creswell (2003) qualitative methods are used to explore a topic where the theory base is unknown.

In the second stage, the researcher sought to evaluate the intervention programme. This stage was a natural progression from the first stage as recommended by the framework. According to MRC (2008);

"Including a process evaluation is a good investment, to explain discrepancies between expected and observed outcomes, to understand how context influences outcomes, and to provide insights to aid implementation. Including an economic evaluation will likewise make the results of the evaluation much more useful for decision-makers" (MRC 2008, p.4).

In this stage mixed methods were implemented to collect and analyse quantitative and qualitative data. The quantitative data was collected by using two instruments; the ADHD scale (Al-Khashrami and Ali 2009) and SDQ scale (Goodman 1997). This allowed for the comparison of the results both before and after the implementation of the programme. In the same time, qualitative data was collected using interviews with parents and teachers to determine why the programme did or did not work. According to Creswell (2003) mixed methods are used for both understanding the impact of a programme and to explore the results in greater depth (see Table 3.2). This stage used a pre/post experimental and control group mixed methodology design. The MRC (2008) framework suggests the conventional parallel group randomised controlled as the suitable method for evaluating an intervention programme. Thus, one group was randomly assigned to the arts therapies programme group while the other group was observed during their normal classes.

For the purpose of identifying existing developments (as in Stage 1), qualitative findings from semi-structured interviews with 'key informants' provided information about existing provision and relevant issues that needed to be taken into account when implementing arts therapies with this client group in this country. As limited information exists regarding working with this client group in both the UK and in particular the KSA, a qualitative approach using interviews as the method of data collection is more appropriate (Cresswell 2003). Furthermore, given the need for cultural issues to be identified as a way of developing relevant arts therapies intervention for children with ADHD in the KSA, the flexible nature of semi-structured interviews allowed for such information to emerge and to be followed up as required. As shown in Table 3.2, information obtained from Stage One was used to

develop guidelines for a culturally sensitive arts therapies programme for children with ADHD in the KSA.

The information obtained was then used to develop an intervention programme which was conducted in Stage 2 of the research where the effect of the intervention was explored from the perspective of the children, their parents and teachers (refer to Table 3.2). Pre- and post- tests of both an experimental and a control group were used. The outcomes were measured using the ADHD scale (Al-khashrami and Ali 2009) and the Strengths and Difficulties Questionnaire (SDQ) scale (Goodman et al. 2000) and analysed using descriptive and inferential statistics. Semi structured interviews also took place to obtain qualitative data from parents and teachers of the children regarding their perception of the programme (refer to Section 3.6.2).

3.6 Research Design

Research design is the plan and structure of investigation that enables the researcher to obtain answers to the research question (Creswell 2009). The choice of a research design is guided by the purpose of the study, the type of investigation, the extent of researcher involvement, the stage of knowledge in the field, the time period over which the data is to be collected and the type of analysis to be carried out, that is, whether quantitative or qualitative (Creswell 2003).

However, according to (Sarantakos 2005), any research requires two basic stages; the first is the planning stage, in which the researcher builds the plan and the design of his study, and the second is the implementation stage, in which the researcher collects and analyses the data. While Bryman (2012) and Sarantakos (2005:106) summarised the main purpose of the research design in the following:

i) Provide the researcher with the essential framework for collecting and analysing his data and reflect the succession of the research process.

ii) Offers a systematic approach to the study operation, thus guaranteeing that all aspects of the research will be addressed and that they will be completed in the right sequence.

iii) Makes the steps of the research design clear, enabling the researchers to foresee and prevent eventual errors, bias and distortions.

Moreover, Babbie (2013) argued that if the researchers clearly specified what they want to find out and specify the right research design, they will be able to reach their objectives. Figure 3.2 outlines the research process, which consists of two main stages. In order to achieve the main aims and objectives of this research, the research process employed different procedures in order to achieve the research objectives. These procedures are discussed in the next sections.
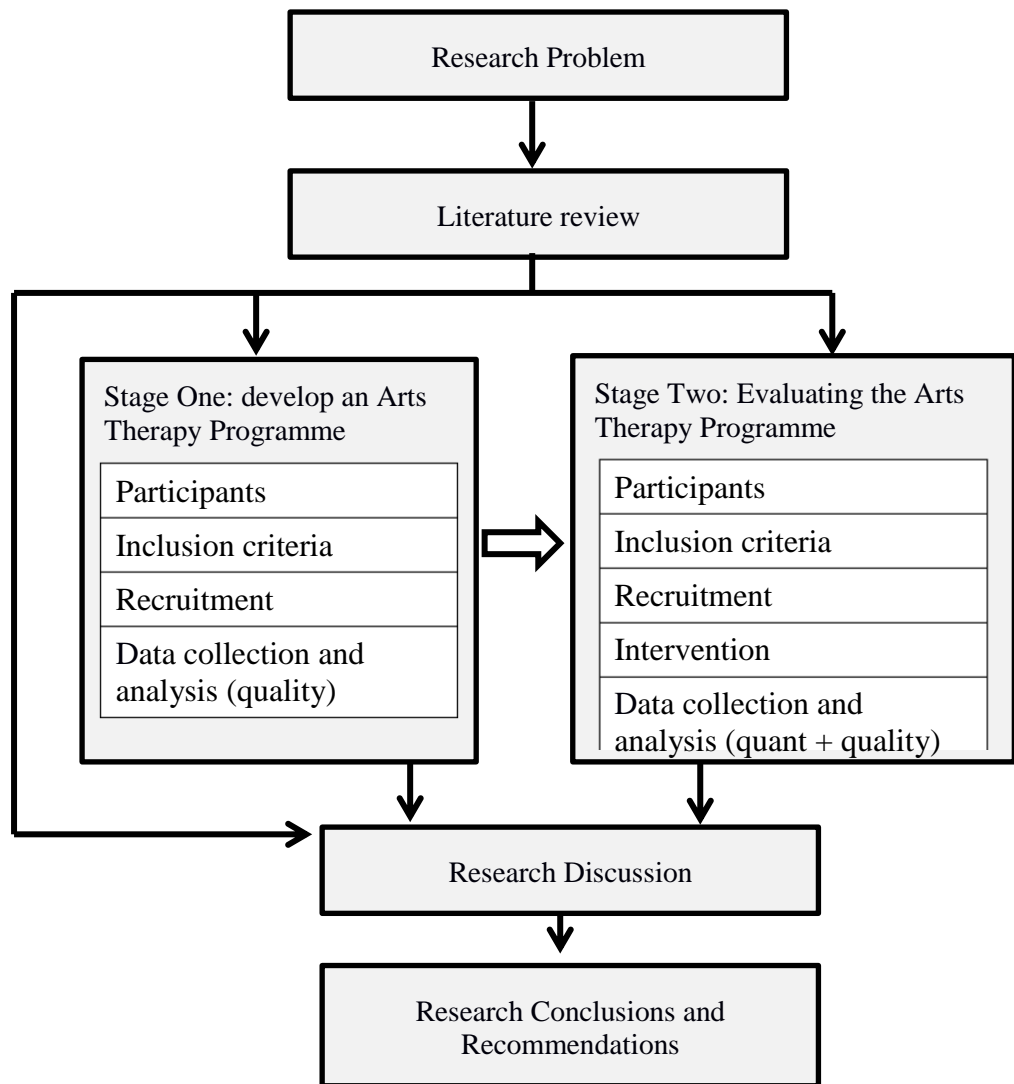
Figure 3.2 Research process

Qualitative and concurrent mixed methodologies procedures have been combined in this research. As Figure 3.3 shows, the whole study consisted of two phases. Qualitative methods were used during the first phase, while mixed methods were used within the second phase. Due to the choice of a mixed methods approach in this study (as defended in Section 3.5), the qualitative approach first helped to generate insightful information to identify the current provision and issues in conducting arts therapies for children with ADHD (Stage 1). Subsequently, quantitative and qualitative approaches used to evaluate the programme of arts therapies for children with ADHD in stage two. During Stage Two the research design adopted involved concurrent mixed methods procedures in which, according to Tashakkori and Teddlie (1998, p.18) and Creswell (2009, p.14), the researcher 'collects both form of quantitative and qualitative data at the same time' and then integrates the information in the interpretation of the overall results in order to 'provide a comprehensive analysis' (Creswell 2009, p.15). Figure 3.3 explains the interaction between various components of this research and indicates multiple data integration procedures, as specified by Creswell et al. (2011).

The complex nature of the study framework is a reflection of the fact that rather than being a linear pathway research is in reality a "set of interactive components" (Creswell 2011). This study incorporates quantitative and qualitative data and analysis at different stages, however this binary relationship forms a coherent dialogue within the study and at the end of the study they are completely integrated and complementary. As can be seen in Figure 3.3, qualitative data was applied more than quantitative data in this study.
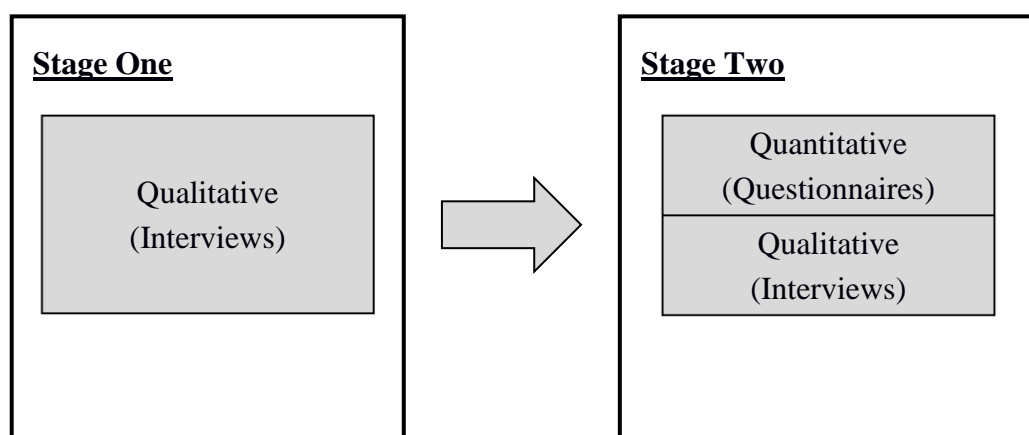
Figure 3.3 Visual model of the study design: qualitative and quantitative components

3.6.1 Stage 1: Developing Arts Therapies Programme

The main aim for this stage was to identify the current provision and issues in conducting arts therapies for children with ADHD. The information obtained assisted in the development of culturally sensitive guidelines for the delivery of an arts therapies programme which was to be conducted in stage two of the study.

3.6.1.1 Participants

The study at this stage was carried out in two countries: i.e. in the KSA and in the UK Participants were recruited from both countries in order both to compare methods of education and therapy between the countries, and to gain insights about techniques in UK arts therapies which can be used to inform the current programme. As Table 3.3 shows, eight key informants from the KSA who were invited to participate were; (i) four arts therapists (ii), the Head of the Special Needs Division, the Head of learning difficulties Division and the Head of ADHD Division in the Ministry of Education (MOE), (iii) the Head of rehabilitation programmes in schools and (iv) the supervisor of the ADHD School. The decision to include professionals outside the field of arts therapies was made in order to acquire context about the educational norms in the KSA, which would enable the researcher to judge the broader acceptability of arts therapies within KSA culture. This was especially important given the limited number of art therapists in the KSA who met the research criteria regarding length of practice.

Table 3.3 Participants in Stage-One of the research

No	Location	Participants (code)	Expected sample	Expected Sample	Final sample	Final sample
1.	United Kingdom (UK)	Art Therapists (AT)	3		3	
2.		Music Therapists (MT)	3		3	
3.		Dramatherapists (DT)	3		3	
4.		Dance/Movement Therapists (DMP)	3	20	3	21
5.	Saudi Arabia (KSA)	Art Therapists (AT)	4		4	
6.		Educators (ED)	2		2	
7.		Special Educators (SE)	2		3	

Twelve arts therapists in total, three from each of the four different arts therapies associations in UK to participate in the study, i.e. (i) the British Association for Music Therapy (BAMT), (ii) the British Association of Art Therapists (BAAT), (iii) the British Association of Dramatherapists (BADth), (iv) the Association for Dance Movement Psychotherapy UK (ADMP UK).

3.6.1.2 Inclusion criteria

1- For arts therapists in UK – twelve qualified arts therapists who hold a licence to practise from a professional association, i.e. BAMT, BAAT, BADth or ADMP UK and have been working directly with children for at least 6 months.

2- For art therapists in the KSA – four qualified art therapists who have been working with children with ADHD. Since arts therapies are not widely used in the KSA, there are no specified standards for training in arts therapies in the country.

3- For other key informants in the KSA – five people involved with special need provision in the KSA such as people from the MOE, in Saudi Arabia, Head of rehabilitation programmes in school and the supervisor of the ADHD School.

3.6.1.3 Background of the sample of art therapists in the KSA:

After consulting with the art therapy office in Riyadh, it appeared that practising art therapists in the country have the following backgrounds: (1) A counselling educational background; (2) An art educational background. The training and field experiences of such therapists were not in art therapy for clients with ADHD; therefore, their knowledge is limited to general practice of art therapy and other populations.

For the purpose of this study, a qualified art therapist is taken to mean one who has completed an intensive art therapy course run by Dr Alyami at his private art therapy clinic as there are few therapists who have worked with children with ADHD.

3.6.1.4 Recruitment:

1. **Participants from UK were recruited with the following procedures:**

Once Queen Margaret University (QMU) ethical approval [see Appendix: 7] was gained, the research representatives from the four professional associations of Arts Therapies in the UK were contacted in order to receive further approval for the study and identify potential participants who can act as key informants (a combination of purposive and snowball sampling was utilised, which was congruent with qualitative methods). The professional associations' newsletters and research networks were mobilised to identify people who have relevant experience and were interested in being interviewed for this study. Some therapists who were interested in the project, as advertised [see Appendix: 6] via various networks, contacted the researcher; others were directly contacted by the researcher. The researcher provided the Arts Therapies with the information sheet [see Appendix: 11] and then made contact with them, running interviews and obtaining signed consent [see Appendix:14].

2. **Participants from the KSA were recruited through the following procedures:**

An approval letter was received from the Ministry of Education [see Appendix: 2] and an approval letter from the supervisor of the one school which specialises in ADHD in Saudi Arabia for approval to conduct the study [see Appendix: 3]. A letter was also received from the art therapy office [see Appendix: 4] and a letter from the Head of the art therapy division, in rehabilitation hospital at King Fahad Medical City

(KFMC) [see Appendix: 5] in the KSA. The researcher contacted the art therapists and the educators to provide them with the information sheet [see Appendix: 12/13] and then contacted them, running interviews and obtaining signed consent. [see Appendix:14].

3.6.1.5 Method of data collection:

Semi-structured interviews [refer to Section 3.7.1] were used for data collection to obtain information regarding perception, experience and issues regarding treatment for children with ADHD. According to Ryan et al. (2009), interviews are a useful and flexible method of data collection and are particularly suitable for collecting information on participants' experiences, perspectives and beliefs. Interviews were preceded by a review of the available literature in the field, to gain insight into both the theories informing arts therapies practice in relation to ADHD, and the practical methods used in such programmes in studies to date. Up till the present, the use of arts therapies with this client group has been very limited, which further emphasised the need for interviews with therapists in this field. Following the literature review, therefore, interview questions were created with a twofold agenda: to understand the main theories underlying the use of arts therapies with children with ADHD, and to build up a picture of the practical strategies considered most helpful when working with this client group. The interviews were recorded using a digital recorder. English language was used for interviewing participants in UK, while participants in the KSA had the option to communicate in Arabic or English. Where Arabic was chosen, it was subsequently translated into English by the researcher and a qualified translator and further examined by an English proof-reader.

3.6.1.6 Data analysis

The data obtained through the semi-structured interviews was transcribed verbatim, typed, checked for accuracy by a transcription service company in the UK, as well as by the researcher, and analysed using thematic analysis: coding the data, grouping the codes into themes which in turn reflect broader themes (Cresswell and Clark 2011). Thematic analysis and its procedures are discussed in Section 3.9.2 below.

To provide further explanation, quotes from participants' transcripts are used to validate the themes and categories that emerged after the thematic analysis. The quotes and themes obtained from participants who communicated in Arabic were translated into English.

3.6.2 Stage 2: Evaluating the Arts Therapy Programme

The second stage involved:

3. pre and post testing of both experimental and control groups, using SDQ questionnaires and an ADHD scale

4. video recording observations of sessions and keeping reflective notes for the intervention

5. semi-structured interviews with parents and a teacher of the children participating in the experimental group, as well as informal one-to-one meetings with the children before and after intervention. This meeting allowed the researcher to gain some useful information regarding the complexities of ADHD, both in terms of abilities and severity (see Section 3.6.2).

3.6.2.1 Participants:

The study at this stage was carried out in the KSA and the participants were children with ADHD, their parents and teachers. These participants were not matched for certain characteristics (e.g. age and gender). Table 3.4 demonstrates the sample size in this stage.

Table 3.4 Participants in Stage-Two of the research

Location	Participants	Expected sample	Expected sample	Final sample	Final sample
Saudi Arabia (KSA)	Parents	12	24	12	19
	Teachers	12		7	

3.6.2.2 Inclusion criteria:

1. Children with ADHD – with diagnosis of ADHD for at least a year. The children had to be between 6 and 12 years old, and able to verbally communicate with therapist. The age range has been selected on the grounds that this is the age where ADHD prevalence is most noticeable with the diagnostic methods currently used.

2. One parent/guardian for each of the 12 participating children – father, mother or other responsible adult for each participating child was interviewed. Parents/guardians must have been living with the participating children for at least six months and needed to be available to communicate with the arts therapist.

3. One teacher for each of the 12 participating children – teachers must have been working or having weekly contact with participating children with ADHD, for at least six months.

3.6.2.3 Recruitment:

A second Queen Margaret University (QMU) ethical approval [see Appendix: 15] was gained for this stage; Children with ADHD and their parents (father or mother) or guardians were contacted through teachers in the one school in Saudi Arabia which specialises in children with ADHD. The Head teacher of the school contacted the selected children and their parents and teachers by letter or email, providing them with the information sheet [see Appendix: 16-18] at least two weeks before the programme is due to start. The researcher made contact with the families thereafter, running interviews and obtaining signed consent [see Appendix: 21-23] at least one week after they had received the information sheet, in order to give them time to read and understand it. A letter from the supervisor of the ADHD School in Saudi Arabia confirming approval to conduct the intervention was received on October 2013 [see Appendix: 26].

Children were randomly allocated to either an intervention or the control group through a computer generated randomisation scheme, with six participants in each group. The groups were not blind to the intervention they received, as blinding was

not possible in this study; it would have been clear to children whether or not they were in the group receiving arts therapies. For the children in the experimental group, the researcher decided, based on initial one-to-one meetings, which children should be in which pairs, depending on age, school timetable, and the severity and type of their ADHD, as judged by teachers and the Head of the school. Children in the intervention group participated in the culturally sensitive arts therapies programme at the school specialising in ADHD, taking part in arts therapies sessions based on the review literature, as well as findings from interviews with UK and KSA therapists and educators. Children in the control group remained in the classroom with their teacher and continued to receive their normal standard curriculum. The school setting was the most practical choice because the children were at school every day as a matter of course. In addition, carrying out the intervention at school gave good ecological validity as the intervention was in a natural environment. By not removing children from their familiar school setting and causing as little disruption as possible to their normal school timetable the research avoided creating an artificial environment, which is preferable (Jadad 1998). In addition, school is an appropriate setting since school is a potential place where future movement therapy may be held.

The main teacher of the children was recruited based on experience working with children with ADHD and availability. During the interview with the teacher during the first stage he said he was happy to participate in the second stage. The researcher received formal consent by asking him to sign a consent form. However, during the interview which preceded the signing of the consent form, the interviewer stressed that there was no obligation to participate, and that the teacher could withdraw at any time.

3.6.2.4 Intervention

The protocol for the intervention in stage two was developed from the interview data from stage one and incorporated with the theory obtained from the literature review. Relevant literature to draw upon included the study conducted by Karkou and Sanderson (2006) that involved an extensive survey of arts therapists practising in the UK. They identified, for example, how different theories and principles inform the work of the therapists, and how these may differ depending on whether the arts

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therapists work in educational settings or in other environments, i.e. clinical. The work of Winnicott (1971) and developmental theories were found to dominate. Payne (1992) favoured developmental theories and Gestalt therapy for younger, latency-aged autistic and some children with learning disabilities in an educational setting which proved more relevant to this study in terms of activities selected; duration; frequency of intervention etc.

Moreover, interview data (from Stage 1) also revealed how practitioners carried out their therapy sessions including information on material used, activities chosen, techniques and any other instruments employed (see Section 3.6.2). The room and physical boundaries were noted to ensure that the most appropriate space was allocated for the intervention. The structure of session was an extremely important consideration. Murphy et al. (2004) emphasise the importance of structure in promoting group cohesion and give each session a recognisable shape which as a result provides a framework where children feel secure. Other studies have acknowledged that their lack of success was possibly due in part to a lack of structure (Rickson and Watkins 2003).

3.6.2.5 Methods of data collection and data analysis:

There were two methods of data collection and data analysis at stage 2 of the study as described below:

1. **Quantitative data collection and data analysis.**

The data was collected from the control and experimental groups at the pre- and post-intervention phase. The study at this stage followed a pilot randomised control trial design (West and Spring 2009), which aimed to determine any quantitative changes in attentiveness, hyperactivity, impulsiveness, emotional wellbeing, social relationships and emotional regulation associated with the culturally sensitive arts therapies programme.

Quantitative data included demographic characteristics as well as changes in ADHD symptoms, using the ADHD scale to test the extent of symptoms (Al-khashrami and Ali 2009) and overall emotional wellbeing, social skills and emotional regulation using Goodman's Strengths and Difficulties Questionnaire (SDQ) (Goodman et al.

2000). The implementation of the ADHD Scale shows that it is valid and reliable to be used in identifying children with ADHD symptoms in Saudi Arabia. One for teacher and one for parent/guardian for each of the 12 participating children were asked to complete these two standardised questionnaires before and after the intervention.

Quantitative data was collected by an assistant – a university lecturer with a background in art education – invited to support the researcher in the study in order to reduce any bias and increase reliability of the research.

Project assistants were trained in assisting the therapists for the following:

- To assist students in art activities when needed

- To carry out an intervention upon a therapist's instruction

- To model activities for children

- To apply arts therapy rules

- To help children attend sessions

Descriptive and inferential analyses were used in order to describe and identify any differences before and after the intervention, both within each group and between the two groups. Due to the low number of participants, non-parametric testing was performed using the SPSS (version 21) statistical software.

2. **Qualitative data collection and data analysis.**

Qualitative data was collected with regards to the arts therapies intervention only. Semi-structured interviews (see Section 3.7.1 below) were used for data collection both before and after the intervention. The first set of interviews were designed to obtain information regarding children's behaviour and emotional wellbeing, relational/social skills, emotional regulation and value of the culturally sensitive arts therapies programme (for parents and teachers). After the intervention, further interviews were conducted to gain insight into whether parents and teachers felt the therapy had any impact on the children's social skills, emotional wellbeing and emotional regulation, and to reassess their judgement of the value of arts therapies.

The interviews were recoded using a digital recorder. Parents and teachers had options to communicate either in Arabic or English.

The researcher also met the children in the experimental group before and after the intervention, to give them an opportunity to express how they feel the therapy has helped them. These interviews did not constitute formal data, but were part of the process of creating trust and understanding between the children and the therapist. The researcher recorded observations of the participants during the sessions in a reflective diary. Interview data was analysed using thematic analysis (refer to Section 3.9.2 below).

3.7 Data Collection

Data collection methods are mechanisms and instruments employed to obtain research data (Mack 2005). Examples of these methods are interviews, questionnaires and observations. Some of these tools are quantitative, such as questionnaires, surveys and laboratory experiments, and some are qualitative, such observations and interviews (Babbie 2013). The quantitative method was originally established to examine natural phenomena and comprises of data collection techniques and data analysis procedures, which produce and use numerical data (Bryman 2012).

Conversely, qualitative methods are intended to build a more holistic picture of the field of study, and as such, are characterised more as a process of inquiry. Despite this, Bryman (2012) highlight the difficulties in using this method as it can be considered impressionistic and subjective. This means that the results often rely upon the unsystematic views of the researcher, and depend on the ingenuity of the researcher.

Despite this, mixing qualitative and quantitative methods can draw multiple advantages. In the current research, the choice of using qualitative and quantitative techniques could increase the reliability and validity of data collected (Bryman 2012). In this study, as mentioned before, in order to meet the objectives of the study and answer the research questions, the decision was made to adopt a multi-method approach through using semi-structured interviews; self-administered questionnaires

delivered and collected by the researcher; and observations (These observations provided the researcher with useful insights but were not included in data analysis).

3.7.1 Interviews

Semi-structured interviews were the first method of research used in the program of study. It is possible to define interviews as a conversation either between the research and another participant, or among participants in a group setting. The researcher used questions to ascertain information from the participants which is relevant to the subject being investigated (Powney and Watts 1987). As a data collection method, interviews are generally qualitative in their nature.

The advantages of interviews are that they allow the opportunity to delve into the feelings, attitudes, values, perceptions and experiences of the interviewees. There are two different types of qualitative interviews, these are: unstructured and semi-structured. Unstructured interviews present the interviewee with open questions allowing them to offer more explanatory answers. Semi-structured interviews generally rest somewhere in-between unstructured and structured interviews.

Semi-structured interviews consist of numerous questions that address specific points about the topic in questions which are tied back to the research questions. Interviewees are asked the complete set of question in a consistent and systemic manner, yet, interviewees are allowed and in some cases encouraged to expand their responses and branch into related subject matters (Bryman 2012).

This degree of flexibility in semi-structured interviews allows the researcher to develop and control the follow of the conversation. This dynamic allows the researcher to pursue certain pathways within the interview as different topics and opinions emerge, allowing themselves greater freedom to probe interesting responses. Additionally, interviewees have the opportunity to freely express opinions, behaviours, beliefs, knowledge that pertain to the developing conversation all the time within a structured environment which itself allows for a framework to exist that allows for the comparison and analysis of interviews (May 2011).

Based on the above, this study adopted semi-structured interview in the first stage of the research to collect the primary data from practising Art therapists [see

Appendix:8] and educators in the KSA [see Appendix:9] regarding the current provision in the country for supporting children with ADHD and the lessons that can be learnt from arts therapists practising in the UK [see Appendix: 10]. This research, also, adopted semi-structured interview in the second stage of the study to evaluate a culturally-sensitive provision of arts therapies for children with ADHD, from the perspective of parents and teachers.

Nevertheless, it is important to bear in mind the issues raised by Creswell (2009) when he illustrates four key concerns within the interview process. These are; (i) an interview provides indirect information filtered through the view of interviewees; (ii) an interview provides information in a designated place rather than the natural field setting; (iii) researcher's presence may bias responses; and (iv) not all people are equally articulate and perceptive. Furthermore, conducting a large amount of interviews may be hard due to the obtaining access to the appropriate interviewees. In this research, the researcher made every attempt to ensure that a convenient time and place was selected for the participants. Leading questions were avoided during the interviews. Moreover, the participants were reminded that the interview could be stopped at any time and that their consent could be withdrawn at any time without prejudice.

3.7.2 Questionnaire

A self-administered questionnaire was used to collect the quantitative data in Stage two of the research. May (2011) and Bryman (2012) outline several advantages to this approach. Firstly, self-administered questionnaires have an important practical advantage both in terms of cost and time. This method of data collection is more cost effective than traditional face-to-face interviews and allow for the researcher to collected data from a much wider area or sample size than would be possible with traditional interviews. Secondly, such an approach is far more convenient for the interviewees as it allows them to complete the questions at their own pace, with more time to consider their response and in an environment to which they are more accustomed. Additionally, it removes any effect the presence of an interviewer might have over the answers given by the interviewees. These advantages must of course be weighed against the disadvantages associated with this approach to collecting data.

For instance, the respondents are unable to request for help or clarification if they struggle with answering certain questions. Also, there are issues connected with the interviewee reviewing the entire questionnaire before tackling the questions, leading to a potential loss of independence for the questions. There is also the potential for the interviewee to skip or miss off questions and indeed even a level of uncertainty of who completed the questionnaire. There is also the possibility of getting a small level of response (Bryman 2012).

Two questionnaires were adopted after a careful review of the literature, and the researcher's frequent discussions with his supervision team. These included the ADHD scale and the SDQ scale (discussed below). These scales were deemed appropriate for the main question which aims to evaluate the value of culturally-sensitive provision of arts therapies has for children with ADHD.

3.7.2.1 Attention Deficit Hyperactivity Disorder scale

The ADHD scale was developed to test the extent of ADHD symptoms by Al-khashrami and Ali (2009), depending on Ali's (1999 cited in Al-khashrami and Ali 2009, p.83) study to fit the Saudi society context. This scale contains 128 items; 70 items for the school version of the scale [see Appendix: 27] and 58 items for the home version [see Appendix: 28]. As can be seen in Table 3.5, ADHD scale covers the three components of ADHD, i.e., inattention, hyperactivity and impulsivity. Each item is a 5-point scale (0-4) arranged in the following format: Never, Rarely, Sometimes, Often, and Always.

Table 3.5 The components of ADHD Scale

ADHD components	School Version		Home Version	
	No.	Items	No.	Items
Inattention	38	1-38	32	1-32
Hyperactivity	20	39-58	16	33-48
Impulsivity	12	59-70	10	49-58

3.7.2.2 Goodman's Strengths and Difficulties Questionnaire (SDQ)

The SDQ was initially introduced as a brief screening instrument in mental health and later on became widely used internationally (Goodman et al. 2000). According to Goodman (2005), SDQ is highly recommended to use in studies for measuring outcomes of mental health disorders and to assess emotional and behavioural difficulties. SDQ consisted of 25 items with each subscale consisting of five for the school version [see Appendix: 29] and the home version [see Appendix: 30]. Each item is a 3-point scale (0-2) arranged in the following format: Not true, Some what true, and Certainly true. The SDQ yielded individual scores for aspects like emotional symptoms subscale, hyperactivity/inattention subscale, conduct problems behaviour subscale, prosocial subscale and peer problems subscale. SDQ has been seen as a very common tool to study emotional and behavioural difficulties in children with ADHD disorders and has been used widely by researchers, as seen in Classi et al. (2012), which examined impacts of co-occurring emotional and social difficulties of children with ADHD; Papageorgiou et al. (2008), which examined teachers' and parents' ratings of ADHD symptoms; Czamara et al. (2013), which examined the co-morbidity between symptoms of ADHD and reading/spelling and math difficulties.

Arabic version of SDQ is capable of predicting psychiatric diagnosis precisely as reported by Alyahri and Goodman (2006), with high value in terms of screening purposes and epidemiological studies. They claim that SDQ can be used without country difference, and it has the possibility to be used as a screen to assess psychiatric disorders. The main advantage according to the researchers is that using SDQ not only helps to cover common areas of behavioural and emotional difficulties, but also checks whether informant feels that the child really has a problem in concerned areas. Results from Almaqrami and Shuwail (2004) and Alotaibi (2014) suggest that SDQ in Arabic version is very useful to investigate emotional wellbeing and childhood behavioural problems.

3.7.3 Observations

Observational evidence is a method to generate additional data about a certain area of study and helps the researcher to gain a better understanding of the research topic (Creswell and Clark 2011). The researcher spent almost three months conducting his

fieldwork in the KSA during Stage Two of the research. This long period of time gave the researcher the chance to take reflective notes about the arts therapies programme on both the control and experimental groups. These observations were easy for the researcher since he shares the language and social background of the respondents. The researcher wrote down these observations immediately after each programme session. These observations helped to form a general understanding of the school environment and programme evaluation. It also gave the researcher a deeper and more comprehensive understanding when it came to writing his discussion and conclusions. As mentioned above, these observations provided the researcher with insight but were not used as actual data analysis.

3.8 Reliability and Validity

According to May (2011), there are two criteria for testing the quality of research methods: validity and reliability. A number of steps were taken during the research to improve the reliability and validity of the research.

3.8.1 Test for validity

Litwin (1995) considers that the validity of research is determined by the ability of the data collection methodology/ instrument to successfully capture the data/ information it was designed to capture. Thus, the method/ instrument can be considered valid (internal validity) if it manages to collect the data needed to address the research objectives (Bryman 2012). Ruane (2005) believes that validity is focused on the ability of the research instruments to arrive at accurate results. Another factor in which the concept validity must be considered, is the ability to generalise the results, for example reaching conclusions for a whole population based on a much smaller sample size (external validity). It is essential therefore that research tools are appropriately selected to collect the data needed to address the research questions.

Content validity is one of the approaches that assess the validity of an instrument by the judgement of a group of experts to confirm that the questionnaire comprises an representative and adequate set of questions that reflect the real meaning of the concept (Litwin 1995). For this research, the content validity of questionnaire

questions in stage two was reviewed by the supervision team, the advisor and an expert from the KSA.

Furthermore, several steps in the research design were taken to improve the trustworthiness of the findings. For example, the researcher eliminated selection bias through randomisation of all research participants and the researcher clearly delineated sample characteristics in the inclusion and exclusion criteria. Both SDQ and ADHD measures were previously tested and founded to be valid (e.g. Sander et al. (2007) and Giannakopoulos et al. (2013) for SDQ test; Alyahri and Goodman (2006) and for Arabic versions of SDQ test; and Al-khashrami and Ali (2009) for ADHD test).

Regarding to the validity of SDQ test, Goodman (1997) in his study used Receiver Operating Characteristic (ROC) curves to test the validity of SDQ and to compare it with Rutter questionnaires, which helped to study about the paired nature of the data. The ROC analyses depicted the ability of SDQ to distinguish between psychiatric and non-pyschiatric samples. The performance of the SDQ is stabilised by three of its design features including inclusion of both strengths and difficulties, using same questionnaire for both teachers and parents thereby enhancing correlations between parents and teachers, and a condensed presentation on one side of paper.

The validity of ADHD scale was tested by Al-khashrami and Ali (2009) through implement it on a sample of 4087 students of Saudi elementary schools. The validity was tested by three ways: 1) content validity 2) construct validity and 3) face validity ($p < 0.01$). The practical implementation of this scale indicates that it is valid and reliable ($\alpha > 0.96$ for all factors) for identifying children with ADHD symptoms in the KSA.

3.8.2 Test for reliability

Reliability refers to the ability of the devise or method of data collection to produce consistent data over time whilst taking into account an acceptable margin of error within the data collection (Golafshani 2003; Creswell 2009; Bryman 2012). Bashir et al. (2008) believe that research devises, methodology or results can be considered as reliable if such approaches are able to replicate the same results when retested with the same conditions at a later date. Many researchers argue that since reliability issues

concern measurements then the concept has no relevance in qualitative research Golafshani (2003). For instant Stenbacka (2001) stated that;

> It is obvious that reliability has no relevance in qualitative research, where it is impossible to differentiate between researcher and method. The basic distinction that makes reliability irrelevant is the notion of measurement method, which is not relevant in qualitative research (Senbacka 2001, p.552).

Validating the reliability of responses given by participants in quantitative research is usually done by using one of three possible approaches. These are the internal consistency method, the alternative form method, and the test and re-test method. (Litwin and Arlene 1995). The internal consistency method is based on 'Cronbach's Alpha Test' and Field (2013) believes that this method is the preferred approach in statistically determining the reliability of questionnaire responses. Gray and Kinnear (2012) argue that this type of reliability is used to assess a summated scale where several statements (items) are summed to form a total score for a construct.

Table 3.6 presents the reliability results of the Cronbach's alpha coefficient for key diminutions in the ADHD questionnaire used in this research. As shown in Table 3.6, the values for the Cronbach's Alpha coefficients ranged from 0.86 to 0.98, and were considered to have a high level of reliability for this measurement (Gray and Kinnear 2012).

Table 3.6 Reliability Results of ADHD Questionnaire

items	Parents		Teachers	
	Pre-test	Post-test	Pre-test	Post-test
Inattention	95.2	94.6	97.4	97.5
Hyperactivity/impulsivity	93.4	85.6	97.3	97.5
Total ADHD	96.3	95.0	97.9	98.1

3.9 Data Analysis

3.9.1 Methods used for analysing the quantitative data

The quantitative data in this research was analysed by using a simple statistical application design using the SPSS statistical package version 21 to aid with the configuration and investigation of the data. Chapter 5 presents the quantitative analysis of the data collected during this study to help build up a level of understanding on the evaluation of the programme (findings of Stage 2). The comparative method (see Section 5.2) was seen by the researcher as the preferable approach given the style of questions used to evaluate the design of art therapies to fit within the cultural sensitivities of Saudi society.

3.9.2 Methods used for analysing the qualitative data

In both Phase One and Phase Two of the study, thematic analysis was used as the method for analysing interview transcripts. Thematic analysis is a method for identifying, analysing, and reporting themes within qualitative data (Braun and Clarke 2006; Bryman 2012). Thematic analysis allows researchers to identify patterns in their raw data, and create 'codes' and 'themes' which allow for the collation and analysis of examples of these patterns. Patterns may be explicitly expressed, or they may be implied through context. When the 'codes' and 'themes' have been identified, the patterns in the data are found.

There are two ways of conducting thematic analysis; an inductive or 'bottom up' approach and a theoretical deductive or 'top down' approach (Braun and Clarke 2006). An inductive approach means the themes identified are strongly linked to the

data themselves 'data driven' and includes a process of coding the data without trying to fit it into a pre-existing coding frame. In contrast, a theoretical thematic analysis would tend to be driven by the researcher's theoretical or analytic interest in the area (Braun and Clarke 2006; Vaismoradi et al. 2013).

In this research, inductive thematic analysis was used to analyse qualitative data. Joffe and Yardley (2004) recommend inductive analysis especially in fields that are under-researched, thus for this study, this mode was maintained as much as possible. Therefore, codes were derived entirely from the content of the data, without any prior agenda.

The qualitative data-analysis software, such as NVivo (v.10), was considered as a means of studying the interview data. NVivo (v.10) organises the data, and allows researchers to retrieve quotes and develop diagrammatic representations of the codes. However, it was decided that a more hands-on, physical approach using Microsoft Excel (v.2010) would be used, which was better suited to the researcher's preferences.

The researcher used six stages for doing thematic analysis developed by Braun and Clarke (2006). These stages are:

1- Familiarising with data

As recommended by Schmidt (Burnard 1991; Flick et al. 2004), the first stage of thematic analysis tends to be a thorough and repeated re-reading of the data. In this case, however, this was preceded by translating the data from the original Arabic into English. The decision was taken to translate the interviews before the thematic analysis, rather than after, to minimise the effects of over-familiarisation with the data on the terms used to translate the interviews. It was felt that translating the interviews before beginning the thematic analysis would maximise familiarisation with the data.

2- Coding

After this translation, the interviews were converted into PDFs, and line numbers were added. They were then read and reread. After thorough familiarisation with the data, the researcher generated an initial list of interesting observations that emerged from the date and assigned them initial codes. Repeated codes were then formed into

a list. After several readings, the researcher began to label the repeated concepts and ideas in the data, using the 'Comment' feature in Microsoft Word (v.2010).

3- Searching for themes

As this labelling continued, the researcher analysed the codes for similarities and differences and subsequently arranged them into potential themes. According to Creswell (2013); themes are considered as broad units of information that were consistent across different codes to form a grouped common idea. In this stage, the researcher began to identify recurring patterns in the data, especially those relating to the research question and any other themes that emerged inductively and could not have been anticipated. In some cases, these were explicitly occasioned by a particular question, and clearly stated by the interviewee (for instance, observations about a child's friendship groups). Other patterns related to more subtle undercurrents in the data which were not explicitly expressed, such as underlying cultural expectations and beliefs about ADHD. Potential themes and sub-themes were used to make a table using Microsoft Excel (v.2010), and the relevant data-units were entered into that table together with the associated line-numbers from the PDFs. Following Braun and Clarke's (2006) suggestions, this stage ended with a collection of candidate themes, main and sub-themes, and all extracts of the data were coded in relation to main themes and sub-themes.

4- Reviewing themes

This stage aimed to examine whether all candidate themes were significantly important to be considered as themes. During this stage, it is common for some themes to collapse into each other whereas other themes may need to be divided into two separate themes (Braun and Clarke 2006). The researcher revised and modified themes that were created using Microsoft Excel (v.2010). It became clear at this stage that certain "patterns" were not in fact recurring with sufficient frequency for those to be robust enough to be included in the final report; these were therefore discounted. It also became clear where overlaps between the sub-themes were so extensive as to devalue some of them; these sub-themes were similarly discarded at this stage of the analysis.

5- Defining and naming themes

Boyatzis (1998) recommends that a code should consist not just of a label, but also of a clear definition of the theme, and – importantly – exclusions relevant to that particular theme. During this stage the researcher identified the essence of what each theme was about. The researcher organised data of every theme and organised these themes into a coherent consistent account. This means that for every single theme the researcher conducted a detailed analysis through identifying a story that each theme conveyed. This process involved going through the data several times, ensuring that every unit of data was coded according to the now-finalised themes and sub-themes. Following that, the relationships among the themes were found. The researcher then set these themes up into a new story which would give a sense of the whole analysis. At the end of this stage a clear picture of the themes existed.

6- Producing the report

This stage consisted of illustrating a description of the data and providing an argument according to the researcher's own views and in light of the perspectives in the literature (Creswell 2013). Following Sparkes (2005), quotations were used to demonstrate descriptions of the data. This final stage involved reviewing each theme and sub-theme. For example, in the post-intervention interviews of Phase Two in this study, this involved recording any significant differences in the patterns across the experimental and control groups. According to Braun and Clarke (2006, p.23); it is important that the analysis (the write-up of it, including data extracts) provides a concise, coherent, logical, non-repetitive, and interesting account of the story the data tells – within and across themes. These analyses involved linking the patterns back, where relevant, to the research question, and suggesting their implications for the study overall.

3.10 Ethical Consideration

The researcher considered specific ethical areas during the entire research process; before, during and after the intervention. According to Bryman (2012) the most important areas and concerns that the researcher had to consider and fulfil were: (i) whether there is harm to participants (ii) whether there was sufficient information

provided to the participants (consent form and information sheet); (iii) whether there is an invasion of privacy (anonymity and confidentiality); and (iv) whether deception is involved.

These issues were addressed clearly by the researcher in two ethical approval forms that were submitted for each stage to Queen Margaret University. The researcher clarified and confirmed how the participants would be informed about the programme.

All interviews completed were anonymised and a coded number was given to them in order to protect participants from being identified [see Appendix: 31/33]. The code sheet was saved separately from the interviews at the researcher's home in a locked cupboard. Electronic transcripts of the interviews were stored in the researcher's home computer with a password known only to him; the password was regularly changed. All tapes were deleted after they have been transcribed. All details that identify participants were locked in a separate cupboard from the rest of the data, and a code sheet with numbers replacing names on the data was created and safely locked separately from the names, information and the data. Any transfer of data from one computer to another took place through safe protected memory sticks, while transferring data from the researcher's home computer to QMU took place through saving files on his QMU desktop within Citrix. All interview transcripts will be destroyed after five years of the completion of the study in accordance with Queen Margaret University policy. The researcher is the named data guardian responsible for ensuring that all study information is destroyed at the end of the 3 year period.

All interviews were digitally recorded with written permission from interviewees and following an explanation of the study, its purpose and the potential use of the interview data. This intended to minimise any misconceptions on the part of the interviewees regarding the nature of the study and was aimed to lead to informed consent. During the interview participants were able to stop the recording at any time. They were reminded that the interview can stop at any time and that their consent can be withdrawn at any time. The study may be published or presented at conferences. However, the participants' personal information will not be mentioned at any time.

As the research project also involved running movement therapy with children between 6 and 12 with ADHD, great care was taken to ensure their well-being at all times. Their ADHD did not interfere with their right to consent or to withdraw from the study. The intervention was designed to involve the children in familiar activities to enhance trust and build a relationship between the researcher and the participants. Arts therapies may be new and unfamiliar; therefore it was important to reduce any feelings of distress or discomfort. Each session followed a routine so the children know what to expect which further reduced anxiety.

Because the youngest participating children (around ages 6-10) were unlikely to be able to read or write, due to their age and ADHD (school starts at age 7 in the KSA), they did not receive information sheets beforehand. However, they met one-to-one with the researcher, two or three days before the programme starts. During this meeting, the researcher explained the programme, using pictures, and asked the child to give verbal assent to the various aspects. An observer (either the therapist's assistant, or a school teacher) bore witness to the child's verbal assent. The researcher answered any questions, and asked them verbally if they would like to participate. Any children who did not want to participate would hypothetically have been free not to do so. The children were free to take an information sheet with pictures away with them.

Children who were able to read (around ages 10-12) were given an information sheet during the interview, and had it explained to them by the researcher. In the same way as the younger children, they gave verbal assent which was witnessed by an observer. Due to KSA cultural norms, they were not asked to physically sign an assent form; an act of such formality for such young children would not have been considered appropriate.

The teacher was given an information sheet by the head teacher two weeks before the programme started, and was interviewed around one week before the programme began. Before the formal interview began, the interviewer stressed that participation is voluntary, and obtained a signed consent form from the teacher.

Any questions or concerns from either participants or parents throughout the intervention were addressed immediately. Culturally sensitive issues were also

addressed by having a female on hand to liaise with mothers or female guardians if necessary.

The process was monitored throughout:

- Both the researcher and an assistant were present during the sessions, both with experience of working with children with ADHD. Both had teaching qualifications and extensive experience of working with this population.
- Also the study was monitored through the external advisor: Prof Vicky Karkou was consulted regularly and acted as a clinical supervisor as well as an academic advisor.

3.11 Reflexivity

I was reflexive throughout my research process. I endeavoured to be reflexive through understanding my feelings in connection to the arts therapies. The nature of inquiry included personal contact with parents and teachers of the children that participated in my research. The interviews that I conducted were in depth and uncovered surprising details and information regarding the treatment of children who suffer from ADHD. I was personally challenged by some of the comments from the teachers and parents during the interviews as I deemed them to be ethically unacceptable according to my own personal views. As a researcher I was trying to be as objective as possible, therefore, I tried to ensure that my opinions and personal values were not reflected in the research.

As an arts therapist, I understand and recognise how therapists can use reflexivity. I am naturally self-aware of my own feelings and throughout my research I ensured that I was objective in order to not be affected by other people's opinions so as to ensure that my research was as impartial as possible. My reflexivity not only related with the parents and teachers or the children but also with the relationship with the assistant who helped me conduct my research.

Admittedly, it was difficult at times to manage my own feelings when they differed from the opinions of my assistant during the treatment sessions. On a few occasions my assistant was challenged by the protocols and rules that I established in working

with the children, and at times there was potential for conflict to develop between us. As I recognised this early on I ensured that I acted sensibly and calmly so that any conflict did not arise. By maintaining a professional relationship with my assistant and by ensuring that we did not have arguments in front of the children we helped to foster an open and unbiased setting to conduct the research in.

I tried to prepare myself before developing the programme through the expertise gained from extensive reading in the field. Also I prepared myself through debates and by attending conferences. Furthermore, I have attended some intensive courses in art therapy and movement therapy in order to be able to develop and evaluate the intervention for this sample.

Before starting the program for children with ADHD, I conducted a small pilot with some children to ensure the duration and applicability of the activities was appropriate and to raise any difficulties I may face. At the end of every working day with children, I tried to do a relaxation for myself in order to get rid of the negative impact that may affect the intervention and to allow me start the following day with the same passion.

Finally, I learned from this experience that the children suffering with ADHD actions are often beyond their understanding and also it is not their choice. We should as therapists try to understand and accept their problems and try to help them through the arts therapies intervention.

Chapter 4:   The Results of Stage One

4.1 Introduction

This chapter involves two sections. The first section presents the results of the qualitative data analysis (interviews) with experts from the UK and the KSA using thematic analysis. Therefore, this section is organised into five parts according to the research question. It begins with the current provision of art therapy in the KSA. Then it presents the practice of art therapy in the KSA followed by a description of the issues specific to art therapy in KSA. Finally, the practice of arts therapies in the UK and issues of conflict between UK practice and the KSA culture are discussed. The second section introduces and outlined the arts therapies programme for children with ADHD in the KSA. Then the principles, overall aims and rules of the intervention as well as the managing behaviour during the intervention, are discussed. Finally, the phases of the intervention and the structure of the sessions are illustrated with the activities schedule

4.2 Qualitative Data Analysis

4.2.1 Current provision in the KSA

There are very limited treatments available for children with ADHD. Only one school for children with ADHD exists in Saudi Arabia. One special educator commented that 'regular school is the natural environment...for students with special educational needs' (SE KSA 1, 6-7). Arts therapies provision is also very limited, and is rarely used to treat ADHD. There is a private art therapy institution (Art Therapy Office, Riyadh); however, it focuses on autism more than any disorder. In addition, though King Fahd Medical City has an art therapy rehabilitation department, it focuses on treating injuries rather than specific disorders.

Some interviewees related the deficiencies in ADHD treatment, and the lack of arts therapies, to diagnostic issues. They noted issues in correctly diagnosing patients with ADHD − 'there are no precise diagnostic units for these children' (ED KSA 1, 71),

especially due to comorbidities. ADHD may only be diagnosed 'in the advanced stages' (SE KSA 3, 71).

Further, several interviewees noted 'the lack of specialists' ((SE KSA 2, 54, ED KSA) in arts therapies in KSA. One interviewee suggested that 'no one has the patience to work in a field such as this' (ED KSA 2, 41-2), while one therapist noted that the inexperienced therapist would struggle to find 'suitable activities' (AT KSA 1, 50). A few interviewees mentioned 'a lack of clear curriculum' for arts therapies (ED KSA 1, 192), especially since materials 'may be written in English only' (ED KSA 1, 193-4).

However, one interviewee suggested that the KSA has some non-therapist specialists in art education; psychologists can access the work their students do for diagnosis (SE KSA 3, 37-41). Others noted progress in the recognition of ADHD in KSA. One interviewee noted that support for ADHD education is available at state, ministry and management level, as well as specialised associations (SE KSA 3, 16-20). Another observed that the authorities were organising workshops to educate supervisors and teachers about ways of working with ADHD (SE KSA 1, 14-16).

To sum up, in the KSA, treatment for children with ADHD is very limited, and arts therapies are not regularly used to treat ADHD. The main focuses of the few arts therapies programmes in the KSA are on treating injuries and on dealing with autism more than any other disorder. According to the interviewees, the key reasons for this are the lack of arts therapies, the difficulties of diagnostic issues and the preserved deficiencies in ADHD treatment.

4.2.2 Practice of Art Therapy in the KSA

4.2.2.1 Perceived problems of children, and aims to resolve problems

This section presents interviewee's views on the children's types of difficulty, and also discusses the arts therapists' aims in order to meet these needs. However they are focusing on different disorders: not only ADHD, but autism, brain injury and other issues comorbid with ADHD. A few interviewees note 'the diversity of clients...who suffer from different problems' (AT KSA 1, 52). One interviewee specified that children with ADHD are different from those with learning difficulties (ED KSA 2, 125-6). In addition, only art therapy is available; no drama, dance or music therapy.

Overall, aims for art therapy in KSA are different from those in the UK. According to the participants, the main difference is that in KSA there is particular focus on changing behaviour, while in the UK, the stated focus tends to be on improving emotional wellbeing.

All therapists interviewed in the KSA mentioned hyperactivity as a primary issue faced by children: they may be 'unable to stay in therapy for the duration of the session' (AT KSA 1, 82-3). However, only a few interviewees mentioned 'aggressive feelings' (ED KSA 1, 155) as an issue children faced. This contrasts with the UK, where almost every interviewee mentioned it as an issue. A few therapists noted how challenging behaviour affects the therapy; children 'don't do the homework' (AT KSA 3, 187); they may be 'unable to stay in therapy for the duration of the session' (AT KSA 1, 82-3), or it may be hard to 'control the child in the beginning' (AT KSA 2, 44).

Behaviour management issues affected the therapeutic approach. A few therapists in the KSA said that their aim is generally 'to help the child acquire behavioural skills' (AT KSA 1, 325). Compared with the UK, where a number of therapists stated that a rigid approach 'focused on changing' behaviour is less effective (MT UK 1, 683). A pressure-free, non-directive approach was not mentioned by KSA therapists. A few KSA interviewees – notably, not the therapists themselves – aimed to 'rehabilitate them academically' (ED KSA 2, 6). However, some others suggested that art therapists need to have 'an open mind' (AT KSA 1, 28) and should not 'restrict the expressions of the child' (AT KSA 3, 293-4). A few therapists aimed for the patient to 'understand that he is different' (AT KSA 2, 124) and 'relieve his concern towards this problem' (AT KSA 3, 305). Several interviewees said that the aim of art therapy is 'enhancing the confidence of the child' (AT KSA 4, 155) and 'giving him a chance to express himself' (AT KSA 3, 277).

A few interviewees noted that children may have issues with motor skills – eg, 'writing properly' (ED KSA 2, 82). A couple of therapists noted that children may have issues coping with change, such as 'the change of the place' (AT KSA 1, 187). Many therapists aimed for cognitive and social skills, such as 'organization and

coordination' (AT KSA 1, 328), 'increase the level of focus' (AT KSA 3, 33) and 'communication' (AT KSA 2, 126-7).

A variety of other problems were mentioned, including obsessiveness and difficulty task-switching (AT KSA 2, 29-30, 63-4), fear of self-expression (AT KSA 3, 96-7), tearing clothes and urinating (AT KSA 4, 44-7), muteness ('some of these children can't speak' (ED KSA 1, 148-9), violence from parents (ED KSA 1, 28-9), perceived 'pressure' from the centre (ED KSA 1, 153). AT4 mentioned that she recommends exercise and walks to parents as part of the therapy.

Several KSA interviewees noted 'the lack of specialists' (SE KSA 1, 54) in arts therapies. A few therapists noted that arts therapies work is 'very tiring' (AT KSA 4, 38) and requires 'significant mental capacity' (AT KSA 1, 58-9).

In the KSA, only art therapy is available, and the aims of this kind of therapy are different from those in the UK. Several KSA interviewees noted 'the lack of specialists' in arts therapies. Therapists interviewed in the KSA focus on changing behaviour using a rigid approach, while in the UK the focus is on improving emotional wellbeing. The primary issues faced by children with ADHD in the KSA are hyperactivity, aggressive feelings, and cognitive and social skills.

4.2.2.2 Therapy approaches and strategies

Art therapists interviewed in the KSA described a very structured therapy, which was a response to comorbidity with autism. According to the participants in UK, It is possible that such a structured approach may not be appropriate for patients with ADHD only.

The approach commonly considered the best was behavioural (AT KSA 1, AT2), though not all interviewees provided clarity in their response to the question of what approach they used. One therapist stated that the 'analytic approach holds less value' for children with ADHD (AT KSA 3, 379). A number of other approaches were mentioned. One therapist appealed to 'the five senses' (AT KSA 1, 414) to increase concentration. Another therapist ordered activities carefully, using mirroring/imitation in dance, and careful timeframes (AT KSA 4). One educator used plenty of 'motor

activities' (ED KSA 2, 145), while another used art to 'change the child's perspective' on specific issues (ED KSA 1, 170-1).

Sessions were a mixture of group and one-to-one. Significantly, a couple of therapists implied that one-to-one sessions were a stepping stone into group work – children were integrated into groups when 'they have progressed significantly' (AT KSA 3, 211).

Interviewees worked with a range of ages, from around 3 to 21. One therapist specified, however, 'We do not work with the under-fives' (AT KSA 3, 9), while another only worked with children up to 6 (ED KSA 1, 5-7).

Sessions were significantly more frequent than UK sessions, ranging from 2 weekly (AT KSA 1, 222-3) to 5 weekly (AT KSA 3, 171). The sessions were shorter than many UK sessions, ranging between half an hour and 45 minutes. Significantly, around half the therapists noted that 'some children may have to end the session early' (AT KSA 1, 217,8). Some therapists maintained 'the same time' (AT KSA 1, 223) for each session, while the times of another therapist's sessions differed.

Commentary on the therapy space was interesting and varied. A repeated theme was that the room should 'minimise distraction' (AT KSA 1, 91). Other suggestions were a clear space in front of the child, with clear 'lighting' and 'few colours in the room' (AT KSA 3, 158-61). One therapist provided space to draw on the wall, and a big table for social activities (AT KSA 2, 53-6). Most therapists used 'the same place' (AT KSA 1, 185) for each session, considering it 'very important' (AT KSA 1, 185), while another therapist's sessions shifted rooms.

In general, sessions were very structured, though one therapist mentioned allowing the child some choice in the use of music and colours (AT KSA 4). A few interviewees made use of the child's preferences, allowing them, in one case, to choose their own colours in the session (AT KSA 4, 89) A few interviewees mentioned adapting to the child's needs. For example, one aimed to 'develop' creative children (AT KSA 3, 315), while another integrated the child's need to move into the session, allowing the patient to 'work standing up' (AT KSA 4, 40). A couple of therapists avoided rigidity in their approach; one claimed that he did not 'restrict the expressions of the child' (AT KSA 3, 293), allowing him to draw what he likes, while

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another allowed the child to move between the therapy room and garden (AT KSA 4, 198-9). Several interviewees recommended 'an individual plan for each child' (AT KSA 1, 90). One therapist mentioned that he 'may modify the plan' (AT KSA 1, 219) depending on the progress of sessions.

A couple of therapists noted the importance of creating a bond between therapist and patient: this might involve going 'down to the level of the child' (AT KSA 3, 57), or for the therapist to 'kiss [the child's] hands' (AT KSA 4, 137). Almost all the arts therapists, though none of the educators, mentioned how difficult it is to understand children with ADHD: 'you don't know what they want' (AT KSA 4, 34). One therapist noted that 'strengthening the confidence between the therapist and the child is not easy' (AT KSA 3, 237)

Several therapists used reinforcements such as sweets (AT KSA 3, 59) to encourage good behaviour, with one therapist using peer reinforcement as encouragement (AT KSA 4, 126-8). Two therapists stated that they use punishment. They did not specify what methods of punishment they use. One punished for 'involuntary' urination or clothes tearing (AT KSA 4, 47).

Most therapists helped prepare the child for therapy – telling him 'details of this session, so that he is aware of what he is going to do' (AT KSA 4, 347-8). Another noted, 'the child should use the therapist's name and how to use the tools, and the reason of being here' (AT KSA 2, 110-1). This preparation may involve making the child aware of the session timeframes. Several therapists mentioned the importance of clear timeframes, with one adding, 'We should tell the child himself the details of this session' (AT KSA 3, 346-7). A common approach was to use a set beginning for the session: 'we begin by asking, 'What did you do today...?'...Then we start telling him what he will do today' (AT KSA 3, 182-4). Similarly, one therapist described a clear end to session: recapping what they did, 'to remind him to take advantage' (AT KSA 1, 201-5)

Some therapists described a different structure for the first session – either trying to 'evaluate his behaviour in a place or an environment free of pressure' (AT KSA 1, 234-5), or introducing the child to the room and materials (AT KSA 3, 103-5)

Principles behind the activities chosen included 'consistency in the use of materials' (AT KSA 1, 175), 'motor activities...that require focus and attention' (AT KSA 2, 49-50), and trying to 'keep [the child] busy' (AT KSA 3, 62). Precautions specified included avoiding small beads (AT KSA 1, 165) which could be swallowed; ensuring that tools are 'disinfected immediately after use' (AT KSA 1, 168); using non-toxic colours, and not using 'scalpels and knives' (AT KSA 3, 156-8).

Methods varied significantly between KSA therapists. One therapist uses drawing – both free drawing, and drawing behaviour issues in order to reflect on them objectively (AT KSA 2). Another specified a variety of unique activities, mostly relating to motor skills and focus: cutting shapes out of cork, matching shapes, colouring shapes without crossing lines, arranging tiles neatly inside pre-drawn forms. This therapist also ran tests to measure focus, and might set homework. Another therapist let the child dance, performing moves for the child to imitate. A few therapists allowed the child to colour (AT KSA 3, AT4)

Several therapists used music – a striking fact, given how frequently music was mentioned given cultural inhibitions around the use of this art form in KSA. Therapists might use 'soft music to calm the atmosphere' (AT KSA 1, 347-8), or dance to music (AT KSA 4, 229). However, these therapists are working within private practice, which is more permissive than a school environment.

Venting of aggression or energy was a commonly used technique, often achieved 'through the use of clay' (AT KSA 3, 102). A few therapists used clay to 'calm tantrums' (AT KSA 3, 102) or 'make different shapes' (AT KSA 4, 39). Other techniques included 'venting through drawing', as it used the arm and hands (AT KSA 1, 155-6), and dance, 'as it helps in unloading energy through movement' (ED KSA 1, 176-7).

Several therapists mentioned progressing therapy, as the child begins to 'accept the activities and materials' (AT KSA 2, 44-5). Therapists might 'gradually introduce more challenging situations' such as leaving the door open (AT KSA 3, 34-6), or might integrate the child into groups (AT KSA 3, 210-11).

The art therapists in the KSA described a very structured therapy, which may not be appropriate for patients with ADHD. The described therapies used a mixture of group

and one-to-one sessions. These sessions were very structured and were shorter than many UK sessions, but were significantly more frequent. Interviewees worked with people aged from 3 to 21 years and mentioned how difficult it is to understand children with ADHD. Several therapists mentioned the importance of clear timeframes and reinforcement to encourage good behaviour.

4.2.2.3 Initial Assessment and Evaluation of intervention

KSA therapists appeared more confident than UK therapists about the degree to which art therapy works with this client population, perhaps due to reduced acceptability of art therapy in the country, potentially forcing them to be defensive about their practice. Assessment methods were formal and organised, though they varied between therapists.

Most therapists interviewed used tests in assessment; either informal tests (AT KSA 1) for instance, asking a child to hand him pieces of fruit from a plate (453-6), or more formalised tests, such as 'the test of drawing the House' (AT KSA 3, 401) to measure concentration. Therapists might also 'repeat' the tests to eliminate the effect of external factors on the results (AT KSA 3, 403-4); it was not specified whether or not the tests were repeated over time to check for changes.

Several therapists used observation; one would even 'take photos for this child with each phase' (AT KSA 4, 291-2), noting which methods work.

Interviewees who wrote overall assessments might include 'parent's evaluation' (AT KSA 2, 178), or the assessments of 'a specialist in various fields' (ED KSA 1, 81-2).

Therapists might track the patient's 'developments, his responsiveness and his cooperation' in the weekly reports, as well as logging all activities done (AT KSA 3, 418-20); alternatively, they might 'write the evaluations of each behaviour session by session' (AT KSA 4, 286-7) and at the end of the month, map the child's progress on a graph (AT KSA 4, 289-90).

Several interviewees stated that their intervention caused clear improvement in their patients, particularly 'the absorption of information' (AT KSA 3, 356), and their skills to 'deal with ordinary children' (ED KSA 2, 69-70). One interviewee cited their success rate at 30-40% (ED KSA 2, 14-15). However, some children 'don't achieve

half their aims' (AT KSA 4, 74), and another interviewee believed that for children with ADHD, 'sports activities may suffice more' (SE KSA 1, 34).

The majority of assessment and evaluation methods used by the KSA therapists were formal, organised tests or observations. The KSA therapists appeared more confident than the UK therapists about the degree to which art therapy works with this client population. Several interviewees stated that their intervention caused clear improvement in their patients.

4.2.2.4 Working with teachers/parents/other therapists/assistants

The primary issue mentioned regarding work with parents was a lack of parental follow-up at home, and an expectation that 'the doctor will do all the work' (AT KSA 1, 108). Another therapist noted that parents may not 'support session' when they are present, and have to be excluded (AT KSA 3, 31). Children might also be 'absent from the therapy sessions' (AT KSA 1, 65).

A number of interviewees noted the negative impact of poor parental engagement with therapy: if they 'do not pursue their child's behaviour and help to modify it' (AT KSA 1, 112-3), then the parents 'waste our efforts' (AT KSA 3, 50). One therapist cited a case which has 'not improved, due to the non-implementation of the therapist's tips' (AT KSA 4, 179-80).

Other issues mentioned were that cost causes 'a lack of follow-up (AT KSA 1, 72), and that late intervention was harder than with the under-3s (ED KSA 1, 18-19)

Most interviewees described working closely with parents, particularly regarding cultural issues: they might need to explain or justify the use of music during the therapy (AT KSA 2, 120-1), or obtain a signed work plan from the parents, 'in order to have something proves parental consent' (AT KSA 3, 329-30). They might also need to explain to parents why they do not immediately tackle the socialisation issues which tend to be the parents' priority, explaining that the patient may have to 'wear Pampers for example' (AT KSA 4, 196-7) while they focus on deeper rehabilitation. Two therapists worked with parents in the session: either 'because without her, [the patient] will cry' (AT KSA 3, 197-8), or for the carer 'to learn the strategies and

processes of behaviour modification' (AT KSA 1, 117-8), though 'unfortunately, the attendance is limited' (AT KSA 1, 118-9).

Several therapists used input from parents in their programmes, asking them 'questions about the nature' of their child (AT KSA 1, 239-40). Some therapists 'offer session for these children's parents' (AT KSA 3, 372-3) to explain 'how to deal' with their children (AT KSA 4, 114-5).

Several interviewees mentioned issues for therapists in working with schools. The main issue mentioned was schools which 'resist our intervention' (AT KSA 1, 123). Other interviewees mentioned a lack of expertise in schools: 'the inability of teachers to communicate with [children with ADHD]' (ED KSA 2, 8-10)

Practices regarding help in the session varied. One therapist had 'the same assistant' (AT KSA 1, 226) in every session, while others had 'a single therapist' (AT KSA 2, 77). One therapist believed more than one therapist is distracting (AT KSA 3, 208-9). One therapist stressed the importance of working with a 'skilled or professional' assistant (AT KSA 1, 214).

A therapist stressed the importance of sharing relevant information about children with 'all the therapists and other specialists' (AT KSA 2, 38-40) dealing with them.

The KSA therapists mentioned the lack of parental follow-up at home as an issue regarding working with parents, and they emphasised the negative impact of poor parental engagement with therapy – particularly regarding cultural issues. Moreover, the therapists mentioned resistance from schools regarding their intervention.

4.2.3 Issues specific to Art Therapy in the KSA

4.2.3.1 Cultural issues

Many therapists mentioned cultural issues surrounding arts therapies. For example, one therapist noted that it is usually 'the mother that, according to our culture, cares for children' (AT KSA 1, 135-6). The same therapist was careful to match his manner to the child's 'socio-cultural' level (AT KSA 1, 279). He stressed that the therapist should educate himself about his patients' cultures, 'to break barriers' (AT KSA 1, 293).

The cultural taboo in the KSA against women and men associating had a number of implications for arts therapies. One therapist noted that 'the female patients themselves may not interact with you as a man' (AT KSA 1, 313-4), necessitating a female specialist, while another remarked that she, 'as a (female) therapist can't shake hands with a (male) doctor' (AT KSA 4, 143-4)

Another cultural issue is the degree of acceptability of this forms of therapy primarily due to issues relating to the use of music: either 'schools refuse this therapy' (ED KSA 1, 195), parents 'may object' to music (AT KSA 4, 150), or a patient hearing music 'may..[ask] to shut down the music' (AT KSA 1, 357-8). One interviewee also thought sculpture might raise cultural objections (SE KSA 3, 64)

Though a number of interviewees noted that the religious feeling against music in KSA causes 'difficulties' for arts therapists (SE KSA 3, 62), most therapists used it in some form. However, they had to manage cultural difficulties: they might have to explain or justify its use to parents (AT KSA 2, 120-1). One therapist replaced musical instruments with the sound of rain, or Quranic readings (AT KSA 1, 352-61). Most of the art therapists are private therapists so they are much freer to use music or dance in their choice of activities; while one art therapist does not use music, since she works in a hospital and is more publicly observed. This is worth considering with regard to the intervention for this study.

One therapist did not control child's drawing, despite cultural-religious taboos against depicting human forms, suggesting 'he may mean something else' (AT KSA 3, 294-5).

One educator thought that Western materials and techniques would be problematic to apply in KSA, 'because the children there and their nature and the ways of programs are also different from here,' (ED KSA 2, 44-46).

Many of the therapists interviewed mentioned issues of parental consent: parents may or may not consent to the use of music in the session (AT KSA 2, 120-1, AT KSA 4, 148-50). One therapist mentioned the difficulty in convincing some parents to allow their children to access arts therapies: 'I...explain to them, give them information brochures. I invite them to attend one of the sessions...if they are not satisfied at this point, I find it is difficult to convince them' (AT KSA 3 271-4)

The issue of working with or against Saudi culture drew an interesting mixture of responses. While several interviewees tried not to 'teach things that are not socially acceptable' (AT KSA 2, 144-5), on the grounds that 'our job is helping someone to go and to deal with the same culture' (AT KSA 1, 370-1), other therapists felt differently. One therapist who was working in the hospital, stated that they did not relate their goal to community culture, 'because I want to achieve something different' (AT KSA 3, 296), while another stated that the art therapist had to 'be a little bold' (ED KSA 1, 185) to achieve results.

A few interviewees were optimistic that KSA society's outlook on arts therapies was changing or would change: 'society in general needs to know that art therapy is not forbidden' (AT KSA 3, 255-6).

The most mentioned cultural issues surrounding arts therapies in the KSA are the cultural taboo regarding the association between women and men, and the degree of acceptability of this form of therapy due to its use of music. However, some of the private art therapists are much freer to use music or dance in their choice of activities.

4.2.3.2 Overall issues with art therapy in the KSA

Overall, art therapy practice in the KSA was subject to the limitations expected, given the cultural context, and the relative newness of the profession in the country. As well as being highly structured, to an extent that may be counterproductive with an ADHD client population, it made limited use of movement, and no use of drama. Further, some of the interviewees' descriptions indicated that their clients may have had comorbidities (AT KSA 4) describes one client who appears to have autism and epilepsy, which may have affected the reliability of their results. Finally, it is clear that the profession suffers from a lack of recognition, a societal confusion about the purpose of art therapy, and a lack of qualified arts therapists, particularly dramatherapists, dance/movement therapists and music therapists.

In general, art therapy practice in the KSA is subject to cultural context and is highly structured, with limited use of movement and no use of drama. It suffers from a lack of recognition, societal confusion about the purpose of art therapy, and a lack of qualified arts therapists due to the relative newness of the profession in the country.

4.2.4 Practice of Arts Therapies in UK

4.2.4.1 Perceived problems of children, and aims to resolve problems

Overall analysis of this section shows that since children have a number of different problems, arts therapists necessarily tailor the aims of their therapy in order to meet these needs. Most therapists aim to improve physical as well as cognitive, emotional and social needs.

For example with regards to physical needs, some therapists suggested that the frequent confinement and lack of exercise which children face worsen the symptoms of ADHD; exercise and fresh air mean that 'the ADHD goes right down' (AT UK 3, 493) – a point which reinforces the case for plenty of movement as part of the therapy programme. The majority of interviewees noted that environmental factors, in the child's home or family situation, often exacerbated the symptoms of ADHD. Two therapists observed that a diet of sugar, caffeine and salt 'doesn't help' ADHD symptoms (AT UK 1, 182).

Several therapists were clear about the detrimental effects of pressure, from schools and especially parents, on children and their behaviour. Expectations are often unrealistic as 'parents...are not sure what to expect from their child' (DT UK 3, 739-40), and do not provide the necessary support and nurture. Children are often told 'you're not good enough...we need to fix you' (MT UK 1, 639-41), which affects their self-esteem, and consequently their behaviour.

Additionally, a few therapists mentioned that children struggle to understand their ADHD label, meaning that 'their self-esteem...is low' (AT UK 1, 134-5). Arts therapies may help them 'reflect on their experience of having ADHD' (MT3, 330-1).

Emotionally, all therapists identified aggression as an issue, to themselves, others and/or objects, particularly 'aggression that comes out of frustration' (DMP UK 2, 171-2) A few therapists noted that some patients turn their aggression in on themselves; they may engage in 'self-harm behaviours such as biting themselves' (MT UK 2, 80-1). This may be related to the fact that children can struggle to 'express how they feel' (AT UK 1, 127-8), or 'can't explain' why they misbehave (MT UK 1, 159). More generally, they may be 'wasn't able to invent something or spontaneously move' (DT UK 2, 576). Therefore, self-expression was cited extremely often as an aim for

arts therapies: therapists repeatedly suggested that arts therapies represent a 'safe space' (DMP UK 1, 519) where clients can 'express without judgement' (DT UK 2, 394) and 'be accepted' (MT UK 1, 513-4).

A majority of therapists noted that their patients are likely to have 'chaotic lifestyles' (AT UK 3, 353-4) and 'dysfunctional and difficult families' (AT UK 1, 168-9) where 'everything...is constantly changing' (AT UK 1, 316). One therapist noted that this means behaviour worsens towards the holidays, since children are anxious that 'holiday times might be chaotic...somebody is not going to meet their needs.' (DT UK 3, 189-90). Overall, it is clear that family environment has a major effect on ADHD symptoms.

As a result, a majority of therapists stated that 'understanding...their background, their early experience, their family' (AT UK 1, 414-6) is or would be helpful. One therapist stated that she would find more statistics comparing ADHD prevalence and background helpful for her work. These observations have several implications: not only the importance of working with parents to create a calmer, more consistent environment (possibly offering whole-family therapy), but the significance of the therapy room as a stable point in otherwise chaotic lives. A few therapists observed that their patients are likely to be 'fairly deprived' (AT UK 2, 79); this may additionally affect their ability to take up the therapy, as one patient 'didn't have the money to travel to the clinic' (MT UK 1, 79-80)

Several therapists noted that their patients' parents have health issues, ranging from 'alcoholism' (AT UK 2, 152), 'bipolar disorder' (AT UK 2, 290), to 'post-natal depression' (AT UK 2, 294). Alcoholism is the most frequently mentioned health issue. These health issues may mean the parent is not 'emotionally available' (AT UK 3, 356). The majority of therapists interviewed suggested that at least some of their patients had experienced neglect, resulting in 'significant attachment problems' (AT UK 3, 349) which may manifest as ADHD symptoms, and will need to be tackled in therapy. The children may be 'needy for...care and attention' (AT UK 2, 238). Responding to the child's need for nurture will need to be a key part of the programme; interviews with the therapists indicate an anecdotal correlation between poor attachment and ADHD. A majority of therapists suggested that their patients

they see may have been 'badly treated or abused' (DT UK 2, 624-5), which means that the child's brain is 'hotwired in a different way' (DT UK 1, 316-7). Again, the link between abuse and ADHD is hinted at, or at least the possibility that abuse may result in some of the symptoms of ADHD.

Therefore, several therapists aimed to help adults – parents and teachers – understand the child better, appreciating that 'the child's brain is wired' (DT UK 3, 746) in a specific way. While this may not work (this 'often isn't the case' (AT UK 1, 368), one therapist regarded improving the mother's ability to 'reconnect with the child' (AT UK 2, 172) as a primary aim of therapy.

Due to all these factors, many therapists aimed to support the child emotionally. This could take many forms: the child may simply 'leave the session in a better state (AT UK 1, 369), feel 'able to play' (DT UK 2, 481-2), or begin to tackle 'low self-confidence' (AT UK 2, 135). Other aims related to the child's emotional well-being included helping the child 'regulate their feelings' (MT UK 3, 410), or increase 'self-awareness' (MT UK 3, 548).

In terms of cognitive skills, all therapists noted 'problems with concentration and attention, specifically sustained attention' (MT UK 2, 77-8). Concentration spans were estimated between 10 and 20 minutes. In addition, most therapists mentioned that the children they see are 'hyperactive, very impulsive' (MT UK 1, 182); they 'cannot be made to sit still (AT UK 2, 406-7). One therapist made the interesting suggestion that one reason for hyperactivity may be hypervigilance: 'needing to...check that the surroundings are okay.' (DT UK 3, 250-1). This insight suggests that hyperactivity can be contained, at least partly, by a consistent and reassuring therapy environment.

Around half of therapists observed that the children they saw had issues with coordination, physicality and motor skills – 'they can't connect with their physicality' (DT UK 1, 560-1) and tend 'to be clumsier' (AT UK 3, 449) than other children. Improving 'motor skills' (MT UK 2, 254) was therefore mentioned as an aim for therapy. ADHD is also characterised by unawareness of personal space – 'invading of each other's spaces' (DT UK 3, 628). An additional remark was that children with ADHD may struggle to make eye contact (DT UK 2, 477-8).

One therapist made an interesting observation that children with ADHD have disrupted speech patterns – when telling a story, they may 'jump to other events' (DMP UK 2, 153) and confuse themselves. Improving 'speech and communication' (MT2, 251) and 'decision-making' (MT UK 2, 250) were therefore mentioned. Several related their aims to concentration, helping the child 'hold attention for longer on an activity' (DMP UK 2, 473-4) and 'trying not to leave the room' (DT UK 3, 505-6). Other interviewees noted that children with ADHD find it 'difficult to think in these abstract ways' (DMP UK 2, 543), making CBT an inappropriate choice of therapy for them.

Socially, all therapists noted challenging behaviour by clients, with many stating that this behaviour affects their therapeutic work. Children may even be 'too disruptive' (MT UK 3, 320) to work with. Children may struggle 'to stay in the room' (MT UK 2, 165-6); one therapist was 'attacked by a student' (DT UK 1, 507). Many therapists mentioned the demanding nature of managing children with ADHD in arts therapy, particularly 'in the beginning' (DMP UK 2, 59), or in a group (too many children in a group would leave therapist 'very frazzled' (AT UK 2, 541)). One therapist even suggested that managing them in music therapy would be too demanding, and the child would not benefit. Comorbidity with emotional and behavioural issues can be 'very hard to manage' (DMP UK 3, 77), an issue mentioned by several therapists. Many therapists mentioned the frequency with which other disabilities are comorbid with ADHD, particularly autism. Some comorbid disabilities, such as EBD, may be particularly difficult to work with (DMP UK 3, 123-126).

As a result of these behaviour issues, around half of therapists interviewed observed that children with ADHD experience social isolation. One therapist noticed a gender split, saying that 'girls with ADHD have no friends' (AT UK 3, 857). Children with ADHD 'can cause other pupils alarm' (DMP UK 1, 103-4), and 'bounce off each other' (DT UK 2, 609), which results in social isolation: 'they were...loners' (MT UK 2, 311).

Improved socialisation or social skills was a key aim of most interviewed therapists. This may take the form of developing a single 'reasonable relationship' with the therapist (AT UK 1, 362), as a model or, may aim to improve general social skills

such as 'listening, cooperating, respecting others' (DMP UK 3, 530-1). The nature of the social skills aimed for will obviously depend on whether the therapy is in group form or one-to-one.

The key to all of these aims is that, in every case, they are particular to the child: one therapist phrased it as the child being able to do more of 'whatever they can do now' (AT UK 3, 689).

Finally, the issue of ADHD diagnosis was frequently mentioned. Some arts therapists used music therapy as 'a component to diagnostic assessment' (MT UK 3, 187). It is notable that some therapists expressed doubts about ADHD as a valid diagnosis, one even suggesting that it was possibly 'created in the US' (AT UK 3, 155) to compensate for the rigidity of medical insurance. Other therapists suggested that individuals may be misdiagnosed. Misdiagnosis can be due to funding issues: one therapist noted that parents 'will get more money' (AT UK 1, 190) if their children are diagnosed, so seek out the diagnosis strategically. Over-diagnosis with ADHD can hide other underlying issues: these may be 'attachment-based issues' (DT UK 1, 162), or 'difficulties...to do with trauma' (DT UK 3, 127-8). This may affect the effectiveness of the intervention. In terms of programme creation, these observations will make it necessary to ensure that the ADHD diagnoses of children admitted on to the programme are valid, by checking that they meet clearly defined criteria. The effects of comorbidities must be accounted for when creating individualised plans for children and assessing intervention.

The UK arts therapists customised the aims of their therapy for the needs of their clients. These aims were to improve clients' physical, cognitive, emotional and social skills. The UK therapists were clear about the detrimental effects of pressure from schools and parents on children. These therapists identified child aggression as an issue, and mentioned that children struggle to understand their ADHD label and that family environment has a major effect on ADHD symptoms. Therefore, the UK therapists aimed to help parents and teachers understand the child better and support the child emotionally. Hyperactivity, motor skills and cognitive skills, like concentration and attention, were also employed as aims for arts therapies. According to the UK therapists, ADHD is also characterised by unawareness of personal space;

therefore, improved socialisation and social skills was a key aim of most of the interviewed therapists. Lastly, the issue of ADHD diagnosis was frequently mentioned and some therapists expressed doubts about ADHD as a valid diagnosis.

4.2.4.2 Therapy approaches and strategies

The approaches and strategies depend on the type of arts therapies used. However, there are drama therapists who use music and some music therapists use art.

A wide variety of theories were cited, the most common being psychodynamic, with more than half of therapists stating that this informs their approach. Jung, Winnicott, and Klein were also frequently mentioned; more broadly, integrated approaches, person-centred therapy, attachment theory and, behavioural and developmental approaches were cited more than once.

It is worth noting that CBT was repeatedly cited as a less effective approach, being 'rigid' (DMP UK 1, 652) and too directive (DMP UK 2, 533-5). One therapist described CBT as 'sticking plaster over the cracks', while another added that its focus on 'changing behaviour' reduced its effectiveness. Another therapist was unconvinced of the value of 'a talking based therapy' (DT UK 1, 836) with children with ADHD; another thought 'long term work with children with ADHD...is likely to be unhelpful' (MT UK 3, 615-6). Only one of the UK arts therapists interviewed believed that psychodynamic and psychoanalytical approaches were less valuable (MT UK 2, 335-6).

Views on the most helpful approach differed greatly; the most popular choices were person-centred and behavioural, with other therapists making a case for psychodynamic (AT UK 3). One therapist described her approach as 'going right back to very simple nurture' (AT UK 2, 196-7). However, most therapists appeared to use 'a blend' of approaches (DT UK 3, 732).

Managing behaviour was a primary concern when working with children with ADHD. Possible solutions included 'good support systems' (AT UK 1, 568) for therapists, small number of children in groups, and factoring in the effects of comorbidities into expectations of children, as well as the therapy plan. Many therapists agreed on the importance of 'clear boundaries' (MT UK 3, 363), with the most common rule being

to forbid 'harm or damage' (MT UK 2, 123) to anyone or anything. The rules mentioned tended to take the same form: 'not to harm themselves, not to harm the room' (AT UK 1, 246-7). Other therapists created the rules as 'a collaborative effort', (DT UK 3, 289), or included other rules, such as giving everyone time to speak, and confidentiality, while one therapist's situation meant they used ordinary classroom rules. Going over 'the contract of behaviours' regularly (DT UK 1, 659) was considered important, particularly in the early stages of therapy. One therapist used classroom rules; this therapist was also unusual in occasionally using a time-out (DMP UK 3, 310-2). Otherwise, the main response to unacceptable behaviour seemed to be to 'stop a session' (MT UK 3, 365), and then only in extreme or dangerous situations. Interestingly, one therapist focused primarily on anticipating problems before they occur, through awareness of the child's 'early-warning signs' (DMP UK 1, 166). Their main behaviour management technique was allowing the child to calm down in a side room.

Therapists stated repeatedly that working with a group of children with ADHD brings issues, calling one-to-one therapy 'ideal' (DMP UK 1, 363). A large group (of eg more than 13) is 'difficult to contain' (DT UK 3, 147) and 'distraction is higher' (DMP UK 2, 111-2). According to some therapists, even 8 children would be 'problematic' (DT UK 1, 398). It is clear that for the purposes of this programme, large groups of children with ADHD will not be an effective option.

A few therapists observed 'relationships building and adapting' (DMP UK 1, 600-1) between the children in their therapy groups or pairs, which gives group work one possible advantage over one-to-one work. Few therapists used pair work. While one therapist worked with a pair of boys (two to one), another therapist used pair work within a group session, as 'an opportunity of intense interaction and mirroring' (DMP UK 1, 438-9).

A few therapists specifically tried to avoid preconception when dealing with their clients. One therapist met the young person before reading their diagnosis, 'so I'm not influenced by it' (AT UK 1, 229). This strategy is plausible in a one-to-one or very small group situation, and may help mitigate some of the issues surrounding

comorbidity: each child will be different, and those differences may only be fully realised if the child is encountered initially without the presupposition of ADHD.

Almost all therapists stressed the importance of a consistent room. Several therapists noted that "the session is chaos when they move room' (AT UK 3, 548-9). Some observed that it is even important to 'set the room out in a certain way' (DMP UK 1, 123), while others aimed to minimise distractions, using 'if possible an empty room' (DMP UK 3, 348).

Many therapists had issues with the standard and continuity of their therapy rooms, with several being unable to guarantee the same room. In the worst situation, a therapist was once 'moved to another room' (DT UK 1, 626) at the last minute, while others went 'to the children's classrooms' (DMP UK 3, 389-90), or even to a central office (AT UK 2). If the room is used by others, the therapist may have to 'manage' changes in the room as 'part of the process' (AT UK 3, 657-8). Several therapists noted how a poor or inconsistent room affects the patients: 'behavioural problems come back' when they switch rooms (DMP UK 2. 315-6). The consensus seemed to be that a consistent room and time for therapy contribute greatly to its success. A dance therapist without a dedicated therapy room put coloured placemats on the floor of their shared room, always in the same positions, to mark the hall as a therapy space during that time, and give the children 'a sense of place' (DMP UK 1, 58). This insight would be particularly helpful in a situation where a dedicated therapy room could not be obtained.

The idea of allowing mess was frequently mentioned as a principle of work. A couple of therapists noted that modern children 'are never allowed to get dirty' (AT UK 1, 352-3), which prevents them from exploring and expressing freely. Not only does 'messy play allow your child to have a physical sensation' (DT UK 1, 570-1), but making and reflecting on mess can be an 'incredible step' (DT UK 2, 340) for a child with ADHD.

Encouraging trust is key to therapeutic success. A few therapists noted that patients may be reluctant to attend therapy, sometimes to the extent of affecting the therapy's progress. This may be because the child is 'too scared to come' (AT UK 1, 505), or anxious about expressing themselves (AT UK 1, 503). One therapist suggested that

adolescents may be 'very reluctant to come' (MT UK 3, 262-3). DT2 described a successful approach in encouraging a reluctant child to attend: she 'kept going into the classroom and offering him the spot' (DT UK 2, 325-6), without forcing or pressurising him. She noted that it 'took...days before the child made that journey into the therapy room' (DT UK 2, 523-4); the time-consuming nature of this approach will need to be factored in to the programme.

The most common method of encouraging trust cited was a 'lack of pressure' (AT UK 1, 264). Creating a space with 'no judgement' (DT UK 2, 549) makes patients more 'calm and relaxed' (AT UK 1, 147). Patients may be allowed just 'to sit back and watch', rather than participating, if they are anxious (DMP UK 1, 511). Another therapist encouraged trust between group participants by using a 'Blind Exercise' – one person shuts their eyes, while another leads them around. (DT UK 1, 693-6). In a unique and interesting approach, one art therapist used the metaphor of framing lines to represent 'safety and confidentiality' (AT UK 2, 692), putting a board around the children's paintings 'to remind us that you are working in a safe and confidential environment' (AT UK 2, 465-6) Other techniques included 'laying out the boundaries and expectations' (DT UK 3, 205) to help the children feel safe; a 'really calm...gentle' attitude and manner (AT UK 3, 343); protecting the therapy space by, as AT2 does, putting a 'Meeting in Progress' sign on the door (AT UK 2, 785), and finally, recognising that 'trust starts very slowly' (DT UK 1, 702).

The duration of therapy differed; however, this may not reflect ideal practice so much as funding limitations. Some therapists mentioned that children had limited access to arts therapies, in terms of both duration and frequency. In one case, this was specifically due to funding limitations; in another situation, the reduced duration of therapy available to the children made effective intervention 'pretty well impossible' (AT UK 2, 108). Several therapists mentioned that funding issues affect the frequency and duration of therapy – 'We don't have the resources to offer intensive, twice or three times weekly therapy' (MT UK 3, 371-3). Funding constraints can make it 'quite rare' (MT UK 2, 71) for people to receive more than six months of therapy; they limit the kind of therapy that can be practised (MT UK 1) was trained in Nordoff-Robbins therapy, which is expensive because it is traditionally therapist and co-therapist: (MT UK 1, 363-6). One child mentioned was unable to access therapy because 'they didn't

have the money to travel to the clinic' (MT UK 1, 79-80). As a result, children may not get as much therapy as they need. One therapist mentioned that young children need 'more support' (AT UK 1, 545), and often don't get therapy until they're old enough to be troublesome. Given that the programme will span a variety of ages, this information will be important in assessing the programme's effectiveness at different ages within the bracket.

As a result, then, the duration of therapy differed significantly, between 8 weeks (DT UK 2, DT UK 3) to 18 months plus (AT UK 1), depending on the funding situation, and child. A year was commonly cited as an appropriate duration. The vast majority of therapists offer a session 'once a week' (DMP UK 2, 366), with one therapist offering a session once every two weeks (AT UK 3). There was considerable variation in the length of a session. Sessions might run between 20 min and 1 hr 30 min, depending on ability, stage in therapy, age, group or individual, activity.

Precautions included tailoring instruments – using foam blocks (DMP UK 2, 291), or 'large instruments instead of small instruments that could be thrown around' (MT UK 3, 360-1). Therapists might also 'restrict materials' (AT UK 1, 275), especially 'poisonous or sharp or dangerous' (AT UK 3, 599). Behavioural precautions included 'watching for the build-up of behaviour' (DMP UK 1, 149), and 'putting a boundary' around disruptive impulses - for instance, allowing a child to jump on the drum as long as he removes his shoes (MT UK 1, 253-4). One art therapist also put children 'in a big shirt' (AT UK 2, 606) to protect their clothes from paint.

Though most therapists offered an assessment session, their formality varied. They might be unstructured observations (MT UK 1), or alternatively very structured (MT UK 2, 240-1). Therapists used their own forms to assess the child, or tools such as the 'Six part story making process' (DT UK 1, 850) or Conners (DT UK 3, 824). Again, 'physically looking' at the child seemed to be an integral part of the assessment (DMP UK 1, 673).

Most therapists would 'explain the rules' (DMP UK 2, 406) in the first session, and 'explain...how we are going to go about art therapy' (AT UK 2, 790-1). They would sometimes 'use visuals' to prepare the child (DMP UK 1, 493), 'identify goals' (MT UK 3, 653), or ask children to assess their emotions on 'a scale of one to five' (AT UK

1, 522). The most common approach used to prepare the child for the therapy was simply to 'explain very carefully...what we are going to be doing' (AT UK 3, 317-8). Other methods included stressing that the environment is 'safe and confidential' (AT UK 2, 465-6), to 'set the timeframes' (AT UK 2, 796-7), and 'talk about the group rules' (DT UK 3, 668-9).

Methods for opening the session varied considerably, depending on both the therapist's personal style, and the needs of the individual child. A few therapists mentioned the importance of reminding children of the 'working alliance' (DT UK 2, 286), and the idea of the introductory or 'hello' song or game is also quite common. Therapists sometimes recapped the previous session (DT UK 3, 522-3), went over the plan for the session (MT UK 1), encouraged children to 'say something about the week' they have had (DT1, 340-1), or asked children to 'get the materials out' (AT UK 2, 454-5). Several therapists used some form of warm-up. This might be a 'warm up song' (DMP2, 421), a warm-up to music (DMP UK 3, 273), or a warm-up using a ball (DT UK 1, 342)

Some therapists stressed the importance of giving children clear time signals over the course of the session, saying it will 'really help the young people' (AT UK 3, 438). Several therapists used pictures or visual aids in their sessions: to explain the rules (DMP UK 2, 411); to 'help the child scaffold' the structure of the session, and understand timeframes (DT UK 3, 255), for recap at the end of the session, and to enable non-verbal pupils to 'ask for something' (DMP UK 1, 85-9). Therapists mentioned using visual aids with a variety of abilities and age groups, including some older children, depending on need. Visual aids evidently have a variety of uses for the practical requirements of arts therapies.

In terms of structure, UK therapists used a variety of approaches. Almost all therapists indicated some sort of structure: sessions varied from completely child-led (AT UK 1) to 'quite a set pattern' (DT UK 1, 337). Several therapists stressed that it was important to 'keep track of the time' (DT UK 2, 273), so that the child knows what to expect and feels secure. Perhaps the most common strategy was to create a 'balance between structured activities versus more free play' (MT UK 3, 367-8). This approach allowed 'space for creativity' (DMP UK 3, 334), allowing therapists to 'respond

to...their need' (DT UK 3, 324), while still following 'quite a set pattern' (DT UK 1, 337). A few therapists ran wholly child-led one-to-one sessions, but there seemed to be general agreement that this approach was problematic with groups of children with ADHD. A few therapists stressed the importance of 'individualised plans' (DMP UK 1, 221). Interviewees noted very mixed issues experienced by children over routines; while one child 'can get very anxious if he doesn't have a routine' (MT UK 1, 205), others 'find it really difficult to follow the routine' (DMP UK 1, 101-2). These observations highlight the importance of creating a programme which is flexible and responsive to the varying needs of the individual child.

Though therapists did not lay out an exact session structure, many therapists offered general advice about structuring a session. One therapist suggested that it helps to 'slowly introduce props' as the session goes on (DMP UK 1, 442), while another 'always started with some artwork' (AT UK 2, 279-80). One therapist gave the child a choice of three activities (DMP UK 2, 425-31). One therapist began the session with a discussion, before developing it into a dramatic story. Further, there seemed to be consensus on the value of some kind of quiet time towards the end: relaxation (DMP UK 1, 471-3), or a calming activity like Tibetan singing bowls (MT UK 1). Many therapists will finish with a goodbye song or activity.

All therapists mentioned the importance of adapting the session or therapy plan to 'the needs of the children' (DMP UK 2, 343). Several therapists stressed the importance of treating each child as an 'individual' (MT UK 3, 488). Most often, this took the form of reducing the time of the session, establishing 'how long they can manage' (AT UK 3, 264) and tailoring the session accordingly. Other strategies included giving the child 'a few minutes to calm down' in a side room (DMP UK 1, 162-3), allowing the group 'to sit and talk' (MT UK 1, 271) on bad days, swapping therapists within a session (DMP UK 2, 342), or tailoring activities and tools to the child's needs and abilities. A few therapists limited choice as a specific strategy with children with ADHD (DMP UK 2, 225), particularly if 'they're being very violent' (MT UK 1, 474-5); this was not punishment, but a view that unstructured choice can be 'too overwhelming' (DMP UK 3, 330).

Therapists offered a variety of insights into the reasoning behind their props. While one therapist used 'all the same materials for everyone' (AT UK 1, 271), another suggested that materials were 'more restricted' for children with ADHD (UK, 285-6). Props might be used to create continuity – 'the same instruments every week' (MT UK 1, 296), and one therapist mentioned how colourful her props were. Many therapist offered overall advice on the principles behind their chosen activities. Activities should be 'hands on tasks' (DMP UK 3, 328), 'kind of short' (DT UK 3, 298), 'attractive enough...so that they could engage' (DT UK 2, 195-6), and use close interaction (DMP UK 2, 169-70). Music therapists also added the concept of 'connecting [whatever they do] to music' (MT UK 1, 421-3).

Several therapists used, or implied that they used, arts therapies materials for children to vent or 'calm their energy' (DMP UK 1, 110). One therapist linked this to behaviour control, so that 'the anger still gets expressed.' (DMP UK 2, 268) Music was used by some therapists as a specific method of behaviour management: they 'put on a piece of very relaxing music' to calm a hyperactive child (DT UK 1, 588-9), or used strong rhythm 'to calm their energy' (DMP UK 1, 110)

Several therapists, even those who were not specifically dance/movement therapists, used movement as an important part of the therapy session, since 'taking physically part in something has an emotional and psychological impact' (DT UK 1, 770-1), and 'does calm a lot of young people down' (AT UK 1, 213-4). Demonstrating to children, and mirroring their movements, was used by some therapists to 'encourage' participation (DMP UK 1, 433-5), and 'make it look like fun' (DMP UK 3, 473). One dance therapist taught the children 'dance movements...from different countries' (DMP UK 3, 250-1). This might be more applicable with older children. While one dance therapist used free movement throughout the session, another had no more than 10 minutes of unstructured movement, possibly using props (DMP UK 3, 252-8). One dance therapist did a performance with some children; again, this might apply more to older children, or those with more sustained concentration. (DMP UK 3, 279-80)

Some therapists contained or managed hyperactive behaviour by turning it into a purposeful activity – 'If he's running round the room, we'll all run round the room and we'll sing' (MT UK 1, 278-9). Another method involved asking an inquisitive child to

find materials in different parts of the room, perhaps in 'red boxes' (AT UK 2, 429). These insights may be invaluable for behaviour management.

Four therapists (DMP UK 2, DMP UK 3, DT UK 1 and DT UK 2) used balls for throwing/kicking. One therapist used foam blocks to be thrown around the room, as 'the danger of them hurting themselves is less' (DMP UK 2, 291-2)

One therapist used a variety of useful and unique movement props. Firstly, he used a stretchy elastic 'bunny band' which could 'hold and contain' a child, or be used in a group, with children pulling it from inside or outside (DMP UK 1, 61-4). This sense of containment can be very calming, and can reinforce the sense of a body boundary. The same therapist used an 'Octoband', a circle with 8/16 stretchy arms. It was used for the group to 'run around the room together', holding on, or for a 'targeted movement activity' (DMP UK 1, 69-70). This activity would be particularly appropriate for larger groups. Another of their methods was using stretchy elastic cuffs for a variety of purposes: to be pulled between people, to swing small children, or as symbolic objects (car, plane) (DMP UK 1, 71-6). This therapist also used large inflatable balls, which allow children to 'lie on their backs and roll on their tummies' (DMP UK 1, 91-2), in very physically connecting ways. Finally, he found that elastic material, wrapped around the body, can 'really give them a sense of a body boundary' (DMP UK 1, 73-4)

The parachute was a very popular activity, used by all the dance and movement therapists interviewed. Above all, it was used to connect participants to each other, as they physically held on; one therapist always used it to help parents and children connect, as it makes them 'focus on each other' (DMP UK 2, 436). Other activities included 'hide and seek' (DMP UK 2, 442), and shaking the parachute (DMP UK 3, 518). A few therapists used cloths: colourful 'different cloths' (DMP UK 3, 498) for Indian dancing, or to 'wave...in the air' (DMP UK 1, 290-1), more generally.

One therapist used ribbons on sticks; the children 'really love' moving the ribbons around (DMP UK 3, 510). They also used 'colourful and exciting' pompoms in dance therapy (DMP UK 3, 511).

Around half of therapists used clay suggesting that 'They get a great deal from clay' (AT UK 1, 350-1) and its freeing, physical, messy potential. One therapist used papier

mache with a child who likes getting his fingers in everywhere (AT UK 2, 434); again, this may be a useful approach with certain, very physical children. A few therapists used drawing, regularly or occasionally. A few therapists, not just art therapists, used painting – not just with a paintbrush, but 'we might print from a painting' (AT UK 2, 451), or 'do Jackson Pollock pictures' (AT UK 2, 688) [ie splashing paint randomly on a canvas, possibly to suggest emotional states]. One therapist used cardboard sculpture, in response to the needs of a particular child who 'wanted to make a town' (AT UK 2, 662). One therapist used metal welding, 'building fantastic machines' with the patients (AT UK 3, 167-8) – this would obviously not be suitable for younger children! One therapist found the processing of photographic film to be 'an incredibly powerful tool' (AT UK 3, 170)

Many therapists used, or sometimes used, talking as part of the therapy. This may be a response to a bad day (MT UK 1, 271-2), or a reflective 'conversation about the work that we've done' (DT UK 1, 346-7), or a 'short exchange of information' (DT UK 2, 719) as an introduction to the session.

A few therapists used 'meditation and relaxation' (DMP UK 3, 553), perhaps at the end of a session (DMP UK 1, 78-80). Props included blankets and pillows (DMP UK 1) or 'massage props' (DMP UK 3, 555). Activities included breathing in through the nose and out through the mouth (DMP UK 3, 554-5); tightening and relaxing muscles (DT UK 1, 601); visualising 'hot relaxing liquid' running through the body, from head to toe (DT UK 1, 605-6). Relaxation activities may be used as a core part of the session, or used as needed to calm agitated children.

While all three music therapists obviously used musical instruments, a few other therapists also use drums, as they are 'quite a good focus' (DMP UK 2, 294). Around half of therapists, across the disciplines, use song in their sessions, most commonly 'a hello song' (DT UK 2, 282).

A few drama therapists used the notion of liminal or transitional space as a metaphor for their therapy. Therapy was described as a 'transitional space' (DT UK 2, 641), where patients can 'view ourselves from a different perspective' (DT UK 1, 775-6) and model strategies to use in the outside world. The idea of liminal space allowed

patients to see their own behaviour objectively, and experiment with different behaviours in a safe space without the consequences of real-world situations.

A few therapists across the disciplines used puppets for symbolic play with the children. All drama therapists used story making or storytelling: the story might be 'based on...the discussion' (DT UK 1, 344-5), or might use puppets (DT UK 2, 490). One therapist used the concept of this exercise, to formalise the transition between the art and the therapy space: 'allowing people to step out of the story they've created, and come back into themselves' (DT UK 2, 676-7). One therapist stated that they use 'projected play' (DT UK 2, 269).

A few therapists played with toys with the child (e.g., AT UK 3 plays shop), while another allowed children to play with 'little toys' (DT UK 2, 270). A few therapists stressed the importance of play as 'the basis of the work' (DT UK 2, 640); they believed that 'children need...play and pantomime and make-believe' (AT UK 2, 369-70) in order to develop properly. One therapist used masks, but did not describe the process of using them in detail (DT UK 2, 67). One therapist 'had a sand tray' which the children could use (DT UK 2, 66).

Games were commonly used, particularly in drama and dance therapy. These games might focus on 'turn-taking' (DMP UK 1, 444), or to help the children 'focus on being still' (DT UK 1, 549). They may also 'copy the movement' of other children (DMP UK 3, 277), which increases body awareness and empathy in the same way as 'feelings bingo' used by another therapist (DT UK 3, 526). One therapist encouraged trust between group participants by using a 'Blind Exercise' – one person shuts their eyes, while another leads them around (DT UK 1, 693-6).

Interestingly, one therapist found that 'cooking was very therapeutic' (DMP UK 3, 335-6), and used it with some children.

Finally, DMP UK 2, MT1 and MT UK 2 used a goodbye song. All had a closing ritual. Some therapists considered 'cleaning up the mess...part of the ritual' (AT UK 3, 427-8). This may, however, be most applicable to art therapists.

Several therapists suggested that they may develop the length or complexity of the therapy as it progresses; they may focus on 'extending the time' that the child spends in session (AT UK 3, 673), or use 'more new activities' each week (MT UK 2, 350).

In summary, a wide range of approaches, strategies and theories was used by the UK therapists depending on the type of arts therapies used. Jung's, Winnicott's, and Klein's theories were frequently mentioned. The UK therapists frequently used integrated approaches, person-centred therapy, attachment theory, and behavioural and developmental approaches. The most popular choice was person-centred therapy. Managing behaviour was a primary concern when working with children with ADHD. Possible solutions included good support systems for therapists and working with small numbers of children. Encouraging trust is key to therapeutic success. The duration of therapy differed depending on the funding situation, the children's ability, their stage in therapy, and the children's ages.

In the first session, the UK therapists would explain the rules to prepare the child for the therapy and stress the 'safe and confidential environment'. Methods, approaches and visual aids for the session varied considerably. Many therapists would finish with a goodbye song or activity. Several therapists stressed the importance of treating each child as an individual. The UK therapists offered overall advice on the principles behind their chosen activities. Demonstrating to children, and mirroring their movements, was used by some therapists to encourage participation. The UK therapists used clay, drawing, painting, talking, relaxation activities, story making, storytelling, games and even cooking as part of the therapy. They suggested that the length or complexity of the therapy may be increased as it progresses. Some therapists contained or managed hyperactive behaviour by turning it into a purposeful activity.

4.2.4.3 Initial Assessment and Evaluation of intervention

Several therapists mentioned that children are assessed before being referred to therapy; this may be in 'the context of the school' (DT UK 3, 819), or assessment done by the therapists themselves, who may 'collect as much information as we can' (MT UK 3, 207-8), or 'observe a young person or child in the classroom' (AT UK 1, 487-8).

Therapists used a huge variety of standardised assessment tools, including the Conners' Rating Scales (DT UK 3, 824-5) and the Children's Global Assessment Scale (AT UK 3, 663-4). Specific arts therapies tools were also used such as the Nordoff-Robbins scales (MT UK 1 732-3). However, one therapist made the pertinent

observation that 'Some of the most important things in life are very difficult to actually measure on a scale' (AT UK 1, 577-8), while another claimed that she doesn't use 'specific tools to evaluate' (DMP UK 3, 726). Nevertheless, observation of the child by the therapist appeared to be a key part of both initial assessment, and ongoing evaluation: several therapists described their assessment procedures as 'mainly observational' (DMP UK 3, 728). Observation might be used to 'help form our aims and objectives' (MT UK 2, 363-4), and might be referred back to over the course of the session. More than one therapist mentioned the importance of 'classroom observations' (DT UK 3, 835). A primary insight obtained from this was that these therapists did not rely on information on teachers, supplementing teacher input with their own observations and evaluations of the child's behaviour.

Though around half of therapists mentioned some form of mid-term assessment, practice varied hugely, with one therapist stating that 'the assessment throughout a piece of work is still very much work in progress' (DT UK 1, 870-1). Therapists might review after 6 weeks (MT UK 2, 355) or 6 months (DMP UK 1, 328).

In addition to scales and observation, ongoing assessment might include 'having a conversation with the child' about whether to continue therapy (AT UK 3, 717-8), monitoring and summarising notes (DMP UK 1, 679-80), meeting with staff in schools to 'discuss pupils' development' (DMP UK 1, 691), 'talking to the parent' (DMP UK 2, 576-7), and to 'review the video material...with our multi-disciplinary colleagues' (MT UK 3, 656-8).

Several therapists noted that evaluating the impact of the therapy may be complex, due to a number of factors. A lack of feedback about 'what was going on in [the child's] homes' made it difficult to evaluate therapy (DT UK 2, 690-1). Feedback received might also be misleading, since 'children say what they think the adult wants them to say.' (AT UK 1, 562-3). Additionally, it could be unclear whether change in the children is due specifically to the therapy, or bound up with broader interventions from school – 'It's very hard to think if it's my session once per week for 55 minutes or if it's everything that the school does for these children' (DMP UK 3, 572-3). Finally, one therapist noted that she is too 'busy' (AT UK 2, 985) to do a comprehensive evaluation which she agreed would be very helpful.

The outcomes judged as successful varied. They included being able to 'wait until the teacher isn't looking' before misbehaving (AT UK 3, 850-1), children being 'much calmer' (DT UK 1, 193), children being 'reprocessed back into mainstream school' (DT UK 3, 866-7), 'increased self-esteem and confidence' (MT UK 2, 300) and improved 'interaction skills' (DMP UK 1, 532).

At the end of therapy, a few therapists sought feedback from their patients themselves, using 'tick boxes' (AT UK 2, 919) or longer written reflections on 'how they feel it's been helpful to them' (AT UK 1, 553).

However, several therapists noted that changing behaviour can be slow or non-existent; they repeatedly linked this to the fact that 'quite often the children need parents also to do something different at home' (DMP UK 2, 521-2) before the behaviour will change. Lack of implementation of 'boundaries and strategies' (AT UK 2, 245) at home therefore had a significant effect on the therapy's effectiveness. Further, two therapists made striking comments about how children and families can themselves be resistant to changes in their roles and behaviour: 'Change [in the child] is not necessarily welcomed' by the family (AT UK 1, 446), while another therapist described a child who was upset when his ADHD began to decrease, 'because he wasn't so popular' (AT UK 3, 836). The issue of change therefore needs to be carefully managed. It is necessary to communicate with parents not only to ensure that therapeutic strategies are used consistently at home, but also to prepare them for changes in their child. Some form of family therapy may be helpful to manage the overall family dynamics, to prevent the child becoming stuck in one set role due to their ADHD, and allow change to happen.

Another issue which may affect the outcomes of therapy is medication. Several therapists noted that medication may have a negative effect on the child. Medication sometimes 'numbs things' (DT UK 3, 414); it puts the child into an 'altered state' (DT UK 1, 238), so that you are not working with 'true behaviours' (MT UK 2, 391). The patient may struggle to 'communicate', forcing therapist 'to be...the driving force' in sessions (MT UK 1, 125-6). Around half of therapists suggested that medication 'has its place' in today's world (AT UK 1, 471), even though 'it would be better if we could manage without' (AT UK 3, 795-6). The consensus seemed to be that the

appropriateness of medication 'depends on the individual children' (DT UK 1, 264). One therapist commented that it would be useful if comprehensive evaluations included details about medication status (AT UK 2, 983-4). A few therapists noted that medication 'makes it easier for the school to cope' (AT UK 1, 476-7).

The UK therapists offered varied assessment sessions, used unstructured observations, or, alternatively, used very structured scales. They used a wide variety of standardised assessment tools, including the Conners, Nordoff-Robbins and Children's Global scales. Other methods for assessment included ongoing assessment, monitoring and summarising notes, meeting with staff in schools, talking to parents, and reviewing video materials. The UK therapists noted that evaluating the impact of the therapy may be complex due to a number of factors, and changing behaviour can be slow or non-existent. In addition, it is necessary to communicate with parents to ensure that therapeutic strategies are used consistently at home. Medication is an issue that may affect the outcomes of therapy. The UK therapists noted that medication may have a negative effect on the child.

4.2.4.4 Working with teachers/parents/other therapists and assistants

The therapy is not the whole of the child's world. The child might receive some therapy sessions a week, the rest of the time he is in the classroom with teachers or at home with his parents. So the role of parents and teachers becomes an important one that shapes the experience of the child.

Almost every therapist mentioned difficulties working with staff or parents. AT UK 1 noted that 'a holistic approach' (AT UK 1, 440), working with staff and parents, is helpful but hard to achieve. Several therapists noted 'a lack of understanding from teachers about the purpose of music therapy' (MT UK 2, 161-3), with both parents and teachers failing to realise that music therapy has different rules from a classroom. In one case, a teaching assistant punished a student against the therapist's wishes, affecting the ethos and progress of the therapy, since the therapist 'couldn't be seen to be arguing' with her decision (DT UK 1, 482-3). Several therapists also mentioned inconsistent or inappropriate support from teaching staff. These may result from unclear expectations of staff during therapy sessions (for instance, teaching assistants taking a break when they are needed to assist, or teacher absences from the session).

Other staff members may also misunderstand the necessary atmosphere for arts therapies: one therapist described another member of staff putting inappropriate quotations on the therapy room walls, which was 'invading the therapy space' (DT UK 3, 454). One therapist mentioned that issues inevitably arise from having other staff members in the therapy session, suggesting that the therapist is 'managing their feelings and thoughts' (DMP UK 1, 408-9) as well as those of the children. In terms of issues with parents, therapists noted not only that parents fail to implement 'boundaries and strategies' (AT UK 2, 245) at home, but that they can be eager to tell the therapist all the issues they have faced that week, which affects the session. One therapist also suggested that a parent in the room can 'feel in competition' (AT UK 3, 588) with the therapist.

Several therapists mentioned parental disengagement from therapy. This could be due to anxieties about their child (the parents of a depressed child 'didn't want him to come' (AT UK 1, 504)) or time (parents 'find it difficult to...find the time' (DMP UK 2, 570) to attend sessions separately from their child). Parental disengagement may be severe: one therapist described parents who refused even to 'give a telephone number' (AT UK 2, 204). In one case, lack of communication with parents caused significant disruption to the progress of therapy. The therapist described a child on such a high dose of Ritalin that he was unable to engage with therapy, but the lack of communication with the parents meant that 'it took quite a long time' (MT UK 1, 133) for the therapist's recommendation of a split dose to be implemented. The success of the programme in this case will clearly be dependent on consistent parental engagement.

A number of therapists noted that parents have 'unrealistic expectations' of their child (AT UK 1, 169-70), or flawed perceptions, failing to 'notice' behavioural improvement (AT UK 3, 812). Parents may also misunderstand that arts therapies are 'expressive therapy' (DMP UK 2, 68) rather than making the child obey rules.

However, a majority of therapists noted that working with parents 'could be really helpful' but 'doesn't often happen' (AT UK 1, 440-2). Parental involvement is considered 'very important' (AT UK 3, 581), and several therapists described the importance of supplementing therapy with 'supporting parenting' (MT UK 3, 141):

they may include the parent in the session (MT UK 2), come in for meetings (DT UK 3, 233-4), or 'go and look in the home environments and see if there's anything we can provide to help the child at home' (DMP UK 1, 176-80).

Some therapists worked with the parent in the room, especially if child is 'very young' (DMP UK 2, 71). However, for one therapist, working with both parent and child was key to the therapy: 'Helping the parent...and renegotiating at that level' (AT UK 2, 188-90).

Almost all therapists tried to liaise directly or indirectly with parents. They may 'try and offer support' (AT UK 1, 93-4), or they may be 'reliant on feedback from...parents' (MT UK 2, 265-6) about the child's behaviour at home.

Therapists faced other issues, largely connected with the needs of the school environment. One therapist found that at school, 'invariably I can be interrupted' (AT UK 2, 787), while another therapist observed that schools dislike having 'to have the same time every week' (AT UK 3, 739), since students will miss the same part of their timetable every week. Consideration of these issues will be crucial when formulating a school-based programme. One therapist mentioned that one day a week in a school is 'very little time to establish yourself as a therapist there' (DT UK 2, 46-7). This insight may be helpful when planning the programme's schedule; intensive presence in the school, even if not working with the same children, may increase credibility of the therapies.

All therapists liaised to some extent with teachers. This may take the form of 'feedback from teachers' (MT UK 2, 265-6), or supporting teachers to deal with the child, introducing 'the idea of having structure...predictability...movement breaks' (DT UK 3, 235-6) All therapists stated or implied that they communicate with teachers. They may 'offer support' (AT UK 1, 94) to teachers, link therapy and classroom goals (MT UK 3) or use 'contact with the teacher' to learn about the child's day (DT UK 2, 460). The ideal situation seemed to be one in which the exchange of information and support between therapist and teacher was two-way. However, teachers were only rarely involved in the actual therapy session. Most therapists obtained some form of feedback about the child and their behaviour from teachers; one therapist stated: 'Some staff may say their behaviour has improved' (AT UK 1, 537-8).

Several therapists noted that 'schools vary greatly depending on how much staff know about ADHD' (AT UK 1, 195-6). A few noted 'a different culture' in specialist schools (DT UK 3, 227), with more understanding about ADHD.

Though a few therapists preferred working one-to-one, more than half the therapists interviewed brought another adult into the room for safety. This may be 'another therapist' (DMP UK 2, 597-8), or – in most cases – teaching staff. One therapist worked together with other agencies (MT UK 3, 79). A few therapists expected the teacher to do standardised questionnaires (DT UK 3, 837).

The lack of understanding from parents and teachers about the purpose of therapy – connected with the needs of the school environment, the inconsistent or inappropriate support from teaching staff, the parental disengagement, and the unrealistic expectations of parents – were some of the difficulties of working with school staff or parents during arts therapies that were mentioned by the UK therapists. However, the majority of the therapists noted that parental and teacher involvement in terms of supplementing therapy could be very helpful.

4.2.5 Issues of conflict between UK practice and the KSA culture

The interviews revealed a number of issues of conflict between UK practice and KSA culture. As one would expect, many UK therapists use music and dance, practices which are not culturally acceptable in the KSA. UK therapists also tended towards a less structured style, which contrasts sharply with the very structured interventions used in the KSA.

4.3 Development of Arts Therapies Programme

Developing an effective intervention for children suffering from emotional and behavioural disorders is critical matter. The long term treatments are costly in both; providing the financial and human resources. Therefore, the outcomes of research designed to evaluate the most appropriate interventions for children with ADHD should be taken in account.

4.3.1 The arts therapies programme outline

The arts therapies programme delivered movement therapy and art therapy. The programme was 24 sessions, 3 times a week, over 3 months including the interviews and the pre post-test. The programme itself lasted around 8 weeks, based on suggestions from interviewed UK therapists that 8 weeks, with one session a week, is the minimum suitable intervention (DT UK 2, DT UK 3). Though longer intervention was frequently stated to be more beneficial (for instance, AT UK 2 108), this programme was limited in length by time constraints; however, it increased intervention by holding three sessions a week, rather than one (this follows the advice of Safran (2002), Karkou and Sanderson (2006) and (MT UK 1), who said children with ADHD benefit from 'intensive blocks of work' (68). The UK practice of having only one session a week is a result of funding constraints, and does not reflect best practice (see MT UK 3), 'We don't have the resources to offer intensive, twice or three times weekly therapy' (369-71).

There was at least one month preparation in contacting parents and teachers to participate in this study. Since school lessons are 45 minutes long, the sessions were between 30 to 40 minutes. This session length is recommended by several interviewed therapists, including DT UK 3 and MT UK 3.

The children were aged between 6 and 12, and were diagnosed with ADHD. They were randomly divided into control and experimental groups, by using computer-generated randomisation. The experimental group was also divided into three groups, each with two children. Though pair work is not frequently used in the UK, it was used by (MT UK 1 and DMP UK 1). One-to-one work was too time-consuming for this programme, and also would not have enabled the children to develop essential social skills. Although many UK therapists used group work (DT UK 1, DT UK 3), they agreed that group work was not feasible when all members had ADHD diagnoses. Therefore, this programme worked with pairs, following Grönlund's (2005) suggestion, on the grounds that this approach combined social-skills learning with a large amount of one-to-one attention from the therapist. The pairs were grouped to a possible degree according to age and ability, though the requirements of scheduling may mean this was only plausible to an extent. However, taking into

consideration the differences between approaches have been applied in education setting and those practicing in health care (Karkou 1999).

Based on the findings from interviews, the consensus seemed to be that a client-centred approach was most helpful, with attachment therapy strongly recommended for instance, by (AT UK 2). The vast majority of the therapists interviewed used a loose structure, with room to follow the child and adapt to their individual needs including (MT UK 3, DMP UK 3 and DT UK 3). Therefore, based on the findings from phase 1 interviews, this programme used an integrative approach, combining child-centred therapy and attachment therapy, as recommended by, for instance, (MT UK 1 and DMP UK 2). It aimed to respond to the needs and personality of the individual child, helping them to grow in self-confidence, emotional wellbeing and social skills by focusing on their strengths. Following Winnicott's theory (Karkou and Sanderson 2006), the programme was designed to provide a secure therapy space in which the child can safely explore themselves, and their relation to the outside world, through semi-structured movement therapy with room in safe environment.

Since the rpogramme involved working with pairs of children, it used activities from Sherborne (2001), Karkou and Sanderson (2006), Koshland (2010), Levy (2005), Curtis (Karkou and Sanderson 2006) and Grönlund et al. (2005). Activities, such as tossing balloons to each other using different body parts (Grönlund et al. 2005), tug of war (Curtis cited in Karkou and Sanderson 2006), and partner balances (Sherborne 2001), were used to improve participants' social skills and wellbeing. Koshland's (2010) use of fast then slow movement and Levy's (2005) division of the therapy room into 'energy zones' were among the exercises used to help children recognise and regulate their own emotions. Kestenburg's work on therapist-patient attunement was also used in the 'mirroring' activities which recurred in every session (Amighi et al. 1999).

The children's absences were taken into account. Since children with ADHD find disruption to routine difficult to cope with (MT UK 1, 196), the session was not filled with another child when one was absent. Instead, the session ran one-to-one, with a catch-up session later in the week with both children. If one child chose to leave

during the session, it continued with one child, with the therapist acknowledging the feelings that resulted.

In selecting participants, children varied in whether or not they received medication. However, children with diagnosed comorbidities were not included in the programme, to improve the validity of the programme's evaluation.

The researcher acted as therapist, though an assistant employed by the therapist was present. The assistant attended in case of emergencies, and participated and supported where and as appropriate. All sessions were videotaped. The therapy took place in a tailor-made room (10m x 5m). It was an empty room, completely clear and painted in solid colours. Mats were used as a sitting area and were used in some activities. Sessions took place on the floor. Props were kept in a basket. Balls used were soft and light, such as beach balls or balloons.

Soft mats were brought out to cover the floor, during more risky activities. In general, the structure of the session was followed loosely, so the therapist might leave the structure and follow the child when the child decides to do something different or not follow the suggestion made by the therapist. This was in accordance to the ethos of client centred approach.

In terms of cultural sensitivity, dance and music were not used due to the cultural context of the intervention; activities were adapted accordingly from their sources. As an alternative, rhythmic clapping and clicking were included. At different times, children were encouraged to add sounds to their movements. To accommodate the gender requirements of the cultural context, the (male) researcher worked only with boys, and used a male assistant. Where artwork was used, the children were not pressured to depict natural entities, in accordance with the Islamic stricture against the representation of living beings. Finally, the massaging of clients' necks used by Grönlund et al. (2005) to assist the participants in relaxation was not used, since this degree of physical contact would not be considered appropriate in the context.

4.3.2 Key Principles of the intervention

This programme's integrative approach combined the principles of client-centred therapy with those of attachment theory to meet the complex needs of children with ADHD.

The programme employed a number of principles from client-centred therapy (Rogers 2003). Above all, it used unconditional positive regard. Throughout the programme, the therapist aimed to be warm and encouraging, accepting the child as he is without judgement, no matter which choices he made. In the programme, therefore, the therapist avoided praise, as this might have suggested to the child that the therapist expected him to behave 'correctly'. However, the therapist aimed to be warm and positive at all times.

Further, the therapist followed client-centred theory in not challenging the child's chosen ways of expressing themselves, so long as no one in the room was endangered and the 'ground rules' were kept. Most importantly, the client-centred approach was key to this programme's expectation that the therapist also followed the child where the child chose to diverge from the session's structure, focusing on the present and adapting to the child's immediate needs. On a practical level, this meant that the planned session structure was frequently diverged from, and the therapist had to be prepared to adapt flexibly with little notice.

However, client-centred therapy can lack structure: an issue when treating children with ADHD, due to their need for security and routine. This approach was therefore combined with attachment theory (Bowlby 1997). The theory suggests that behavioural problems may derive from insecure attachment, which can be tackled by developing a secure attachment relationship with the therapist. In the therapeutic environment of this programme, such stability and security was created by using a regular room and time. Crucially, a predictable structure to the therapy session can also help create security, particularly a very standardised beginning and ending, which were an important part of this programme. Knowing what to expect helped the children feel secure, and relax into trusting the therapist. Nevertheless, they were free to leave this structure when they chose.

A further principle of attachment theory that was key to this programme was responsiveness from the therapist. Many activities on this programme centred on 'mirroring' and imitation, activities designed to help the child feel empathised -with, understood and responded-to. This was considered to have an especially helpful effect for children who were neglected, or whose needs were inadequately met as infants.

In accordance with attachment theory, the Arts therapies programme also involved activities which used positive or reassuring touch, as these may have been missing from the child's early experience: for example, helping the child to jump by holding him securely, or encouraging him to wrap himself in cloths to create a body boundary. The programme also used a number of activities which encourage eye contact for instance, 'balancing with eye contact': crucial in establishing a secure attachment relationship.

Further, attachment theory suggests that the therapist's attitude must create a nurturing environment, helping the child to constructively handle any change that does occur; this programme aimed to achieve this. This programme's focus on recognising and regulating emotions – for instance, in Levy's (2005) 'energy zones' activity – derived from attachment theory, with activities aimed to help children notice how they may react negatively to stimuli or changes, and subsequently rebalance their emotions.

Finally, both attachment theory and client-centred therapy demand a high level of empathy and trust, from and in the therapist. This helps the child to view the therapist as 'genuine'. In this programme, trust was developed through a variety of activities, such as 'rowing the boat' and drawing body outlines, designed to help the child trust the therapist, assistant and other participants.

4.3.3 The overall aims of the intervention

The aims of the intervention were developed out of the ethos of client-centred theory and attachment theory, and were as follows:

(i) to increase emotional wellbeing

(ii) to improve relational/social skills

(iii) to increase emotional regulation.

It was anticipated that there will be a decrease in hyperactivity/impulsivity, and increase in attention span, as the participants increased their levels of confidence and self-esteem, developed relational and social skills, and learned to manage their emotions.

4.3.4 Ground rules and managing behaviour

The therapist introduced the following ground rules in the beginning of the intervention

- Children did not have to participate in the activities suggested.
- Neither the therapist nor the assistant would prevent children from doing what they want.
- The only exception to this was if there was danger of harm to the children themselves, each other, the therapist and assistant, or the room.
- Children should ask for permission before leaving the room.

These ground rules and session structure were explained at the beginning of the session, using pictures. Children were invited to add to these rules if they wished, and to sign a visual 'contract' which was placed on the wall of the room where sessions took place.

Behaviour was managed by reminding the children, at the beginning of every session in the beginning phase, of the ground rules, as recommended by (DT UK 1). Ground rules were minimal but firmly enforced; this was considered a key step in creating a secure therapy space, as suggested by (MT UK 3). Breaking the key rules of safety would hypothetically have resulted in removal from the session, or ending the session if appropriate (MT UK 3).

Generally, however, active or disruptive behaviour were managed therapeutically. If children started moving independently, their movements were incorporated into the session and given structure. This followed Curtis's practice: when her clients began rolling across the floor, she focused their movements by encouraging them to roll across the room, fast then slow, in a line (Karkou and Sanderson 2006). Alternatively, she suggests channelling behaviour by setting challenges: for example, challenging them to move in certain patterns and at varying rates (Karkou and Sanderson 2006).

4.3.5 Programme Phases

There were three phases:

4.3.5.1 The Beginning Phase

The beginning phase (Table 4.1) aimed to build trust in the children, increase their confidence, and ensure they understand the ground rules and the purpose of therapy. It lasted three sessions. In the first session, the therapist introduced himself; let the children know why they were here, what the aims of the sessions were, what they would be doing, and how long therapy would last. He created the ground rules with the children, a procedure suggested by (DT UK 3), as well as creating a 'hello song' with them for use in later sessions.

The sessions in this phase were more directive, encouraging trust, with the therapist either playing with both children at once, or working with the assistant to demonstrate activities. During this phase, culturally appropriate art activities were used to allow children to create and share their own self-image, such as drawing themselves, and body-outline work. There was emphasis on what children can do rather than what they cannot do, and a focus on positive aspects of the work. Activities were repeated frequently during this time, to increase the children's confidence. Also, there was some individual work and self-expression through movement.

At the beginning of every session in this phase, the therapist introduced or reminded the participants of the ground rules of therapy.

Table 4.1 The Beginning Phase

<table>
<tr><td colspan="4" align="center">Week 1</td></tr>
<tr><td colspan="4" align="center">the Beginning Phase</td></tr>
<tr><td>Session</td><td align="center">1</td><td align="center">2</td><td align="center">3</td></tr>
<tr>
<td>session aim</td>
<td>Introducing the therapy; introducing ground rules; introducing the therapist; encouraging children to introduce themselves; creating the hello song; increasing trust; observing children's self-perception through art.</td>
<td>Reminding children of ground rules; increasing trust.</td>
<td>Reminding children of ground rules; increasing trust; increasing emotional wellbeing.</td>
</tr>
<tr>
<td>Warm up</td>
<td>Introducing myself and the ground rules using pictures; create hello song; mirroring game (follows Kestenberg's ideas of attunement); fast warm-up</td>
<td>Remind children of the ground rules; hello song; mirroring game; fast warm-up; stretching and breathing</td>
<td>Remind children of the ground rules; hello song; mirroring game; fast warm-up; stretching and breathing</td>
</tr>
<tr>
<td>Middle Activities</td>
<td>1) Children draw themselves.
2) Mirroring participants' movements – first participants copy therapist, then all participants copy children in turn, attuning to their movements and body shapes.
3) 'Move and Stop'. Children move when therapist says 'move' and stop when he says 'stop' – a familiar children's game in the KSA. They accompany this game by making sounds.</td>
<td>1) Each child lies on floor, while assistant/therapist draw around them. Within the body outline, each child writes or draws how they are feeling in that part of the body – happy (smiley face), sad (sad face), angry (angry face), wanting to move it (wavy lines) – or any other picture/word the child likes.
2) Minimise and maximise the movement.
3) 'Move and Stop' – while making sounds.</td>
<td>1) Mirroring participants' movements.
2) Minimise and maximise the movement.
3) Imagining they are 'angry trees', and keeping their feet rooted, children physically practised by moving faster and faster, with sound (building a storm) then moving back to slow movement (letting storm subside).</td>
</tr>
<tr>
<td>Conclusion</td>
<td>Deep breathing with arms; lying on the floor breathing in through the nose and out through mouth, using imagination/symbolic work. Tighten/relax body parts; mirroring OR expressing through art; goodbye song</td>
<td>Deep breathing with arms; lying on the floor breathing in through the nose and out through mouth, and tighten/relax body parts; mirroring OR expressing through art; goodbye song</td>
<td>Deep breathing with arms; lying on the floor breathing in through the nose and out through mouth, and tighten/relax body parts; mirroring OR expressing through art; goodbye song</td>
</tr>
</table>

4.3.5.2 The Middle Phase

The middle phase lasted eighteen sessions for six weeks (Table 4.2 shows Week 5 as an example). In addition to increasing emotional wellbeing and emotional regulation, this phase also aimed to increase the participants' social skills. The middle sessions therefore involved more pair work than the beginning phase, after trust and confidence had increased. The therapist and assistant demonstrated pair work with each other, for children to copy and follow them. Furthermore, this phase encouraged turn-taking: for instance, the therapist played with one child, then the other, gradually lengthening the waiting time to support children in regulating their emotions and develop patience. This phase also encouraged children to try new things, and focused on their successes rather than weaknesses. In addition, the therapist started to set challenges: for instance, asking them if they can run faster or slower, or perform coordination tasks (Curtis in Karkou and Sanderson 2006).

The sessions were less directive, allowing children to improvise more, while still keeping a broad structure in the session.

Table 4.2 The Middle Phase

Week 5			
The Middle Phase			
Session	13	14	15
session aim	Increasing body awareness and increasing confidence; increasing wellbeing and social skills	Increasing emotional wellbeing; increasing body awareness and increasing understanding of strength to increase social skills; increasing emotional wellbeing	Increasing emotional wellbeing; reinforcing social skills
Warm up	Hello song; mirroring game; fast warm-up; stretching and breathing	Hello song; mirroring game; fast warm-up; stretching and breathing	Hello song; mirroring game; fast warm-up; stretching and breathing

Middle Activities	1) Rolling on backs and bellies on large inflatable balls. 2) One child lies on the ground with arms and legs spread, and other steps or jumps between the limbs. Roles can then be reversed. 3) Octoband activities	1) Children go and then stop, following the leader who stayed with the beat as he clicks/claps. 2) Children roll each other. 3) Tug of war/strength testing games using large elastic cloths.	1) 'Move and Stop' 2) Swinging - therapist and assistant take the child by a wrist and ankle each (preferably with child also gripping their wrists). They swing child headwards and footwards. Children have to take turns. 3) Parachute – activities include hide and seek and shaking parachute
Conclusion	Deep breathing with arms; lying on the floor breathing in through the nose and out through mouth; imagining activity (hot water); mirroring OR expressing through art; goodbye song	Deep breathing with arms; lying on the floor breathing in through the nose and out through mouth; imagining activity (rain); mirroring OR expressing through art; goodbye song	Deep breathing with arms; lying on the floor breathing in through the nose and out through mouth; imagining activity (green garden); mirroring OR expressing through art; goodbye song

4.3.5.3 The End Phase

The end phase (Table 4.3) lasted three sessions. As well as continuing the aims of the first two phases, it further increased participants' confidence by structuring sessions according to their choice of activities. Additionally, it focused on acknowledging the upcoming end of the programme, and helping children come to terms with it. It therefore encouraged children to share feelings verbally and through movement, and find concrete movement tasks and rituals that could signify the end of the work.

Table 4.3 The Ending Phase

Week 8			
The Ending Phase			
Session	22	23	24
Session aim	Increasing understanding of strength, and encouraging personal choice, and thus self-confidence; winding down therapy	Increasing wellbeing; increasing understanding of strength and encouraging personal choice, thus increasing self-confidence; winding down therapy	Increasing self-reflection and emotional wellbeing; encouraging personal choice and thus increasing self-confidence; concluding therapy

Warm up	Hello song; mirroring game (feelings about ending sessions); fast warm-up; stretching and breathing	Hello song; mirroring game (feelings about ending sessions); fast warm-up; stretching and breathing	Hello song; mirroring game (feelings about ending sessions); fast warm-up; stretching and breathing
Middle Activities	1) Minimise and maximise the movement. 2) Rocks – Child sits in a stable position on the floor, knees bent, feet apart, fingers spread and hands fixed firmly on the floor. One approaches directly from the front (this increases concentration) and pushes gently on child's knees. 3) Children's choice.	1) Room divided into energy zones. Children explored what body cues they felt in each energy state. 2) Parcels – child lies on their side, hugging their knees. Partner pulls on child's limbs, trying to uncurl them. Roles then reversed. 3) Children's choice.	1) Children's choice. 2) Draw themselves compare with beginning. 3) Children's choice.
Conclusion	Deep breathing with arms; lying on the floor breathing in through the nose and out through mouth; imagining activity (hot water); mirroring OR expressing through art; goodbye song	Deep breathing with arms; lying on the floor breathing in through the nose and out through mouth; imagining activity (rain); mirroring OR expressing through art; goodbye song	Deep breathing with arms; lying on the floor breathing in through the nose and out through mouth; imagining activity (green garden); mirroring OR expressing through art; goodbye song

4.3.6 The session structure

4.3.6.1. Warm-up

The warm-up lasted between five and ten minutes, and was the same in every session to increase trust and familiarity (see Tables 4.1-3). Every warm-up followed this structure:

- In the beginning phase, every session began with a reminder of the ground rules.
- A hello song, created with the children in the first session, was sung (as suggested by several therapists, including (DT UK 2 and MT UK 1).
- A 'mirroring game' – the children were encouraged to move a part of their body to express their feelings, and everyone else in the group mirrored their

movements as used by (DMP UK 1) and based on Kestenberg's practice (Loman and Merman 1999). As each person shared their movement, they were encouraged to give an imaginative name to this movement about how they were that day.

- Then the therapist encouraged the children to move various body parts with him – hands, legs, shoulders, body and head.
- The therapist guided children in gentle stretching and breathing, to prepare children for the activities which followed.

4.3.6.2 Middle Activities

The main part of the session included activities aiming to increase emotional wellbeing, improve social skills, and enhance emotional regulation. Each session included three middle activities (see Tables 4.1-3), with every session repeating at least one activity to increase the children's confidence and familiarity. The activities were short and engaging, as recommended by (DT UK 3).

In the beginning phase, the middle activities aimed to build trust. They mainly involved the children working individually. They included mirroring activities, where participants copied the children's movements to make them feel noticed and acknowledged used by (DMP UK 1), and based on Kestenberg's practice (Loman and Merman 1999), as part of their development of social skills and self-confidence. Art activities were used in this phase – for example, the children draw themselves – to encourage the growth of confidence. Trust and confidence will be built through games familiar to the children, such as 'Move and Stop'. Introductions to slow versus fast movements additionally contributed to the participants' emotional regulation (Koshland 2010).

In the middle phase, the middle activities began to introduce pair work, such as tossing balloons to each other using different body parts (Grönlund et al. 2005), tug of war (Karkou and Sanderson 2006), and partner balances (Sherborne 2001). The aim of pair work was to improve their social skills and wellbeing. The activities in this phase also began to involve turn-taking, to encourage the children to wait for their turns: for example, the therapist will help one child to jump, then the other (Sherborne 2001). The lengths of time each child waited increased as the therapy progressed.

The end-phase introduced more energetic pair-work, and encouraged children to suggest activities which they wanted to do. For example, they asked to play different activities such as 'Parachute' and 'Octoband'. It also involved encouraging the children to reflect on the upcoming end of therapy.

4.3.6.3 Conclusion of the session

The closing activities followed a similar structure in every session (see Tables 4.1-3).

Each session wound down with some form of relaxation and breathing activities. The children were encouraged to imagine various scenarios as they lay and breathed deeply. The scenarios reflected aspects of the work that took place during the sessions.

After relaxation, they were encouraged to draw or write some things. Since drawing, provides the children with an opportunity to express their feeling. Alternatively, the 'mirroring game' would be used again; each child was encouraged to perform a movement, copied by all participants. As each person moved, they were encouraged to give a name to this movement about how they were feeling. Finally, the session concluded with a goodbye song.

After relaxation, the 'mirroring game' was used again; each child was encouraged to perform a movement, copied by all participants. As each person moved, they were encouraged to give a name to this movement about how they were feeling. Alternatively, on some occasions, they were encouraged to draw or write something to express their feelings. Finally, the session concluded with a goodbye song.

Chapter 5: The Results of Stage Two: Evaluating the Arts Therapies Programme

5.1 Introduction

This chapter presents the evaluation of the program of arts therapies for children with ADHD in the KSA. It starts with the quantitative data analysis for the Attention Deficit Hyperactivity Disorder (ADHD) scale and the Strengths and Difficulties Questionnaires (SDQ) scale. Then the results of the qualitative data analysis from the interviews with parents and teachers that were conducted in the KSA, are presented using thematic analysis.

5.2 Quantitative Data Analysis

The purpose of this section is to compare two groups of participants: the control and the experimental groups. The quantitative data analysis used two tests of differences: Mann-Whitney U test for independent samples (Burns 2000), and Wilcoxon W test for paired groups (Gray 2014). The reason for using these particular tests is the nature of the quantitative data in this research. Thus, non-parametric tests were used because the data did not follow a normal distribution. According to Gray and Kinnear (2012, p.199), "non-parametric models do not assume normality of distribution". A histogram graphic was utilised to test normality (Gray and Kinnear 2012) for each variable as well as the totals in both the ADHD and SDQ tests. The histogram shows that the data was not normally distributed. This may be due to the limited number of participants (i.e. six children in each group).

As shown in Figure 5.1, when comparing two groups, the researcher must see if the data is related or not related. If each participant is tested before and after the intervention, the data were related. This means each participant has two scores, one in the pre-tests and one in the post-tests. In this case, the Wilcoxon W test is used.

However, when comparing the control and experimental groups in the pre-test only, each participant got one score in this test. This means that the data is not related; therefore, the Mann-Whitney U test is used as shown in Figure 5.1.
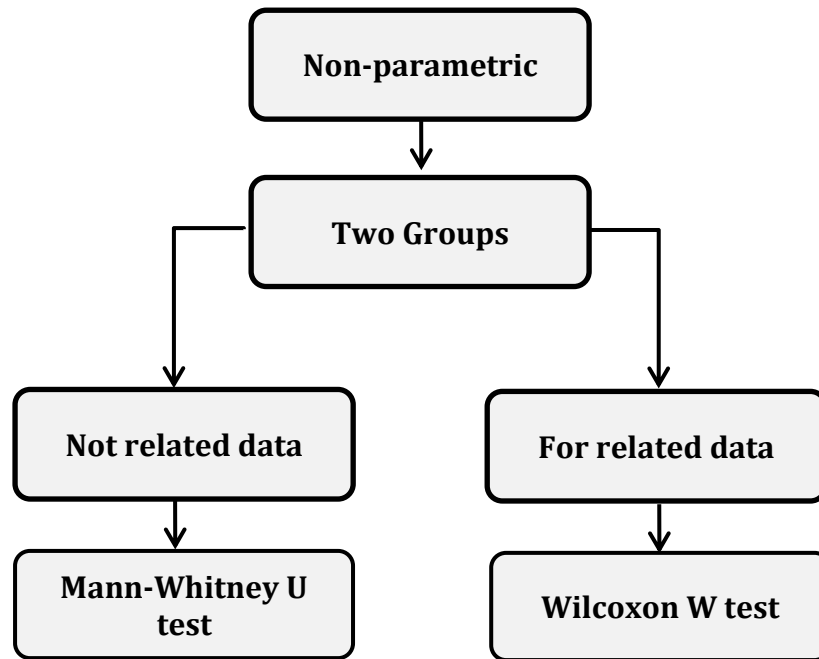
Figure 5.1 Flow chart for testing difference between two groups in non- parametric condition

Source: adapted from Gray and Kinnear (2012)

Where possible effect size (r) was calculated using via $r = Z/\sqrt{n}$ (r: effect size; Z: Z value; n: observation number). Z value can be found on the output case at the end of the Wilcoxon and Mann-Whitney tests. Effect size will be small if $r < 0.3$; moderate if $0.3 \leq r < 0.5$; and large if $r \geq 0.5$. In a clinical trial, effect size corresponds to the probability that a person on the experimental group will do better than a person on the control group. Effect size (r) were calculated for ADHD and SDQ outcomes if they were statistically significant. If the outcome was not significant the r value was only calculated if it served as a comparison to the significant finding.

5.2.1 Age difference

In a pilot controlled trial, randomisation ensures that allocation of students to experimental and control groups is left purely to chance. The characteristics of students that may influence outcome are distributed between experimental and control groups so that any difference in outcome can be assumed to be due to the intervention. However, imbalance between groups in baseline variables that may influence

outcome (such as age or symptom severity) can bias statistical tests, a property sometimes referred to as chance bias.

In order to make sure that both control and experimental groups are equal regarding the student age (a baseline variable), Mann-Whitney U was used as Table 5.1 presents. The table shows that there were no statistically significant differences at the level of significance (0.05) between the mean scores for control and experimental groups in the age variable.

Table 5.1 Mann-Whitney test for significant differences in the age between the control (n=6) and experimental groups (n=6).

Group	N	Mean Rank	Mann-Whitney U	Z	Sig
Control	6	6.67	17.0	-.162	.871
Experimental	6	6.33			

5.2.2 Attention Deficit Hyperactivity Disorder (ADHD) test

The Man-Whitney U test has been used to investigate if there were any significant differences between the control and the experimental groups at baseline (the starting point), regarding ADHD symptoms (i.e. inattention, hyperactivity and impulsivity) in both the parents' ADHD test as demonstrated in Table 5.2, and the teachers' ADHD test as shown in Table 5.3.

Table 5.2 Mann-Whitney test for significant differences between the control (n=6) and experimental groups (n=6) in the pre-test of parent ADHD scores

Factors	Groups	Mean Rank	Mann-Whitney U	Z	p
Inattention	Control	5.67	23.000	0.802	0.423
	Experimental	7.33			
Hyperactivity/ Impulsivity	Control	4.67	29.000	1.764	0.078
	Experimental	8.33			
Total	Control	5.17	26.000	1.281	0.200
	Experimental	7.83			

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Data analysis reveals that there were no significant differences in inattention, hyperactivity and impulsivity between the control and experimental groups. For instance, Table 5.2 highlights that there was no statistically significant difference with moderate effect size in the parents' ADHD test (Mann-Whitney U test = 26.0; Z = 1.28; P > 0.05; r = 0.37), nor does Table 5.3 show any statistically significant difference with small effect size in the teachers' ADHD test (Mann-Whitney U test = 22.0; Z= 0.64; P>0.05P r = 0.19).

Table 5.3 Mann-Whitney test for significant differences between the control (n=6) and experimental groups (n=6) in the pre-test of teachers ADHD scores

Factors	Groups	Mean Rank	Mann-Whitney U	Z	p
Inattention	Control	6.67	17.000	-.160	0.873
	Experimental	6.33			
Hyperactivity/ Impulsivity	Control	5.08	26.500	1.363	0.173
	Experimental	7.82			
Total	Control	5.83	22.000	0.641	0.522
	Experimental	7.17			

The Wilcoxon W test was used after the intervention to determine whether there were any statistically significant differences between the pre and post-test results, regarding the inattention, hyperactivity and impulsivity variables in the ADHD test for both the experimental and the control group. In the case of the control group, the results of both the parents' ADHD test (shown in Table 5.4) and the teachers' ADHD test (laid out in Table 5.5) revealed no statistically significant differences between the tests. A negative value for Z in the inattention, hyperactivity and impulsivity variables would suggest a positive improvement; this was not observed for the control group.

In Table 5.4, data analysis for the pre and post-tests reveals that the results of the total ADHD score for the control group did not change in the parents' ADHD test with moderate effect size (Z = 1.05; P > 0.05; r = 0.43). Similarly, Table 5.5 demonstrates that the corresponding result from the teachers' ADHD test showed no change with no significant effect size (Z = -.18; P > 0.05; r = 0.08). Neither parents nor teachers reported any statistically significant differences regarding inattention (Z = 0.53 and -

0.45 respectively; P > 0.05), or regarding hyperactivity and impulsivity (Z = 1.17 and -0.54 respectively; P > 0.05). This means that there were no improvements due to treatments at home or school.

Table 5.4 Wilcoxon W test for significant differences between pre and post- test for parents ADHD scores in Control group (n=6)

Factors		Main Rank (n)	z	P
Inattention	Negative Ranks	3.0 (3)	0.530	0.596
	Positive Ranks	1.0 (3)		
Hyperactivity/ Impulsivity	Negative Ranks	1.0 (2)	1.166	0.244
	Positive Ranks	4.0 (4)		
Total	Negative Ranks	2.0 (2)	1.051	0.293
	Positive Ranks	2.0 (4)		

Table 5.5 Wilcoxon W test for significant differences between pre and post -test for teachers ADHD scores in Control group (n=6).

Factors	Groups	Mean Rank (n)	Z	P
Inattention	Negative Ranks	1.0 (1)	-.447	0.655
	Positive Ranks	5.0 (1)		
Hyperactivity/ Impulsivity	Negative Ranks	1.0 (2)	- .535	0.593
	Positive Ranks	4.0 (1)		
Total	Negative Ranks	1.0 (2)	-.184	0.854
	Positive Ranks	4.0 (2)		

Wilcoxon W test was also used for the experimental group, to see if there were any statistically significant differences in the ADHD test between the pre and post-results, regarding the inattention, hyperactivity and impulsivity variables after the intervention. Both the parents' ADHD test, as shown in Table 5.6, and the teachers' ADHD, outlined in Table 5.7, reveals statistically significant differences between the pre and post-test.

Table 5.6 Wilcoxon W test for significant differences between pre and post -test for Experimental group (n=6) in parents ADHD scores

Factors	Groups	Mean Rank (n)	Z	P
Inattention	Negative Ranks	3.0 (6)	-2.207	0.027
	Positive Ranks	0.0 (0)		
Hyperactivity/ Impulsivity	Negative Ranks	3.0 (6)	-2.214	0.027
	Positive Ranks	0.0 (0)		
Total	Negative Ranks	2.0 (6)	-2.201	0.028
	Positive Ranks	0.0 (0)		

Table 5.7 Wilcoxon W test for significant differences between pre and post -test for Experimental group (n=6) in teachers ADHD scores

Factors	Groups	Mean Rank (n)	Z	P
Inattention	Negative Ranks	2.00 (6)	-2.201	0.028
	Positive Ranks	0.00 (0)		
Hyperactivity/ Impulsivity	Negative Ranks	2.00 (6)	-2.207	0.027
	Positive Ranks	0.00 (0)		
Total	Negative Ranks	2.00 (6)	-2.201	0.028
	Positive Ranks	0.00 (0)		

Both Table 5.6 and Table 5.7 show a statistically significant difference in the experimental group between pre and post-tests. For example, Table 5.6 shows a statistically significant difference in the parents' test with significant effect size for the ADHD total score ($Z = -2.20$; $P < 0.05$; $r = 0.90$). In addition, there was a statistically significant difference in the teachers' test with significant effect size for the ADHD total score ($Z = -2.20$; $P < 0.05$; $r = 0.90$) as shown in Table 5.7. Overall, the inattention and hyperactivity/impulsivity variables show statistically significant differences with significant high effect sizes between pre and post-tests for both the parents' ADHD tests ($Z = -2.21$; for both; $P < 0.05$; $r = 0.90$ for both) and those of the teachers ($Z = -2.20$ and -2.21, respectively; $P < 0.05$; $r = 0.90$ for both). It is important to note that the fact that the study was not conducted "blind" may have had an impact on these findings; this fact will be further discussed later in this thesis.

5.2.3 Strengths and Difficulties Questionnaires (SDQ) test

To determine if there were any statistically significant differences between the experimental and the control groups at the starting point, regarding emotional and behavioural difficulties in both the parents' SDQ test (results shown in Table 5.8) and the teachers' SDQ test (results shown in Table 5.9), the Mann-Whitney U test was employed.

Table 5.8 and Table 5.9 reveal no statistically significant differences in the total difficulties between the control and experimental groups. In other words, there was no statistically significant difference with no significant high effect sizes in the total difficulties noted in either the parents' test (Mann- Whitney U test = 22.0; Z = 0.64; P > 0.05; r = 0.19) or in the teachers' test (Mann-Whitney U test = 25.5; Z = 1.21; P > 0.05; r = 0.35). However, it is important to note that Table 5.8 highlights a statistically significant difference with significant high effect size between the control and experimental groups regarding hyperactivity/inattention in the parents' test (Mann-Whitney U test = 33.0; Z = 2.51; P < 0.05; r = 0.73). There is also a statistically significant difference in the variable of conduct problems in the teachers' test (Mann-Whitney U test = 32.5; Z = 2.36; P < 0.05; r = 0.68) as shown in Table 5.9.

Table 5.8 Mann-Whitney test for statistically significant differences between the control (n=6) and experimental groups (n=6) in the pre-test of parent SDQ scores

Factors	Groups	Mean Rank	Mann-Whitney	Z	p
Emotional problems	Control	6.42	18.500	.081	.935
	Experimental	6.58			
Conduct problems	Control	5.75	22.500	.742	.458
	Experimental	7.25			
Hyperactivity/inattention	Control	4.00	33.000	2.512	.012
	Experimental	9.00			
Peer problems	Control	6.25	19.500	.248	.804
	Experimental	6.75			
Prosocial	Control	5.33	25.000	1.187	.235
	Experimental	7.67			
Total difficulties	Control	5.83	22.000	.642	.521
	Experimental	7.17			

Table 5.9 Mann-Whitney test for statistically significant differences between the control (n=6) and experimental groups (n=6) in the pre-test of teachers SDQ scores

Factors	Groups	Mean Rank	Mann-Whitney	Z	p
Emotional problems	Control	6.92	15.500	-.411	.681
	Experimental	6.08			
Conduct problems	Control	4.08	32.500	2.359	.018
	Experimental	8.92			
Hyperactivity/inattention	Control	5.50	24.000	.978	.328
	Experimental	7.50			
Peer problems	Control	6.00	21.000	.486	.627
	Experimental	7.00			
Prosocial	Control	6.08	20.500	.410	.682
	Experimental	6.92			
Total difficulties	Control	5.25	25.500	1.207	.227
	Experimental	7.75			

In the analysis of statistically significant differences between the pre-test and post-test results, Wilcoxon W test was used to examine the SDQ emotional and behavioural difficulties of the control group after the intervention. Both the parents' SDQ test (Table 5.10) and the teachers' SDQ test (Table 5.11) reveals no statistically significant differences between the tests. The negative value for Z in the variables of emotional problems, conduct problems, hyperactivity/inattention and peer problems variables as well as in the total difficulties means a positives improvement. However, positive value for Z in Prosocial means positive improvement.

In Table 5.10, the data analysis of the pre and post-tests suggests that the results of total difficulties for the control group did not change at all with no significant high effect sizes in the parents' SDQ test ($Z = 0.74$; $P > 0.05$; $r = 0.30$) The same situation was observed for the results from the teachers' test ($Z = -1.29$; $P > 0.05$; $r = 0.37$) as shown in Table 5.11. Neither parents nor teachers reported any statistically significant differences regarding emotional problems, conduct problems, hyperactivity/inattention, peer problems or prosocial variables. This means that there were no improvements observed through the quantitative method due to treatments at school or home

Table 5.10 Wilcoxon W test for statistically significant differences between pre and post- test for parents SDQ scores in Control group (n=6).

Factors		Main Rank (n)	Z	p
Emotional problems	Negative Ranks	1.0 (1)	0.000	1.000
	Positive Ranks	3.0 (2)		
Conduct problems	Negative Ranks	1.0 (2)	-0.378	.705
	Positive Ranks	2.0 (2)		
Hyperactivity/inattention	Negative Ranks	0.0 (0)	1.857	.063
	Positive Ranks	2.0 (4)		
Peer problems	Negative Ranks	2.0 (3)	-0.368	.713
	Positive Ranks	2.0 (1)		
Prosocial	Negative Ranks	1.0 (2)	0.108	.854
	Positive Ranks	2.0 (2)		
Total difficulties	Negative Ranks	1.0 (2)	0.740	.459
	Positive Ranks	2.0 (4)		

Table 5.11 Wilcoxon W test for statistically significant differences between pre- and post-test for teachers' SDQ scores in control group (n=6).

Factors	Groups	Mean Rank (n)	Z	p
Emotional problems	Negative Ranks	1.0 (2)	-1.342	.180
	Positive Ranks	4.0 (0)		
Conduct problems	Negative Ranks	1.0 (1)	.000	1.000
	Positive Ranks	4.0 (1)		
Hyperactivity/inattention	Negative Ranks	2.0 (2)	-1.414	.157
	Positive Ranks	4.0 (0)		
Peer problems	Negative Ranks	2.0 (3)	-1.633	.102
	Positive Ranks	3.0 (0)		
Prosocial	Negative Ranks	1.0 (1)	-1.000	.317
	Positive Ranks	5.0 (0)		
Total difficulties	Negative Ranks	1.0 (3)	-1.289	.197
	Positive Ranks	3.0 (1)		

.For the comparison of pre-test and post-tests, the Wilcoxon W test was used to identify any statistically significant differences regarding the emotional and behavioural difficulties of the experimental group after the intervention, as revealed by the SDQs. Table 5.12 outlines the results of the parents' SDQ test, while Table

5.13 summarises the findings from the teachers' SDQ test. Both reveal statistically significant differences between the pre-test and post-test results.

Table 5.12 Wilcoxon W test for statistically significant differences between pre and post -test for experimental group (n=6) in parents' SDQ scores

Factors	Groups	Mean Rank	Z	p
Emotional problems	Negative Ranks	2.0 (5)	-2.041	.041
	Positive Ranks	1.0 (0)		
Conduct problems	Negative Ranks	3.0 (5)	-2.070	.038
	Positive Ranks	1.0 (0)		
Hyperactivity/inattention	Negative Ranks	2.0 (6)	-2.207	.027
	Positive Ranks	0.0 (0)		
Peer problems	Negative Ranks	2.0 (4)	-1.857	.063
	Positive Ranks	2.0 (0)		
Prosocial	Negative Ranks	0.0 (0)	2.032	.042
	Positive Ranks	2.0 (5)		
Total difficulties	Negative Ranks	2.0 (6)	-2.214	.027
	Positive Ranks	0.0 (0)		

Table 5.13 Wilcoxon W test for statistically significant differences between pre and post -test for experimental group (n=6) in teachers' SDQ scores

Factors	Groups	Mean Rank	Z	p
Emotional problems	Negative Ranks	2.0 (5)	-2.041	.041
	Positive Ranks	1.0 (0)		
Conduct problems	Negative Ranks	2.0 (5)	-2.032	.042
	Positive Ranks	1.0 (0)		
Hyperactivity/inattention	Negative Ranks	2.0 (6)	-2.207	.027
	Positive Ranks	0.0 (0)		
Peer problems	Negative Ranks	2.0 (3)	-1.633	.102
	Positive Ranks	3.0 (0)		
Prosocial	Negative Ranks	0.0 (0)	2.121	.034
	Positive Ranks	4.0 (5)		
Total difficulties	Negative Ranks	3.0 (6)	-2.226	.026
	Positive Ranks	0.0 (0)		

Both Table 5.12 and Table 5.13 show a statistically significant difference with significant high effect sizes between the pre and post-tests. For example, there was a

statistically significant difference in the parents' test for the total difficulties (Z = -2.21; P < 0.05; r = 0.85), as can be seen in Table 5.12. In addition, there was a statistically significant difference in the teachers' test for the total difficulties (Z = -2.23; P < 0.05; r = 0.91), as shown in Table 5.13. All the variables of emotional problems, conduct problems, hyperactivity/inattention and prosocial show statistically significant differences with significant high effect sizes between pre- and post-tests for both the parents' SDQ (Z = -2.04, -2.07, -2.21 and 2.03 respectively; P < 0.05; r = 0.83, 0.85, 0.90 and 0.83 respectively) and the teachers' SDQ (Z = -2.04, -2.03, -2.21 and 2.12 respectively; P < 0.05; r = 0.83, 0.83, 0.90 and 0.87 respectively).

On the other hand, Table 5.12 highlights that there were no statistically significant differences between the pre- and post-tests regarding peer problems in the parents' test (Z = -1.86; P > 0.05). However, results demonstrate that there is significant high effect size (r = 0.76) between the pre- and post-tests regarding peer problems in the parents' test. Similarly, the results shown in Table 5.13 show no statistically significant differences in peer problems in the teachers' test (Z = -1.63; P > 0.05) but there is significant high effect size (r = 0.67) between the pre- and post-tests regarding peer problems in the teachers' test. Overall, therefore, while most variables revealed statistically significant alteration between the pre- and post-tests for the experimental group, peer problems were the sole variable which remained unchanged (in terms of statistical significance) in the quantitative responses of both parents and teachers. It should be noted that this study has small sample size hence it would be hard to draw robust and conclusive quantitative results from it, future studies must involve significantly larger sample size to ensure sufficient model power.

5.3 Qualitative Data Analysis

This section presents the results of the interviews conducted with parents and teachers of children with ADHD prior to arts therapies treatment, and then following arts therapies. The intention is to determine and then evaluate how effective the treatment has been according to parents' and teachers' perceptions. Therefore, this section is logically organised into 2 parts. The first part looks at the opinions of parents and teachers prior to the arts therapies, identifying certain trends and themes. The second part subsequently reviews the opinions of parents and teachers after the arts therapies treatment.

5.3.1 Perspectives of parents and teachers on a child's externalised behaviour prior to arts therapies

All parents identified varying degrees of aggression within their children. One parent stated that "he gets angry when I don't do it [homework] for him, and he swears, using bad words he has learned at school' (S1, 76-7). In several cases this aggression is characterised by violence against other people, notably siblings. For example, one parent described how 'sometimes he [the participant's child] hits his brother hard' (S10, 83-4); 'he doesn't mean it, but sometimes he is aggressive when he plays with children. Sometimes he hits children' (S10, 139-40). Other parents noted how this aggression can be directed against objects which the child breaks without feeling remorse afterwards.

Similarly, many teachers of children with ADHD also identified 'aggression' as a problematic externalised behaviour. Again this is often manifested in acts of violence against others. One interviewee noted their student's 'aggressive behaviour towards friends' They would sometimes hit their classmates' (S2, 50), whilst another noted that the child would 'throw dangerous objects at teachers and other students (S12, 50).

All the parents noted that their children had problems with their attention and ability to concentrate. Additionally, all the parents recorded that their child's attention span is very short with one parent noting that their child is able to concentrate for 'less than a minute' (S3, 64). Some parents noted however that the child's ability to concentrate depended on the subject. For example, one parent, when asked about their child's concentration, noted that 'it depends on the subject, for example in maths he can

concentrate for a long period because he loves it' (S5, 78-9). Another parent however noted that 'when I teach him mathematics, he can't concentrate' (S7, 68). All the teachers also recorded incredibly low concentration levels amongst all the children with eight out of the twelve teachers expressing their belief that their student could concentrate for only 5 minutes or less.

The responses from the parents, when asked about their child maintaining eye contact, varied. Several parents reported that despite the child maintaining eye contact at the beginning of a conversation, the child would shortly get distracted. Again, a couple of parents noted that the child was able to maintain eye contact longer if they found the topic engaging. The majority of the responses from the teachers claimed that the child was able to maintain eye contact.

Hyperactivity was strongly reported to be an issue by all the parents. Several parents linked their child's hyperactivity with the theme of the child enjoying movement. One parent commented that 'we noticed that he is hyperactive and inattentive' (S2, 19); 'He suddenly became hyperactive' (S2, 24); 'He loves movement' (S2, 211). Another parent commented that 'he is hyperactive' (S10, 18), 'He does not listen to our commands' (S10, 25); 'sometimes he shouts and misbehaves (S10, 128). Impulsiveness was also identified as a characteristic of a child's hyperactivity. All but one of the parents interviewed reported that their child was impulsive. Likewise all but one of the teachers described the child as hyperactive, with one explaining that the child they teach 'can't stay in his seat' (S12, 18) and engaged in 'throwing dangerous objects at teachers and other students' (S12, 50).

All the parents had strong concerns relating to their children and their performance at school as a result of their ADHD. One parent described that 'when he [their child] started at school, he had lots of problems' (S5, 20-1); 'he has been expelled twice' (S5, 30); 'in the school which expelled him, he was nearly bottom, because he always had problems with the other children, and was leaving the class' (S5, 212-3). Another parent reported that 'he has some difficulties in learning. He had difficulty in Arabic, mathematics, religious studies, reading and writing' (S2, 171-2). Interestingly however, the teachers interviewed were much more positive about the academic performance of the children with responses such as 'he is doing well sometimes' (S1,

135), 'Fairly good' (S4, 139), 'he is doing excellent' (S5, 141). Only two teachers reported significant concerns in regards to their child's academic performance. One stated that 'he always neglected his studies' (S6, 50); 'On the academic side, he is doing poorly, especially in regular activities like reading and writing' (S6, 51-2). Another teacher reported that, 'he's not doing well, but this could be solved with parental care and support' (S12, 138).

Only one parent was able to answer positively when asked about their child's ability in task completion. Other responses ranged from 'sometimes, if there is a reward or punishment' (S2, 71) to 'almost never. When I ask him to do homework, he can't do it' (S7, 72) and 'No. Unless he likes it, he might complete a task once in two months' (S10, 72). The issue of 'task completion' drew an interesting variety of responses from the teachers of the children. Four of the teachers detailed, how their child could complete tasks. One teacher explained that 'most of the kids can't, but [student's name] is very good at it' (S5, 77). Conversely, four teachers explained that their students were not able to complete tasks. Additionally, another four teachers said that their pupil was 'sometimes able to complete a task, or rather able to complete the task 'to some degree' (S11, 78).

5.3.2 Perspectives of parents and teachers on a child's internalised behaviours prior to arts therapies

Another core theme that emerged during the interview process with the parents and teachers was surrounding issues connected to the child's 'internalised behaviours'.

Several parents were able to identify 'fear' or 'insecurity' characteristics within their children. One parent was able to give several examples of these characteristics being displayed by their child. They stated that ''the housekeeper told him that there was a thief to try and frighten him. It took him five days to recover from this problem – he became very afraid of thieves' (S9, 143-4); 'He is sometimes afraid and asks lots of questions. He sometimes becomes anxious and fearful' (S9, 168); 'He can't trust people, even children outside. He says they might hit him' (S9, 177). One parent stated that 'He is emotional, and he is afraid of losing people – he is frightened that his father will leave him behind' (S4, 118-9). Additionally two parents inferred issues related to 'egotism'. One stated that, 'he plays with his sisters. He thinks he is much

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better than them' (S5, 48); 'He likes the attention to be on him' (S5, 62); 'when he sees others bigger than him playing tug of war, he goes and joins in – he thinks he will win' (S5, 182-3); 'He has to be the leader' (S5, 257). The other parent simply stated that 'the attention has to be on him more than others' (S6, 124).

Some children showed signs of insecurity, according to their parents. This might show itself in a need for exact routine: 'He might ask me to come to him in half an hour – if I don't come in exactly half an hour, he gets angry and upset, feeling I have broken my promise' (S5, 131-3); alternatively, it might show as a desire to get power over others – 'He buys things the other children can't buy, and tries to lead the children, offering them bribes to try and control them' (S5, 259-60). Children might also be clingy: 'When I leave him, he calls me and asks me where I went. He wants me to be near, and is anxious when I leave' (S9, 172-3). For one child, clinginess turned into jealousy: "He loves to play with his sister all the time, and becomes very jealous of other children, including his brothers and sister, when they play with her' (S1, 53-4). Two children were, according to their parents, not secure in their parents' love: 'Sometimes he understands our feelings, and he says, 'You don't like me! You don't like me!" (S7, 117).

When asked about their child's insight into their own difficulties most of the parents stated that they felt that their child did not understand their condition. One parent stated that 'he doesn't know what the problem is. We give him medicine and he doesn't know why' (S12, 109). Two parents however stated however that their child did have an insight into their condition. One parent explaining that 'Yes, he understands his situation' (S5, 125). When asked whether their child recognised their feelings, the same parent answered, 'yes, he does; he is very clever and can understand' (S5, 142).

All but one of the parents explicitly expressed concerns surrounding the issue of anger management or emotional control. Most noted anger tendencies within their child and several mentioned the speed at which their anger can emerge. One parent stated that 'he gets upset or angry very quickly' (S6, 40); 'He is very, very angry. He sometimes breaks things and throws things, and says, 'I am angry" (S6, 137). Another parent noted that 'he is sometimes aggressive and can't accept others' (S7, 36); 'he is very

sensitive' (S7, 46); 'He is sensitive and reacts immediately afterwards' (S7, 107); 'Sometimes he reacts very strongly to something unimportant. For example, when we take the iPad from him, he gets angry and aggressive – he shouts and cries' (S7, 140-1).

When asked whether or not their child understands the consequences of their actions, only two parents stated 'yes', although one used the example of touching hot things [tea and coffee] rather than behavioural issues. This parent explained that ''Yes. Sometimes when he touches something hot, he learns from his mistake. But he has to have experience to know the consequences of his actions' (S12, 157-8). Interestingly, one parent stated that 'sometimes he knows, and sometimes he acts impulsively anyway because he wants to' (S5, 178). The other parents all argued however that their child did not understand the consequences of their actions. One stated that 'No. Many times I have tried to speak to him, but there is no result' (S7, 149), whilst another simply explained that 'No, he cannot understand' (S11, 144). In contrast to the opinions of the respective parents, the teachers were more inclined to believe that the children knew and understood the consequences of their actions with five of the twelve answering that the child did indeed understand, however one included the disclaimer that 'yes [the child understood the consequences], but they don't care (S6, 120).

The parents interviewed largely described their children as happy. One parent explained that 'He is very happy when he watches Tom and Jerry' (S1, 69), but the parent subsequently stated that they did not know about the future happiness of their child (S1, 123). Another explained that 'he is happy' (S6, 128), explaining that, 'Yes he trusts people. He interacts with them and quickly becomes happy' (S6, 153). One parent however displayed more misgivings about their child's happiness, explaining that 'he becomes sad when he sees someone cry' (S12, 51); 'No, I don't think so' (S12, 139); 'he feels sadness due to making lots of mistakes, he thinks that he makes problems for his family. He suffers from that. I think that as he gets bigger, this sadness will increase' (S12, 144-5). Several teachers mentioned that sometimes the child seemed unhappy.

Largely the parents of the children with ADHD were able to identify empathetic traits within in their children. One parent stated that their child "has a very kind heart and is emotional' (S1, 46). Another parent explained that her child was very empathetic, stating that although 'he loves to play rough' he 'is completely harmless' (S2, 58). This response was not universal, as demonstrated by one parental response which described how, 'I punish him by ignoring him, not talking to him or answering him. He feels it but does not apologise' (S4, 78).

The issue of confidence perhaps received the largest mixture of answers from the parents. For example one parent noted that 'when we go to visit cousins, he always asks where the children are so that he can go play with them' (S9, 55); 'He is sometimes afraid and asks lots of questions' (S9, 168); ' He is not confident enough to buy from the tuck shop at school. Once he went, and I was happy, but he did not go again. Someone hit him, and now he never goes to the shop' (S9, 177-9); 'Once, in a mall, I tried to ask him to buy nuggets from a shop, but he couldn't – he spent about 7 minutes watching others, but he couldn't buy. He may be afraid' (S9, 180-1). Whilst some parents described their child as quite happy in the company of others, one parent stated, in response to the question relating to their child being content to be left alone with others that 'he doesn't spend all the time with the children – sometimes he plays with them, sometimes he comes back to me' (S9, 56-7); 'When I leave him, he calls me and asks me where I went. He wants me to be near, and is anxious when I leave' (S9, 172-3). Alternatively another parent described how, 'he [the child] doesn't have any problem staying with other people. He can stay with the housekeeper, his grandmother – no problem at all' (S10, 156-7).

Another parent explained how they believed their child was 'fearless' (S5, 160); 'two years ago, he had a car accident on the street … he had a shock; and did not speak for about 2 weeks; after that he become normal and fearless. He still runs in the street now, and cycles in the street' (S5, 160-2); 'I always feel that he is very confident in new situations. For example, when he sees others bigger than him playing tug of war, he goes and joins in – he thinks he will win' (S5, 182-3); 'I don't know how he is with people that he has just met. He isn't afraid of people' (S5, 189-90).

The response from the teachers was much briefer, but equally mixed with six of the twelve teachers stating that their student was not confident, four of the teachers described their student as confident and the remaining two described the child as 'sometimes' (S2, 121) confident, or 'somewhat' (S4, 123) confident.

When asked about the preferences of their child, the parents responded by listing a broad variety of activities. These activities often included watching TV, however one parent noted that 'he loves to sit with adults and try to copy what they do' (S4, 55); 'My child loves music and poetry and dance' (S4, 168-9). Another parent suggested that 'He likes electronics, such as smartphones, and maybe bicycles second most' (S5, 70); 'He loves listening to stories. He always likes it before he sleeps' (S5, 74); 'in maths he can concentrate for a long period because he loves it' (S5, 78-9). Additionally another parent explained how 'He loves colouring, drawing, construction games – anything he can build with or make shapes' (S2, 62).

When the teachers were interviewed about the 'preferences' of the child, over half mentioned the inclination of the child to use the computer. Other preferences and hobbies were also recorded. One teacher noted that their student enjoyed 'playing and sometimes chatting with their friends (S6, 60) and 'playing football', (S6, 68). Another teacher noted that their student enjoyed 'chatting mostly' (S4, 59) and 'playing football' (S4, 83). When the teachers were additionally asked whether their student was reluctant to be in school, in an attempt to build up a pictures of the child's 'evasive behaviours', interesting only three teachers responded that their student was reluctant to be in school, with the remaining teachers simply stating 'no' and one stating 'not much' (S4, 83).

5.3.3 Perspectives of parents and teachers on a child's social relationships prior to arts therapies programme

When asked about their child's social relationships with their family, siblings and teachers, the parents gave a variety of interesting answers. One parent explained that 'in the family, he mostly does not get on with the others – perhaps once a week. They don't play with him – mostly he plays alone' (S7, 55-6). Likewise another parent explained that 'He is very, very naughty when we visit our cousins' (S12, 68). Several of the parents were able to identify 'considerate behaviour' within their child;

however this was largely connected with the idea of apologising when they had something wrong. For example one parent mentioned, when asked if their child considers their siblings feelings, how 'in the beginning, he might annoy or upset them, but afterwards he comes and says sorry' (S5, 57).

When asked how the child interacts with their siblings, the responses were again mixed but within most replies, the theme of aggression arose. For instance, one parent noted that 'with his sister he is a little bit aggressive, but overall they love each other very much. He sometimes shouts and hits her' (S2, 37-8). Another described how 'He always treated them harshly [his siblings], without meaning to' (S10, 37); 'He is always sharing his toys – his brothers are always playing with them!' (S10, 41); 'Sometimes he hits his brother hard' (S10, 83-4). The parent of 'Student 1' offered a detailed account of their child's interactions with their siblings stating that:

'He interacts normally' (S1, 37); 'He loves to play with his sister all the time, and becomes very jealous of other children, including his brothers and sister, when they play with her' (S1, 53-4); 'Even his sister sometimes asks him to bring something, and he does' (S1, 104); 'his older brothers, when they get angry at him, they tell him that he is crazy and hyperactive' (S1, 112); 'he is always angry with his younger brother, he hits him all the time and takes his things. He mocks his brother with gestures and tries to make him angry. Sometimes he shuts his younger sister in the wardrobe. He sometimes opens the street door and puts his brother out and shuts the door' (S1, 132-5)

Not all the responses to questions surrounding a child's interaction with their siblings however were negative. One parent detailed how 'He does not have any problem with his brothers' (S6, 39); 'He doesn't feel that there is a difference between him and his brothers' (S6, 116). Furthermore, the majority of the parents interviewed stated that their child had the ability to share with one explaining that 'He is always sharing his toys – his brothers are always playing with them!' (S10, 41). Another parent however stated that 'sometimes he lets them play with them. But if he wants them to do something, and they refuse, he takes all the toys from them' (S7, 41-2).

The responses, when asked if their child got on with their classmates, were predominately positive. This is in contrast to the responses given by the parents, when asked about their child's interaction with their siblings, where the responses mostly focused on the difficulties the child had in normal interactions. Over half the parents were able to say 'yes', their child did get on well with their classmates. One parent offered a more detailed answer, stating that 'he likes to play with his friends, but some of them are aggressive and angry, and will take his pens. We are always having to give him new ones. He is always saying, 'This guy took my pen.' But, in general, he has good relationships' (S9, 202-4). The majority of the teachers stated that their student got on with their classmates. Three teachers stated that their student did not get on with their classmates, whilst one explained that their student got on 'with some of them, not all' (S8, 141). Also the majority of the teachers also believed that their student had the ability to share, with two giving the explicit example of playing 'football' (S4, 42), (S6, 42).

Three quarters of the parents interviewed were able to say that their child had 'particular friends'. Of those who answered 'no', one explained that 'he interacts with everyone' (S4, 51). Three quarters of the teachers responded positively to the question relating to the children's ability to form friendships. Furthermore, when discussing the topic of 'peers' an interesting mixture of responses were recorded. Most of the parents were able to detail negative experiences of their children interacting with others. One for instance described how 'he loves to interact with other children, but he finds it difficult' (S2, 50); 'he loves to participate with other children' (S2, 211). Another explained that 'Only a few can tolerate him' (S7, 37) and explained that, 'In general, people don't accept him' (S7, 51).

On the other hand, several parents were able to record positive experiences of their child interacting with their peers. One for example noted that, 'He does not have any problem with his brothers or with making friends. He can make relationships quickly' (S6, 39-40). Likewise when asked about their child's interaction with other children the parent answered positively, believing that their child could even interact well with 'those older than him' (S6, 52). A different parent noted that, when asked about their child's interaction with other children, 'he is OK. He plays with children when he

visits his cousins. He doesn't stay by himself – he always plays with children' (S11, 52-3).

The teachers were asked three questions pertaining to the relationship between their students and the child's peers. These were, 'do the children interact easily?', …'with children their own age?' and, 'do they play well together?'. On the whole responses were generally positive, with a straight 'no' only recorded 5 times out of a total of 36 responses.

5.3.4 Parental and school attitudes towards ADHD and managing a child with the condition

The initial observation by the parents of a problem with their child, happened within a wide age range, with the earliest claiming they noticed a problem from 'when he was nearly 1 year old' (S1, 27) and the latest explaining that 'the problems became very clear at age 9' (S6, 31). Three quarters of the children involved within this study were diagnosed with ADHD by 4 years old or younger.

The parents interviewed about their attitude towards the diagnosis responded with a mixture of optimism and concern, especially about the child's future. Many parents also described how they were becoming more used to the issues and needs of their child. For example one parent explained 'My child's difficulty is not as bad compared to other children. But God can help' (S4, 104); 'At the beginning I was irritated, but afterwards I become more optimistic' (S4, 181). Asked if their child was a burden, the parent responded, 'No, it does not make any problem for us' (S4, 187). Many parents however described their frustrations at the consequences of having a child with ADHD and their reluctance to leave their children with other people. For example one parent detailed how 'We have to be calm. God gave us this child. We have to teach him' (S12, 116). When asked, about coping with the problems related to ADHD' the parent replied, positively (S12, 125). When asked if their child was a burden, the parent replied, 'Yes, socially' (S12, 129); 'he feels sadness due to making lots of mistakes, he thinks that he makes problems for his family. He suffers from that. I think that as he gets bigger, this sadness will increase' (S12, 144-5); 'I don't leave him alone with other people. People can't cope with him' (S12, 166). Over half of the replies from the parents described their child as a 'burden'.

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When asked how the parents disciplined their child, most used the method of deprivation, although some admitted that they had resorted to violence. One parent explained that, 'I used to use wrong strategies such as hitting, but after I realised that my child has problems, I use only bribes and threats' (S2, 81-2); 'I threaten him with deprivation of a particular thing that he loves' (S2, 86). Another parent described how they 'I punish him [the child] by ignoring him, not talking to him or answering him. He feels it but does not apologise' (S4, 78). Another response hinted towards the frustrations in trying to control a child with ADHD, 'I try to be calm and speak to him. Sometimes we punish him – sometimes shouting, sometimes hitting him, quite strongly' (S7, 85-6).

When asked about the effectiveness of discipline on their child, most detailed experiences of struggling to get their child to behave. One for instance explained that 'when I say, 'No, you can't play, come and study. We will stay half an hour.' he gets bored and goes. He will stay for five minutes study, then five minutes play' (S5, 84-6); 'Sometimes I get angry with him, and I ask him to sit down. Sometimes he responds, sometimes not' (S5, 101). The limited time frame within which a child would behave was a common theme. Another parent stated that 'after the punishment he is OK for a while, then he causes trouble again' (S12, 96-7). One parent's experience contrasted sharply with the others, where they described how, 'I threaten him with deprivation of a particular thing that he loves. It always works' (S2, 86); 'He responds right away' (S2, 90). Additionally, a couple of parents were able to identify a piecemeal improvement, over time, in their child. When asked 'Do you find it difficult to cope with?', one parent answered, 'Yes, especially at the beginning, but he has improved slightly' (S3, 111); 'he was angry and aggressive, but it has started to reduce' (S3, 128). Likewise another parent responded that ''We are reducing the medicine slightly because he is much better' (S4, 118); 'He used to be afraid and not talk, but now it is OK' (S4, 139).

Some parents alluded to the idea of isolation experienced as a parent of a child with ADHD. For example one parent stated that 'there is no specialist in this problem, only this school. The government doesn't have specialists' (S4, 19); 'God can help' (S4, 104), whilst another stated that 'People always say, 'this is not our problem, this is your problem' (S5, 258).

5.3.4.1 Parental Attitudes towards ADHD treatments (Medication and art therapies)

The issue of 'medication' drew an interesting variety in responses from the parents. Five of the parents explained that their child was on medication for ADHD. One explained that 'We give him Esperidal and Ritalin to make him calm. We used to use Concerta, but not any more' (S12, 109-110); 'If he doesn't have the medicine, there will be a big difference' (S12, 179). Four of the twelve parents explained how their child had tried medication for their ADHD symptoms in the past but were not taking anything currently. One parent explained 'We did use [ADHD medicine], but he has not been using it for nearly a year' (S10, 165); 'He used to stutter – after the medicine, it's OK. It did help him to concentrate and reduced his hyperactivity' (S10, 169-70). Another parent explained that she stopped her child using it because she worried about the side effects (S5, 200-4).

A few parents described their beliefs surrounding ADHD in their child. One explained that, 'as you know, in the Arab world, they think a hyperactive child is naughty. This is an illness, and it has medicine and therapy' (S5, 15-6); 'One day, I asked him to draw his anger. He drew an angry face, and after that, he became calm. These things can help' (S5, 242-3). Another commented that, 'I used to use wrong strategies such as hitting, but after I realised that my child has problems, I use only bribes and threats' (S2, 81-2). The same parent explained that his child was 'is too young to understand his condition' (S2, 102); 'I am sure that he will get better over time with God's help' (S2, 110).

While some of the parents were not convinced that 'arts therapies' would help their child, they were all willing to try such an approach. One parent stated that 'I don't have any idea about it' (S3, 173); 'It might help him' (S3, 177); 'I hope this programme is a success and gets good results' (S3, 195). Another parent explained that 'I don't know, God knows. But why don't we try? I am happy to try this trial. Maybe it will succeed. Just so long as it doesn't endanger the child' (S6, 186-7); 'I hope it will help. He loves art and drawing, and he is good at it' (S6, 207).

Most parents were positive about the prospective of arts therapies on their children. One explained, 'I support new approaches. I took him to the school to help him. My

child loves music and poetry and dance' (S4, 168-9). When asked, 'do you think arts therapies will help?' the parent responded positively, stating that 'I hope it will bring good things. I don't want this programme to have bad side effects, but I hope it can help' (S4, 202-3). Another parent stated that 'It is a new approach and it is not known in the Kingdom of Saudi Arabia, and I totally support it. In my mind, I agree with any study which supports this problem. Even if it's dance or music' (S2, 177-8); 'He loves movement, and he loves to participate with other children. I expect a good result from this program because it touches on his interests' (S2, 211-2).

Despite the general support for the 'arts therapies' some parents expressed concerns over certain elements of the program. One declared that 'dance and music are Haram: 'God did not make healing for his people in something Haram'' (S12, 201). Likewise, another stated that 'I want him to contribute in the drawing and physical classes only' (S8, 200). Other parents were more relaxed about the prospect of musical therapy, with one explaining that, 'in my mind, I agree with any study which supports this problem. Even if it's dance or music' (S2, 177-8).

5.3.4.2 School Attitudes towards ADHD treatments (Medication and art therapies)

The teachers were universally positive about the prospective art therapies treatment on their students. One stated that 'this method is excellent, and I think it will be very helpful to children with ADHD' (S2, 104); 'I think it will have a positive outcome' (S2, 149), whilst another confirmed that, 'Yes, I believe it will help them' (S7, 106); 'I expect a good outcome Inshallah (God Willing)' (S7, 150).

When quizzed about their attitude towards the effectiveness of medication for ADHD, most teachers viewed such medication as 'good' or 'useful'' in helping their child/pupil with ADHD. One stated that the medication 'helps them focus, and reduces their impulsiveness' (S8, 129); 'Useful' (S8, 133). Three teachers however disagreed with the usefulness of such medication. One explained that they 'strongly oppose using medication' (S6, 132). Interestingly, one teacher also admitted that they 'sometimes [I] become irritated' by their student, whilst another described how 'from the behavioural side he [the student] is really tiring' (S6, 132). All the teachers reported that they have discussed the progress of the child with the parents of the

child and most were able to answer when asked whether or not the child was on medication.

5.3.5 Perspective of the parents on interaction with the school

The parents interviewed were able to describe difficulties in the relationship between their child and the school. This included difficulties with both the schoolwork and the practices at the institution itself. One parent whose child attends a specialist school explained that:

'The doctor suggested this school to me for children like this' (S5, 26); 'I say to him, 'this school will not expel you no matter what you do! This school is for children like you'' (S5, 129-30); 'The school is very expensive. We have to put him in this school because it is the only one. Both other schools have expelled him, one after just one day. In the ADHD School, he has become good at mathematics' (S5, 146-8); ' In this ADHD School, they should have English but they don't' (S5, 224-5); 'I always ask the school to be in contact with me, but they don't' (S5, 279-80)

Many parents detailed their concerns with the school their child was attending, and the progress of their child. One parent stated 'in school, other children improved, but my child has become worse. They don't have experience with children with this condition – they are educators, not specialists' (S12, 131-2). Another parent simply explained that their child was not progressing, detailing that, 'Last year was better than this year. Maybe the teacher changed or something' (S10, 175). Many parents touched upon the theme of 'lack of communication' with the school. For example one parent responded when asked about their child's interaction with classmates at school they responded that they were uncertain and ''Ask the school' (S6, 173). Another mentioned that 'We don't know what he is doing at school' (S1, 64). Additionally another parent explicitly stated that ''I always ask the school to be in contact with me, but they don't' (S5, 279-80). The same parent also described the school's involvement

in the diagnosis, explaining that 'the school asked us to go to a specialist centre for ADHD' (S5, 21), which eventually lead to the child being diagnosed with ADHD.

5.3.6 Perspectives of parents and teachers on a child's externalised behaviour post arts therapies

The interviews that followed the arts therapies intervention were conducted to discover whether or not the parents and teachers felt that the therapy that their child had experienced had helped improve the child's emotional wellbeing, social skills, emotional regulations and other ADHD symptoms. Additionally, the post intervention interviews also served to reassess the judgement of the teachers and parents on arts therapies programme acquired with the use of the two assessment tools (i.e. ADHD and SDQ scales).

All of the parents of the children in the experimental group reported substantial changes in their child's ability to concentrate after the arts therapies programme. One parent explained how "there has been a significant improvement in his ability to concentrate' (S7, 46). Another parent explained how the 'biggest benefit' from the treatment had been their child's 'increased concentration in writing and learning, and even in discussions with me' (S9, 146-7). Again another parent noted how, 'before the programme he didn't want to stay and study. Now, I can leave him, and he can study a page by himself. There have been changes' (S5, 55-57). The teachers of the children included within the experimental group were less universal in their feedback. Although one did notice that their student had achieved a 'remarkable improvement in their attention span' (S1, 74), several still claimed that their student could concentrate for only '5 minutes' (S2, 70), (S6, 71).

The reported concentration and inattention levels contrasted greatly between the control group and the experimental group. Whilst within in the experiment group, most of the parents were able to report sizable increases in their child's concentration levels, this was not the case for the parents of the children in the control group. One parent believed that there was 'just a little' (S3, 42) improvement in their child's attention span. All the other parents of the children in the control group however reported that there had been 'no changes at all' (S8, 45). Likewise the teachers of the children within the control group all detailed the short attention spans of these

children, with the maximum attention span of any of these children detailed by a teacher as reaching only '15-20 minutes' (S8, 70).

Another positive development for the children subjected to the experimental group was the reported noticeable increase in eye contact by their parents. One parent explained that not only had their child improved their 'eye contact' but also that 'he can concentrate emotionally' (S5, 66). Only one parent of a child in the experimental group didn't notice any 'big changes in eye contact' (S7, 56). The teacher of this student also reported that they had noticed no improvement in eye contact. The other teachers, like the other parents, reported an improvement in eye contact with one of the teachers exclaiming that there had been a 'remarkable improvement in his attention span and eye contract' (S1, 78).

The parents of the children in the control group noted no such improvement with one stating that there had been no improvement and 'that this is one of the biggest problems that he still has' (S8, 53). The teachers of the children who were included in the control group largely did not offer detailed feedback on the improvement of their respective students when it came to eye contact.

The parents of the children included within the experimental group were able to give positive and, in some cases, dramatic feedback on the extent to which the level of hyperactivity in their child had decreased since the programme. One explained how 'after the programme he has become much better. Thank God' (S5, 126). Another explained how 'in terms of movement, it definitely made a change' (S2, 115). All but one of the parents were able to describe an improvement within their child. Several described their child as 'much better' (S2, 77), (S5, 100), (S9, 94-5), whilst another explained that 'he has become less impulsive, thank God. But we still have to keep an eye on him, especially when we go out of the house' (S1, 79-80).

The teachers of the children within the experimental group generally recorded that their child had become more obedient after the treatment, which the teacher can link to a decrease in the disruptive levels of hyperactivity in the children following the treatment. One noted how their child 'has become less stubborn that before' (S7, 50). When asked before the treatment, whether or not their student followed instructions, the teachers of both Student 1 and Student 6 both replied negatively. Following the

treatment both responded positively to the question relating to the child's ability to follow instructions. Likewise the teacher for Student 9 was able to answer 'most of the time' (S9, 95) to the same question, having answered 'no' when the question had be forwarded prior to the arts therapies.

These responses contrast greatly with the feedback offered by the parents of the children included within the control group. Not a single parent of a child within the control group was able to report any discernable change in their child's hyperactivity levels. For example one declared that, 'No, in [terms of] hyperactivity there was no change, or we can say a very small change. I think his friends affect his behaviour because he is imitating them' (S8, 119). Whilst some parents of the children in the control group claimed they had witnessed 'gradual' (S8, 75) or 'subtle' (S11, 71) changes in their child's impulsivity, the majority of feedback detailed no changes in their child's level of impulsivity.

Likewise most of the teachers of the students within the experimental group were able to recount deep changes in the hyperactivity levels of their respective students. One noticed how their student was 'much better than before in terms of his hyperactivity' (S9, 155). Another teacher explained that 'at the end of the programme his hyperactivity was much less' but that the student needed 'an ongoing programme' (S7, 156). One described how 'the impulsively has significantly decreased after the programme' (S5, 16). Another teacher was able to go further, explaining that 'he used to behave impulsively, but not any more' (S7, 113). The teachers of the children in the control group also all reported that there was 'no change' in the hyperactivity levels of their respective students. Likewise almost all simply responded 'yes' when asked whether their child behaved impulsively.

Improvement in terms of the child's 'performance at school' was also greatly noticed by the parents of the children within the control group. One parent explained in detail how…

I was suffering from asking him to sit and write or do homework, but now he reads everything, even three times, five times. He used to say, 'No, it's too

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much!" (S9, 56-58); 'But he has started caring about his homework more – he tells me that he has homework and has to do it' (S9, 118-9);

Another parent reported how 'now, I can leave him, and he can study a page by himself. There have been changes' (S5, 56-57). Likewise another parent confirmed that their child was 'much better than before' (S1, 103). Only one parent of a child in the experimental group described 'no big change' in terms of their child's academic life, however the same parent did note that 'anything else, for example activities or art, he is now much better at' (S2, 106). Again the feedback from the parents of the children assigned to the control group was sharply different to the feedback from the parents of the children who had experienced the arts therapies. Whilst one parent claimed to have noticed 'gradual progress' (S3, 92) and another 'subtle improvement' (S11, 92) the rest of the parents reported 'no change'. Interestingly, the teachers gave far less feedback on this topic area than the parents. This included both the teachers of the children in the control group and the teachers for the children in the experimental group. Only two teachers reported a change. These were both focused on the improvements witnessed within two students who had been assigned to the experimental group, with one teacher saying how their pupil 'has become more interested in school and studying' (S5, 140). Another teacher of a pupil within the experimental group also noticed how their student's 'screaming and impulsivity have significantly decreased' (S9, 14).

All the parents of the children within the experimental group were able to report that there had been improvements in their child's ability to complete tasks. One enthusiastically exclaimed how, when asked whether their child's ability to complete tasks had improved, 'absolutely, especially in writing. Even in drawing, he has started to stay for a long time, longer than before' (S9, 62-3). Another parent described how their child 'is much better. When you ask him something, it's much better now. In the past when I asked him to brush his teeth, for example, he wouldn't finished it- now he does it' (S7, 51-2). All the parents of the children in the control group reported 'no change' except for one parent who had been a 'gradual progression' but 'very little

change' (S8, 49). Perhaps surprisingly, none of the teachers focused upon, and thus reported, any change in their child's ability to complete tasks.

5.3.7 Perspectives of parents and teachers on a child's internalised behaviours post arts therapies

The parents of the children in the experimental group offered a mix of responses when asked whether their child's level of anger had decreased following the programme. Three parents stated that there had been 'no change' in their child's anger, with one explaining that 'there is no real change in his anger. Since a month ago, he has been shouting when he is angry'; "A child hit him, and it has made him very emotional' (S1,90). One parent found that their child had become 'less angry' (S3, 73) after the treatment. Another parent found that 'sometimes he gets angry, but this is unusual' (S2, 73). Surprisingly however, one parent believed that 'he gets angry quicker' (S6, 69-70), although they suggested this may be connected to getting him to take medication again. Only one parent of the children assigned to the control group suggested that they had witnessed their child become 'less aggressive and less angry'. All the other parents of the children within the control group reported that there had been 'no change'.

Two thirds of the parents of children in the experimental group noticed an improvement in their child's ability to understand the consequences of their actions. One stated that 'yes, he now understands much better when we explain that something is dangerous' (S1, 84). Another parent agreed that their child was 'much better than before' (S2, 81). Only one parent of a child within the control group could answer that 'yes' there had been an improvement, which had been 'since the beginning of the year' (S10, 76). The teachers of both the children in the control group and the experimental group largely held the same opinion of their child's ability to understand the consequences of their action post arts therapies as they did prior to the arts therapies.

The majority of the parents of the children in the experimental group were able to report that their child was happier after the arts therapies. One parent described how, 'he is much better than before. He now talks about the program and the activities he is doing. He has also become more eager to go to school' (S6, 64-5). These changes in

the happiness of the children in the experimental group have also been matched by improvements the confidence levels of the children within the experimental group. One parent described how, 'usually, when we ask him to go out to a place where we can enjoy ourselves, he always says 'no, no, no', but now he goes out with us and plays and enjoys himself' (S5, 46-8). Likewise, another parent stated that, 'I noticed, when we went out to the park – he doesn't have any friends there – that he went over to other children in the play area and tried to play with them a little bit, and that's great' (S9, 39-41).

All parents of the children in the control group did not notice any change in their child for 'the worse or the better' (S11, 63) in relation to their child's happiness. Similarly, the parents of the children in the control group all largely noticed no change in the confidence levels of their children with one explaining that 'I have not noticed any change. I asked the school if they had noticed anything about my child, and they said they had not noticed any changes. I think there are no changes in him' (S10, 81-2).

When questioned generally about their child's preferences after the programme one parent of a child in the experimental group explained in some detail the changes they had noticed in their child. The parent stated that:

> He used to play a lot on the computer. Usually, when we ask him to go out to a place where we can enjoy ourselves, he always says 'no, no, no', but now he goes out with us and plays and enjoys himself' (S5, 46-8); 'Before, he used to like to stay at home, always playing on the computer. Now, he is much better. Even yesterday, I was going to the shop, and I asked him to come with me, and he said 'Yes, I will', and he did go. This has only happened after the programme – before he would not' (S5, 48-51)

The parents of the children in the control group did not report any changes in their child's hobbies or behaviour.

The teachers of the students in the experimental group were able to offer detailed responses when asked about their perception of change in their student's emotional

regulation. One mentioned the problem of their student 'leaving the classroom sometimes', but that this was 'less than before' (S1, 18); adding 'There is a remarkable improvement in his attention span and eye contact' (S1, 78). Another teacher noted how, with their student, 'the impulsivity has significantly decreased after the programme' (S5, 16). Another teacher concluded that 'his screaming and his impulsivity have significantly decreased' (S9, 14). The same teacher was also able to note an increase in their student's attention span. For example, one teacher explained that, 'his attention span has improved (especially when there are no distractions)' (S1, 70). Another teacher was able to report that he used to have some issues, such as taking pens from his classmates, but they have greatly decreased lately' (S6, 50-1). There were no similar observations from the teachers of the students involved in the control group.

Three of the teachers of the students within the experimental group made specific references to the improvement in their students' behaviour following the arts therapies. One teacher stated that I think it's good and I have noticed some positive changes in his behaviour' (S7, 104); 'It has improved the child's behaviour just as I expected, even though it was short. I think it should have been longer' (S7, 149-50). Another stated that 'it [the programme] has significantly improved his behaviour, and I wished it had lasted longer' (S9, 149). Another simply concluded that 'I think this child has changed for the better' (S1, 145). One teacher was able to specifically notice the improvement in their student's social skills following the arts therapies. When asked if their student could interact easily with other children, the teacher responded, 'yes, especially after the programme' (S5, 29); 'there's been an improvement in his social skills. Now he is more likely to share and help his friends' (S5, 45-6). The same teacher was also able to conclude that, 'the child has become more interested in school and studying, especially after the programme' (S5, 84). Similarly, one teacher noted how 'He used to be hard to convince, but now he is beginning to understand and follow class instructions' (S7, 95).

5.3.8 Perspectives of parents and teachers on the child's social relationships post arts therapies.

All parents of the children assigned to the experimental group were able to detail positive changes in their child's interaction with their siblings. One claimed that 'Of course there are some changes. Big positive changes – he is better at participating than before' (S2, 20). This statement was indicative of the feedback from the other teachers. The parents of the children assigned to the control group noted 'no big changes' (S3, 18). The only change noted by any of these parents was either 'gradual' (S8, 18) (S10, 20-1) or 'very slight' (S11, 20) change. Likewise, the parents of the children in the control group were unable to notice any significant changes in their child's relationships with their classmates. This is in contrast to the parents of the children in the experimental group. One of these parents described how, 'he has started to make many friends, not just one, and tells me about them. He has started to go with them to buy sandwiches from the canteen, and eat with his friends, which had not happened before' (S9, 124-5). Improvement in the child's relationship with their classmates was also a common theme amongst the teachers of the children in the experimental group.

Another personal trait that was reported to have improved following the arts therapies was that of the 'ability to share'. All but one of the parents of the children within the experimental group reported this increased ability to share. One parent explained that their child 'has started to share his toys. Before, he always said, 'No'. Now, with encouragement from me, he shares them' (S5, 25-5). The parents of the children within the control group, except for one parent who reported a 'slight improvement' (S8, 24) and another who reported 'gradual change' (S10, 25), did not witness any improvement in their child's ability to share.

The parents of the children in the experimental group were also able to recount how their relationship with their child had improved. One parent explained how, he has even started to hug me, which had not happened before. I had to tell him, 'Hug me just once! Don't hug me too much!' [laughing] because he was hugging me continuously' (S5, 66-8). Another parent explained that 'in the past he felt that we didn't love him, and now this feeling has decreased' (S7, 67-8). The parents of the children in the

control group were unable to detail such positive feedback on the improvement of their relationship with their child.

Interestingly, despite all the positive feedback detailed above in different aspects of their child's life, when asked about their child's relationship with particular friends, the responses of the parents whose children had been included within the experimental group did not differentiate greatly from the parents of the children in the control group. Although the majority of them could detail no change, one parent did mention that child's friendships are 'much better than before – they are increasing' (S2, 37).

When asked about the peers of their children, the parents of the children in the experimental group were once again able to offer positive feedback. One simply stated that 'yes, thank God. There is an improvement' (S1, 36). Another detailed how they, 'have noticed great changes in his interaction; now he interacts with children of his own age, while in the past he only interacted with younger children' (S7, 32-3). The parents of the children in the control group were not able to offer similar feedback, with most simply stating that there had been no changes. Again, the opinions of the teachers of the children in both the control group and the experimental group were largely mixed and indistinguishable from each other suggesting that the focus of the teachers may have not have been on the social interaction of their students.

5.3.9 Parental and school attitudes towards ADHD and managing the child with the condition after the arts therapies program

All the parents of the children in the arts therapies responded positively when asked specifically about their opinion of the therapy. One described how 'Yes, it has changed our perception about the treatment in a positive way. I didn't know about arts therapies, but it has improved his situation' (S7, 115-6). Another suggested they would like the programme to have run longer, stating that 'if the program were longer it could lead to significant, better results, because it gives him activities that he enjoys, especially when he works with children he likes. If this programme continues in the future, we will need to participate again' (S2, 120-2). Another declared 'Thank

God for your programme' (S5, 102). Obviously, the parents of the children in the control group could not offer specific feedback on the arts therapies.

All the teachers of the children assigned to the experimental group expressed the same positive feedback on the arts therapies, with many additionally expressing a desire for the therapy to have lasted longer. One teacher stated that 'I think it's wonderful, and might be helpful for children with ADHD' (S1, 102); 'I think this child has changed for the better, and I would have hoped that the programme had lasted longer' (S1, 145-6)'. Another teacher expressed similar sentiments, stating that I think it's excellent and will definitely be helpful for children with ADHD' (S6, 105) and 'I think this programme would have been more helpful if it had lasted longer' (S6, 150). All of the parents of the children who were placed in the control group were also convinced of the value of the programme with many expressing their wish that their child had been included within the experimental group. For example one parent stated that, 'Yes, this programme would be very helpful for his concentration and hyperactivity' (S11, 105); 'I would expect a major change in the child's behaviour if this programme was applied' (S11, 150).

In contrast to the universal acclaim apparent within all the teachers' responses towards the arts therapies, when quizzed about role of medication in addressing the symptoms of ADHD, the teachers were much more mixed and divided in their opinions. Most teachers could see the value of medication in some circumstances. One believed that 'It's useful if it has no side effects' (S10, 133) whilst another described how 'it depends on the child's condition and the doctor's opinion' (S4, 129). One teacher offered an example of how medication had managed to help her student, saying that, 'There used to be crying and stubbornness, but they are less now due to medication' (S11, 14). Three teachers nevertheless bluntly described the use of medication as 'not useful' for treating children.

Almost half of the parents interviewed stated that they used medication – more had used it in the past, but had since stopped. Views on medication were very mixed. Some emphasised the benefits of medication: 'If he doesn't have the medicine, there will be a big difference' (S12, 179); 'It did help him to concentrate and reduced his hyperactivity' (S10, 169-70). Others were more hesitant, noting concerns about side-

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effects: 'It had a side effect. We haven't used medicine for about 5 years' (S6, 165). Some parents expressed strongly anti-medication views: 'I don't need medicine' (S9, 186). One was even highly anxious that the arts therapies programme might involve medication: 'There is no harm in using any physical therapy as long as there is no medication. You get benefits' (S1, 188); 'I don't want you to give him any medicine' (S1, 231). It is clear that parents have had very mixed experiences of medication, with many deciding not to pursue it. Some comments about medication further show anxiety about which medical opinion to trust, and a sense of mixed messages from practitioners: 'A doctor gave him medicine – Espirdal and Omega-3 – to make him calm, but when I read the description, I saw very bad side effects' (S5, 200-4). I asked his cousin who is a pharmacist, who said, 'don't use this kind of medicine, he might get addicted' (S5, 201-2). So I didn't use them. We became afraid. I have American friends – I spoke to their doctor, who said, 'this is for severe problems, not for normal children' (S5, 202-4). Now we have stopped".

All teachers used varying degrees of punishment on their students when necessary. This often involved some form of 'deprivation as a punishment' (S3, 87) (S4, 91). One teacher explained how they would combine 'taking away the things he likes' with 'changing the tone of [their] voice' (S1, 87). Another teacher explained how they deal with a student's bad behaviour by 'engaging him in physical activity to use his energy' (S7, 91). Similarly, another teacher stated that they used 'motivation' (S8, 91) to deal with their students' bad behaviour. One teacher's approach contrasted even further with the forms of 'positive' punishment above, explaining that they deal with bad behaviour 'with verbal communication and clear instructions to reach an understanding' (S5, 89); 'There's no punishment / denying his right to participate or do his hobbies' (S5, 93).

Several parents of the children within the experimental group found that the child is more engaged when being told off. One parent described how 'now, when I am scolding him, he focuses more on what I am saying '(S1, 90). Other parents however suggested that soon after being in trouble the child will revert back to 'naughty' behaviour. For example one parent highlighted that 'he responds to what I tell him directly, then he goes back to his previous action' (S6, 59), whilst another informed the researcher that 'after half an hour, he may misbehave [with them] again' (S9, 74)

All but one the parents of the children in the experimental group perceived an improvement in their child's emotional regulation following their child's involvement in the arts therapies programme. The exception was a single parent who explained that their child 'gets angry quicker' (S6, 69-70), although as mentioned above, the parent also expressed a belief that this may be linked to the child restarting medication. The rest of the parents expressed similar feelings about their child being 'much better' in their emotional regulation. This has included anger management, obedience, impulsivity and the child's ability to cope in new situations. The parents of the children in the control group were not able to make similar observations within their children. Although several did mention 'gradual changes' (S8, 79), However, most noticed 'no change' within their children.

When asked about their perception of change in their child's emotional wellbeing, one parent of a child in the experimental group explained that 'He is absolutely happy… He used to not be confident, but now he is becoming confident' (S9, 84-6); 'There is a change. He has started to play with the children – when they ran races, he participated (S9, 104-6). Another parent of a child in the experimental group concluded that 'in general, he is happy, and he became happier after the programme' (S2, 69). Similarly, another parent in the same group concluded that 'I feel he is much better now – more happy, optimistic and ambitious' (S1, 126). None of the parents of the children in the control group were able to offer similar evaluations on the perception of change in the emotional regulation on their child. One parent of a child in the control group stated that 'no, he is the same, nothing has changed' (S12, 67). Another explained that 'anger is one of his problems. If you don't give him his phone or iPad, he becomes angry. There have been no changes' (S8, 70-1).

Many parents of the children in the experimental group also perceived that there was a significant improvement in their child's ability to concentrate and behave. These improvements also transcended into an increased performance at school amongst the children of the experimental group. One parent explained how, 'He used to not sit and do his writing and homework; now he can be more patient, and stay and write. I used to give him two lines – now he can write everything' (S9, 20-2). Another parent explained that, 'he has some learning difficulties, but he is better than before. Now he is able to sit and do his homework, and for longer than before" (S6, 103-4). Similar

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feedback was recorded amongst all the parents of the children in the experimental group except one who stated that 'there are no academic changes' (S2, 116). Once again, the parents of the children in the control were unable to offer any similarly positive feedback on their children on this theme, with most simply recording that there had been 'no changes' (S8, 66).

The parents of the children in the experimental group also relayed perceptions of positive change in the social relationships of their children. One mentioned how there is improvement in playing with his brothers – "he likes to interact with them' (S1, 21). Another stated, when asked whether there had been changes in their child's social relationship, that 'Of course there are some changes. Big positive changes – he is better at participating than before' (S2, 20); 'his ability to share his toys has improved significantly' (S2, 24); 'His behaviour with his friends is much better. He always talks about his friends now, he likes them' (S2, 102). Other parents also cited their child's increasing inclination to 'share their toys' (S5, 25-5) following the arts therapies treatment. Another parent described how their child 'used to be afraid of playing at the park with many children, even big children, but now he is happy to play normally' (S9, 84-5). The responses of the parents whose children had been placed in the control group were unsubstantial. At most, some of the parents could describe only 'very slight' (S11, 20) or 'gradual change' (S10, 20-1). This was attributed by one parent to the fact that their child was 'getting older' (S8, 32). The response from the parent of 'Student 4' was indicative of the responses from the other parents of the students in the control group. They responded to questions on the child's relationship and considerate behaviour towards siblings, peers, classmates with the same observation; that they had 'not noticed any change' (S4, 20, 32, 96, 24, 28). Elaborating that he is 'very jealous as before' (S4, 20) in his relationship with his siblings. Likewise all parents of the children assigned to the control group were unable to notice any change in the attention or concentration levels of their children.

Most parents, of the children in both the control and the experimental group, did not notice much of a change in the preferences of their child. One parent however did note that ''He loves clay now. He enjoys playing with clay' (S5, 146-7); 'He now enjoys playing with sand in the park, and plays with mud. He may have gotten this idea from your clay' (S5, 152-3).

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5.3.10 Perspective of the parents on interaction with the school post arts therapies

Even after the arts therapies several of the parents of the children in the experimental group detailed on-going issues with their child's school. One focused upon a particular student that their child did not get along with and the failure of the school to mitigate the hostile relationship. This parent detailed how, ''he is angry, but that is because the child hit him. The child has been taken to the school manager. Perhaps, in the future, I will ask for them to be separated. There is not enough supervision at break times, and this is when they hit each other' (S1, 130-2). Another parent of a child in the experimental group, described how ''I really don't like this school, they don't actually help or care about the child' (S5, 101-2); 'To be honest, I give him extra homework. Because if I rely solely on his school, he will not improve' (S5, 127). A similar opinion was expressed by the parent of a child in the control group. They stated that I thought this school was a good school, with a specialist, but they are not as good as I had hoped' (S8, 96-7).

Some parents highlighted the issue of lack of communication with the school. One parent stated, when questioned about their child's behaviour, 'maybe his behaviour is different in school' (S7, 72); 'I do not know about his behaviour at school' (S7, 103). Another parent admitted that 'There is no communication between us and his teacher' (S9, 118). Both these were parents of children in the experimental group. The teachers meanwhile all reported that they discussed the progress of the child with the parents.

Chapter 6:   Research Discussion

6.1 Introduction

This chapter presents the discussion of the findings from the investigations conducted into art therapy programmes in the KSA. This chapter identifies the broader topics for discussion that have been brought to the surface by the research carried out in the classroom and, most importantly, identifies the tangible lessons that can be taken away by practitioners of arts therapies, teachers and parents as they attempt to deal with the challenges posed by ADHD in children in the KSA.   Moreover, it demonstrates how both the quantitative and qualitative findings complement each other and offer an evaluation of the outcomes of this study.

This discussion chapter has been produced to bring together the quantitative and qualitative results from addressing the research questions. This involved two significant stages. First, this chapter demonstrates how the researcher evaluated and drew together an overarching picture of the current practices and the level of understanding of ADHD in the KSA; offering critiques and comments. The landscape of ADHD treatment and understanding in the KSA was then compared with the current practices and methodologies employed by arts therapies in the UK. This discussion chapter thus serves to highlight the shortcomings in the current level of treatment and understanding of the condition of ADHD in the KSA. Furthermore this discussion chapter highlights how the researcher uncovered both the opportunities and limitations available to a practitioner of arts therapies in the KSA by adopting Western thinking and practices. This discussion of the first research question in this chapter brings together the whole pre-intervention process of the study, demonstrating how studying the current practices in the UK allowed the researcher to assess which approaches could be successfully adopted by a trial study in the KSA. Furthermore, it shows how such observations of UK practices directly impacted upon the researcher's program design.

Second, this chapter brings together the quantitative and qualitative evidence to address the second research question. This section discusses both how and why a

mixed methodology was adopted to address the second research question and demonstrates that from the perspective of both parents and teachers, the value of a culturally sensitive provision of arts therapies can have value in treating children with ADHD. This chapter explains how the data was captured from the parents and teachers before the arts therapies and then after the program to measure the effect of such therapies in children with ADHD.

Initially, this section of the chapter discusses the quantitative data analysis, demonstrating how the Mann-Whitney U test and the Strengthens and Difficulties Questionnaires (SDQ) - when analysed with the Wilcoxon W test - allowed the researcher to establish that there were no statistically significant differences between the control and experimental group of children used in this research. It then discusses how the Wilcoxon W test was able to offer quantitative data to justify the position that there is a clear value of this program of arts therapies when treating children with ADHD.

Additionally, this chapter also discusses the collection and analysis of qualitative data. As with the quantitative data, the qualitative data analysis was collected from the parents and teachers both prior to and following the arts therapies. This chapter draws together the main findings and conclusions discussed in detail in the qualitative data chapter. It is demonstrated that once appropriately coded, the interviews with the parents and the teachers of children with ADHD offer an unparalleled insight into the symptoms, problematic behaviours and, ultimately, positive changes in children with ADHD assigned to the experimental group. More importantly, these interviews offered evidence not only of the effectiveness of this program of arts therapies on children with ADHD, but also that despite the cultural differences, UK-inspired arts therapies can be successfully adapted for the KSA and enthusiastically welcomed by parents and teachers in the KSA. The qualitative findings of the second phase also offered opportunity to further explore and expand the quantitative findings. As mentioned in Section 3.5, mixed methods are used in the second phase of this study to both understand the impact of a programme and to explore the results in greater depth. In this chapter, the findings from both phases will be viewed through the prism of the available evidence and literature (i.e. the findings will be compared and contrasted with the available literature).

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6.2 Addressing the Research Aim and Questions

The core aim of this research was to develop a programme of arts therapies for primary school aged children with ADHD in the KSA, which fitted with the cultural sensitivities in the country. The biggest impact that such cultural sensitivities had from the outset was the inability to conduct this research with female school children. As argued in depth by Hamdan (2005), it is difficult for males to deal with females in an educational, and/or health care setting (Arebi 1994; Al-Shahri 2002; Buchele 2008). It is hoped, however, that the experience from this study will exceed gender boundaries and that female therapists will be able to build upon their 'best practice' knowledge, as they interact with girls displaying ADHD symptoms in the KSA. Whilst unfortunate, it was simply impossible for a male researcher to carry out this study with female children in primary schools in the KSA.

In terms of the design of the arts therapies programme, which suited the cultural environment in Saudi Arabia, it was necessary to avoid using activities such as playing musical instruments or dance as these activities are culturally taboo (Van Nieuwkerk 2008; Ali 2014) and forbidden in school (Freemuse 2010). Thus the programme of arts therapies adapted the approaches followed in the UK to fit with these cultural requirements. Despite these restraints on traditional arts therapies methods, the results achieved – in what was a relatively short period of time – were positive, as displayed by both the quantitative and qualitative findings.

As previously explained, the data was collected from both the experimental and the control group before and after the arts therapies intervention. A pilot randomised control design (e.g. Jadad 1998; West and Spring 2007) was employed that sought to identify changes in the social relationships, emotional wellbeing, emotional regulation, hyperactivity, impulsiveness, and attentiveness that could be attributed to the programme of arts therapies developed for children suffering from ADHD in Saudi Arabia. This quantitative data incorporated demographic characteristics alongside developments surrounding ADHD symptoms by using the ADHD scale to investigate the range and extensiveness of such symptoms. Overall emotional and behavioural difficulties were determined – in the quantitative data collection stage – by utilising Goodman's Strengths and Difficulties Questionnaire (SDQ).

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By interviewing existing practitioners of arts therapies in the UK, the researcher was able to understand the existing landscape of ADHD treatment methods used in the UK. This insight allowed the researcher to build up a picture of the exact way treatment programmes are conducted, the exact methods, theories and exercises used and the successes and problems with such approaches.

6.3 Research Question 1

- How can arts therapies be introduced for children with ADHD in primary schools in the KSA in culturally sensitive ways? This question incorporates the following questions:
  - What is the current provision in the KSA regarding support for children with ADHD?
  - What are the lessons that can be learnt from arts therapists practising in the UK with this group?

6.3.1 Current practises in the KSA

Research into the current provision in the KSA regarding support for children with AHDH suggested that treatment options available at present remain limited (Eisa and Abdulrashed 2010), with a focus on medication to address the symptoms of ADHD in the children of the kingdom. This may be due to the argument that psychotropic had a more beneficial effect on children with ADHD in the KSA than psychotherapy (Al-Haidar 2003). As expected, the research highlighted how the majority of studies into the use of arts therapies on subjects with ADHD had been carried out largely in the Western world. Such a lack of studies on this topic in the Middle East is a reflection of the cultural differences and divergent perspectives between Western countries and Middle Eastern countries (Jones 2005). Such differences appear even more acute in the field of arts therapies given that in the KSA forms of music and dance are strictly prohibited, whereas in the West, music and dance can constitute 'stand-alone' therapies. Thus, art therapy in the KSA is extremely underdeveloped, despite the benefits that it could bring in treating subjects with ADHD in the country. However, an important shift is beginning to appear in clinical practice in the KSA. Alyami (2009) introduced art therapy in 1995, but for almost 10 years he was the sole

practitioner in a single clinic. The King Fahad Medical City (KFMC 2010) Rehabilitation Hospital introduced art therapy in 2005; however as previously discussed they focused on just art therapy. Furthermore, this art therapy is not specific to ADHD treatment. As a result there is no substantial guidance on establishing or conducting arts therapies in the KSA.

The qualitative data analysis conducted on the current provision of arts therapies in the KSA reinforced the evidence that such programmes were very limited, if they existed at all. According to the findings, art therapists in the KSA had a far more structured approach than commonly used in the UK. UK based therapists found that rigid approaches designed to 'change behaviour' were less effective. KSA based therapists did not share the same focus on a pressure free environment, with their focus more on achieving tangible aims, such as improving the academic performance of the child rather than more abstract concepts such as the emotional wellbeing of the child. The focus of such therapies, such as the treatments available via the King Fahd Medical City attempted to treat the symptoms rather than the specific disorders.

Problems in the diagnosis of ADHD, was raised as an issue by the participants alongside the limited experience of therapists in designing suitable and effective programmes. Furthermore, ADHD was treated using the same methods as other neurological conditions, meaning that uniqueness of the condition – and associated challenges - was overlooked. The issues identified during Phase One pertaining to art therapists in the KSA were significant. They included the cultural taboo of men and women associating, the lack of cultural acceptance of arts therapies, and the need to justify such approaches to parents and schools. According to the participants, parents need to be persuaded to allow their children to attend. The ADHD School accepted the implementation of the arts therapies programme. However, the religious feeling against music in the KSA causes 'difficulties' for arts therapists.

The qualitative data analysis showed that KSA therapists used both informal and formal tests to evaluate the effectiveness of their art therapy practices on the children. Interviewees worked with children from a wide age range, and had different preferences with regards to whether individual, couple or group work worked best. They were also more optimistic about the extent to which art therapy could improve

the behaviour of the children than therapists in the UK. As mentioned previously however, there may be an element of defensiveness in their answer as with art therapies being less accepted in the KSA, they may feel under more pressure to justify their methods. This lower profile of art therapy in the KSA is also reflected in the primary issues reported by the therapists, namely, working with parents. The lack of complimentary work with the parents to reinforce the therapy limited the treatment outcomes. This result aligns with the work of Regev et al. (2012) who conducted a quantitative methodology study in Israel and found statistically positive effects ($p <$ 0.05) of mothers' participation in movement therapy on the emotional functioning of their school-age children. Furthermore, the therapists from Phase 1 reported that schools have been known to resist interventions, again highlighting the lack of understanding of art therapies in the KSA.

As previously stated, the acceptability of various forms of therapies available was restricted. Music therapy was largely prohibited. Where musical approaches were allowed, the 'issue' of music had to be handled carefully with parents, teachers and schools. Issues also emerged on the topic of art where one special educator in the KSA thought that sculpture 'might raise cultural objections' and one therapist in the KSA was concerned about allowing their client to draw images of natural entities.

The general theme therefore, was the extent to which the arts therapies had to work with or against Saudi culture. The limitations imposed on arts therapies in the KSA from the cultural environment are thus significant. The relative newness of the concept hinders an understanding of its practice in the country. Restrictions on music, dance, and other forms of arts limit the options available when attempting to design a programme of arts therapies specific to the Saudi context. Additionally, the highly structured approaches adopted by practitioners in the country appear to be less than optimal when treating children with ADHD. Finally, given the limited prominence of art therapists in the country, the lack of practitioners in the country, itself, becomes an issue.

6.3.2 Current Practices in the UK

The data collected on the effectiveness of such programmes in the UK suggested to the researcher that if it was possible to replicate such treatments - by developing a

culturally appropriate approach - then the benefits that it could bring to children with ADHD in Saudi Arabia could have therapeutic potential. Although methods and exact practices varied; perhaps the strongest difference between the UK and the KSA methodologies was the focus of UK based arts therapist to respond to the child's need to nurture and support the child emotionally. This is achieved using a variety of different means, highlighted by the qualitative work carried out on the current practices of arts therapies in the UK.

When asked about the theories that instructed their approach, the most common theory quoted was psychodynamic, with Jung, Winicott and Klein also mentioned widely. CBT was often viewed by UK therapists as 'rigid' and that it was ineffective in addressing the root causes of ADHD symptoms, instead it achieved more superficial outcomes. There was no generally preferred approach amongst UK based therapist, which indicated the flexibility that the therapists enjoy in the UK and most therapists used a blended approach. The often cited concern about working with groups of children, all with ADHD instructed the researcher that this would not be an effective approach when designing a programme for use in the KSA.

UK therapists mentioned the pressures faced by modern children, coupled with a lack of support and nurture. Lack of self-esteem, aggression, and struggling with expressing their feelings were all emotional issues that UK therapists believed were important to address through arts therapies. In the literature, many studies addressed these issues in their interventions (e.g. Majorek et al. 2004; Grönlund et al. 2005; Hamre et al. 2010). UK therapists stressed the importance of family situations, including diet, on ADHD symptoms. Diet, social and physical environments may contribute to ADHD (NIMH 2015). Similarly to the KSA based therapists, UK based therapists also spoke of creating a 'safe space' for the children. It is important to create trust and a safe space (Winnicott 1971). Most felt that understanding the background of the children was essential. Indeed, it is likely that creating a 'safe space' for the children would contrast with the children's home environment where many therapists discussed the effects of parents' health issues, such as alcoholism, on the children. The study by Carr and Vandiver (2003), on the effects of the art therapy on children's behavioural responses, also argued that children who are exposed to stressful events such as parental alcoholism, poverty, abuse and family separation

required encouraging independent thinking, developing self-expression, and enhancing self-esteem.

When discussing the cognitive skills of the children they treated, the UK based therapists placed a special emphasis on the problems the children faced in terms of concentration and attention span. These challenging behaviours were found to be problematic in conducting the therapy (Redman 2009). As such, nurture was widely viewed as a key aim of arts therapies. Emotional support by the therapists took many forms, including tackling low self-confidence or increasing the child's self-awareness. Half of the UK therapists also noted problems with the children's coordination and motor skills. Improving speech and communication skills was mentioned by UK therapists. Likewise, all therapists noted challenging behaviour by the children and the disruption that this can bring to therapy sessions. When it came to managing behaviour, there was a common rule to forbid harm or damage. Most UK therapists stressed the importance of 'clear boundaries' and going over a 'contract of behaviour' was considered important by some. The final response, by UK therapists to unacceptable behaviour, was to stop the session completely. UK therapists also detailed repeatedly how working with groups of children with ADHD presented challenges which were difficult to overcome, as the level of distraction was too high for the children, for the therapy to be effective. The literature also highlighted the difficulties in dealing with and controlling ADHD children (Al Mulla 2008).

The importance of a consistent room was stressed by many therapists. The study by Solsvig (2010) also emphasised the importance of a consistent room for dance/movement therapy. According to the participants in Phase 1, inconsistency in the venue for therapy, or a poor location, was found to negatively impact on the therapy session. In cases where a regular, consistent room was not available, many would customise the room to demonstrate to the children a level of similarly that marked the therapy session. Additionally, the ability to create mess was considered important and building trust was essential, although the process of building a genuine level of trust between the therapist and child could naturally take some time.

The results from Phase 1 indicate that the duration of the therapy time varied and was dependent upon multiple factors, including financial implementations. Thus therapy

programmes lasted from 8 weeks to over 18 months, with a year generally cited as the ideal time frame. As for the individual therapy sessions, they could run from 20 mins to over 1hr 30 min. In the literature, likewise, the sessions run from 20 minutes (Kearns 2004) to over 90 minutes (Henley 2000; Murphy et al. 2004). Within these sessions, numerous precautions were taken by the UK therapists, such as restricting materials that could be dangerous and putting procedures in place to mitigate disruptive behaviour. Assessments of the sessions were a rather individualistic process with therapists devising their own assessment procedures.

Furthermore, from the results, it is clear that the beginning of therapy sessions depended upon the personal style of the therapist but that an introductory song was a common theme. The hello song helped orient group members to both place and time. In the literature, there is evidence that the hello song was used in arts therapies for children in the age group of 5 to 8 years (e.g Erfer and Ziv 2006). Following the beginning of the session, the therapists (patriating in Phase 1) followed different structures; from being child-led to a more formalised structure. Many sessions were balanced between structured activities and free-play, with time management seen as important to help structure the sessions. All UK therapists were adaptable in their approach, and often the therapy sessions were designed around the needs to the individual children. Props were carefully considered and introduced into therapy sessions, and several were chosen according to their value in helping the therapist to 'vent' the anger of the children. Again, within the theme of adapting the therapy to the children, one therapist detailed how they would channel a child's hyperactivity into a purposeful activity. The UK therapists detailed a wide range of activities that they used to achieve various aims with the therapy sessions. These included using foam blocks, a parachute, ribbons on sticks and dance movements from different countries. Clay was found to be particularly popular and useful during therapy sessions. Sholt and Gavron (2006) argued that there are many opportunities of modelling in clay for expressing or ventilating anger.

Simple concepts such as talking and meditation were also viewed as potentially useful approaches during therapy sessions, whilst, obviously, the music therapists all used musical instruments. Some dramatherapists drew upon the idea of 'liminal' or 'transitional' space during their therapies, where the child was encouraged to

objectively view their behaviour. The use of puppets transcended the various disciplines and some played with the toys alongside the children. Again this shows the variety of methods employed by the various therapists to build rapport and trust with the child. In the literature, Karkou and Sanderson (2006) also emphasised the benefits of using different methods by therapists to build trust with the child. Games were commonly used by the participants and often designed to help the child develop particular skills such as patience, sharing and impulse control. From the literature, Chang and Liu (2006) used games to ADHD students to increase their trust and confidence and to support self-expression. One therapist participating in the study developed trust by using the 'blind exercise'.

According to the study participants, evaluations methods were varied. For example, this included standardised assessment tools such as Conners' Rating Scales and the Children's Global Assessment Scale and therapy tools such as the Nordoff-Robbins scales. Previous studies also used such scales; for example Al-Hamed (2003), Eapen et al. (2009) and Sobanski et al. (2010) used Conners' Classroom Rating Scale for ADHD. According to Carpente (2014), the Nordoff-Robbins scale is an assessment tool for music therapy that evaluates how clients perceive, create, and play music with the therapist. According to the study participants, the most important method seemed to be the observations of the child by the therapist. This was true for both the initial assessment and on-going evaluation. One important insight was that the therapists did not rely on the assessment of the children's teachers when conducting their own assessment. Observation can be a powerful check against what people report about themselves during interviews (Mack et al. 2005). Assessments had their limitations, especially when it came to getting an insight into the child's wider environment, including home life. Determining the effect of the therapy was complex as the therapy did not exist in isolation, and there may have been far more important factors in the child's life that affected their behaviour. "In practice, evaluation takes place in a wide range of settings that constrain researchers' choice of interventions to evaluate and their choice of evaluation methods" (MRC 2008, p.8).

Medication was another unknown variable when it came to evaluating the progress of the therapy sessions on the children, with several therapists describing the medication as having a negative effect on the child. The UK therapists were evenly divided about

the role of medication, with half believing it had some role to play. The effect of drugs on children with ADHD remains unclear, and there is a lack of systematic data in this area (Prasad et al. 2012).

Almost all UK therapists detailed the difficulty in working with the parents and teachers of children with ADHD. The same result also found in previous studies; for example, Hemmingsson et al. (2007) emphasise the lack of cooperation between therapists and teacher. Therapists often commented that they struggled to get both parents and teachers to cooperate in the therapeutic process. Where additional staff members have been included in therapy sessions they may not have a holistic understanding of the processes and environment that the therapy is dependent upon. The UK based therapists also noted that the parents may not incorporate therapeutic strategies into the child's daily routine, minimising the effectiveness of the entire programme. Furthermore, there may be general disagreements with parents over certain aspects of the programme. Additionally, UK therapists also noted that the parents may hold unrealistic expectations about what therapy can achieve with their child or indeed exactly what are the objectives of therapy sessions. This experience with the parents in the UK demonstrated the need to involve the parents and teachers to the greatest possible degree, to encourage communication from both sides and to manage the expectations of both parents and teachers regarding what can be realistically achieved by the therapy sessions. The issues experienced between the therapists and the school highlight the importance of considering potential points of conflict – such as having the therapy during the same class each week – when formulating the programme. The research with UK based therapists demonstrated that it would be essential to communicate with parents and teachers during the research process. From the literature, Jachson (2003) found that parent and teacher are the most frequent source of referrals to therapy for children. According to Meekums (2002), the treatment of ADHD children is a combined effort of parents and teachers. Kennedy et al. (2014) indicated that children are more comfortable in expressing their difficulties about ADHD syndrome via art therapies and that this kind of intervention requires involving the child's parents and teachers.

6.3.3 The programme design

The literature findings and the results of Phase 1 show that a longer intervention period was seen as more beneficial for the treatment of children with ADHD. Due to time constraints, this was not possible, but the researcher mitigated the limited time frame by increasing the intensity of the programme (Safran 2002; Karkou and Sanderson 2006). The longer time period to assess treatment outcomes is critical (Jensen 2002). The arts therapies programme consisted of 24 sessions, 3 times a week over a period of two months. In previous literature, Kearns (2004) carried out an art therapy programme consisting of two sessions a week. Indeed, the usual practice of UK therapists to conduct their therapy only once a week was more determined by financial constraints, rather than best practice. The session length of between 30 to 40 minutes followed the recommendations of several therapists from Phase 1 and fit within normal school scheduling, with the intention to minimise disruption to both the children and the school. This study followed suggestions of the UK arts therapists and the previous literature (e.g. Gronlund et al. 2005) in choosing 30 to 40 minutes as session length.

The experience of the UK therapists demonstrated to the researcher that group sessions would not be an effective strategy when designing the arts therapies. This may because the difficulties of controlling children with ADHD. Again, pragmatism dictated that one-to-one work would be too time consuming. Paired work was thus chosen as the most effective therapy procedure. This protocol follows the study of Gronlund et al. (2005) in using pair groups for conducting arts therapies for ADHD children. Despite this not being a popular approach in the UK, the researcher decided that it would offer the greatest opportunity to combine social-skill learning and the necessary attention from the therapist to address specific issues. Again based on literature findings and the results from Phase 1, an integrative approach was adopted as it combined child-centred therapy and attachment therapy. Following Winnicott (Karkou and Sanderson 2006), the programme sought to create a safe therapy space allowing them to fully engage with the arts therapies.

The programme used activities that were inspired from the literature review and from the qualitative results of stage one (as detailed in chapter 4). The research with the UK

based therapists demonstrated the importance of noting and addressing absences during the programme. Likewise, a tailor made room was made available for the therapy sessions to ensure a level of continuity with props carefully chosen with the aim of mitigating potential harms. The structure of the arts therapies was loose, incorporating an insight from the UK approach, which warned against adopting too rigid an approach. A client centred approach was seen as essential to enhance the potential effectiveness of the programme. Modifications to conform to cultural sensitivities included the prohibition of dance and music and physical contact were minimised (as discussed in Chapter 1). Only male children were involved in the study, therefore a male assistant was hired for the programme.

Principles from client-centred therapy were incorporated into the programme. The therapist was non-judgemental in his interactions with the children. Again, according to the views of the practitioners who took part in Phase 1 of this study, the therapist ensured that the 'ground rules' were maintained, however the child-centred approach led the therapist to diverge from the therapy structure depending on how the therapy session was progressing. Reminding the children of the expected behaviour was also a strategy taken from the feedback with the UK therapists. The research into UK methodologies inspired such flexibility and responsiveness in the therapy sessions. Culturally sensitive arts therapies programmes included movement therapy in accordance with Saudi cultural constraints was encouraged during the sessions. Likewise, potentially disruptive behaviour was incorporated into the therapy session, as inspired by the UK approach. The UK therapists – like attachment theory – stressed the need to create a safe, encouraging and enabling environment. This programme of arts therapies embraced this perspective as it attempted to rebalance the emotional wellbeing of the children.

6.4 Research Question 2

- What value can culturally-sensitive provision of arts therapies have for children with ADHD, from the perspective of the children themselves, their parents and teachers?

This research question was addressed by adopting a mixed methodology. This approach was considered the most effective and comprehensive way to investigate the use of arts therapies to treat children with ADHD in the KSA. As outlined in Chapter One, the purpose of this study was to introduce, conduct and evaluate a culturally-sensitive programme of arts therapies in Saudi Arabia. This was a challenging proposition due to the cultural sensibilities stemming from the country's deep conservativism.

The religious and cultural environment seriously limits the approaches and methods available to art therapist in the KSA. As previously discussed dance therapy would be inappropriate for use in the KSA due to the use of music. Such restrictions have limited the development of arts therapies in the KSA. The early stage of such treatments in the KSA would lead to its own problems. Unfamiliarity with arts therapies can lead to a general degree of suspicion surrounding its practice (Koepfer 2000). This study has sought to overcome such obstacles by adopting a flexible and pragmatic approach that can deliver significant results. The over reliance on medication in the KSA to address the disorder runs counter to the more child-centred, humanistic trend developing in the UK. Practical steps the researcher utilised during this research involved working only with male children, hiring a male assistant, avoiding music, dance and limiting culturally inappropriate body contact 'dramatherapy' to accommodate the gender requirements of the cultural context. However, alternatives steps like; rhythmic clapping and clicking were added to encourage sounds in the intervention.

Despite the challenges, the potential benefits resulting from a successful study in arts therapies and ADHD in the KSA are multifaceted and extensive. For example, in addition to being an important contribution to the general literature on ADHD treatment, this study also offers the practical development of a framework through which it is able to perform arts treatment within the Saudi cultural environment.

Specifically, these therapies sought to improve the emotional regulation, social skills, and overall emotional wellbeing of the participating children. The lack of treatment options for children with ADHD in Saudi Arabia suggests that this research into arts therapies treatments is both timely and necessary. The lack of studies is reflected in the complete lack of guidance or existing frameworks for implementing such therapies in the KSA. This study demonstrates that employing the concept of arts therapies is an innovative and valuable treatment option that can be realistically implemented in the KSA.

The mixed methodology that this study adopted overcomes the limitations of using a single methodology, which Creswell reminds is associated with restrictions to understanding the complexity of human behaviour (Creswell 2009). The mixed methodology in this study allowed the researcher to identify existing themes and trends in the field, whilst allowing the researcher to build upon, evaluate and ultimately develop such themes. Mixed methodologies were used in the previous literature (e.g. Grönlund et al. 2005).

Chapter Four established the three key criteria that claims of a successful programme should be measured against; these were that the programme should; increase emotional wellbeing, improve relational/social skills, increase emotional regulation and increase attention span and decrease hyperactivity/impulsiveness.

This is best determined from the data collected at the pre and post-intervention phase from the parents and teachers of the children in both the control and experimental groups. Parents focused on the improvement in their child's social relationships while the teachers focused more on a child's cognitive skills. This data collection method highlighted the changes in the children following the art therapies. This mixed methods design generated valuable descriptive quantitative and rich qualitative data.

6.4.1 Quantitative Data Analysis

The quantitative data in this section is generated from perception of participants (i.e. teachers and parents) by sending them the ADHD and SDQ scales to be completed by them (refer to Section 3.7.2). The Mann-Whitney U test was used to ensure that there was no statistically significant variance in a number of variables between the control and experimental group at the beginning of the study. The Mann-Whitney test found

that the 'age variable' between the control and experimental group was not significantly different. It was difficult to match those participants for other characteristics (e.g. family size) due to the small number of participants. Furthermore, the study was conducted on male students only due to the cultural context discussed in Chapter 1, thus the participants were not matched for the sex variable. Likewise, the Mann-Whitney also found that there was no statistically significant difference in terms of the typical ADHD symptoms of inattention, hyperactivity and impulsivity amongst the control and experimental group. These results confirm that children were randomly allocated to either an experimental or the control group for intervention.

The Wilcoxon W test was then used following the program of art therapies to determine whether there were any significant statistical differences between the pre and post-test results in terms of the symptoms of inattention, hyperactivity and impulsivity. In the case of the control group, the results from the parents' and teachers' ADHD test found no significant differences between the pre-test and post-test. Simply stated, this means that there was no discernible improvement in the ADHD symptoms of the children in the control group during the trial period.

In contrast, the Wilcoxon W test showed that the parents and teachers of the children in the experimental group found significant differences in the children's symptoms following the programme of art therapies. The tests revealed significant differences in the children's levels of inattention, hyperactivity and impulsivity. These significant differences pre and post-test in the results of both the parents' and teachers' ADHD scores demonstrate the positive progression in the children who were assigned to the experimental group. The quantitative results from this study align with previous studies which suggest a positive influence of arts therapies programmes on levels of inattention, hyperactivity and impulsivity for children with ADHD (Erfer and Ziv 2006; Rickson 2006; Eisa and Abdulrashed 2010; Chen et al. 2012).

The Strengthens and Difficulties Questionnaires (SDQ) was used to identify any statistically significant differences between the control and experimental group at the pre-testing stage in terms of the emotional and behavioural difficulties of the children. SDQ scale was cited by previous studies in arts therapies (Grönlund et al. 2005; Lanzillo 2009; Grönlund and Renck 2011; Alotaibi 2014; Cortina and Fazel 2015;

Kõiv and Kaudne 2015). The results revealed no significant difference in the emotional and behavioural difficulties of the children assigned to the two groups, as noticed by the parents or teachers. However, there were differences between the two groups in 'conduct problems' in the teachers' questionnaire and 'hyperactivity/inattention' in the parents' questionnaire prior to the programme. The differences between parents and teachers may be explained when we take into account the differences between the two environments in home and school (Alamiri and Faulkner 2010; Alqahtani. 2010). The school environment may be more rigid than the home environment and would expect different issues with a child's emotion and behaviour.

The Wilcoxon W test was also used to examine the SDQ tests. The data analysis showed that the parents and teachers of children in the control group did not observe any significant differences in their child's emotional problems, conduct problems, hyperactivity/inattention, peer problems or prosocial variables. In contrast, the data analysis on the SDQ from the parents and teachers of children assigned to the experimental group reveal significant positive changes in the conduct of their children. For example, there was statistically significant change ($p < 0.05$) in the 'total difficulties' recorded by the parents and the teachers, which aligns with the findings from Grönlund et al. (2005) who conducted a pilot study on the effect of dance/movement therapy on two young boys with ADHD symptoms, employing multiple methods to collect data, including SDQ scale.

Additionally, all the variables of emotional problems, conduct problems, hyperactivity/inattention and prosocial, revealed statistically significant positive change ($p < 0.05$) between the pre and post-test stages. Interestingly however, the variable of 'peer problems' showed no statistically relevant change between the pre and post-test stages in the parents' test. The same finding was discovered amongst the teachers' feedback on the child's 'peer problems'. The reasons for this result may be due to most of the children presenting with no significant peer interaction problem prior to the programme as reported by parents and teachers; for example (S9, 202-4). The majority of the teachers also indicated that the child they worked with got on with their classmates; for example (S6, 42). The reason may also be related to the complex nature of the peer problem for children with ADHD. Children with both ADHD and peer problems have multiple factors placing them at risk for poor outcomes, and the

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relations among these factors are likely to be complex (Hoza 2007). Therefore, Hoza (2007) emphasised that research investigating the nature of the relation between peer relationships and later outcomes for children with ADHD is needed. This was, however, out of the scope of the current study. Moreover, Mrug et al. (2001) emphasised that the treatment of peer problem for children with ADHD should be long-term multimodal, intensive, and should be conducted consistently across settings.

However, given that 'peer problems' was the sole variable that remained unchanged one can conclude, based on the quantitative findings, that the children assigned to the experimental group - and who participated in the arts therapies - showed significant positive changes in their difficulties. The children assigned to the control group did not demonstrate any such changes during the same time period. Unlike their peers in the experimental group, the results of the data analysis of the variables in the children in the control group remained unchanged.

6.4.2 Qualitative Data Analysis

Thematic analysis of the data allowed the researcher to identify key points that were mentioned by the parents and teachers. Thematic analysis (Burnard 1991; Boyatzis 1998; Flick et al. 2004 and Zubala 2013) was used in previous literature in arts therapies to serve as a general framework for approaching qualitative data. Thematic analysis of the data allowed the researcher to identify key points that were raised by the parents and teachers. 'Codes and themes' were then determined which allowed the researcher to analyse the information being provided. The relevant data for each theme allowed for a comprehensive assessment on the effectiveness of the art therapies programme. These semi-structured interviews offered an invaluable insight into the main problems and issues encountered by the parents and teachers of children suffering from ADHD. The semi-structured interviews method of data collection was also used in previous literature that targeted ADHD treatment (Kovshoff et al. 2011). These interviews – once coded – were instrumental in demonstrating the value, and ultimately – the success of this programme.

This qualitative data analysis offered the researcher the greatest insight into the effectiveness of the programme and so the findings have been discussed in detail.

They confirm and expand the findings conclusions from the quantitative data analysis. The major findings from the thematic analysis of the interviews with the parents and teachers demonstrated exactly how the intervention programme of arts therapies has benefited the children who participated. The findings were structured around the criteria determined in Chapter Four, which are used to benchmark whether the arts therapies programme has achieved its objectives.

6.4.2.1 Perception of change in emotional wellbeing

All the parents in the experimental group felt their child's emotional wellbeing had improved as a result of the programme, and several spoke about the changes in very animated language. A study by Dilawari and Tripathi (2014) also emphasised that arts therapy may enhance and improve emotional wellbeing of individuals of all ages. The parents in the experimental group used a variety of terms to describe these changes: for instance, 'optimistic and ambitious'. Several parents in this group noted a change in their child's confidence. One of the parents, for example, stated that his child used to be afraid of playing at the park with many children, but after the programme the child was happy to play normally. Another parent stated that his child had previously lacked confidence, but after the programme the child was becoming confident. Most notably, however, several parents talked about the changes in their child's happiness and increased confidence showing through their improved relationships with their parents. Parents spoke about their child's new willingness to open up and share their thoughts. Previous avoidance and ambivalence towards the parents, and towards school, was replaced with a greater sense of security and enthusiasm. One parent even felt her child had become more physically demonstrative with affection. Previous studies in arts therapies presented similar results. For example, Novy (2003) argued that her dramatherapy programme achieved improvements in the children's confidence. Similar results were presented by Pratt (2004) and Lundy and Mcguffin 2005).

None of the parents in the control group however, noticed any changes in their child's emotional wellbeing, in terms of confidence, happiness or ability to trust. While around half of these parents felt their child was already happy, other parents in this group spoke clearly about their child's unhappiness. In stark contrast, only one parent

in the experimental group felt there was no change in their child's emotional wellbeing. This parent stated that his child was afraid, though sometimes confident. This is an interesting comment which suggests an uncertainty about the child's internalised problems.

A revealing difference between the pre- and post-intervention interviews of teachers became apparent over the issue of students' emotional wellbeing. In the pre-intervention interviews, teachers' comments on students' emotional needs were either monosyllabic or vague. In the post-intervention interviews, however, a couple of teachers implied that their students needed 'empathy', or 'attention and someone to listen'. Largely, though, children were still characterised as having no specific emotional needs, usually in extremely brief answers. The teachers predominately focused on behavioural outcomes as shown in the pre-intervention interviews. This is an interesting contrast with the parents' response, and is likely attributed to the different ways in which the behaviours of the children manifest themselves in different contexts. It could be argued that in a more rigid environment such as a school you would expect more issues with a child's emotional regulation; however it would seem in a more passive home environment, the children display more exacerbated behavioural issues (e.g. Alamiri and Faulkner 2010; Alqahtani 2010).

6.4.2.2 Perception of change in social relationships

Amongst the experimental group, every parent suggested that their child's ability to form functional social relationships had increased in some way. Every parent thought that their child's ability to share with others had improved. This was observed mostly in their relationships with siblings. However, an improvement in sharing behaviour was also observed in their interactions with classmates. Changes were observed both in the quality of children's friendships and in their number. In one case, friendships also seemed to become more age-appropriate. One exception to note was a parent of a child in the experimental group who noticed that their child's social relationships could be conflicted. This still, however, demonstrates progress for the initial social interactions of the child. Overall, parents of the children in the experimental group also felt that their child' had become more confident and trusting in their relationship with them (the parents). The control group parents also noted some changes in their

child's social relationships, these tended to be described in terms such as 'very slight' and 'gradual'.

A couple of teachers noted improvements in social relationships among children in the experimental group. One teacher went into some detail, noting that his student became more likely to share and help his friends. Discussions of social relationships differed strikingly between the control and experimental groups amongst the teachers. While all children in the experimental group were described as getting on well with classmates at least to some extent, only around half of the teachers felt that the social relationships of children in the control group were positive (one teacher noted that a student's jealousy was noticeable). Of the experimental group, two teachers specifically suggested those students' social relationships had recently improved or even certainly improved. Teachers of students in the experimental group thought that their students played well together (all but one) and interacted easily, with one teacher specifying that this was the case especially after the programme. In the previous literature, arts therapies programmes were also found to make improvements in social relationships (Pratt 2004; Chong and Kim 2010; Freilich and Shechtman 2010). According to Petruta-Maria (2015), arts therapies offer the advantages of a non-verbal language with strong emotional effects, allows the development of all personal abilities of children with special needs, contributing to their social integration. Again there is an interesting contrast with the responses from the parents who focused on the improvement in their child's social relationships. This again demonstrates that the school focuses more on the difficulties that ADHD places on a child's cognitive skill set.

Around half of the parents in the experimental group felt their child's activities had changed in some way due to the programme. There was a reported increased interest in physical movement, with one parent reporting that his child started to play the games that he had learned during the program with his siblings. This suggests that skills from the programme were internalised and used beyond the sessions themselves: beyond their role in emotional regulation, this also implies an increase in physical exercise, especially as an aid to social relationships. One mother of a child in the control group felt their child's activities had changed a great deal. This suggests that this mother perceived a shift in her child, away from isolation and an obsessive

interest in technology, towards a more outward-looking and social perspective. She later noted that her child was playing creatively in ways inspired by the programme.

6.4.2.3 Perception of change in emotional regulation

Most parents in the experimental group noted behavioural changes in their child which suggested improved emotional regulation following the art therapies. Impulsiveness was one area in which many noticed an improvement. One of the parents suggested that his child was much better now after the programme, while another told a story illustrating how her child had become more thoughtful and self-controlled. One parent felt their child had become less hyperactive and his ability to control his movement had increased. On the whole, changes in self-regulation were described in terms of impulse control and understanding consequences. Aggression was an area in which parents described less of an improvement – one parent actually found that their child was getting angry quicker, though they attributed this to a change in medication halfway through the programme. Strikingly, a couple of parents in the control group felt their child had become less aggressive. These results agree with previous literature which suggests that arts therapies programmes have a positive influence on levels of inattention, hyperactivity and impulsivity for children with ADHD (Erfer and Ziv 2006; Rickson 2006; Eisa and Abdulrashed 2010; Chen et al. 2012).

Impulsivity was one area in which the teachers noted significant change after the intervention. Either their charges were characterised as not behaving impulsively, or they felt that impulsiveness was less than before. In contrast, children in the control group were almost universally (and monosyllabically) described as impulsive, with no change indicated after the programme. The results from this study align with previous literature, which found that arts therapies programmes reduce impulsivity; for example Grönlund et al. (2005) who conducted a pilot study on the effect of dance/movement therapy on two young boys with ADHD symptoms, employing multiple methods to collect data, including SDQ scale; and Erfer and Ziv (2006) who carried out an investigation on the effects of DMT on children in the age group of 5 to 8 years.

The majority of teachers of children in the experimental group specifically mentioned improvements in their charges' emotional regulation. Two teachers judged that hyperactivity had subsided; one child who habitually left the classroom was reported to now do it less than before. Most significantly, teachers noted a reduction in outbursts deriving from frustration. One teacher of a child in the experimental group, for example, noted that a child's screaming had significantly decreased. On the other hand, one teacher of a child in the control group noted a reduction in crying and stubbornness, but specified they are less now due to medication. A couple of teachers of children in the experimental group noted that their charges had become more obedient; for example, less stubborn, less wilful and more understanding. However, some of the language is worth examining: S7's teacher suggested, 'He used to be hard to convince, but now he is beginning to understand and follow class instructions' (S7, 95). It is worth noting the phrasing in this latter answer; it seems to imply that apparent disobedience may actually be confusion and incomprehension, which incidentally appear, according to this answer, to have improved post-intervention. Other children in the experimental group, however, did not show marked signs of change; S2's teacher characterised the child as 'sometimes' following instructions both before and after the programme (S2, 95). Answers about members of the control group tended to be brief, with all but one child characterised as 'wilful'. One teacher noted that changes in medication during the programme had decreased the 'crying and stubbornness' shown by one child in the control group. Again, these results are similar to the results from Grönlund et al. (2005). Moreover, these results are similar to the results from Eisa and Abdulrashed (2010) who conducted a study to evaluate the effectiveness of an art therapy programme for 22 students in Saudi primary schools.

Aggressive behaviour was even less frequently discussed than before the intervention, with only three teachers mentioning it at this stage. Two teachers mentioned it with reference to a child in the experimental group, while one mentioned aggression with reference to a member of the control group. Of the former, one child's aggression was described as having reduced significantly in both intensity and duration: 'Earlier, his reactions were aggressive and they would last for a long time'. However, another child in the intervention group might still respond aggressively. The teacher of the child in the control group who was described as showing aggression implied that his

aggression continued to affect his social relationships, and he could not socialise effectively due to his aggressive behaviour. The findings from previous literature also suggest that arts therapies can reduce anger of children (e.g. Grönlund et al. 2005). Moreover this result aligns with the results from an exploratory study conducted by Silverman and Rosenow (2013) to determine the effects of music therapy on the mood and aligns with the results from a study conducted by Alavinezhad et al. (2014) to use art therapy as an effective intervention to reduce anger and increase self-esteem of aggressive children with 7 to 11 years old.

Emotional regulation remained an issue for children in the control group. Two parents felt their children still struggled to understand the consequences of their actions, while two felt their child still had problems with aggression. Interestingly, however, only one parent noted that their child's impulsiveness had not changed. Anger, impulsiveness and understanding consequences remained an issue for much of the control group. According to Petruta-Maria (2015), art therapies offer the advantages of a non-verbal language with strong emotional effects.

Regarding 'attention', the increased level of emotional regulation following the art therapies was also displayed in a perception of change in the attention levels of the children in the experimental group. All but one of the parents in the experimental group felt that their child's attention span had improved as a result of the intervention. Some parents were very emphatic about the improvement: 'Most of all, I have noticed big, big changes in his concentration' (S9, 106). This parent also felt their child's eye contact was much better after the programme. Most parents discussed the change in concentration span in terms of their child's academic or intellectual performance. However, others noted the impact that their child's improved concentration span had had on family life - 'he is much better. When you ask him something, it's much better now. In the past, when I asked him to brush his teeth, for example, he wouldn't finish it – now he does it' (S7, 51-2). Similar changes were not described by parents in the control group.

Almost all the teachers of the students in the experimental group specifically noted an improvement in attention. The extent of the improvement varied – one teacher simply noted improvement when asked about the child's attention span, while another noted

that a child's attention span had increased to approximately 20 minutes. A teacher of one student in the experimental group also noted remarkable improvement in the child's eye contact, which he ascribed to improved ability to pay attention. The feedback from the teachers is insightful as it allows us to see the focus of the teachers on the improvement in the cognitive skills of their students. Improvements in these cognitive skills have a direct impact on the ability of the child in the classroom which is obviously the main concern of the teachers.

The majority of parents in the control group expressed, in very definite terms that their child's inattention had not improved. The emphasis behind these answers may reflect a sense of disappointment and urgency, and perhaps shows how highly prized attentiveness is in this cultural context. For example, in the pre-intervention interviews, estimates of children's concentration spans varied significantly, with some attention spans cited even perhaps in the range one might expect for a child without ADHD. For instance, a child in the intervention group was characterised as being able to concentrate for 20 minutes and lack of attention was cited as an issue even for this child, aged six. There are perhaps underlying implications about the pedagogical expectations of children in KSA culture, and the impact these might have on ADHD diagnoses, which are worthy of future research. Nevertheless, three teachers of children in the intervention group reported definite changes in their ability to concentrate. The qualitative results from this study align with previous studies which suggest a positive effect of arts therapies programmes on levels of inattention for children with ADHD (Erfer and Ziv 2006; Rickson 2006; Eisa and Abdulrashed 2010).

6.4.3 Perception of change in academic issues

Although the study did not initially consider an improvement in academic performance as an indicator of a successful programme of art therapies, the reported progress in academic issues for the children in the experimental group is worthy of inclusion. Almost every parent in the experimental group perceived a change in their child's academic abilities. In some cases, this was explained in terms of increased attention span. In other cases parents seemed to imply changes in their child's anxiety levels and confidence, which had led to academic improvement. One parent claimed

that the child used to refuse to do his homework and was struggling to find the answer, but this stopped after the programme. Some parents even perceived a change in their child's intellectual capabilities: 'now he can understand and not forget the information he reads. After the program he forgets information less' (S7, 41-2); 'He is much better at learning now' (S1, 113). Having said this, parents in the control group also talked about gradual progression and a subtle improvement academically. It is important to remember that, with or without the programme, the children would still be developing academically as a natural part of growing up. Most parents from the control group felt there had been no changes in academic issues. In previous literature, arts therapies programmes found to make progress in academic achievement (Freilich and Shechtman 2010). However, results from a study by Chong and Kim (2012) suggest there were no improvements in academic competency. Therefore, further studies may focus on the evaluation of the effects of arts therapies on academic achievement.

Reported academic ability varied across both the control and the experimental group. While the teachers reported no changes post-intervention were noted in the control group, a couple of teachers noted changed in the experimental group. One teacher noted that a student's academic work had improved, while another child (who was already performing very highly) had become more interested in school and studying, especially after the programme.

6.4.4 Areas for improvement

The relationship between the parents and the school remained an area of concern following the art therapies programme. Indeed, this was an area of concern that was highlighted during the research of art therapies in the UK. There are differences in parent-teachers partnerships between societies as well as countries (Hujala et al. 2009). Several parents expressed frustration with the school, for various reasons. Particularly among parents of children from the intervention group, there was a tendency to blame the school for a lack of change in their child. For instance, S2's parent though that the lack of change in the child's inattention 'might be a result of...the school' (S2, 47-8). Other complaints focused on the school administration with one parent explaining how a conflict between their child and another child at the

school, might be resolved if the school would address the situation, suggesting that the school should put them in different buses when they bring them home. The school was also thought to be expensive and academically inadequate. For instance, 'I sometimes say to him...this school is very expensive and they don't give you enough homework because they treat you like you have learning disabilities' (S5, 72-5). This last comment is telling: it could reflect some underlying confusion, in both the teachers and parents, about what exactly ADHD is, and how it should be handled.

Most of the parents who mentioned communicating with their child's teacher came from the experimental group, perhaps because these parents were particularly intrigued about any changes in their child's behaviour at school. Notably, some comments centred on the frustrations of working with the school. Only one parent reported that communication with the school had revealed a change in the child's behaviour. One parent from the control group also communicated with the school to ask if the teachers had noticed anything about his child, and they said they had not noticed any changes.

6.4.5 Use of medication

The literature suggests that medical intervention combined with behavioural psychotherapy in succession has had the most effective, long term degree of success (Magyary and Brandt 2002). Of the experimental group, four out of six children did not receive medication, one had been receiving it throughout, and one began taking it halfway through the programme. This latter child is an intriguing case. His parents observed: 'at the beginning of the program he was not taking any medicine, but at about the middle of the programme, his doctor asked us to give him medicine, and that was when we noticed that he gets angry easily'. The parents' phrasing here attributes the negative change in emotional regulation to the alteration in the medication regime; this may or may not be a product of false causality, but it is significant that the parents believed medication, rather than arts therapies, to have caused a downturn in the child's behaviour. Among the control group, all but one child did not receive medication for the duration of the programme.

Several parents in the experimental group shared their views on the effectiveness of medication, after the programme. Of the views shared, most were suspicious of

medication: 'I was looking on the Internet and I found a video by a doctor, suggesting that it's better not to give children medicine. The medicine he was talking about was the medicine I had been giving my child' (S1, 119-22). This indicates a sense of doubt in the experimental group surrounding medication, and a sense of disempowerment, with parents seeking alternative advice to aid their decisions about medication. A similarly uncertain attitude was reflected in one parent of a child in the experimental group. This parent stated that since he gave his child medicine, there was no improvement in attention. This parent, therefore, went to a doctor to ask him about this medicine but the doctor advised him to continue with it. Some parental comments were framed in terms of a comparison with arts therapies. One parent describes the programme as much better than medication, while another parent observed that the programme had showed her that medicine is not the only solution.

6.4.6 Attitude of the school towards arts therapies

As before the intervention, teachers generally felt positive about arts therapies, with many saying some variant of 'I think it's wonderful, and might be helpful for children with ADHD'; this phrasing is so common in the responses that it suggests a 'party line' which teachers were sticking to. However, some other comments may come across as more genuine. Of the teachers of children in the experimental group, four out of six thought the programme should have been longer, or would have been more helpful if it had lasted longer. One teacher commented, 'I would expect a better and a more significant outcome if this programme was applied on other children', but did not explain why. One possible answer is that the child in question had a very high IQ, and was already performing better academically than most of his classmates. Comments generally were very positive; for example, 'I think this child has changed for the better' (S1, 145), 'It has significantly improved his behaviour' (S9, 149). Comments from teachers of the experimental group were very neutral variants of comments like 'this programme would have had a positive outcome on the child if he had joined it'.

Chapter 7: Conclusions and Recommendations

7.1 Introduction

The last chapter of this thesis draws final conclusions and recommendations for future research. Moreover, this chapter highlights the main contributions of the current research in terms of its theoretical contributions and practical implications. It also discusses the limitations that emerged while conducting this research.

7.2 Summary of the Main Findings

The aim of this project was to develop a culturally sensitive arts therapies programme for children with attention deficit and hyperactivity disorder (ADHD) in primary schools in Saudi Arabia (KSA). This aim was approached through the use of mixed methods and multi-phased, and the research therefore followed a complex design which was, however, appropriate to the topic studied.

Findings in this study originated from the analysis of qualitative and quantitative data and thus presented several perspectives. Therefore, it allowed for an understanding much deeper than could have been realised through the use of a single methodology. The main findings in this study may be summarised as follows:

I. According to the literature review, ADHD is a common condition in the KSA. However, there are very limited arts therapists in the KSA and no guidelines in terms of their practice with ADHD children. The result from this study indicates that there is a lack of understanding in the KSA of how to conduct an arts therapies programme. Art therapists in the KSA tend to focus on behaviour modification, while arts therapists in the UK focus on improving emotional wellbeing. Arts therapists in the KSA used more structured approaches, which are less effective for children with ADHD. There are culture problems in using arts therapies in the KSA, particularly with music and dance. According to the literature review and the results, safety, routine activities and ground rules, adopted from the current practices in the UK, must be adapted to be appropriate for the cultural context of the KSA.

II. According to the results, culturally sensitive arts therapies programme may be an appropriate and valuable intervention for children with ADHD. This study shows that this type of intervention has achieved specific benefits including a decrease in hyperactivity and impulsivity and an increase in attention span. Moreover, the intervention of this programme improves emotional wellbeing, relational/social skills, and regulating emotions.

III. According to the literature review and the findings, understanding cultural issues by the therapist may increases the value of arts therapies intervention.

7.3 Research Conclusions

Research in arts therapies for children with ADHD is difficult to conduct, especially in a country as strongly influenced by a particular culture as the KSA, since arts therapies are bounded by place and time, by culture and history. Saudi Arabia actually needs such studies and the culturally sensitive nature of the KSA encourages such research for this reason. Similarly, there are few empirical studies in arts therapies with a focus on the culturally sensitive nature of the KSA. Moreover, while some parents in the KSA understand the importance of the arts therapies, many do not understand the role of arts therapies as a treatment for children with ADHD. Therefore, this research fills a gap in the knowledge regarding culturally sensitive arts therapies for children with ADHD in the KSA, by using an arts therapies programme that incorporates current practises of the UK and cultural issues of the KSA into a comprehensive intervention programme.

Although there are some differences in the approach to arts therapies between those working in health services and those working in education, there are similarities in the process and structures of art, music, drama, and dance movement therapies. Kids in this sample enjoyed different activities such as 'Parachute activities' and 'Octoband activities'. This study is based on different activities within arts therapies that have been used to support children with ADHD. The current study used a mixed-method approach to investigate the effect of an eight-week arts therapies programme on children with ADHD in the KSA. The choice of a mixed-method strategy derived from the complex nature of this research and the belief that the different strategies of

enquiry would be complementary to each other and might help to clarify findings. In this research, both quantitative and qualitative results support the findings of the value of the arts therapies programme.

Arts therapies programmes are helpful for children with ADHD. However, arts therapies programmes for children with ADHD should be longer than eight weeks for this kind of disorder. Therapists must provide arts therapies programme across a long period and in a repeated manner when needed. Both a client-centred approach and attachment theory are valuable with children with ADHD. Although arts therapies are internationally recognised, a broader, more scientifically based body of research would raise the reputation and interest of arts therapies in educational setting and health care in developing countries. Arts therapists should recognise different types of client groups who may benefit from arts therapies and recommend this therapy in practice.

Arts therapies in the UK have been used gradually with children with ADHD, on the other hand, there is lack of arts therapies provided to help children with ADHD in the KSA. There is some cultural context for using dance and music for therapy in the KSA. As an individual's opinion is affected by their environment, there are sometimes differences in the perspective of parents and teachers regarding the same child.

7.4 Contribution to Knowledge

This study has contributed to the knowledge of arts therapies for children with attention deficit and hyperactivity disorder (ADHD) in three ways:

Firstly, by developing a culturally sensitive arts therapies programme for children with attention deficit and hyperactivity disorder (ADHD). This research is one of the first studies that adopts and adapts an arts therapies programme to be appropriate for a culturally sensitive country such as Saudi Arabia. Previous studies in the KSA did not consider the cultural context in their research studies. Therefore, this research addresses the knowledge gap of implementing arts therapies within the cultural context.

Secondly, by identifying the differences in practice of arts therapies between the UK as a Western country and an Eastern country such as Saudi Arabia. In the first stage of this study the researcher identified the current provision in the KSA regarding support for children with ADHD, as well as the practice of arts therapists in the UK with the same group. This comparison has not been done before.

Thirdly, by practically validating an ADHD scale (Al-khashrami and Ali 2009). There are different scales for ADHD that have been used in previous literature. However, for the purpose of this study, the researcher used a scale of ADHD that was developed by Al-khashrami and Ali (2009) and fits the context of Saudi society.

7.5 Clinical Implications

This study is the first on arts therapies for ADHD in the KSA. It presents the following implications:

- The activities introduced throughout the study can provide practical materials for arts therapists working with children with ADHD in hospitals, schools and day-care centres for particular populations.
- The practical strategies presented in the study offer an outline for implementing arts therapies for ADHD in the KSA.
- The outcome of this study can inform developping specific arts-therapy specialised programmes in the KSA.
- The cultural aspects presented in this study can be used as baselines for the further implementation of arts therapies.

7.6 Limitations

First of all, the sample was small, so the results cannot be generalised. The number of people in the sample was limited to the available and qualified art therapists in the KSA for the first stage of the study. Also, the sample number of the student participants was limited to the availability and willingness of their guardians. Such limitations may have affected the qualitative analysis of the study.

Limitations in Phase 1: The small number of participants who were interviewed may be a methodological limitation of this research. The number of participants in the UK was twelve, three from each discipline. The training and field experiences of such therapists may not in art therapy for clients with ADHD; therefore, their knowledge is limited to general practice of art therapy and other populations. The inclusion criterion for these practitioners was their experience working with children with ADHD. Each therapist may be influenced by different theories and therefore it is important to interview as many as possible to obtain a wide range of experience and beliefs. However, due to practical limitations this was not possible. The relatively small number of participants in stage one is compensated by the fact that semi-structured interviews involve generating depth of data, which is ideal for this type of study (Hammell and Carpenter 2004). Due to time limits, it was not possible to conduct more face-to-face interviews. However, additional phone/skype interviews were conducted, which generated more data.

Another limitation in the use of interviews is the fact that in Saudi Arabia there are very few licensed arts therapists who have experience working with children with ADHD. This significantly limited the number of interviews. Approximately four educationalists with relevant experience have been identified at this stage, as a way of discovering culture specific characteristics.

Limitations in Phase 2: The number of children involved in the intervention was small as, due to the nature of ADHD, it is necessary to work with small groups. Moreover, there was only one private school in the KSA which deal with children with ADHD, and this may be because due to the cultural context there were few parents willing to participate in this research. Further limitations include issues with generalisation (or external validity of the study), given the particular age group (6-12), and the fact that

the study was gender specific. Only boys were included because of religious and cultural reasons relevant to the particular geographical region. Because of the cultural context, only male children were involved in the study, thus a male assistant was hired for the programme. The literature suggests that ADHD is not limited to this age group (Barkley et al. 2006) and gender (Ramtekkar et al. 2010).

7.7 Future Research and Practical Recommendations

Further studies should be carried out on a large sample for the experimental phase, as it appears that arts therapies have the potential to improve the emotional wellbeing, relational/social skills, and increases attention span of children with ADHD and, decreases hyperactivity/impulsiveness. Future RCT studies should have larger sample sizes to increase the statistical power of detecting differences between groups.

The current research was conducted only with male children; therefore, future studies should include both girls and boys as participants. Moreover, in this study the programme was of a two month duration; since a longer term approach may have been more valuable, a longer intervention period study could prove fruitful for future research. Moreover, a longitudinal study with more follow-ups could be a subject for further studies. Further studies on arts therapies with ADHD should focus providing more support and understanding at an early age (children younger than 6 years of age). It would also be valuable if future studies considered the cultural issues in the different context of the countries in which they would be conducted.

Further research could also examine the role of the attitudes of both parents and teachers about the value of programmes of arts therapies in the KSA. It is suggested that in further research at least one parent could participate in the arts therapies programme, and the therapy could be moved to the home environment.which may allow parents to involve arts therapies activity at home. This may increase the effectiveness of such programmes.

The greatest value of the current research lies in its culturally sensitive approach. This is a relatively new field of study and therefore holds potential for both clinical and academic implications. Fundamentally, this study contributes new knowledge to the field of arts therapies when working with children with ADHD and adds to the

discussion on best treatment choices in addressing cultural context. It also opens the potential for arts therapies to be more widely considered as a treatment option within educational and health care setting in the KSA.

This research can facilitate the adoption and combination of arts therapies within environments that may be to some extent culturally different from the West. On the other hand, the study suggests a pathway for consideration for many countries in the Arab world to evaluate arts therapies as a viable alternative practice that is compatible with their culture and society. Educational design makers in these counties should critically examine the potential benefits of integrating the practice of arts therapies as part of mainstream school activity. Professionals should also help in this evaluation process to devise a practicable approach that will help many children with special needs. Awareness programmes should be planned for both parents and teachers, to help children with ADHD reach their potential among their peers and in terms of academic challenge.

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Appendices

Stage One

Appendix 1: Search Strategy

Four different databases were searched: Cinahl; Medline; PsycINFO; ERIC. The following key words were used.

For the intervention, some keywords, such as art* therap* OR music* therap* OR dance* therap* OR drama * therap* OR dramatherap* OR dance* psychotherap* OR art* psychotherap* OR movement* psychotherap* followed by stars produced a high number of results.

For the client group keywords included; attention deficit hyperactivity disorder OR Attention deficit disorder OR ADHD. This also showed a high number of results.

Keywords for the setting were: school* OR educat* OR teach* OR learn* and

Finally research included keywords such as mixed method* OR RCT OR study OR research OR interview* This search also showed a high number of results.

The above keywords were combined to produce the most relevant results which gave a smaller number of results.

Combination of key words: intervention AND client group AND setting AND research (mixed method* OR RCT OR study OR research OR interview*).

This strategy was repeated for each database.

Different combinations were also tried, i.e. intervention AND client group AND setting or intervention AND client group alone. Analysing the results, the most relevant publications could be chosen.
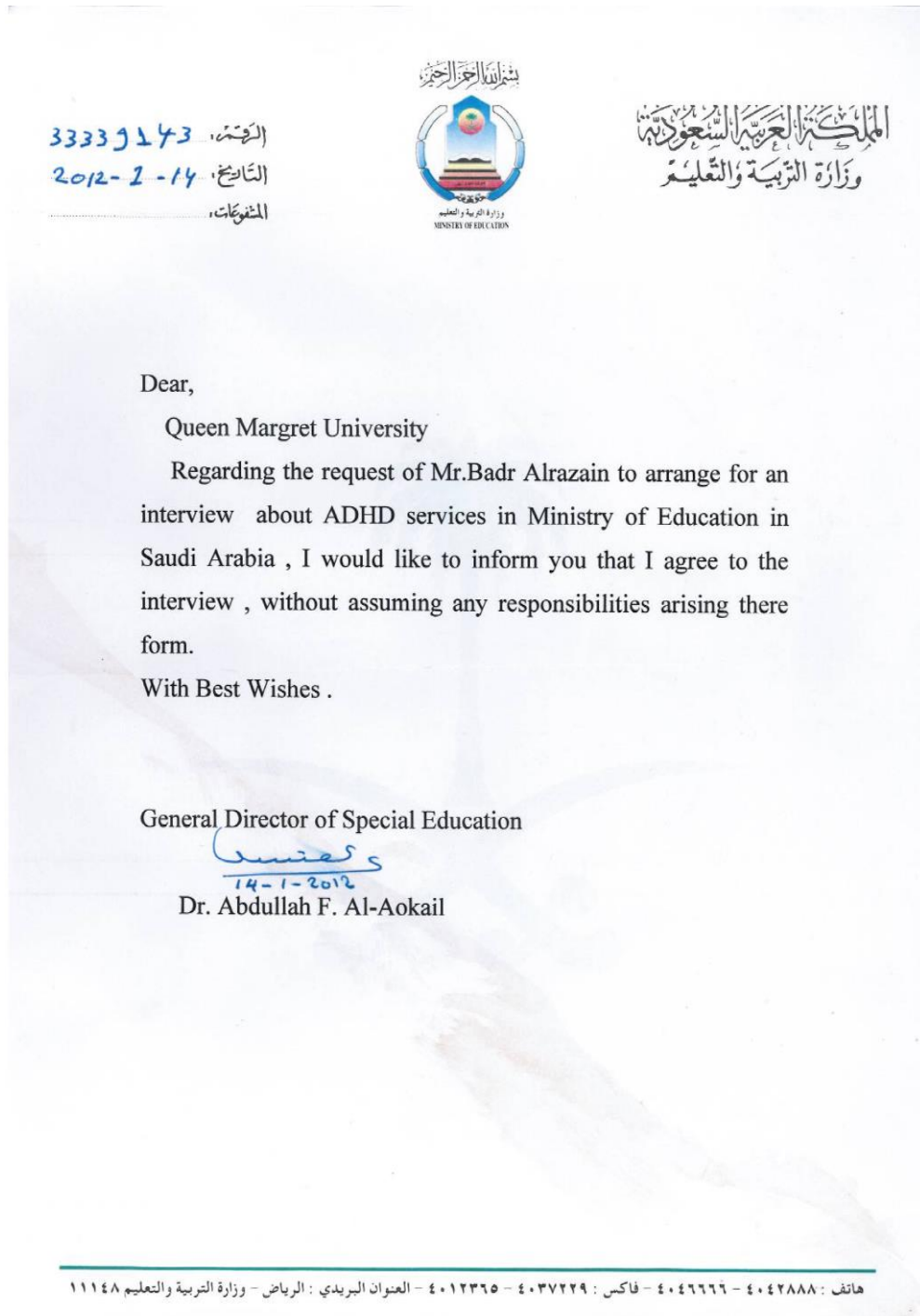
Searching : **CINAHL**

n	Key word	Search Date	Results
S1	art* therap* OR music* therap* OR dance* therap* OR drama * therap* OR dramatherap* OR dance* psychotherap* OR art* psychotherap* OR movement* psychotherap*	8-3-2012	17033
S2	Attention deficit hyperactivity disorder OR Attention deficit disorder OR ADHD	8-3-2012	5502
S3	school* OR educat* OR teach* OR learn*	8-3-2012	422536
S4	mixed method* OR RCT OR study OR research OR interview*	8-3-2012	672459
S5	S1 and S2 and S3 and S4	8-3-2012	6
S6	S1 and S2 and S3	8-3-2012	17
S7	S1 and S2	8-3-2012	43

Searching : **MEDLINE**

n	Key word	Search Date	Results
S1	art* therap* OR music* therap* OR dance* therap* OR drama * therap* OR dramatherap* OR dance* psychotherap* OR art* psychotherap* OR movement* psychotherap*	8-3-2012	106976
S2	Attention deficit hyperactivity disorder OR Attention deficit disorder OR ADHD	8-3-2012	20331
S3	school* OR educat* OR teach* OR learn*	8-3-2012	2674799
S4	mixed method* OR RCT OR study OR research OR interview*	8-3-2012	5364369
S5	S1 and S2 and S3 and S4	8-3-2012	11
S6	S1 and S2 and S3	8-3-2012	18
S7	S1 and S2	8-3-2012	37

Searching :**PsycINFO**

n	Key word	Search Date	Results
S1	art* therap* OR music* therap* OR dance* therap* OR drama * therap* OR dramatherap* OR dance* psychotherap* OR art* psychotherap* OR movement* psychotherap*	8-3-2012	15627
S2	Attention deficit hyperactivity disorder OR Attention deficit disorder OR ADHD	8-3-2012	19952
S3	school* OR educat* OR teach* OR learn*	8-3-2012	1255802
S4	mixed method* OR RCT OR study OR research OR interview*	8-3-2012	1725585
S5	S1 and S2 and S3 and S4	8-3-2012	22
S6	S1 and S2 and S3	8-3-2012	34
S7	S1 and S2	8-3-2012	76

Appendix 2: An Approval Letter from the Ministry of Education

المملكة العربية السعودية
وزارة التربية والتعليم
MINISTRY OF EDUCATION

Dear,

Queen Margret University

Regarding the request of Mr. Badr Alrazain to arrange for an interview about ADHD services in Ministry of Education in Saudi Arabia , I would like to inform you that I agree to the interview , without assuming any responsibilities arising there form.

With Best Wishes .

General Director of Special Education

14 - 1 - 2012

Dr. Abdullah F. Al-Aokail

Appendix 3: Approval Letter from ADHD School in KSA

HDC
مركز تنمية الإنسان
لتأهيل المعاقين

التاريخ: / / ١٤هـ
الموافق: / / ٢٠م
الموضوع:

To whom it may concern

I am writing to inform you that I have agreed for Mr. Badr Alrazain to conduct interview with the supervisor of attention deficit hyperactivity disorder school in Riyadh, Saudi Arabia. I have been informed about Mr Badr Alrazain's proposed study and offer my full support.

Your Sincerely

Director of School

Raed Abdulaziz ibn Taleb

Appendix 4: A Letter from the Art Therapy Office in KSA

To whom it may concerns

I am writing to inform you that I have agreed regarding the request of Mr.
Badr Alrazain, to arrange for an interview about arts therapies services in
Saudi Arabia.
with assuming any responsibilities arising there form.

Your Sincerely

Awad Alyami, Ph.D.
Associate professor,
King Saud University.
Head of Art Therapy Office, Riyadh,
Saudi Arabia
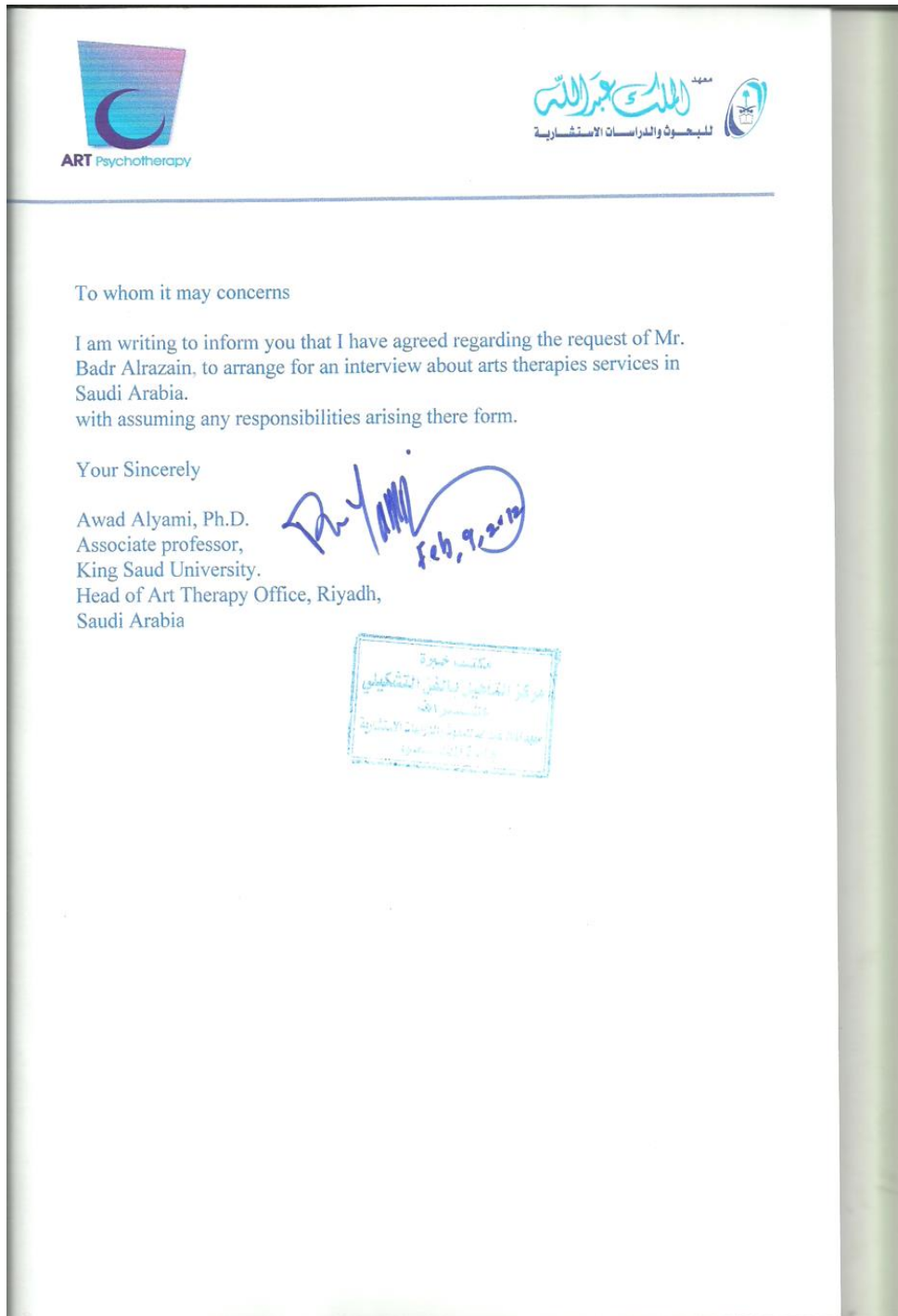
Appendix 5: A Letter from the Rehabilitation Hospital at KFMC in KSA

From: Hills de Zárate, Margaret
Sent: 14 March 2012 12:40
To: Alrazain, Badr
Subject: FW:

FYA

From: McMillan, Ian
Sent: 14 March 2012 09:37
To: Hills de Zárate, Margaret
Subject: FW:

Margaret,

Does this relate to your PhD student?

Thanks

Ian

Ian R. McMillan MEd, PgDip Ed Res, Dip COT, Cert Ed.

Acting Head of Division

Nursing, Occupational Therapy and Arts Therapies
School of Health Sciences
Queen Margaret University, Edinburgh EH21 6UU

Tel: 0131 474 0000; Say "Ian McMillan" when prompted by our automated system
e mail: imcmillan@qmu.ac.uk   www.qmu.ac.uk

From: Amal Olyan [mailto:aolyan@kfmc.med.sa]
Sent: 10 March 2012 06:38
To: McMillan, Ian
Subject:

To whom it may
concern

I am writing to inform you that I have agreed for Mr. Badr Alrazain to conduct interview with
the art therapists in Rehabilitation Hospital, King Fahd Medical City, Riyadh, Saudi
Arabia.
I have been informed about Mr. Badr Alrazain's proposed study and offer my full
support.

Appendix 6: Advertising Poster for Arts Therapists in the UK

Appendix 7:

Queen Margaret University

EDINBURGH

Lucy Clapson
Registry Officer
Queen Margaret University
Queen Margaret University Drive
Musselburgh
East Lothian EH21 6UU
Tel: 0131 474 0000
Email: lclapson@qmu.ac.uk

Name: Badr Alrazain
Status: PhD Student
School: Health Sciences

11 January 2012

Dear Badr,

Ethical Approval – An evaluation of the role of Arts Therapies for children with Attention Deficits Hyperactive Disorder (ADHD) in primary schools in Saudi Arabia (KSA)

The Research Ethics Panel has reviewed your application and Dr Jane McKenzie, Convener of the Panel, has confirmed that she is happy to take Convener's Action to grant ethical approval for your research, subject to you gaining the required permissions from the Ministry of Health and the ADHD Society Support Group (AFTA). Once you have received these permissions please send copies to researchethics@qmu.ac.uk and a letter can then be issued (via email) confirming ethical approval for your study. Please note that we must have this information before you begin your research.

Yours sincerely

Lucy Clapson

Secretary to the Research Ethics Panel

Cc   Dr Vicky Karkou, Supervisor

Appendix 8: Interview Questions for Arts Therapists in KSA.

Name:

Discipline:

Date:

Time:

Location:

Tape recording: Yes/no

Email interview:

Skype interview:

1. Could you tell me about your present job?

    Where do you work?

    How often? Full time or part time?

2. Could you tell me about the clients/children you are working with?

    How often have you been working with children.

    Any specific children – specific conditions

3. Could you tell me about your general experience of working with children with ADHD.

    If no experience go to no 5

    How long have you been working with children ADHD.

    Age group

4. Could you describe some of the difficulties that the children you see more often present with?

    Hyperactivity during session.

    Behavioural problem.

    Problems described by caregivers / parents

    Problems at school/unit and/or at home.

5. What impact do these difficulties have on the work you do with them?

    Material/activities/techniques/instruments

Room and physical boundaries

Structure of session

Practical principles of practice

Does culture play a role in the work you do?

6. What aims do you hold for the work?

Change of behaviour

Further understanding of issues?

Growth? Self-awareness?

Does culture play a role in the aims you chose?

7. What kind of theory guides your work?

Key theoreticians

Particular approach e.g. humanistic, psychoanalytic/psychodynamic, developmental, artistic/creative, active/directive, eclectic/integrative

Specific arts therapies tradition

Does culture play a role in the theory you choose?

8. What type of approach you feel (based on your experience) is of more value for children with ADHD.

Why?

Changes in behaviour at home?

During socialisation with friends?

9. What type of approach you feel (based on your experience) is less valuable for children with ADHD?

Why?

In what way?

10. Are there particular ways in which you undertake initial assessment and/or you evaluate your arts therapies practice?

Add examples

11. Anything you would like to add?

12. Anything you would like to ask?

Thank you

Appendix 9: Interview Questions for Educators in KSA.

Name:

Discipline:

Date:

Time:

Location:

Tape recording: Yes/no

Email interview:

Skype interview:

1. Could you tell me about your present job?

   Where do you work?

2. What policy is available?

3. How easy is it to implement this policy?

4. Could you tell me about any relevant support of children with special needs and ADHD in particular.

Schools, special units, hospitals etc

5. Are there any specialists practitioners working in the following areas and what specialty do they have?

   During assessment?

   For therapy?

   For support for teachers and/or family?

6. What do you think would be the contribution of arts therapies to children with special and their families?

   Why?

   Changes in behaviour at home?

   During socialisation with friends?

7. What would be the difficulties in including the arts therapies in the standard treatment of children with special needs?

   Why?

In what way?

8. Anything you would like to add?

9. Anything you would like to ask?

Thank you

Appendix 10: Interview Questions for Arts Therapists in the UK.

Name:

Discipline:

Date:

Time:

Location:

Tape recording: Yes/no

Email interview:

Skype interview:

1. Could you tell me about your present job?

    Where do you work?

    How often? Full time or part time?

2. Could you tell me about the clients/children you are working with?

    How often have you been working with children.

    Any specific children – specific conditions

3. Could you tell me about your general experience when working with children with ADHD.

    How long have you been working with children ADHD.

    Age group

4. Could you describe some of the difficulties that the children you see more often present with?

    Hyperactivity during session.

    Behavioural problem.

    Problems described by caregivers / parents

    Problems at school/unit and/or at home.

5. What impact do these have on you and/or on the work you do with these children?

    Material/activities/techniques/instruments

    Room and physical boundaries

Structure of session

Practical principles of practice

6. What aims do you hold for the work?

Change of behaviour

Further understanding of issues?

Growth? Self-awareness?

7. What kind of theory guides your work?

Key theoreticians

Particular approach e.g. humanistic, psychoanalytic/psychodynamic, developmental, artistic/creative, active/directive, eclectic/integrative

Specific arts therapies tradition

8. What type of approach you feel (based on your experience) is of more value for children with ADHD.

Why?

Changes in behaviour at home?

During socialisation with friends?

9. What type of approach you feel (based on your experience) is less valuable for children with ADHD?

Why?

In what way?

10. Are there particular ways in which you undertake initial assessment and/or you evaluate your arts therapies practice?

Add examples

11. Anything you would like to add?

12. Anything you would like to ask?

Thank you

Queen Margaret University

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Information Sheet for Potential Participants (Art therapists in UK)

My name is Badr Alrazain and I am a PhD student from the Division of Nursing, Occupational Therapy & Arts Therapies at Queen Margaret University in Edinburgh and I am undertaking a research project titled: An Evaluation of the role of Arts Therapies for Children with Attention Deficit Hyperactivity Disorder (ADHD) in primary schools in Saudi Arabia (KSA). This study is supervised by Dr Vicky Karkou.

I would be very pleased if you agree to take part in this study. The research project will be carried out in two stages. However, you have been invited to participate in the first stage of this study ONLY as the second stage will take place in Saudi Arabia. The first stage of the study is looking into your experience of working as an arts therapist with children with ADHD. I am particularly interested in the value of arts therapy for children with ADHD and challenges faced whilst you working with the children with ADHD (see attached interview schedule).

The findings of the project will be useful for Stage 2 of my study which will involve children with ADHD, their parents and teachers in designing a culturally sensitive arts therapy programme delivered in KSA.

If you agree to participate in the study, you will be interviewed at a time and place of your convenience. The whole process should not take longer than 60 minutes. You will be free to withdraw from the study at any stage and you would not have to give a reason.

Your anonymity will be maintained throughout while all data will be treated as confidential and share only with my my supervisory team ONLY. Information will be kept in a locked place and will be destroyed one year after I completed my study. The

study may be published or presented at conferences as part of disseminating findings from this study; however, anonymity will be assured. Your personal information will not be mentioned at any time.

If you would like to contact an independent person, who knows about this project but is not involved in it, you are welcome to contact Dr Kathy Munro, Head of Division of Nursing, Occupational Therapy and Arts Therapies. Her contact details are given below. If you have read and understood this information sheet, any questions you had have been answered, and you would like to be a participant in the study, please now see the consent form.

Contact details of the researcher

Name of researcher: Badr Alrazain

Address: PhD Student, Division of Nursing, Occupational

Therapy & Arts Therapies, Queen Margaret University,

Queen Margaret University Drive

Musselburgh

East Lothian EH21 6UU

Email / Telephone: balrazain@qmu.ac.uk / 0131 474 0000

Contact details of the independent adviser

Name of adviser: Dr Kathy Munro

Address: Head of Division of Nursing, Occupational Therapy and Arts Therapies

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Queen Margaret University Drive

Musselburgh

East Lothian EH21 6UU

Email / Telephone: KMunro@qmu.ac.uk / 0131 474 0000

Appendix 12:

Queen Margaret University
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Information Sheet for Potential Participants Arts therapists in KSA

My name is Badr Alrazain and I am a PhD student from the Division of Nursing, Occupational Therapy & Arts Therapies at Queen Margaret University in Edinburgh. I am undertaking a research project titled: An Evaluation of the role of Arts Therapies for Children with Attention Deficit Hyperactivity Disorder (ADHD) in primary schools in Saudi Arabia (KSA). This study is supervised by Dr Vicky Karkou.

I would be very pleased if you agreed to take part in this study. The research project will be carried out in two stages. You have been invited to participate in the first stage of this study. The first stage of the study is looking into your experience of working as an arts therapist with children with ADHD. I am particularly interested in the value of arts therapy for children with ADHD and challenges faced whilst you work with the children with ADHD (see attached interview schedule).

The findings of the project will be useful for Stage 2 of my study which will involve children with ADHD, their parents and teachers in designing a culturally sensitive arts therapy programme delivered in KSA.

If you agree to participate in the study, you will be interviewed at a time and place of your convenience. The whole process should not take longer than 60 minutes. You will be free to withdraw from the study at any stage and you will not have to provide a reason.

Your anonymity will be maintained throughout this study (or project). All data will be treated as confidential and only my supervisory team will have access to it. Information will be kept in a locked place and will be destroyed one year after the study completion. The study findings may be published or presented at conferences as

part of disseminating findings; however, anonymity will be assured. Your personal information will not be mentioned at any time.

If you would like to contact an independent person, who knows about this project but is not involved in it, you are welcome to contact Dr Kathy Munro, Head of Division of Nursing, Occupational Therapy and Arts Therapies. Her contact details are given below. If you have read and understood this information sheet, any questions you had have been answered, and you would like to be a participant in the study, please Complete and return the consent form.

Contact details of the researcher

Name of researcher: Badr Alrazain

Address: PhD Student, Division of Nursing, Occupational

Therapy & Arts Therapies, Queen Margaret University,

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Email / Telephone: balrazain@qmu.ac.uk / 0131 474 0000

Contact details of the independent adviser

Name of adviser: Dr Kathy Munro

Address: Head of Division of Nursing, Occupational Therapy and Arts Therapies

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Email / Telephone: KMunro@qmu.ac.uk / 0131 474 0000

Appendix 13:

Queen Margaret University

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Information Sheet for Potential Participants (Educators in KSA)

My name is Badr Alrazain and I am a PhD student from the Division of Nursing, Occupational Therapy & Arts Therapies at Queen Margaret University in Edinburgh and I am undertaking a research project titled: An Evaluation of the role of Arts Therapies for Children with Attention Deficit Hyperactivity Disorder (ADHD) in primary schools in Saudi Arabia (KSA). This study is supervised by Dr Vicky Karkou.

I would be very pleased if you agree to take part in this study. The research project will be carried out in two stages. You have been invited to participate in the first stage of this study. The first stage of the study is looking into your experience of working with children with ADHD. I am particularly interested in the value of arts therapy for children with ADHD and challenges faced whilst you working with the children with ADHD (see attached interview schedule).

The findings of the project will be useful for Stage 2 of my study which will involve children with ADHD, their parents and teachers in designing a culturally sensitive arts therapy programme delivered in KSA.

If you agree to participate in the study, you will be interviewed at a time and place of your convenience. The whole process should not take longer than 60 minutes. You will be free to withdraw from the study at any stage and you would not have to give a reason.

Your anonymity will be maintained throughout while all data will be treated as confidential and share only with my supervisory team ONLY. Information will be kept in a locked place and will be destroyed one year after I completed my study. The study may be published or presented at conferences as part of disseminating findings

from this study; however, anonymity will be assured. Your personal information will not be mentioned at any time.

If you would like to contact an independent person, who knows about this project but is not involved in it, you are welcome to contact Dr Kathy Munro, Head of Division of Nursing, Occupational Therapy and Arts Therapies. Her contact details are given below. If you have read and understood this information sheet, any questions you had have been answered, and you would like to be a participant in the study, please now see the consent form.

Contact details of the researcher

Name of researcher: Badr Alrazain

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Contact details of the independent adviser

Name of adviser: Dr Kathy Munro

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Appendix 14:

Queen Margaret University

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Consent Form for stage one

"An Evaluation of the Role of Arts Therapies for Children with Attention Deficit Hyperactivity Disorder (ADHD) in Primary Schools in Saudi Arabia (KSA)"

I have read and understood the information sheet and this consent form. I have had an opportunity to ask questions about my participation.

I understand that I am under no obligation to take part in this study.

I understand that I have the right to withdraw from this study at any stage without giving any reason.

I agree to participate in this study.

Name of participant: _____

Signature of participant: _____

Signature of researcher: _____

Date: _____

Name of researcher: Badr Alrazain

Address: PhD Student, Division of Nursing, Occupational

Therapy & Arts Therapies, Queen Margaret University,

Queen Margaret University Drive

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Stage Two

Appendix 15:

Queen Margaret University
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Badr Alrazain
School of Health Sciences

Lucy Clapson
Governance and Quality Enhancement
Queen Margaret University, Edinburgh
Queen Margaret University Drive
Musselburgh
East Lothian EH21 6UU

Tel (0)131 474 0000 Fax (0)131 474 0001
Email: researchethics@qmu.ac.uk

12 February 2014

Dear Badr,

Ethical Approval – An evaluation of the role of Arts Therapies for children with Attention Deficits Hyperactive Disorder (ADHD) in primary schools in Saudi Arabia (KSA).

Thank you for your response dated 11 February to the email that I sent you following consideration of your application by the Research Ethics Panel.

Dr Derek Santos, Deputy Convener of the Panel, has reviewed your response to the points you were required to address, and has confirmed that he is happy to take Convener's Action to grant full ethical approval for your research.

A standard condition of this ethical approval is that you are required to notify the Panel, in advance, of any significant proposed deviation from the original protocol. Reports to the Committee are also required once the research is underway if there are any unexpected results or events that raise questions about the safety of the research.
We would like to thank you for your co-operation and wish you well with your project.

If you need this confirmation of approval as a signed hard copy please let me know and I would be happy to provide it.

Yours sincerely

Lucy Clapson
Secretary to the QMU Research Ethics Panel

DIVISION OF GOVERNANCE AND QUALITY ENHANCEMENT
QUEEN MARGARET UNIVERSITY, EDINBURGH
MUSSELBURGH
EAST LOTHIAN EH21 6UU
TELEPHONE: 0131 474 0000

Queen Margaret University

EDINBURGH

Information Sheet for Potential Participants Parents of Children with Attention Deficit Hyperactivity Disorder in KSA

My name is Badr Alrazain and I am a PhD student from the Division of Nursing, Occupational Therapy & Arts Therapies at Queen Margaret University in Edinburgh. I am undertaking a research project titled: An Evaluation of the role of Arts Therapies for Children with Attention Deficit Hyperactivity Disorder (ADHD) in primary schools in Saudi Arabia (KSA). This research is overseen by a team of supervisors in Queen Margaret University.

The research project will be carried out in two stages. You have been invited to participate in the second stage of this study, since you are the parent or guardian of a child with Attention Deficit Hyperactivity Disorder. Your participation could help us to develop new ways of improving the concentration and emotional wellbeing of children with Attention Deficit Hyperactivity Disorder.

The second stage of the study involves both children with Attention Deficit Hyperactivity Disorder, and their parents. Half of the children will participate in a culturally sensitive programme of movement therapy in their school over ten weeks, engaging in activities designed to increase concentration, increase emotional wellbeing, and decrease hyperactivity. The programme has been designed especially to fit KSA cultural needs. The activities have also been designed to be safe so that the children will not be at any physical risk. The children will meet the researcher one-to-one, before and after the therapy, so that he can assess whether the programme has helped them.

The other half of the children will be the "control group" - they will attend their normal classes, to allow the researcher to assess how the therapy is helping the other children. A computer will randomly decide which group your child is in.

As a parent of a participating child, you will also be interviewed about your child's behaviour before and after the programme, so that the researcher can assess whether the programme has helped your child. In addition, you will be asked to complete questionnaires before and after the programme, before meeting the researcher. These questionnaires should not take more than half an hour to complete.

You do not have to take part, but if you agree to participate in the study, you will be interviewed at a time and place of your convenience. During this interview, the researcher will answer any questions you have about the activities your child will be doing. The whole process should not take longer than 60 minutes. You will be free to withdraw from the study at any stage and you will not have to provide a reason.

If the movement therapy is found to help children with Attention Deficit Hyperactivity Disorder, the research findings and programme will be sent to the school, to help other children with Attention Deficit Hyperactivity Disorder. If your child was in the "control group", they will benefit from the movement therapy at this stage.

Your anonymity will be maintained throughout this study. All data will be treated as confidential and only my supervisory team will have access to it. The interview will be digitally recorded. Information will be kept in a locked place and will be destroyed three years after the study completion. The study findings may be published or presented at conferences as part of disseminating findings; however, anonymity will be assured. Your personal information will not be mentioned at any time.

This research has been reviewed by the Ethical Approval Committee of Queen Margaret University, who have ensured that it meets all ethical requirements.

If you would like to contact an independent person, who knows about this project but is not involved in it, you are welcome to contact my Director of Studies, Dr Fiona Coutts, Dean of the School of Health Sciences. Her contact details are given below. You can contact her if you have any complaints.

If you have read and understood this information sheet, any questions you had have been answered, and you would like you and your children to participate in the study, please complete and return the consent form.

Contact details of the researcher

Name of researcher: Badr Alrazain

Address: PhD Student, Division of Nursing, Occupational

Therapy & Arts Therapies, Queen Margaret University,

Queen Margaret University Drive

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Email / Telephone: balrazain@qmu.ac.uk / 0131 474 0000

Contact details of the independent adviser

Name of adviser: Dr Fiona Coutts

Address: Dean of the School of Health Sciences

Queen Margaret University, Edinburgh

Queen Margaret University Drive

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Email / Telephone: Fcoutts@qmu.ac.uk / 0131 474 0000

Appendix 17:

Queen Margaret University

EDINBURGH

Information Sheet for Potential Participants Teachers in a School for Children with Attention Deficit Hyperactivity Disorder in KSA

My name is Badr Alrazain and I am a PhD student from the Division of Nursing, Occupational Therapy & Arts Therapies at Queen Margaret University in Edinburgh. I am undertaking a research project titled: An Evaluation of the role of Arts Therapies for Children with Attention Deficit Hyperactivity Disorder (ADHD) in primary schools in Saudi Arabia (KSA). This research is overseen by a team of supervisors in Queen Margaret University.

The research project will be carried out in two stages. You have been invited to participate in the second stage of this study, because you teach children with Attention Deficit Hyperactivity Disorder. The second stage of the study involves interviewing teachers in a school for students with Attention Deficit Hyperactivity Disorder, in order to deliver a culturally sensitive arts therapies programme to help children with the condition.

As a teacher, you will be interviewed about the behaviour of the participating children before and after the programme, so that the researcher can assess whether the programme has helped the children. In addition, you will be asked to complete questionnaires before and after the programme, before meeting the researcher. These questionnaires should not take more than half an hour to complete.

You do not have to take part, but if you agree to participate in the study, you will be interviewed at a time and place of your convenience. During this interview, the researcher will answer any questions you have. The whole process should not take longer than 60 minutes. You will be free to withdraw from the study at any stage and you will not have to provide a reason.

If the movement therapy is found to help children with Attention Deficit Hyperactivity Disorder, the research findings and programme will be sent to the school, to help other children with Attention Deficit Hyperactivity Disorder. Your participation will help us develop ways to increase concentration and wellbeing in children with Attention Deficit Hyperactivity Disorder, and should not have any risks or disadvantages for you.

Your anonymity will be maintained throughout this study (or project). All data will be treated as confidential and only my supervisory team will have access to it. The interview will be digitally recorded. Information will be kept in a locked place and will be destroyed three years after the study completion. The study findings may be published or presented at conferences as part of disseminating findings; however, anonymity will be assured. Your personal information will not be mentioned at any time.

This research has been reviewed by the Ethical Approval Committee of Queen Margaret University, who have ensured that it meets all ethical requirements.

If you would like to contact an independent person, who knows about this project but is not involved in it, you are welcome to contact my Director of Studies, Dr Fiona Coutts, Dean of the School of Health Sciences. Her contact details are given below. You can contact her if you have any complaints.

If you have read and understood this information sheet, any questions you had have been answered, and you would like to be a participant in the study, please complete and return the consent form.

Contact details of the researcher

Name of researcher: Badr Alrazain

Address: PhD Student, Division of Nursing, Occupational

Therapy & Arts Therapies, Queen Margaret University,

Queen Margaret University Drive

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Contact details of the independent adviser

Name of adviser: Dr Fiona Coutts

Address: Dean of the School of Health Sciences

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Appendix 18:

Queen Margaret University

EDINBURGH

Information Sheet for Potential Participants School for Children with Attention Deficit Hyperactivity Disorder in KSA

My name is Badr Alrazain and I am a PhD student from the Division of Nursing, Occupational Therapy & Arts Therapies at Queen Margaret University in Edinburgh. I am undertaking a research project titled: An Evaluation of the role of Arts Therapies for Children with Attention Deficit Hyperactivity Disorder (ADHD) in primary schools in Saudi Arabia (KSA). This research is overseen by a team of supervisors in Queen Margaret University.

The research project will be carried out in two stages. You have been invited to participate in the second stage of this study, which involves delivering a culturally sensitive arts therapies programme in your school to help children with Attention Deficit Hyperactivity Disorder.

The study will focus on 12 children with Attention Deficit Hyperactivity Disorder aged between 6 and 12. They will be randomly allocated to either an experimental group, or a control group, with six participants in each. Pre- and post- tests of both groups will be conducted, with children meeting the researcher one-to-one for short informal assessments. The participant group will be video-recorded, and reflective notes will be made of both groups. Parents and a teacher will be interviewed, and will complete questionnaires, about the children's behaviour before and after the intervention.

Children in the experimental group (Group A) will participate in the culturally sensitive arts therapies programme at the school, three times a week for eight weeks, whilst children in the control group (Group B) will remain in the classroom. This keeps children in their familiar school setting and causes as little disruption as possible to their normal timetable.

If the movement therapy is found to help children with Attention Deficit Hyperactivity Disorder, the research findings and programme will be sent to the school, to help

other children with the disorder. The school's participation will help us develop ways to increase concentration and wellbeing in children with Attention Deficit Hyperactivity Disorder, and should not have any risks or disadvantages.

The programme will require a separate, clear room in the school, without desks or chairs. The sessions should be held at the same times every week, and in the same room, for the programme to be effective.

Since the researcher will require an assistant, if any of your staff would like to observe the sessions and see how they could use movement therapy to help their students in future, they would be very welcome. The assistant will be observing and occasionally participating, as directed by the researcher. It would be very helpful, therefore, if you could ask your staff whether anyone would like to assist. Otherwise, the researcher will bring his own assistant.

The anonymity of all participants will be maintained throughout this study (or project). All data will be treated as confidential and only my supervisory team will have access to it. The interview will be digitally recorded. Information will be kept in a locked place and will be destroyed three years after the study completion. The study findings may be published or presented at conferences as part of disseminating findings; however, anonymity will be assured. No personal information will be mentioned at any time.

This research has been reviewed by the Ethical Approval Committee of Queen Margaret University, who have ensured that it meets all ethical requirements.

If you would like to contact an independent person, who knows about this project but is not involved in it, you are welcome to contact my Director of Studies, Dr Fiona Coutts, Dean of the School of Health Sciences. Her contact details are given below. You can contact her if you have any complaints.

If you have read and understood this information sheet, any questions you had have been answered, and you would like to be a participant in the study, please complete and return the consent form.

Contact details of the researcher

Name of researcher: Badr Alrazain

Address: PhD Student, Division of Nursing, Occupational

Therapy & Arts Therapies, Queen Margaret University,

Queen Margaret University Drive

Musselburgh

East Lothian EH21 6UU

Email / Telephone: balrazain@qmu.ac.uk / 0131 474 0000

<u>Contact details of the independent adviser</u>

Name of adviser: Dr Fiona Coutts

Address: Dean of the School of Health Sciences

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Appendix 19:

Queen Margaret University

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Information Sheet for Potential Participants Patient Information Sheet for Children 10-12 Years Old

A student at Queen Margaret University in Scotland is doing a research study and would like your help. Research means finding out more about something. It is a way we try to find out the answers to questions.

Who is doing this project?

The researcher is called Badr Alrazain.

Why is this project being done?

We are trying to help children who find it hard to concentrate or sit still be calm and happy, and concentrate better. We think that doing special movement exercises might help these children in Saudi Arabia, and we would like your help to find out more about this.

Why have I been chosen to take part?

We are asking you because you are a student at the school for children who find it hard to concentrate or sit still, aged between 6 and 12.

What do I have to do to take part?

A computer will decide the best way you can help us. One way is to do some movement games and activities with us, three times a week. These won't hurt or be difficult, and you don't have to do any activity you don't like. No one will be angry if you say no in the session, or decide you want to leave.

Another way of taking part is not to do anything at all. You will go to school like you usually do. This is called being in the control group, and it's very important. It helps us work out if movement exercises help children to concentrate and sit still, or not.

Will joining in help me?

We cannot promise the study will help you, but it might make you feel calmer or happier. What we find out might also help other children who find it hard to concentrate or sit still.

Could there be any problems if I take part?

It's very unlikely you will get hurt if you take part. Because the exercises ask you to move around, you might sometimes trip or get a little bump, like if you were playing with a friend. If this happens, we will stop to make sure you're okay, and put a plaster on if you need one!

Sometimes the activities bring up big feelings in us, and you might feel a bit upset or cross. If that happens, you can talk to anyone – the researcher, your parents or your teachers. No one will be angry with you, and we will try to make you feel better!

Do I have to take part?

You do not have to take part. You can say no and no one will be cross or upset. If you say yes, but later change your mind then that's ok as well. Just tell your parents, teacher or the researcher. They will not be cross with you.

Will anyone find out if I am on this study?

Your name and the things about you will be kept a secret – only the people who are doing the research will be able to see this information

Did anyone else check the study is OK to do?

Before any research is allowed to happen, it has to be checked by a group of people called a Research Ethics Committee. They make sure that the research is fair. This research has been checked by the Research Ethics Committee in Queen Margaret University, Scotland.

What happens after the study?

Badr will be keeping a diary while he is working with the children in the study. He will also talk to parents and teachers, and write down what they say. After the study, he will look at all his writing and decide if the movement activities helped them to concentrate and sit still, or not. If they helped, he will give the movement activities to your teachers to use with everyone in your school!

What do I do now?

Take time to decide whether or not you want to take part, and please ask us if there is anything that you do not understand. You can talk to Badr, or email Badr's teacher, Fiona Coutts, at **FCoutts@qmu.ac.uk**. She will try to answer your question or will speak to someone who can help.

Appendix 20:

Queen Margaret University

EDINBURGH

Information Sheet for Potential Participants Patient Information Sheet for Children 6-10 Years Old

A student at Queen Margaret University in Scotland is doing a research study and would like your help. Research means finding out more about something. It is a way we try to find out the answers to questions.

Who is doing this project?

The researcher is called Badr Alrazain.

Why is this project being done?

We are trying to help children with ADHD be calm and happy, and concentrate better. We think that doing special movement exercises might help children with ADHD in Saudi Arabia, and we would like your help to find out more about this.

Why have I been chosen to take part?

We are asking you because you are a student at the ADHD School, aged between 6 and 12.

What do I have to do to take part?

A computer will decide the best way you can help us. One way is to do some movement games and activities with us, three times a week for ten weeks, instead of some of your ordinary classes. These won't hurt or be difficult, and you don't have to do any activity you don't like. No one will be angry if you say no in the session, or decide you want to leave.

Another way of taking part is not to do anything at all. You will go to school like you usually do. This is called being in the control group, and it's very important. It helps us work out if movement exercises help children with ADHD, or not.

Will joining in help me?

We cannot promise the study will help you, but it might make you feel calmer or happier. What we find out might also help other children with ADHD.

Could there be any problems if I take part?

It's very unlikely you will get hurt if you take part. Because the exercises ask you to move around, you might sometimes trip or get a little bump, like if you were playing with a friend. If this happens, we will stop to make sure you're okay!

Sometimes the activities bring up big feelings in us, and you might feel a bit upset or cross. If that happens, you can talk to anyone – the researcher, your parents or your teachers. No one will be angry with you, and we will try to make you feel better!

Do I have to take part?

You do not have to take part. You can say no and no one will be cross or upset. If you say yes, but later change your mind then that's ok as well. Just tell your parents, teacher or the researcher. They will not be cross with you.

Will anyone find out if I am on this study?

Your name and the things about you will be kept a secret – only the people who are doing the research will be able to see this information.

Did anyone else check the study is OK to do?

Before any research is allowed to happen, it has to be checked by a group of people called a Research Ethics Committee. They make sure that the research is fair. This research has been checked by the Research Ethics Committee in Queen Margaret University, Scotland.

What happens after the study?

Badr will be keeping a diary while he is working with the children in the study. He will also talk to parents and teachers, and write down what they say. After the study, he will look at all his writing and decide if the movement activities helped their ADHD or not. If they helped, he will give the movement activities to your teachers to use with everyone in your school!

What do I do now?

Take time to decide whether or not you want to take part, and please ask us if there is anything that you do not understand. You can talk to Badr, or email Badr's teacher, Fiona Coutts, at Fcoutts@qmu.ac.uk. She will try to answer your question or will speak to someone who can help.

Appendix 21:

Queen Margaret University
EDINBURGH

Consent Form of Parents of Children with ADHD

"An Evaluation of the Role of Arts Therapies for Children with Attention Deficit Hyperactivity Disorder (ADHD) in Primary Schools in Saudi Arabia (KSA)"

I have read and understood the information sheet ('Parents of Children with ADHD in KSA', Version 2, 23 January 2014) and this consent form. I have had an opportunity to ask questions about my and my child's participation.

I understand that my interview will be recorded, and that, if my child undertakes movement therapy sessions, the sessions will be taped. I understand I am under no obligation to take part in this study.I understand that I have the right to withdraw from this study at any stage without giving any reason.

I agree to participate in this study.

Name of participant: _____

Signature of participant: _____

Signature of researcher: _____

Date: _____

Name of researcher: Badr Alrazain

Address:PhD Student, Division of Nursing, Occupational

Therapy & Arts Therapies, Queen Margaret University,

Queen Margaret University Drive

Musselburgh

East Lothian EH21 6UU

Email / Telephone: balrazain@qmu.ac.uk / 0131 474 0000

Appendix 22:

Queen Margaret University

EDINBURGH

Consent Form for Teachers in a School for Children with ADHD in KSA

"An Evaluation of the Role of Arts Therapies for Children with Attention Deficit Hyperactivity Disorder (ADHD) in Primary Schools in Saudi Arabia (KSA)"

I have read and understood the information sheet ('Teachers in a school for children with ADHD in KSA', Version 2, 23 January 2014) and this consent form. I have had an opportunity to ask questions about my participation.

I understand that my interview will be recorded, and that I am under no obligation to take part in this study. I understand that I have the right to withdraw from this study at any stage without giving any reason.

I agree to participate in this study.

Name of participant: _____

Signature of participant: _____

Signature of researcher: _____

Date: _____

Name of researcher: Badr Alrazain

Address: PhD Student, Division of Nursing, Occupational

Therapy & Arts Therapies, Queen Margaret University,

Queen Margaret University Drive

Musselburgh

East Lothian EH21 6UU

Email / Telephone: balrazain@qmu.ac.uk / 0131 474 0000

Appendix 23:

Consent Form for ADHD School in KSA

"An Evaluation of the Role of Arts Therapies for Children with Attention Deficit Hyperactivity Disorder (ADHD) in Primary Schools in Saudi Arabia (KSA)"

I have read and understood the information sheet ('School for children with ADHD in KSA', Version 2, 23 January 2014) and this consent form. I have had an opportunity to ask questions about my participation, that of my teachers, and that of my students.

I understand that all interviews and sessions will be recorded, and that no one above is under any obligation to take part in this study. I understand that they have the right to withdraw from this study at any stage without giving any reason.

I agree for the school to participate in this study.

Name of participant: _____

Signature of participant: _____

Signature of researcher: _____

Date: _____

Name of researcher: Badr Alrazain

Address: PhD Student, Division of Nursing, Occupational

Therapy & Arts Therapies, Queen Margaret University,

Queen Margaret University Drive

Musselburgh

East Lothian EH21 6UU

Email / Telephone: balrazain@qmu.ac.uk / 0131 474 0000

Appendix 24: Interview Questions for Parents

Name:

Date:

Time:

Location:

Tape recording: Yes/no

Email interview:

Skype interview:

Phone interview:

1. Has your child been diagnosed with ADHD?
   - If answer yes, why did you send your child to be diagnosed?
   - If no, why did you send your child to this school if there is no formal diagnosis?
2. What behaviours did you notice in your child, that have led you to think they might suffer from ADHD?
   - When did you first observe problems?
3. Do you have other children?
   - How does this child interact with them?
   - Is he able to share his toys?
   - Is he considerate of their feelings?
4. Do they interact easily with other children their age?
   - Do they have particular friends?
5. What does your child like to do for fun?
   - Do they have any hobbies?
6. How long are they able to concentrate on one thing for?
   - Are they able to complete tasks and avoid distractions?
7. Are they able to maintain eye contact with you when conversing?
8. When your child is behaving badly, or is particularly overactive, do you have strategies for dealing with that behaviour?
   - How do you respond?
   - How does that affect them?
9. Do your child readily follow your instructions?
   - Are they obedient or wilful?
10. Do you ever talk to your child about their condition?
    - Do they ever reflect on it?

11. How do you feel about your child's difficulty?
   - Does your child recognise your feelings?
12. Would you describe your child as happy or not?
   - Have they ever suffered from depression or sadness as a result of their condition? Do they have any other emotional needs – for instance, fears?
   - Are they ever angry or aggressive?
13. Does your child behave impulsively?
   - Is he able to recognize potential consequences of his actions?
14. Is your child confident when exposed to new situations?
   - Is he happy to be left alone with other people?
   - Does he trust people?
15. Do you use medicines to control/improve the effects of ADHD?
   - If yes, how do you find that that impacts on your child? If no, why not?
16. What about school? Is he performing well?
   - Does he get on well with their classmates?
   - Is he able to learn easily?
17. Have you ever participated in therapy for ADHD before?
   - Are there any other professional interventions you have tried?
   - What was your perception of those processes?
18. In the United Kingdom, they use dance, movement, drama, music and art therapies to help children that suffer from ADHD. What do you think about that approach?
   - Do you think that it could be helpful to your child?
   - Does your child have any physical problems which might stop them from doing movement therapy?
19. How do you feel about your child suffering from ADHD?
   - Do you find it difficult to cope with?
   - Is it a burden on your family or you?
20. Have you ever participated in therapy for ADHD before?
   - Are there any other professional interventions you have tried?
   - What was your perception of those processes?
21. What do you expect as an outcome of this programme?

Any thing would you like to add?

Thank you

Appendix 25: Interview Questions for Teachers

Name:

Date:

Time:

Location:

Tape recording: Yes/no

Email interview:

Skype interview:

Phone interview:

1. What behaviours do you notice in the children?
   - What are the typical problems that you notice in the classroom?
2. How do you evaluate your work?
   - How do you monitor improvements in the children?
3. Are the children able to interact easily with one another?
   - Do they interact easily with other children their age?
   - Do you notice friendship groups forming?
4. Are they able to share their games?
   - Do they play well together?
5. Have you ever observed negative experience taking place?
   - How do you respond to those types of behaviour?
6. What do they like to do for fun?
   - Do they have any special emotional needs?
   - Do they have any hobbies?
7. How long are they able to concentrate on one thing for?
   - Are they able to complete tasks and avoid distractions?
8. Are they able to maintain eye contact with you when conversing?
9. Do you notice any kind of evasive behaviours: reluctance to be in school etc?
10. When the child is behaving badly, or is particularly overactive, do you have strategies for dealing with that behaviour?
    - How do you respond?
11. Do they readily follow your instructions?
    - Are they obedient or wilful?
12. In the UK, they use dance, movement, drama, music and art therapies to help children that suffer from ADHD. Do you think that movement therapy could be helpful to ADHD child? Do the children you teach have any physical limitations that would prevent them from doing movement therapy?
13. Do they behave impulsively?
    - Are they able to recognize potential consequences of their actions?
14. Are they confident when exposed to new situations?

-
15. Are any of the children medicated to control their behaviour?
    - Do you have an opinion of medication?
    - Do you think it is useful or not?
16. What about in their academic work?
    - Do they get on well with their classmates?
17. Have you discussed their progress with their parents?
18. What do you expect as an outcome of this programme?

 Any thing would you like to add?

 Thank you

Appendix 26: An Approval Letter from the ADHD School in KSA

عـبـور

Date : 31/10/2013

To whom it may concern

I am writing to inform you that I have granted Mr. Badr Alrazain permission to conduct a study relating to children with Attention Deficit Hyperactivity Disorder in our School in Riyadh, Saudi Arabia. I am aware that the data collection which will take place in our School will involve children participating in an Arts Therapies Programme, and that one teacher and parents of the children will be interviewed. I wish to state that I fully support the study.

Please do not hesitate to contact me should you have any further queries.

Yours Sincerely

Director of School

Attention Deficit Hyperactivity

Disorder Scale

School assessment copy

- **Dear teacher,**

  This scale includes a group of phrases which describe the behaviour of children aged 6- 13 in the school environment. Please read it carefully. For each phrase, tick (✓) the box which most accurately describes the student's behaviour. Please answer all questions, and put just one tick (✓) in front of each sentence.

Thank you for your cooperation

- **Preliminary data of the child:**

School Name: _____ City: _____

Kind of school: ☐ Government ☐ Private ☐ Boys ☐ Girls

Child's Name: _____ Age: _____

Classroom: _____

Child's Scores

Average Score	Impulsivity and Hyperactivity	Inattention

First aspect: An impaired ability to pay attention

N	Phrases	Always	Often	Sometimes	Rarely	Never
1	The child has a short attention span, to the point that he is unable to pay attention to anything specific for a long time.					
2	His attention is distracted by anything going on around him, even minor distractions.					
3	He finds it difficult to listen to others talk for a long time.					
4	He seems not to hear when you talk to him.					
5	He cannot follow conversations with him or around him in the classroom.					
6	He finds it difficult to understand and absorb new information.					
7	He cannot understand all instructions that he hears.					
8	He finds it difficult to identify shapes and parts of shapes.					
9	He does not notice similarities and differences between objects and parts of objects.					
10	He forgets instructions and needs to be reminded about them.					
11	When he participates in a collective activity, he needs to be reminded of the rules of the activity.					
12	He forgets things that he needs for school activities, whether for curricular or extracurricular activities.					
13	He leaves his books and materials in school, instead of bringing them home.					
14	He forgets how to do things which he already knows how to do, even if he does them daily.					
15	He makes mistakes in activities which he has already learned how to do, and forgets the order of steps in processes.					
16	He cannot finish activities or tasks without help from others.					
17	He cannot finish activities or tasks within the allotted time: for example, exams.					
18	He hesitates even when making simple decisions, especially when he is given a choice.					
19	He does not complete classwork and homework.					
20	His homework is full of mistakes.					
21	His homework is full of crossings-out and erasings.					
22	His handwriting is untidy and not clean.					
23	His books and notebooks are not clean.					
24	He jumps between lines when he writes, leaving some lines or sentences unwritten.					
25	He makes mistakes when writing, even when copying writing in front of him.					
26	He makes mistakes in reading, adding or omitting letters or words.					
27	He jumps between lines when reading, leaving some sentences or lines unread.					
28	He struggles to pay attention to the teacher when the latter is explaining the subject.					
29	When he repeats the words he hears, he changes intonation into a question.					
30	He repeats some sections of the speech that he hears.					
31	He cannot transfer verbal messages from one person to another.					
32	When he is talking about something, his speech is incomplete and incoherent.					
33	He forgets names and event orders even of things he already knows.					
34	He avoids participating in activities which require thinking.					
35	He pauses for a long time before answering any questions, for instance, in a test.					
36	He delays entering classes or activities, more than the rest of the students.					
37	He takes a long time to bring out school books and equipment from his bag.					
38	When there is a class discussion, he tries to leave the room in any way possible.					

Second aspect: Hyperactivity

N	Phrases	Assessment				
		Always	Often	Sometimes	Rarely	Never
39	He is moving a lot, is restless or struggles to stay in his place.					
40	He fidgets in his seat, shown by movements of his hands and feet.					
41	He leaves his place without permission.					
42	He keeps walking back and forth in the same place without a clear reason or goal.					
43	Wherever he is, he makes noise.					
44	He cannot work quietly.					
45	He annoys others while they work.					
46	He speaks too much.					
47	He interrupts others when they talk.					
48	He speaks during times when silence is expected.					
49	He provokes the children who sit next to him, or anyone who passes him.					
50	He interferes in his peers' work when they do not want him to.					
51	He fiddles with objects in his hands.					
52	He snatches his peers' games and possessions.					
53	He runs and jumps when moving from one place to another.					
54	He climbs vertical structures like columns and trees.					
55	He makes his environment scattered and disorganized.					
56	His work has no order or arrangement.					
57	He does not replace equipment in the correct places, after completing his work or activities.					
58	It is difficult to control his behavior outside the classroom.					

Third aspect: Impulsivity

N	Phrases	Assessment				
		Always	Often	Sometimes	Rarely	Never
59	He begins work before receiving instruction.					
60	He answers questions before they are completed.					
61	He moves from one task to another without completing them.					
62	He acts immediately without thinking.					
63	He is hasty, and cannot wait for his turn in games.					
64	He demands that his wishes be fulfilled immediately, and may use strategies like crying or screaming to achieve this.					
65	He is tense and aggressive, and he cannot control his impulsive behavior.					
66	He is moody, and experiences rapid changes in emotions; he may be calm one moment and furious the next.					
67	He demands a share of everything bigger than that of his peers.					
68	He interrupts the teacher when busy in order to have his demands met.					
69	He is stubborn, and will not follow instructions, sometimes doing the opposite of what was required.					
70	He exhibits dangerous behaviors, such as jumping from high places or running into a busy road without looking.					

Attention Deficit Hyperactivity

Disorder Scale

Home assessment copy

- **Dear parents,**

  This scale includes a group of phrases which describe the behaviour of children aged 6- 13 in the home environment. Please read it carefully. For each phrase, tick (✓) the box which most accurately describes your child's behaviour. Please answer all questions, and put just one tick (✓) in front of each sentence.

  Thank you for your cooperation

- **Preliminary data of the child:**

  The Child's Name: _____ Age: _____

  Class: _____

  Respondent's Name: _____ Relationship to child: _____

  Number of family members of the child: _____

  Order of the child in the family: _____

Child's Scores

Average Score	Impulsivity and Hyperactivity	Inattention

First aspect: An impaired ability to pay attention

N	Phrases	Assessment				
		Always	Often	Sometimes	Rarely	Never
1	The child has a short attention span, to the point that he is unable to pay attention to anything specific for a long time.					
2	His attention is distracted by anything going on around him, even minor distractions.					
3	He finds it difficult to listen to others talk for a long time.					
4	He seems not to hear when you talk to him.					
5	He cannot follow conversations with him or around him in the house.					
6	He finds it difficult to understand and absorb new information.					
7	He cannot understand all instructions that he hears.					
1	The child has a short attention span, to the point that he is unable to pay attention to anything specific for a long time.					
2	His attention is distracted by anything going on around him, even minor distractions.					
3	He finds it difficult to listen to others talk for a long time.					
4	He seems not to hear when you talk to him.					
5	He cannot follow conversations with him or around him in the house.					
6	He finds it difficult to understand and absorb new information.					
7	He cannot understand all instructions that he hears.					
8	He finds it difficult to identify shapes and parts of shapes.					
9	He does not notice similarities and differences between objects and parts of objects.					
10	He forgets instructions and needs to be reminded about them.					
11	He forgets in the house books or materials which he needs for school, whether curricular or extracurricular activities.					
12	He loses or leaves his books and materials in school, instead of bringing them home.					
13	He forgets how to do things which he already knows how to do, even if he does them daily.					
14	He makes mistakes in activities which he has already learned how to do, and forgets the order of steps in processes.					
15	He cannot finish activities or tasks without help from others.					
16	He hesitates even when making simple decisions, especially when he is given a choice.					
17	He does not complete classwork and homework.					
18	His homework is full of mistakes.					
19	His homework is full of crossings-out and erasings.					
20	His handwriting is untidy and not clean.					
21	His books and notebooks are not clean.					
22	He jumps between lines when he writes, leaving some lines or sentences unwritten.					
23	He makes mistakes when writing, even when copying writing in front of him.					
24	He makes mistakes in reading, adding or omitting letters or words.					
25	He jumps between lines when reading, leaving some sentences or lines unread.					
26	He does not pay attention while doing homework or revising.					
27	When he repeats the words he hears, he changes intonation into a question.					
28	He repeats some sections of the speech that he hears.					
29	He cannot transfer verbal messages from one person to another.					
30	When he is talking about something, his speech is incomplete and incoherent.					
31	He forgets names and event orders even of things he already knows.					
32	He avoids participating in activities which require thinking.					

Second aspect: Hyperactivity

N	Phrases	Assessment				
		Always	Often	Sometimes	Rarely	Never
33	He is moving a lot, is restless or struggles to stay in his place.					
34	He fidgets in his seat, shown by movements of his hands and feet.					
35	He keeps walking back and forth in the same place without a clear reason or goal.					
36	Wherever he is, he makes noise.					
37	He speaks too much.					
38	He interrupts others when they talk.					
39	He speaks during times when silence is expected.					
40	He intervenes in other children's games without permission (brothers, cousins, neighbours)					
41	He fiddles with objects in his hands.					
42	He snatches other children's games and possessions.					
43	He runs and jumps when moving from one place to another.					
44	He climbs vertical structures like columns and trees.					
45	He makes his environment scattered and disorganized.					
46	His work has no order or arrangement.					
47	He does not replace equipment in the correct places, after completing his work or activities.					
48	It is difficult to control his behavior when he is out with his family.					

Third aspect: Impulsivity

N	Phrases	Assessment				
		Always	Often	Sometimes	Rarely	Never
49	He begins work before receiving instruction.					
50	He acts immediately without thinking.					
51	He is hasty, and cannot wait for his turn in games.					
52	He demands that his wishes be fulfilled immediately, and may use strategies like crying or screaming to achieve this.					
53	He is tense and aggressive, and he cannot control his impulsive behavior.					
54	He is moody, and experiences rapid changes in emotions; he may be calm one moment and furious the next.					
55	He demands a share of everything bigger than that of other children.					
56	He interrupts his parents when they are busy, speaking with others or doing things, in order to have his demands met.					
57	He is stubborn, and will not follow instructions, sometimes doing the opposite of what was required.					
58	He exhibits dangerous behaviors, such as jumping from high places or running into a busy road without looking.					

Strengths and Difficulties Questionnaire   T 4-17

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

Child's Name ....   Male/Female

Date of Birth..

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

Do you have any other comments or concerns?

Please turn over - there are a few more questions on the other side

Appendix 30: SDQ Scale Home Version

Strengths and Difficulties Questionnaire

P 4-17

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

Child's Name ....

Male/Female

Date of Birth...

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

Do you have any other comments or concerns?

Please turn over - there are a few more questions on the other side

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Appendix 31: Codes of Arts Therapists in the UK

No	Code	Defining the Codes of the UK Participants Stag One	Recording Yes/No
1	AT UK 1	First Art Therapists in UK	Yes
2	AT UK 2	Second Art Therapists in UK	Yes
3	AT UK 3	Third Art Therapists in UK	Yes
4	MT UK 1	First Music Therapists in UK	Yes
5	MT UK 2	Second Music Therapists in UK	Yes
6	MT UK 3	Third Music Therapists in UK	Yes
7	DT UK 1	First Dramatherapists in UK	Yes
8	DT UK 2	Second Dramatherapists in UK	Yes
9	DT UK 3	Third Dramatherapists in UK	Yes
10	DMP UK 1	First Dance/Movement Therapists in UK	Yes
11	DMP UK 2	Second Dance/Movement Therapists in UK	Yes
12	DMP UK 3	Third Dance/Movement Therapists in UK	Yes
Total	12	12	12

Appendix 32: Codes of Art Therapists and Educators in KSA

No	Code	Defining the Code of KSA Participants	Recording
1	AT KSA 1	First Art Therapists in KSA	**Yes**
2	AT KSA 2	Second Art Therapists in KSA	**Yes**
3	AT KSA 3	Third Art Therapists in KSA	**Yes**
4	AT KSA 4	Fourth Art Therapists in KSA	**Yes**
5	ED KSA 1	The Head of Rehabilitation Programmes at The ADHD School in KSA	**Yes**
6	ED KSA 2	The Supervisor of The ADHD School in KSA	**Yes**
7	SE KSA 1	The Head of The special Need in The Ministry of Education	No
8	SE KSA 2	The Head of Learning Difficulties Division in The Ministry of Education in KSA	No
9	SE KSA 3	Director of Behavioural Disorders Management in The Ministry of Education in KSA	No
Total	9	9	9

Appendix 33: Codes of Parents and Teachers in KSA

No	Code	Defining the Code of KSA Participants	Recording Pre	Recording Post
1	S1	Parents of student 1	**Yes**	**Yes**
		Teacher of student 1	No	No
2	S 2	Parents of student 2	**Yes**	**Yes**
		Teacher of student 2	No	No
3	S 3	Parents of student 3	No	No
		Teacher of student 3	No	No
4	S 4	Parents of student 4	**Yes**	No
		Teacher of student 4	No	No
5	S5	Parents of student 5	**Yes**	**Yes**
		Teacher of student 5	No	No
6	S6	Parents of student 6	**Yes**	No
		Teacher of student 6	No	No
7	S7	Parents of student 7	**Yes**	**Yes**
		Teacher of student 7	No	No
8	S8	Parents of student 8	No	**Yes**
		Teacher of student 8	No	No
9	S9	Parents of student 9	**Yes**	**Yes**
		Teacher of student 9	No	No
10	S10	Parents of student 10	**Yes**	**Yes**
		Teacher of student 10	No	No
11	S11	Parents of student 11	**Yes**	No
		Teacher of student 11	No	No
12	S12	Parents of student 12	**Yes**	**Yes**
		Teacher of student 12	No	No
Total	12	24	24	24