

Barriers to Education: A Looked-After Child's Perspective. A primary research study into reported differences in educational barriers between looked-after and non-looked after primary school children with social, emotional, and mental health problems.

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Abbreviations and Definitions

ADHD	Attention Deficit Hyperactivity Disorder
ASD	Autistic Spectrum Disorder
DfE	Department for Education
LAC	<p>Looked-after child</p> <p>According to the Children Act (1989) a looked after child who has been under the care of the local authority for more than 24hours or is under a placement or care order.</p>
Non-LAC	Non-Looked After Children
MCQs	Multiple Choice Questions
SEN	Special Educational Needs
SEMH	<p>Social, Emotional, and Mental Health Problems</p> <p>A common special educational need (DfE 2019).</p>

Abstract

Looked after children are more vulnerable to poor educational attainment than their peers (Zetlin 2006), which in turn is associated with negative outcomes in adulthood including poor mental health (Jackson and McParlin 2008). Despite identification of risk factors for poor educational outcomes in looked after children, schools are still failing to provide effective interventions and therefore the attainment gap is widening (O'Sullivan and Westerman 2007). This primary research was conducted in a primary school for children with social, emotional, and mental health problems, in the UK. A semi-structured interview was conducted using a questionnaire entitled 'What matters to you?' by Porter (2015) to collect data about barriers to education for looked after children and non-looked after children diagnosed with social, emotional, and mental health problems. The aim was to identify barriers or differences that may inform school practice. A thematic analysis showed differences between the cohorts' perceived difficulties. Looked-after children found 'Other Pupils Behaviour', 'Difficulty Focusing' 'Academic Confidence' and 'Subject Specific Difficulties' problematic. In contrast Non-looked after children expressed difficulties with 'Other pupils' level of noise', 'Specific Subjects/ workload', and 'Difficulties forming Relationships with classmates. There were also differences between what looked-after and non-looked after children identified as helpful; looked after children identified being alone and movement breaks as helpful whereas non-looked-after children identified staff support and sensory toys as helpful. This study recommends further research into differences between the perceived difficulties of looked-after children with social, emotional, and mental health problems and their peers whilst at school. Future studies should account for poverty, gender and family history as this study was unable to and these are known risk factors for poor academic attainment (Brown et al 2018, Zeitlin 2006).

Introduction

This is a primary research project investigating the differences between Looked-after and Non-looked after children's perceived barriers to education. This area was investigated as there is a lack of participatory research investigating the reasons for the recognised attainment gap between looked-after children and their peers (O'Sullivan and Westerman 2007); despite evidence that good academic achievement is a protective factor against adult mental illness and other outcomes (Jackson and McParlin 2008), and the overwhelming evidence that school-based interventions mitigate childhood mental illness (Berridge 2012, Slayton 2010). Therefore, the attainment gap should be of interest to researchers concerned with the prevention and mitigation of mental illness.

Looked After Children and the Attainment Gap

Looked after children (LAC) are defined by UK legislation (the Children's Act 1989) as children who are either: under the continuous provision of accommodation for more than twenty-four consecutive hours (more than one day), or are subject to a care order, or are subject to a placement order. There are approximately 78,150 children who are currently looked after in England (Hillman et al 2020).

Meltzer et al (2003), identified 747 looked-after children, via local authorities, in order to conduct a survey investigating the prevalence of mental health disorders. They found that looked-after children are far more likely to be diagnosed with mental health conditions than children not in the care of local authorities. Of the 747 children aged between 5 and 17 years old, 45% were considered to have a mental health disorder, e.g., 37% conduct disorder and

12% anxiety and depression. Ford et al (2018) conducted a large study comparing psychopathology of children in the care of local authorities and deprived and non-deprived children in private homes (LAC $n = 1453$, Controls $n = 10,428$). They reported that being a child who is looked-after is associated with poor academic attainment and is independently associated with nearly all types of psychiatric disorder including depression, and anxiety even after adjusting for educational and physical confounders.

According to Kim-Cohen et al (2003) childhood mental health difficulties are associated with adult mental health disorders. Kim-Cohen et al (2003) conducted a longitudinal study of 1037 people. The study made psychiatric diagnoses using DSM1V criteria when participants were aged 11, 13, 15, 18, 21, and 26 and also identified cases via those using or receiving treatment for mental health disorders. 73.9% of cases identified using the DSM had received a diagnosis prior to the age of 18 years of age and 50.0% before 15 years of age. Of the participants using treatment 76.5% received a diagnosis before 18 years of age and 57.5% before 15 years of age. Among cases receiving intensive mental health services, 77.9% received a diagnosis before 18 years of age and 60.3% before 15 years of age.

These results suggest that juvenile disorders, such as anxiety, usually precede those in adulthood, and some disorders such as conduct disorder can precede a multitude of disorders such as depression, anxiety and personality disorder. Therefore Kim-Cohen et al (2003) proposed that juvenile mental health disorders including anxiety and conduct disorder should be a priority for prevention in childhood in order to reduce mental health disorders in the adult population.

This study, although interesting, had several methodological limitations. The study was conducted in New Zealand with a largely white sample, and adult disorders were defined at age 26 only and not at any other adult age, meaning cases in later life may have been missed. In addition, the study did not account for all DSM-IV disorders, and excluded disorders such as other personality disorders, sexual disorders, and somatic disorders. These limitations mean that some disorders may have been missed and that the experiences of minorities were not properly addressed. However, the study included a large population and offers longitudinal data on some of the most common childhood disorders making the study's results valuable. The results show a strong association between adult mental health disorders and those experienced in childhood dictating a focus of additional research to be placed on risk factors for childhood mental health disorders and the need for mental health interventions for children.

The experience of poor mental health during childhood is associated with poor academic attainment, violence, and behavioural and emotional problems (Patel et al 2007). According to Jackson and Simon (2005) LAC children are four times more likely than others to require mental health services, seven times more likely to misuse substances, and 50 times more likely to be imprisoned as adults than non-looked after children (Non-LAC). Most mental health problems begin in childhood (Patel 2007) and schools are well placed to provide interventions that reduce the impact of risk factors for poor mental health (Berridge 2012). Existing school prevention programmes, such as therapy and social and emotional education, appear promising (Stallard 2014). In addition, good academic attainment has been associated with a reduced likelihood of poor mental health as adults (Jackson and McParlin 2006). However, there appears to have been little success in understanding the relationship between these risk factors and academic attainment (O'Higgins et al 2017) and

LAC children remain more likely to experience poor educational academic attainment compared to non-LAC peers. This means that more research is needed in order to establish effective and feasible interventions to mitigate poor mental health and improve academic attainment for young people.

Poor educational attainment is associated with poor outcomes as adults including ICD-10 psychiatric disorders, i.e., depression, anxiety, and substance misuse (Jackson and McParlin 2008), and poor physical health, unemployment, and criminality (Tessier 2017). Evidence for the attainment gap in the UK comes from the Department for Education (2019) which shows educational attainment for LAC children, in both Key Stage Two and Key Stage Four (the years in which standardised testing occurs), is much lower than attainment of non-LAC peers. As shown in Figure 1. LAC children in Key Stage Two are less likely to reach expected levels in core subjects such as reading, writing, and maths (40%) than the general population (65%).

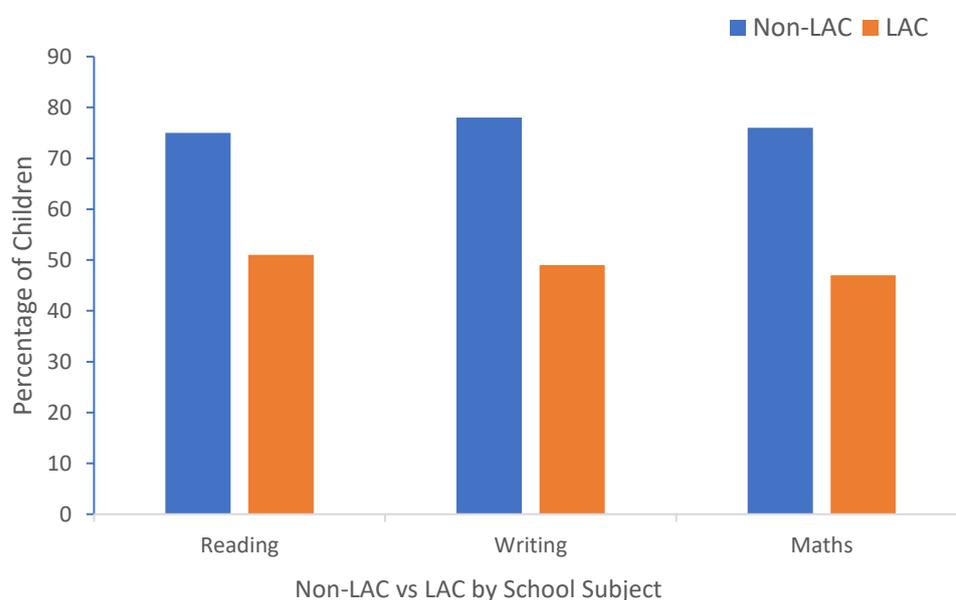


Figure 1. Percentage of looked after children and non-looked after children in the UK who met expected grades in Key Stage Two as reported by Department of Education (2019) for the year 2018.

However, it was also found that 58% of looked-after children at Key Stage Two have a special educational need (SEN), compared to 17% of non-looked after children. When SEN's are considered the attainment gap between non-LAC and LAC children becomes less apparent suggesting an association, as shown in Figure 2.

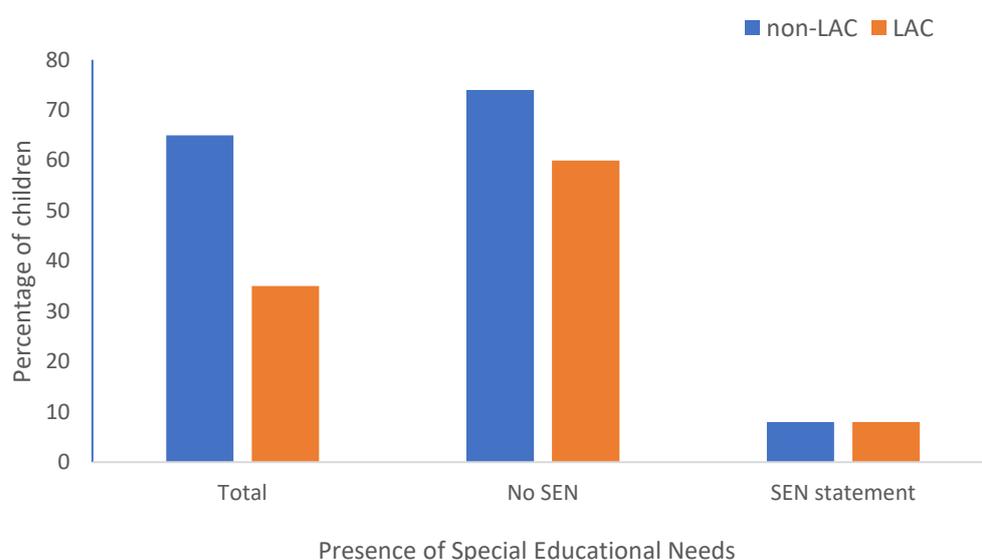


Figure 2. Percentage of looked after children and non-looked after children in the UK who met expected grades in Key Stage Two as reported by Department of Education (2019) for the year 2018, by SEN status.

By Key Stage Four, this attainment gap remains apparent even when the proportion of children with SEN in each group are considered, as shown in Figure 3. (DfE 2019), suggesting additional variables are in effect. In 2018, the government (DfE 2019) collected data on percentage of children receiving passes in at least eight GCSE's; 18.8% of LAC children achieved 8 GCSE passes compared to 44.4% of non-LAC children. A pupil's average grade across these eight subjects is known as an Attainment 8 score and allows for comparison.

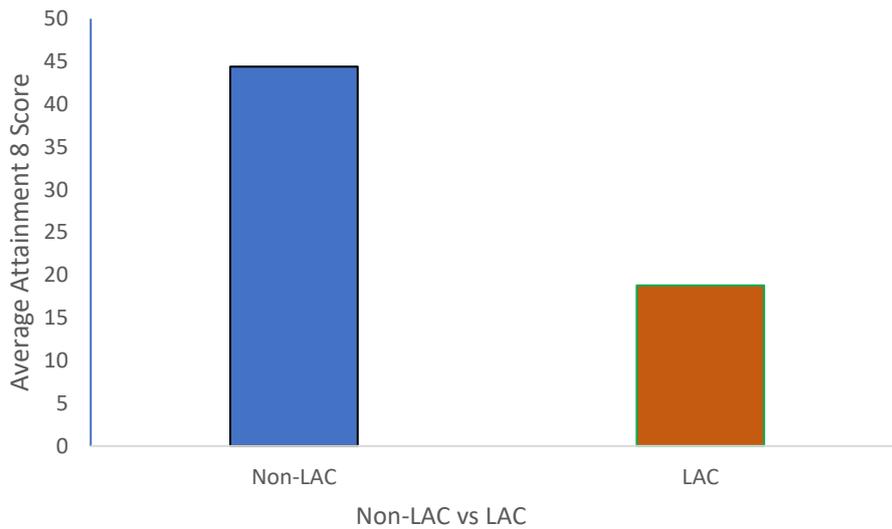


Figure 3. Percentage of looked after children and non-looked after children in the UK who achieved 8 GCSE passes of equivalent in Key Stage Four as reported by Department of Education (2019) for the year 2018.

Figure 4. shows attainment 8 scores and includes children with SEN diagnosis. These statistics support previous findings that indicate that the attainment gap between LAC and non-LAC children widens throughout the Key stages regardless of SEN diagnosis (O’Sullivan and Westerman 2007). This supports the need for early identification and interventions for LAC children at Key Stage Two to mitigate the attainment gap and therefore improve outcomes for mental health.

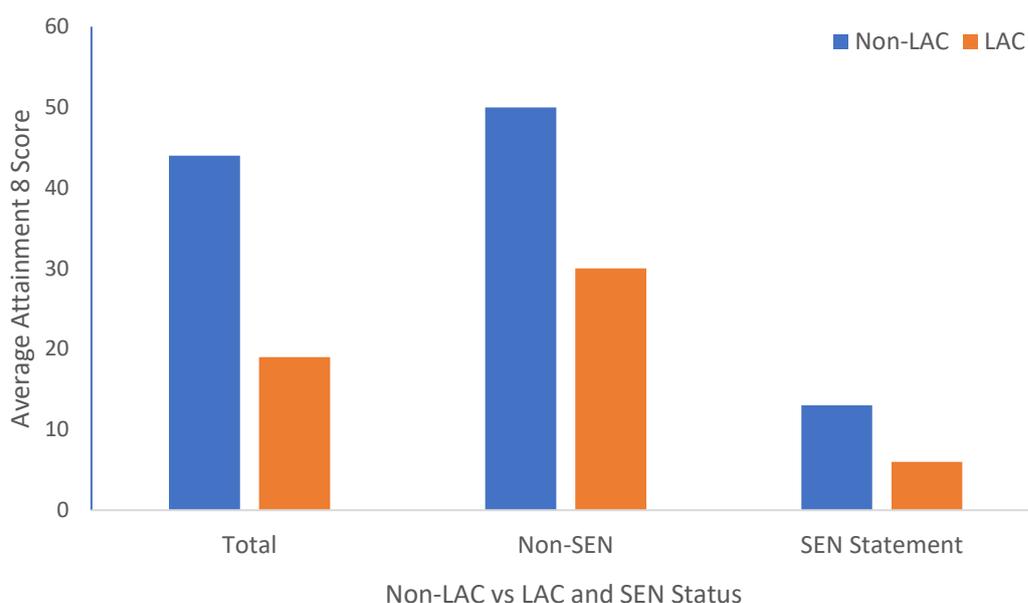


Figure 4. Percentage of looked after children and non-looked after children in the UK who achieved 8 GCSE passes of equivalent in Key Stage Four as reported by Department of Education (2019) for the year 2018 by special educational status.

To further understand the educational attainment gap between LAC children and their peers, frequently identified risk factors for poor educational attainment will be discussed below.

Looked After Children and Special Educational Needs

According to Weinberg et al (2001), between 28 and 52% of LAC children attend a special school most commonly due to behavioural problems or a learning difficulty, in comparison to only 10% of the general population (Zetlin 2006). The most common primary SEN diagnosis for LAC children is social, emotional, and mental health (SEMH) needs which affects between 38.5% to 46.3% of looked after children as compared to 12.8 to 17.5% of the general population (The Department for Education [DfE] 2019). Non-LAC children more commonly experience sensory impairment, Autistic Spectrum Disorder (ASD), or physical disability as

their primary type of special educational need (DfE 2019) although these diagnoses are often comorbid in either group (Ben-Sasson et al 2007).

SEMH is an umbrella term used to identify children with severe difficulties in managing their emotions and behaviour and who often display inappropriate responses to situations due to unmet social, emotional, or mental health needs. Both SEMH and sensory impairment have been associated with behavioural difficulties (Gourley et al 2013, Zetlin 2006) and children with SEN are more likely to develop behavioural and emotional disorders (Patel et al 2007). The most common causes of SEMH have been identified as disrupted attachment, trauma, neglect and abuse and dysfunctional family dynamics in addition to ASD and Attention Deficit Hyperactivity Disorder (Aviles et al 2006). Difficulties in the parent-child relationship can be multi-faceted. A parent may be less able to meet a child's emotional and physical need and require the assistance of services, a child may develop behavioural difficulties which impact parental attachment and parenting style, e.g., due to burnout, or a child may develop behavioural difficulties/ physical needs due to the parenting experienced (Gault- Sherman 2012). Children with SEMH also experience a variety of difficulties with forming relationships, and with concentration, anxiety, and depression. These problems can often manifest as behavioural symptoms i.e., antisocial behaviours, anger, aggression, violence, and self-harm (NICE 2019).

LAC children are thought to be more vulnerable to experiencing special educational needs due to their early experiences (DfE 2019). Cage (2018) conducted a study using data sets for 337 maltreated American adolescents to investigate whether prior maltreatment or placement in foster care was responsible for lower attainment. Results showed that neither factor was associated with failure to complete high school, but instead both were associated

with poor school behaviour. Although the American education and fostering system differs from that of the UK these findings support the hypothesis that unmet needs of children with behavioural problems/ SEMH are the cause of poorer educational attainment rather than being a looked-after child. Cage suggested that regardless of history, LAC need additional educational support during critical developmental stages, such as the onset of puberty, which supports the use of the current studies target population.

Therefore, SEMH does not have to be a lifelong condition with appropriate support, although comorbid conditions such as sensory impairments may present difficulties throughout a child's life.

Looked After Children and Sensory Impairment

According to Ben-Sasson (2007), children with special educational needs often experience comorbid sensory processing difficulties that can lead to discomfort, stress anxiety and even physical experiences of pain. This author conducted a study which suggested that a lack of concentration was the main self-reported academic impact of sensory impairment (N = 14), although these were secondary school students and the population exclusively included students with Autistic Spectrum Disorder. Children with sensory processing difficulties often experience difficulties in other areas such as emotional regulation, attention difficulties and behavioural problems (Gourley et al 2013). Gourley et al (2013) conducted a study in which 59 children presenting to a clinic for behavioural difficulties were assessed for sensory processing difficulties and demonstrated that between 44.1% and 64.4% met criteria for sensory processing difficulties. In many cases (57.7%) for more than one module (i.e., vision and hearing). Although the population consisted of children ages 3-5 years old this study is

important as it demonstrates comorbidity between sensory processing difficulties with developmental problems, special educational needs, and ADHD in addition to ASD. In light of these results, the current study anticipates that problems arising from sensory processing issues may be reported. The study also anticipates responses related to disrupted attachment due to the following.

Looked-After Children and Toxic Stress

In the presence of a stressor, the hypothalamic-pituitary-axis (HPA axis) will be initiated, resulting in the release of the stress hormone cortisol that prepares the body for the fight of flight response to aid survival (Bernard et al 2010). Chronic stress can lead to a dysfunction of the HPA axis. As the fight/flight response diverts energy from other processes, a prolonged period of stress can lead to a suppressed immune system and other health problems (Bernard et al 2010). HPA axis irregularities have been associated with several psychological disorders such as depression, anxiety, and PTSD (Lenaert et al 2016). This suggests that the actions of a caregiver are vital in the development of adaptive stress reactions in infants that can last until adulthood (Pierre Humbert et al 2009).

Two causes of early stress which are known risk factors for mental health disorders and poor academic attainment are discussed below.

Looked After Children and ACES

Adverse Childhood Events (ACEs) are defined as highly stressful events or situations which occur throughout childhood and which require significant resources and adaptations to

survive (Flaherty et al 2013). These events include abuse, neglect, bereavement, parental mental illness, poverty, and age-inappropriate responsibilities i.e., a young carer. As 92% of LAC children have been placed in care due to abuse, neglect, family dysfunction or absent parenting (Department for Education, 2019) this population is vulnerable to experiencing a higher number of ACEs. ACEs are associated with changes in memory storage and retrieval, mood disorders, substance disorders and physical health problems together with higher crime rates, recidivism, harmful behaviours, and a shorter life span (Flaherty et al 2013, Douglas et al 2010). Douglas et al (2010) found significant cumulative effects of ACEs e.g., for every additional ACE experienced a person's odds of developing a substance disorder doubled. Although the study sample was biased towards substance disorders and had a very small control group, this finding is important as it suggests protecting children and breaking cycles of abuse may decrease cases of adulthood mental health disorders.

When considering the impact of ACEs on a child, it is important to account for a child's levels of resilience, access to trusted adults and other protective factors. Experiencing negative events in childhood is not deterministic for a bleak future, i.e., not all children who experience ACEs will develop depression (Poole 2017). Therefore, although early experiences of adversity and trauma may go some way to explaining the educational attainment gap according to Jackson and McParlin (2006), if this were the main reason for low attainment, children who come into care at an early age would be expected to do better than those who enter care at a later age. However, there is no evidence that this is the case. This suggests that there are other factors at play, which influence looked-after children's educational attainment, such as attachment difficulties.

Looked After Children and Attachment

Attachment Theory (Bowlby 1969) suggests that to ensure safety and survival a child will develop close relationships with the adults around them, usually, but not limited to, their primary care giver (Schuengel and Tharner 2020). These relationships are guided and informed by the actions of the caregiver and can lead to secure or insecure attachments (where insecure attachments have three attachment styles of ambivalent, avoidant, disorganised) (Ainsworth 1973).

The theory is anchored in core assumptions, i.e., that the child will seek proximity to a caregiver, the caregiver will prioritise the child's need, and that through these interactions a child will develop an internalised working model of attachment, which informs future attachments (Bowlby 1969). This bond provides feelings of safety, love and comfort and can lead to a secure attachment. A secure attachment, developed by children who experience reliable and sensitive caregiving, will provide developmental advantages such as healthy emotional development, impulse control, and higher academic attainment, amongst others (NICE Guidance for Attachment 2015). The development of secure attachment can be disrupted by via parental separation, adverse childhood events such as abuse and neglect, and dysfunctional family dynamics (Hillman et al 2020) resulting in an insecure attachment style. A child who does not experience a secure attachment may feel unloved and unsafe leading to angry and unsociable behaviours (Bowlby 1969). Milward et al (2006) explained that looked-after children are particularly susceptible to a disorganised attachment style, whereby a child is unsure whether the caregiver will provide comfort or fear. This accounts only for around 5% of attachment styles but is overrepresented in looked-after populations. Disorganised attachment is associated with many childhood mental health problems such as

depression, anxiety, and conduct disorders as well as poor impulse control and behavioural problems (NICE Guidance Attachment 2015). A study by Milward et al (2006) showed that 53% (n = 82) of looked after children vs 13% of the control group (n = 125) met criteria for mental health problems.

Bernard et al (2009) found that infants with disorganised attachments have a higher reactivity to stress than infants with secure attachments and Pierrehumbert et al (2009) found that acute stress reactions and abnormal cortisol levels in children experiencing maltreatment can last into adulthood as a result of enduring changes in the limbic system. In infants, this process can be mitigated by the presence of a reliable caregiver; however, in children who do not receive appropriate support developmental changes can occur leading to a highly sensitive stress response resulting in hypervigilance and potentially PTSD amongst other difficulties.

Insecure attachments can look like attachment disorders covering in the ICD-10 (WHO 1993). The ICD-10 describes disinhibited attachment disorder as an indiscriminate sociability and inappropriate attachments and reactive attachment disorder that involves social behaviour characterised by hypervigilance, ambivalence, and inconsistent responses (Hillman 2020).

The UK guidelines for attachment produced by the National Institute for Health and Care Excellence (NICE 2015) explained the importance of recognising and mitigating the impacts of insecure attachment and attachment disorders in children as early and as effectively as possible emphasising the link between secure attachment and positive outcomes. However, researchers such as that by Woolgar and Baldock (2020) argue that whilst important, attachment disorders are overly diagnosed and mask the diagnosis of more common, but no less important, conditions such as conduct disorder. Although, they admit evidence for this

is weak and the underdiagnosis of more common disorders was partially explained by other factors.

Looked After Children and Biopsychosocial Risk Factors

Many studies have suggested other potential risk factors for poor educational attainment of looked after children including poor access to education (Zetlin et al 2006), home and school placement instability (Pecora 2012), and difficulty forming relationships with peers and adults (Dann 2011). Other associated factors include experiences of maltreatment, experiences of poverty, being a minority (Brown et al 2018), fragmented school experiences (Burns 2009, Hayden 2009) and low expectations of attainment, and mislabelling as 'low intelligence' by schools (Jackson and Sachdev 2001). In addition, Zetlin (2006) argue that whilst children who are looked after can often be over diagnosed as 'emotionally troubled', they can in fact be overlooked. Due to mobility and school changes children with specific learning difficulties, such as dyslexia, can be missed which therefore impacts on LAC children's educational success. Jackson and McParlin (2006) argue that whilst risk factors undoubtedly impact a child's attainment, the attainment gap is actually due to the failure of educational services to addressing negative experiences. This suggestion supports the current studies decision to investigate barriers within the school setting, as these barriers may have more impact on the attainment gap.

LAC Children and Protective Factors

The Department for Education (2019) reported that LAC children at Key Stage Two progress quicker than their peers including children considered 'in need'. This suggests that once a child is placed into care their progression improves. Van et al (2005) conducted a meta-analysis of 62 studies on 17,767 adopted children in the USA. Adopted children performed substantially higher on IQ tests when compared to children who were not removed from home or children that remained in care but adopted children's language skills and work performance remained lower than their classroom peers. This study shows a positive impact of adoption but it also important as it suggests that the experience of care does not need to cause permanent cognitive delay if given the right opportunities. However, the study does highlight areas of potential improvement within the educational services i.e., language skills.

Not all vulnerable children develop mental health problems. Studies have shown the following to be protective factors against behavioural problems for these children; positive social and familial relationships, low conflict environments, emotional openness, and positive role models (Greening et al 2002 as cited in Patel et al 2007). These behaviours lead to increased resilience and lower levels of behavioural disorders, both of which are associated with the reduced risk of mental health problems (Patel et al 2007).

Negative Outcomes of Poor Academic Achievement for Looked After Children

Academic achievement is important for several reasons. Poor educational attainment is associated with a higher risk of psychosocial disadvantage due to fewer opportunities (Tessier *et al.*, 2018), increased risk of poor health choices (Curry and Bray 2019), and poor mental

health (Morton 2018) including higher risk of suicide (Evans et al 2005). According to Jackson and Simon (2005), LAC children with poor educational attainment are four times more likely than others to require mental health services, seven times more likely to misuse substances; 50 times more likely to be imprisoned, 60 times more likely to become homeless; and 66 times more likely to have children needing public care. As such, improving academic achievement for these vulnerable children is vital. Jackson and Simon also stated that reaching a higher stage in the educational ladder is associated with lowered risk in these key areas i.e., improved health and lower risk of criminal involvement. Jackson and McParlin (2006) stated that these poorer outcomes can be securely associated with educational failure and emphasise the need for intervention and mitigation by the education system, which supports the importance of the current study. Jackson and McParlin (2006) suggested that these educational failings are due to the educational systems and not children themselves. Jackson and Martin (1998) attempted to empirically verify the link between educational failure and quality of life for looked-after children. A sample of 38 young adults who had been in care as children and had gone to college or university were matched with a second group who obtained 5 or less GCSEs or O-Levels and were not in attendance at college or university. Results showed highly significant differences in outcomes for the two groups despite very similar personal histories. The second group were found to experience high levels of social exclusion, unemployment, periods of homelessness, early parenthood, welfare dependency and addiction problems. Another important finding was that 18 percent of the men were serving custodial sentences. By contrast, the group with a successful educational history were all in employment, most owned their houses, the majority were in stable relationships, none had been involved with the criminal justice system, only one was a lone parent. Interestingly, the successful group scored much higher than the controls on self-efficacy but not on self-

esteem. Although this study had a small sample size, the results strongly support the association between poor educational attainment and poor outcomes across several domains as in adulthood whilst also supporting the association between good educational attainment and positive outcomes as adults.

However, other research has found good educational attainment to be associated with negative outcomes. Huerta and Borgonovi (2010) conducted a study that found that although adults with higher education are less likely to smoke and to be obese, they are more likely to have increased alcohol consumption and alcohol problems, especially for women. This suggests that good education does not act as a protective factor against all negative outcomes.

Positive Outcomes of Good Academic Achievement for Looked After Children

Good educational attainment has also been associated with positive long-term outcomes (Forsman et al 2016). Such positives include lower rates of unemployment, poverty and incarceration and represent a pathway to self-sufficiency (Tyler and Loftstrom 2009). According to Burns (2009), good educational attainment is a positive experience which helps to mitigate the effects of maltreatment and foster care placement and prevent social exclusion in adulthood.

Participatory Research

Participatory research is a research method, which through dynamic means, allows the subject population to have an active role and or share in the research process (Kidd et al 2005). According to Bradbury-Jones (2018), despite a wealth of research that focuses on the achievements of LAC children the inclusion of children in participatory research has been infrequent, less frequent still for vulnerable children such as LAC children and children with SEN and/or physical disability. This means that the current understanding of barriers to education are not informed by the experiences of these groups. Critical evaluations of participatory research are therefore rare and so it is difficult to develop or design research, which addresses quality issues.

Benefits and risks of participatory research. By including children in the process research can benefit from first-hand experiences and gain unique insights that are otherwise unavailable such as cultural information and individual perspectives. This approach also addresses the rights of children to have a voice and an active role in their care (Franks 2010). However, there are inherent methodological problems with participatory research involving vulnerable children which need to be addressed these include inherent and explicit power relationships between researcher and participant, exploitation of the children for the researchers own gain (i.e., academic) and singling out children from peer groups meaning the clinician adds to feelings of isolation (Franks 2010, Healy 2011). Several methodological steps were taken in this study to mitigate and address these issues and are discussed in further chapters. Other difficulties to consider include the participants' developmental age, reading abilities, comprehension, and ability to assent, particularly for children with special educational needs

and social, emotional, and mental health problems where complex communication difficulties are more commonly experienced (DfE 2019).

However, Wernik et al (2004) describes how the children in their study were viewed as experts on themselves and their lives and thereby able to provide a unique and rich insight that would otherwise have been missed. Whilst participatory research allows for relationships to be built and can add value to the child's experiences, it also has the potential to reinforce negative perceptions. There is a risk that study activities may damage the child-researcher relationship and reinforce the child's negative views of adults (Thomas-Huges 2017). Specific concerns considered in the current study including,

- Damaging self-esteem by asking too much from the child or placing undue stress upon them.
- That the relationship between researcher and child needs to be confidently handled, and not undermined by the research process. Power relationships need to be respected (Thomas- Huges 2017).
- That language used throughout should be appropriate and informative without being patronising or condescending (Wickenden 2014).

The Current Study

As discussed earlier in the earlier chapter, LAC children are far more likely to be diagnosed with mental health conditions, special educational needs (SEN), and attachment disorders than children who are not in the care of local authorities (Meltzer et al 2003). LAC children are also more likely to experience poor educational academic attainment, which is associated with poorer outcomes as adults. Rivkin et al (2005) explained that certain risk factors for

mental disorders/ poor educational outcomes are simply not observable and are subject to simultaneity bias and variation over time. These difficulties lead to challenges measuring risk factors empirically (Summers and Wolf 1977).

A lack of understanding of the relationship between mental health problems and poor educational achievement in LAC children has led to a deficiency of successful, evidence-based interventions as recommended by NICE Guidance for SEMH in primary education (2008) and the attainment gap is widening (O'Sullivan and Westerman 2007). This suggests that further research is urgently needed. The current study is a primary research project with a between groups cohort design which aims to identify new information which may inform current interventions provided by schools and offer new insights into the barriers faced by LAC children with SEMH.

The aims of the study are:

- 1) To identify and compare barriers to learning between looked-after and non-looked after children with social, emotional, and mental health conditions (SEMH).

The objectives of the study are:

- 1) To collect data from two cohorts of children by using a self-report questionnaire entitled 'What matters to you?' (Porter 2015) by supporting children with an interview technique.
- 2) To identify differences between LAC and Non-LAC children results by conducting a t-test on quantitative data collected from the questionnaire.

- 3) To identify and compare themes between the cohorts using data collected from open-ended interviewer questions.
- 4) To compare these findings to previous literature regarding barriers to education to identify differences which may present areas for targeted interventions in the study groups.
- 5) To identify which barriers are important to these children, thereby providing a platform for looked-after children to express their opinions and to be involved in educational decisions and potentially inform targeted interventions for future generations.

Study Design Rationale. The current study involved two groups of children, with SEMH needs, in attendance at a UK primary school. One group consisted of LAC children, and the other of matched participants from the school's general population. The aim of this study is to identify self-reported barriers to education faced in the primary school environment which are specific to the LAC community with SEMH needs. The current study focuses on primary school children for two reasons. Firstly, as the attainment gap between looked after children and their peers expands throughout their school careers (O'Sullivan and Westerman 2007; Tessier et al 2018), identification of barriers in primary school may allow for early identification and intervention mitigating adverse effects on later education and mental health. Secondly, according to Mendle et al (2020), the onset of puberty is a complex time in child development, representing a shift in peer relationships, social identity, cognition and or females and increased risk for the onset of certain mental health disorders i.e., depression. Therefore, the current study wanted to investigate children at a more settled period in their lives, to reduce

extraneous influences but also to attempt identification of barriers which could be mitigated prior to the additional stresses of puberty occur.

Previous research has sought to find causal factors for lower academic attainment in LAC children (Carroll and Hurry 2018). Many have faced methodological problems in studying the association between the historic nature of child removal and its current impacts. Difficulty identifying causal relationships has led to problems in developing successful interventions, which facilitate the positive effects of schooling and so reduce the consequences of poor educational attainment (O'Higgins et al 2017). The current study addresses these methodological issues by attempting a novel, child-centred approach. The study focuses on a specific target population (LAC children with SEN) at a specific time in their academic career, (primary school) in the hopes of identifying specific barriers, which can be addressed with real time intervention from the school.

Although this means the results will be less generalisable, the results may be of real value to the participants in the study as their needs are identified, and the methods used in this study (direct questionnaires and analysis) may be of real use to other LAC children at other schools if the current study indeed finds differences in perceived barriers. The results of the current study may identify novel differences between LAC children and Non-LAC children, which may allow the development of future development of interventions, interventions that foster a positive learning environment, encourage academic engagement, and promote good mental health. Chase et al (2006) argue that children are agents of their own destiny and not merely results of their childhood experiences emphasising the need for these children to have a voice and be recognised as individuals. This idea is supported by legislation such as the 'Every child matters Policy' (DfE 2003) which encourages children to be active partners in plans for their

current and future care plans. Pattman and Kehilly (2004) state that children are the 'experts about themselves' recognising input from these children is valuable and supporting the use of self-report methods in the current study. Lamond (2011) argues that although enrolment in participatory research may not directly benefit the child, it may enable the child to feel valued, also validating the inclusion of children as active participants in research.

As children's experiences are likely to involve many variables, a matched participant design was used to control for a number of individual differences known to influence barriers to learning as identified by previous research including age, gender, ethnicity, and SEN status and 'looked-after' status. Although more time consuming, this design will improve internal reliability of this study. The questionnaire used in the study was designed by researchers Porter et al (2015) as part of a research project for the Department of Children, Schools and Families, recognising the importance of gaining information directly from children in schools whilst not overlooking children with disabilities and SEN. In 2008, Porter et al published a research brief, explaining the process of the development of a data collection tool for use in pupils with disabilities or SEN needs. Forty-five schools used at least one part of the flexible tool providing data from over 2714 children on the barriers and supports to learning. The extent of the data reflected the interest and commitment of schools with this approach and relied on some personalisation to help children in communicating their views. The questionnaire results indicated that these children wanted further teacher input, including more individual support, and the level of noise and distractions to be better controlled. In a report published in 2008 entitled 'Disability Data Collection for Children's Services', Porter et al state that data was collected from 10 schools and 350 children was useful in identifying barriers in children who had been previously overlooked. They acknowledged that a limitation of this method in special schools was that due to complex diagnosis it was hard to identify

which need was the most important and which needs were secondary to this. This limitation should be mitigated in the current study as the case study school is an SEMH school and caters to children with specific emotional needs rather than physical.

Study Value

The methods used in this study will offer fresh insight into a difficulty area of study, LAC children and academic attainment. This study will help children feel valued and may identify areas of difficulty previously overlooked. Although the study focuses on specific children in a particular setting, the results may be valuable in guiding future research into the specific barriers looked after children stated with SEMH needs face compared to non-LAC peers. The current study aims to identify perceived barriers to learning faced by looked after children using methods which support children to be actively involved in their education and learning needs. The matched-participant design and self-report questionnaire (Porter et al 2015) provides the potential for these children to identify salient barriers to education that have been overlooked or not considered important and which are specific to being a looked-after child. This information can help in developing interventions and provide looked-after children with a platform to discuss their education. In either case this study will further knowledge within the school setting which may facilitate the design of effective, targeted interventions, as suggested by Cage (2018) leading to improved educational attainment via benefits of mental health and school participation and paving the way for improved social and mental health outcomes as adults.

Conclusion

Whilst the association between being a looked after child and poor academic attainment is widely accepted, the underlying mechanisms between the risk factors and poor attainment remain poorly understood (O'Higgins et al 2017) and difficult to investigate robustly (Cage 2018) due to the overwhelming complexity of children's backgrounds (O'Higgins et al 2017).

It has proved difficult to determine whether the association between being a LAC child with SEMH and poor academic attainment arises from the reason a child is in care, the experience of care or other contextual variables (Cage 2018). Cage suggested that, regardless of history of maltreatment or placement type, looked-after children need additional educational support and specifically targeted educational interventions during critical developmental stages.

The author of the current study argues that it is the responsibility of the UK Government and educational services to provide *all* children with the same educational opportunity to succeed and thrive in adulthood. However, currently, LAC children are at a disadvantage socially, psychologically, and educationally (Patel 2007). LAC children are statistically more likely to experience poor mental health, substance misuse and poverty, both as children and as care leavers (Jackson and Simon 2018). The link between educational success and success in other areas of life have been clearly demonstrated (Tyler and Loftstrom 2009). The current study aims to reach an of the perceived barriers to learning of this vulnerable group whilst controlling for known variables which impact educational attainment including gender, age, ethnicity, SEN status. Data collected may highlight key areas that could be useful in the future for the formulation of novel interventions to mitigate negative impacts on mental health.

Methods

This chapter will discuss the methodology of the current research study; including the specific research questions that the study sought to answer, inclusion and exclusion criteria, consent procedure, study procedure and methods of analysis.

To recap, the primary aim of this research study is to identify and compare perceived barriers to learning between looked-after and non-looked after children with social, emotional, and mental health conditions (SEMH) by comparing answers collected using a self-report questionnaire and brief discussion. The secondary objective of this study was to collect data which may further the understanding of looked after children's perceptions of barriers to education.

This research study was guided by the following questions:

- Do the barriers to learning, identified by children, differ between looked-after children and non-looked after children in a case study primary school?
- What are the key themes identified, by thematic analysis of questionnaire data, that may further the understanding of barriers to education faced by looked after children?

Study Design

This is a primary research study with matched-participant methods which uses a pre-validated questionnaire entitled 'What matters to you?' (Porter 2015), (see Appendix A) to collect data from 12 (6 LAC and 6 Non-LAC) primary school aged children (aged 7-11 years of age) about their opinions and feelings on different aspects of school, in order to find differences between

looked-after children and non-looked after children. Permission to use this tool was received on the 14th of November 2019 (see Appendix B). A matched participant design is used to reduce participant variables. Children were matched on age, gender, and SEN, all of which have been found to be confounding factors on a previous literature review (Cage et al 2018). All children had a diagnosis of Social, Emotional and Mental Health needs (SEMH), as discussed previously, SEMH is the leading SEN diagnosis in looked after children (DfE 2019) and is therefore a confounding variable. By including only children with SEMH this factor can be mitigated in the investigation of LAC children who are most vulnerable to poor academic achievement.

Two cohorts were selected, Cohort 1 consisted of LAC children who met inclusion criteria. Cohort 2 consisted of Non-LAC children who met inclusion criteria. Participants were selected from a UK primary school as interventions are most likely to be effective at this stage of education and early identification of risk factors will allow for improved outcomes on later education and mental health (O'Sullivan and Westerman 2017).

The questionnaire used in the study was selected as it has previously been shown to be both valid and reliable for use in primary school aged children by Porter et al (2015) and is flexible in its application.

Participants

Firstly, LAC Children who met inclusion criteria were identified by administrative staff at the case study school. Fourteen LAC children were identified, and letters were sent to each of their legal guardians. Six guardians returned consent forms and six children gave their assent.

Children who gave assent were matched in age, gender, ethnicity, and SEN status to Non-LAC children in attendance at the school who met inclusion criteria. In total, nine were contacted and invited to allow their children to participate. Of these, 6 gave consent and 6 children assented. In total 12 children participated

Study Setting

Participants were identified from a population of children attending an SEMH primary school in Lancashire. One hundred and eighteen children are registered to attend (year 2020/2021). Children in attendance ranged from four years to eleven years of age. LAC children represent 7.29% of the population. One hundred percent of children have a diagnosis of SEMH and an Educational and Health Care Plan (EHCP). Fourteen LAC children were invited to take part in this study; six legal guardians consented for their child to participate in the current study giving a return rate of 42.86%. LAC children represent 11.48% of the school population (N = 122). The sample contained children aged 7-11 years old and a ratio of 5:1 male to female.

Nine children were contacted overall and invited to participate as matched controls; six Non-LAC guardians consented for their child to participate. This sample consists of children aged 7-11 years and a ratio of 5:1 male to female and is representative of the school population. No other demographics were collected about the participants.

Ethics Committee and School Consent

The study was given ethical approval on 3/FEB/2020 by the School of Medicine Research Ethics Committee (SMREC) at Cardiff University (Appendix C). The case study school was selected due to the large percentage of looked-after children and all pupils have a diagnosis of SEMH. The case study school was contacted and permission to conduct the research was received by email 11/NOV/2019.

Inclusion and Exclusion Criteria

The inclusion criteria for the LAC:

- 1) A child is considered to be a looked after child (LAC child) if;
 - they are under the continuous provision of accommodation (for longer than a single twenty-four-hour period),
 - they are subject to a care order, or
 - they are subject to a placement order.

This follows the definition as provided by the Children's Act (2003).

- 2) Children will be aged 7-11yrs of age (the age range of looked after children at the case study school).
- 3) All children will have an official SEMH diagnosis as dictated in their Education and Health Care Plan.

The matched control Non-Looked After Children inclusion criteria was as follows:

- 1) A non-looked after child is defined by this study as a child who has never been classified as a looked-after child. This is to keep the categories distinct, as due to the young age of the children any experience of care may still impact educational experiences.
- 2) Children will be aged 7-11yrs of age.
- 3) All children will have an official SEMH diagnosis as dictated in their Education and Health Care Plan.
- 4) Children will be invited if they meet criteria to be matched with a LAC participant in cohort one based on; age, gender, ethnicity, and SEN diagnosis to control these known confounding variables.

There will be a maximum of 12 students aged between 7-11yrs of age of mixed gender participating in this research study.

The following exclusion criteria was applied to both groups:

- 1) Children aged less than 7 years of age (the questionnaire has not been used on children younger than 7 years old and so reliability and validity of the questionnaire is not confirmed.
- 2) Children who lack capacity to consent to the study as defined by the Capacity Act (2005).

Consent Procedure

Informed consent was required from each legal guardian prior to any study activity. A letter was given to legal guardian by the child's home escort (a designated school staff member who takes children to and from school) containing a cover letter from the school, 2 copies of the Legal guardian Informed Consent Form (ICF) (Appendix D), and a copy of the Participant Assent Form for their information (Appendix E). Legal guardians were informed that participation was voluntary and that there were no incentives or repercussions to accepting or declining participation. Guardians were informed that they could contact the study investigator or call or attend the school if they had any questions.

The informed consent form included the research study title, the study investigator details and contact information. The form also included information about confidentiality, right to withdraw, study procedures and information about potential risks/benefits. For study purposes, the form also contained the name of the guardian and participant, participant identification number and legal guardian and study investigator signatures.

Legal guardians were asked to keep one copy of the consent form for their information and instructed to return the completed Legal Guardian Informed Consent Form (ICF) via the school escort. Once the legal guardian informed consent form was received the children were invited to discuss participation with the study investigator and a member of the wellbeing team. Children were informed of the study processes upon arrival to school and given time to consider participation (approx. 3 hours), prior to consent being gained. A shorter period of time was selected due to the nature of the study and concerns about information retention, i.e. it was decided that a longer period of consideration would not benefit the child. Children who consented to participate were then matched with another pupil from the school based

on age, gender, and SEN by school admin staff. Consent was then gained from guardians in the same way as Cohort one children.

Ethical Considerations for Consent Procedure of Children

Informed consent should always be obtained from children's guardians and assent should be sought from the children themselves. Assent is a process by which study information is shared in an appropriate way for each individual child, whilst considering their comprehension and ability to weigh the information. Children should be involved in their care as much as possible and assent must be sought from children over the ages of 7 and children assumed competent to provide such until proven otherwise. The child's age, maturity, and development should be considered (Field 2004). Therefore, a child-centred assent form was designed using child friendly language (Appendix E). The assent form was used to record the interaction; however, the main assent process was a child specific explanation and conversation before verbal assent was gained, at which point the purpose of the form and its role in the study was discussed. This assent process was designed to ensure that children would not be excluded based on disability, reading age, or writing abilities.

Vulnerabilities

Young children, especially those with SEN, and LAC children, are vulnerable to exclusion, coercion, and manipulation (Bradbury-Jones 2018). A chaperone was present throughout all trial activity to act as the child's advocate. Although the language in the assent forms and discussion process were adapted to suit the needs of the children, it was also important not to underestimate the children. Wickenden (2014) explains that children with additional needs

are quick to realise when they are being patronised which can damage the relationships needed for collaboration. This is particularly important with looked-after children as they have experienced poor adult relationships in the past and so an uncomfortable experience with a researcher can be damaging (Hughes 2017).

Confidentiality

The children were made aware that their answers would not be shared with other teaching staff or managers, and that they would not be identified by any third parties for the purposes of the research project. The children were made aware that normal school rules were in place, and whilst they were welcomed to be as open and honest as possible, if it was felt that they may be at risk then the school's Safeguarding Officer and Headmaster would have to be informed in line with the schools normal Safeguarding Procedure.

Data Collection and Study Procedure

Children were invited into a quiet classroom with the study investigator and member of the wellbeing team. The room had been carefully cleared of potential distractions, such as clocks. Children were read the instructions contained within the questionnaire and informed to leave out any questions that they were not comfortable answering. Children were provided with a paper copy of the questionnaire.

Children were informed that they can stop at any time. They were also made aware of the school counsellor and well-being team whose services they could make use of if they felt it necessary. A member of the well-being team was present throughout to ensure that the

children's best interests were always maintained. The questionnaire entitled 'What works for you? - Barriers and Supports at School' (Porter 2015) consisted of 29 items;

- 12 questions requiring a symbol answer
 - a. How do you generally feel at different times and places? (Q1A-Q1F).
 - b. How do you feel about different kinds of lesson? (Q2A-Q2F)
- 7 questions which required a written answer
 - a. What helps at different times? (Q1+)
 - b. What makes things more difficult? (Q1+)
 - c. What helps at different times? (Q2+)
 - d. What makes things more difficult? (Q2+)
 - e. Can you say more about what you find difficult? (Q9)
 - f. Can you say something about what you find easy or are good at? (Q10)
 - g. If you had special powers what is one thing you would change about school? (Q15).
 - h. Q11, Q12 and Q13 were omitted from the questionnaire as they were not deemed appropriate (questions about disability and symptoms).
- 7 multiple choice questions (MCQs) (Q3-Q8 and Q14)

Children were given the choice to complete the questionnaire by themselves or to have the questions read aloud to them. All children chose to have the questions read aloud. Any questions the children had were answered as objectively as possible. A small number of children required short breaks to meet their needs.

Planned Data Analysis

The planned analysis on questionnaire data was as follows:

1. T-test conducted for the 12 questions requiring a symbol answer Q1A-Q1F and Q2A-Q2F2 and the 7-individual multiple-choice questions (MCQs) Q3-Q8 and Q14.
2. Qualitative review and thematic analyses of the seven qualitative questions combined into categories below;
 - a. 'What helps at different times?' combination of Q1+, Q2+ and Q9,
 - b. 'What makes things more difficult?' combination of Q1+ with Q2+,
 - c. 'Can you say something about what you find easy or are good at?' (Q10),
 - d. 'If you had special powers what is one thing you would change about school?' (Q15).

Symbol Data Analysis

Data collected for each of the 12 symbol questions will be coded with numbers 1-6 in the order demonstrated in Figure 5 below.



Figure 5. Conversion table used in analysis of symbol coded data

Using Microsoft Excel as a database, scores for each participant will be entered and a between groups independent t-test will be conducted to find differences between looked-after and non-looked after children.

Results will be presented in tables for comparison in the results section. First, tables will present the scores given by Looked after children and Non-LAC (in bold) for visual assessment and representation prior to coding. Responses categorised as positive are colour coded in green and negative answers are colour coded in red.

Data was then coded with scores range from one to six, with one representing the happiest face and 6 representing the unhappiest face, to allow for t test analysis. A t test was selected as data is ordinal and analysis was interested in statistical significances between means. T test results tables are presented below each raw table.

Written Answers Data Analysis

Written answers for the six open-ended questions will be subject to coding followed by thematic analysis after the procedure discussed below for each group; looked-after and non-looked after children. Each question will be analysed separately.

Thematic Analysis Procedure

The following procedure (Cruikshank 2009) was followed for data collected for each group,

- Written answers were read and then re-read
- Initial themes identified
- Themes reviewed

- Themes defined
- Common themes grouped.
- Grouped themes from each group compared.
- Unique and similar theme groups identified.

Multiple Choice Data Analysis

For Questions 3-7, data was converted into numerical data, as shown in Table 1. and entered into a database.

Table 1. Coding for the conversion of Q3-Q7 to numerical data.

Response	Score assigned for analysis
Yes, all the time	1
Yes, most of the time	2
Yes, some of the time	3
Very occasionally	4
No, not really	5
Never	6

An independent t-test will be conducted on each MCQ and will be tabled for in the following results chapter.

Results

This results section is structured in two main sections. Firstly, the question 'Do the barriers to learning, identified by children, differ between looked-after children and non-looked after children in a case study primary school?' is addressed by presenting visual representations of participants answers. Results of t tests conducted on the answers provided are then reported later in the chapter.

Secondly, the research question, 'What are the key themes identified, by thematic analysis of questionnaire data, that may further the understanding of barriers to education faced by looked after children?' is addressed via a thematic analysis, the results of which are reported in tables.

The results are analysed and presented as discussed in the methods section above. The results of the Q1 of the questionnaire 'What works for you' (Porter 2015) are discussed below.

Do the barriers to learning, identified by children, differ between looked-after children and non-looked after children in a case study primary school?

Table 2. below shows the number of children in each cohort that selected each feeling about different places in school. Scores highlighted in green represent positive answers whilst those highlighted in red show negative responses.

Table 2. Questionnaire Responses to Question 1: How looked-after children (LAC n = 6) and Non-looked after children (Non-LAC n=6) reported feeling at different times and places.

Question Ref	How do you generally feel at different times and places	Very good	good	Okay	not okay	Bad	very bad	No Response
Q1 A During Lesson	LAC	0	2	2	1	0	1	0
	Non-LAC	2	0	3	0	0	1	0
Q1 B During Break	LAC	4	1	0	1	0	0	0
	Non-LAC	2	3	0	1	0	0	0
Q1 C At Lunch Time	LAC	3	1	1	1	0	0	0
	Non-LAC	6	0	0	0	0	0	0
Q1 D Outside Moving Between Buildings	LAC	3	1	0	0	2	0	0
	Non-LAC	1	1	2	0	1	1	0
Q1 E During Special Events	LAC	4	1	0	0	1	0	0
	Non-LAC	3	1	2	0	0	0	0
Q1 F During School Trips	LAC	5	1	0	0	0	0	0
	Non-LAC	5	0	0	1	0	0	0

This table shows that 3 LAC children feel very good in the lunch hall but all 6 of the Non-LAC children selected very good. The table below (Table 3.) shows responses to Question 2 (A-F) of the questionnaire 'What works for you?' which asks 'How do you feel about different kinds of lesson. Positive responses are highlighted in green and negative responses are highlighted in red.

Table 3. Questionnaire Responses: How looked-after children (LAC, n = 6) and Non-looked after children (Non-LAC, n = 6) feel about different kinds of lesson.

Question Ref	How do you feel about different kinds of lesson	Very good	good	okay	not okay	Bad	very bad	No Response
Q2 A When the whole class is working together	LAC	0	1	2	0	1	2	0
	Non-LAC	0	1	2	3	0	0	0
Q2 B Working by yourself	LAC	3	1	1	0	0	1	0
	Non-LAC	1	2	1	1	0	1	0
Q2 C Practical Classes	LAC	4	1	0	1	0	0	0
	Non-LAC	3	3	0	0	0	0	0
Q2 D Sports, Games, Dance, Gym	LAC	2	1	1	0	2	0	0
	Non-LAC	3	2	0	0	0	1	0
Q2 E Tests, Assessments, Exams	LAC	2	1	1	0	1	1	0
	Non-LAC	2	1	1	0	0	2	0
Q2 F Homework	LAC	1	0	1	0	0	4	0
	Non-LAC	2	0	0	1	1	2	0

This table shows that LAC and Non-LAC children appear to have similar feelings about different types of lesson. The following tables are from data collected for the MCQs of the questionnaire (Q3-Q7). Data was converted to numerical data as described in the methodology. The next table (Table 4.) shows responses to Questions 3 to 7 of the questionnaire 'What works for you?' which asks, 'Do you find it difficult to...'. Positive responses are highlighted in green and negative responses are highlighted in red.

Table 4. Questionnaire Responses: How difficult different activities are for looked-after children (LAC, n = 6) and **Non-looked after children (Non-LAC, n = 6).**

Question Ref	Do you find it difficult to...	Yes, all of the time	Yes, most of the time	yes, some of the time	very occasionally	no, not really	Never	No Response
Q3 join in with school activities	LAC	3	0	2	0	0	1	0
	Non-LAC	2	3	0	0	0	1	0
Q4 to learn in class	LAC	2	1	2	0	1	0	0
	Non-LAC	1	2	1	0	1	1	0
Q5 to get on with your classmates	LAC	1	0	4	0	1	0	0
	Non-LAC	0	1	2	0	2	1	0
Q6 get on with teachers/ other people who work at the school	LAC	2	0	1	0	3	0	0
	Non-LAC	1	0	2	0	1	2	0
Q7 to do things you want to do outside of school	LAC	0	2	0	0	1	3	0
	Non-LAC	2	1	0	0	2	0	0

Table 5. below shows responses to Question 8 of the questionnaire ‘What works for you?’ which asks, ‘Do you have to take time of school?’.

Table 5. Questionnaire Responses: Do you have to take time of school? Responses from looked-after children (LAC, N:6) and **Non-looked after children (Non-LAC, N:6).**

Question Ref		Yes, frequently	Yes, occasionally	Not very often	Never
Q8	LAC	1	1	2	2
	Non-LAC	0	0	3	3

Table 6. shows responses to Question 14 of the questionnaire ‘What works for you?’ which asks, ‘If you needed help who would you go to?’.

Table 6. Questionnaire Responses: Places that looked-after children (LAC, $n = 6$) and **non-looked after children (Non-LAC, $n = 6$)** would seek support.

Question Ref		Your classmates	Your teachers	Other people in school	Your family	Other people outside school
Q14	LAC	0	4	0	1	1
	Non-LAC	0	0	0	6	0

An independent t -test showed no significant differences between looked-after children responses to the questionnaire and non-looked-after children’s responses to the questionnaire for Questions 1-8 or 14 as shown above. Results of the t -tests conducted on Likert scale questionnaire sections showed no significant differences between looked-after and non-looked after children with all p values expressed at greater than $p < 0.05$. This suggests that any differences may have occurred by random chance and so, the data collected does not support the current studies hypothesis that differences exist between the groups perceived ideas of barriers to learning. No significant effect of being a LAC child was found between the mean answers of the six LAC children and six Non-LAC children. None of the t statistics had a significance of $p < 0.05$ or below and so none of the results meet the confidence levels set by the current study.

The results of the *t*-test's conducted are demonstrated in the Tables below:

Table 7. for Q1A-Q1F for the questions on 'How do you feel at different times and places?'

Table 8. for Q2A-Q2F for the questions on 'How do you feel about different lessons?'

Table 9. for MCQs Q3 - Q7: 'Do you find it difficult to join in with school activities?', 'Do you find it difficult to learn in class?', 'do you find it difficult to get on with your classmates, do you find it difficult to get on with staff and outside of school, do you find it difficult to do the things you want to?

Table 10. for Q14 'When you need support, where are the best places to find it.

Table.7 below shows results of a *t*-test conducted on the 7 sections of Question 1 of the questionnaire 'What matters to you?'

Table 7. Results of independent *t*-test conducted on data for Q1A-Q1F entitled 'How do you feel at different times and places'.

Results of independent <i>t</i> -test conducted on data for Q1A-Q1F entitled 'How do you feel at different times and places'.		
Question Reference	Difference	Results
Q1 A During Lesson	No significant difference	$t(10) = 0.52, p = 0.617$
Q1 B During break	No significant difference	$t(10) = 0.50, p = 0.628$
Q1 C At lunch time	No significant difference	$t(10) = 1.94, p = 0.111$
Q1 D Outside moving between buildings	No significant difference	$t(10) = 0.75, p = 0.469$
Q1 E During Special Events	No significant difference	$t(10) = 0.00, p = 1.000$
Q1 F On School Trips	No significant difference	$t(10) = -0.63, p = 0.541$

Table 7. shows no statistically significant results for questions 1A-1F. Table 9. Below shows results of a *t* test conducted on data for Q2A- Q2F.

Table 8. Results of an independent t-test for Q2A to Q2F entitled 'How do you feel about different lessons?'

Results of independent t-test conducted on data for Q2A-Q2F entitled 'How do you feel about different kinds of lesson?'		
Question Reference	Difference	Results
Q2 A Whole class working together	No significant difference	t(10) = 1.07 , p = 0.319
Q2 B By yourself	No significant difference	t(10) = -0.61, p = 0.553
Q2 C Practical lessons	No significant difference	t(10) = 0.31, p = 0.765
Q2 D sports, games,dance, gym	No significant difference	t(10) = 0.61, p = 0.555
Q2 E tests, exams, assessments	No significant difference	t(10) = 0.13, p = 0.899
Q2 F Homework	No significant difference	t(10) = - 0.64, p = 0.534

Table 8. shows no statistically significant results for questions 2A-QF. Table 9. Below shows results of a t test conducted on data for Q3-Q7.

Table 9. T-Test Results for Questions 3-7.

Results of independent t-test conducted on data for Q3-Q7		
Question Reference	Difference	Results
Q3 Do you find it difficult to join in with school activities?'	No significant difference	t(10) = 0.15 , p = 0.883
Q4 Do you find it difficult to learn in class?	No significant difference	t(10) = -0.66, p = 0.522
Q5 Do you find it difficult to get on with your classmates	No significant difference	t(10) = -1.23, p = 0.249
Q6 Do you find it difficult to get on with staff	No significant difference	t(10) = -0.58, p = 0.55
Q7 Outside of school, do you find it difficult to do the things you want to?	No significant difference	t(9) = 1.39, p = 0.196

Table 9. shows no statistically significant results for questions 3-7. Table 10. Below shows results of a t test conducted on Question 14: *'When you need support, where are the best places to find it?'*

Table 10. Results of an independent t-test for Q14: *'When you need support, where are the best places to find it?'*

Results of independent t-test conducted on data for Q14 'When you need support, where are the best places to find it?'		
Question Reference	Difference	Results
'When you need support, where are the best places to find it?'	No significant difference	$t(10) = -2.15, p = 0.084$

Thematic Analysis and Synthesis of Results; 'What are the key themes identified, by thematic analysis of questionnaire data, that may further the understanding of barriers to education faced by looked after children?'

Several key themes concerning children's experiences whilst in attendance at an SEMH Primary School were identified and are discussed below.

Looked After Children

Analysis of written answers for 'what makes things more difficult' identified several themes shown in the Table 11. below entitled 'Difficulties identified by LAC and Non-LAC participants.'

Table 11. Difficulties identified by LAC and Non-LAC participants.

Table 11. Difficulties identified by LAC and Non-LAC participants	
LAC	Non-LAC
1. Other Pupils Behaviour	A. Other Pupils Level of Noise
2. Difficulty Focusing	B. Specific Subjects / Workload
3. Academic Confidence/ Subject Specific Difficulties	C. Difficulties Forming Peer Relationships

Identification of each theme is discussed below.

Themes Identified for LAC Children

When looked-after children were asked ‘what makes things more difficult’ several themes emerged. These were ‘Other Pupils Behaviour’, ‘Difficulty Focusing’ and ‘Lack of Confidence in Academic Ability’.

1. Other Pupils Behaviour

This theme was identified for 5 of 6 pupils in the LAC group meaning participants discussed an aspect of other pupils’ behaviours that they found difficult to deal with at school. The focus of this theme was ‘feeling annoyed’ and ‘threatened’ versus ‘the level of noise’, which is discussed later. Pupils discussed feeling ‘picked on’ and ‘feeling annoyed at others’ actions’, such as being told to ‘shut up’ and feeling as if there was too much activity happening around them.

Participant 1: “I don't like school when my friends pick on me and annoy me.”

Participant 5: “when kids make me mad.”

The quotes above suggest that the participants have low resilience to the behaviours of others, describing emotional reactions and feelings of stress.

2. Difficulty Focusing

Looked-after children discussed having difficulties with focusing in class; although the examples and reasons varied, over half of the children noted this difficulty.

Participant 2: "Noisy. Can't focus and it makes me feel stupid and look stupid."

Participant 5: "Hard to sit still. Hard to work".

3. Lack of Confidence in Academic Ability

This theme was identified as a number of participants who mentioned difficulties with specific subjects, notably core subjects such as Maths and English, or workload, and they related these difficulties to feelings of frustration with their ability in the subject rather than issues with boredom or dislike of the subject in general.

Participant -2: "English is hard, but not right now because we can type on laptops but remembering words is hard."

Pupils also found it hard to be confident in their academic abilities suggesting problems with recall, spellings, and inability to think as areas of difficulty.

Participant 4: "When I can't think, what to, like what a big multiplication is".

These statements demonstrate that pupils lack confidence in their academic ability to partake in core curriculum subjects.

Themes Identified for Non- Looked After children

When non-looked after children were asked 'what makes things more difficult' several key ideas were identified.

A. Other pupils' level of noise

This theme was identified as all six of the participants in this cohort reported disruptive or unwelcome behaviours from others that distract, or make it difficult to concentrate such as shouting, threatening, kicking walls, and making noise.

Although creating noise can also be captured under 'other pupils' behaviour' for the non-LAC cohort, this category was specifically identified noise above other behaviours and so whilst this category overlaps with the theme 'other pupils' behaviour' identified for LAC children's answers, it is none the less an independent category as it is noise that is particularly concerning to these children rather than personal offence or feeling annoyed by others.

Participant 7: "When it's noisy, people shouting or being told off because it makes me look."

Participant 9: "people shouting out and taking my answers."

The quotes above support the identification of 'other pupils' level of noise' as a category.

B. Specific Subjects / Workload

This theme was identified as 5 of the Non-LAC pupils discussed concerns with workloads and subjects including English, Maths, Music and PE. Like the LAC children, this cohort complains of hard work; however, answers were more elaborative, and they mentioned boredom and workload as their main concerns. In comparison, LAC children's main concerns besides the subjects being 'hard' was academic ability and lack of confidence.

Participant 7: “Music is too loud”

Participant 9: “Writing and division the one with a line and two dots.

Participant 12: “Work. English is hard and boring.” “English is hard, writing like 10 lines”.

Whilst workload and difficulties with specific subjects was identified in both cohorts there were subtle but significant differences in what this meant between the LAC and Non-LAC groups which would benefit from further investigation in future studies.

C. Difficulties Forming Relationships with Classmates

50% of the non-LAC children referred to some form of difficulty with relationships with peers. These included being the only female in class, feeling they chat too much to others, feeling shy and experiencing aggression from others.

Children with SEMH often experience unmet needs resulting in a variety of difficulties with forming relationships, concentration, and anxiety and depression (NICE Guidance for SEMH 2008, NICE Guidance Depression 2019).

What helps at different times? Open Ended Question 1.

An overview of identified themes is provided in Table 12. and each is discussed in the following sections.

Table 12. What helps at different times as identified by LAC and Non-LAC participants	
LAC	Non-LAC
1.being alone	A. staff support
2. movement breaks	B. sensory breaks

Looked After Children

When questioned about what helps at different times, looked-after children's responses revealed several key ideas including movement breaks and being alone as shown in Table 12.

1. Being alone

This theme encompasses participants who expresses a desire to work independently or emotionally regulate alone and was identified by from comments made by LAC children, such as the quotes below.

Participant 001 "I like working on my own."

Participant 006 "calming down by myself".

As discussed, Bowlby's (1969) theory of attachment suggests that children with insecure or disorganised attachments will experience difficulties relying on others, reaching out for help, and recognizing their needs due to a history of experiencing unpredictable and insensitive responses from their caregiver resulting in confusion as to whether they will receive assistance or trauma.

2. Movement Breaks

Pupils discuss that playing certain sports, games or moving around outside helps whilst at school.

Movement breaks are a recommended tool for children with ADHD and other physical and mental health diagnoses as a method to aid concentration and emotional regulation (Wise, 2016). These children were able to identify their need for this intervention.

Non-Looked After Children

Two main themes were identified for non-LAC children, Teacher Support and Sensory Toys/Aids, which are discussed below.

A. Staff support

This theme was identified as almost all participants discussed feeling that teachers or TA's sitting with them, assisting with work, or helping with emotional regulation was helpful to them. Teaching assistants have been shown to be a useful source of behavioural interventions and as a source of co-regulation.

Participant 11: "Talking to the TA's. My teachers when she does her clap."

Here the participant discusses a number of helpful items including staff support from TAs and Teachers, sensory aids such as the ear defenders and class silencer.

B. Sensory Toys/ Aids

This theme was developed by identifying various sensory inputs, tools and toys discussed by participants. Participants discussed finding the use of sensory toys/aids and sensory breaks as helpful for attention and emotional regulation.

Participant 008 "Playground, you (refers to Author), Cars and watching them"

Here the participant discusses sensory breaks in which a member of staff takes them to the school fence to observe the road and carpark and they find traffic to be comforting and interesting.

Participant 009 “teachers helping me and my ear defenders”

Non-LAC children appear to prefer the use of physical sensory aids to help with focus and emotional regulation, in comparison to the movement breaks identified for LAC children.

What Helps Overview

Porter et al (2015) make no mention of participants discussing sensory aids/ movement breaks, which is surprising as physically disabled people also have a higher rate of comorbid sensory processing disorders (Porter 2015) and so one might expect a similar response. This study therefore offers a new finding that LAC children prefer working alone with movement breaks vs non-LAC children who prefer teacher support and sensory aids.

What are you good at? Open ended question.

When participants were asked Question 10 ‘What are you good at’ trends were identified and are shown in Table 13. below.

Table 13. *What are you good at? Activities identified by LAC and Non-LAC participants.*

Table 13. What are you good at? Activities identified by LAC and Non-LAC participants	
LAC	Non-LAC
1.Art	A. Specific Subjects
2. Movement	B. Construction

Looked After Children

Looked after children identified three areas of skill, including Sports and Specific subjects.

1. Specific Subjects / Art

Art was discussed as a subject and as a separate activity and so was identified as an independent theme defined by 'Pupil expresses interest in art or an artistic outlet, not limited to specific subject or type of art'. When including Art as a subject 100% of pupils identified it as something that they feel that they are good at. When considering that this cohort also identified specific subjects as the biggest difficulty, it is perhaps surprising that these participants also identified as being skilled in these areas despite finding them 'hard'.

Participant 1: "I like art, and sport, and football. I also like running. I am good on computers"

Participant 4: "I'm good at spelling, English, art, and everything!"

2. Movement

Half of the children also discussed ability in physical education or teacher lead team games and running, naming 'football, sports, running, bow and arrow and PE' as areas they were good at.

Participant 6: "Riding a bike. I like art and go to an arts centre. I like PE but mainly bow and arrow."

Non-Looked After Children

Non-LAC participants gave varied answers when asked Question 10, 'what are you good at?' presenting difficulty in identifying strong themes. However, two areas of interest including Specific Subjects and Construction. For the theme Specific subjects 2/6 participants identified Maths and English/Spellings as something they identified as being good at. The same number of participants also revealed that an activity that requires construction such as Lego and MagFormers as an area they are good at.

Participant 9: "I'm good at spelling and making models. Playing. I'm very good at that."

If you were a superhero, what would you change about school? Open ended question.

Some pupils expressed a desire to stop lessons and do no work. Either the children are in charge whilst still in attendance or the building is shut.

Porter used a slightly different question, asking 'if you had a magic wand, what would you change about school?' which elicited responses such as easier lessons and more options to play (23%), changing school rules and increasing the length of break and play and reducing the number of bullies.

50% (3/6) of the LAC children would simply close the school in one form or another and only one pupil mentioned changing anything about the school specifically.

Participant 5 said "I would make it less difficult" and participant 002 stated, "It's a school. You are supposed to learn stuff. I wouldn't change anything". Although 50% (n = 3) of LAC children did give an alternative to simply closing the school, the overarching theme was that the school should be closed or 'Kids should rule'.

The non-LAC children gave a wide array of answers that seemed to fit no apparent theme.

The children mention being allowed to play all day (n = 2), becoming mind readers, and burning down the school. However, one participant mentioned 'reducing bullying'.

Participant 7: "I would change all the people attacking and swearing, especially on the bus."

Conclusion

Although the current study has been conducted on a much smaller scale with a different methodology, it does appear that the results support and are supported by previous use of the interview tool 'Good and Bad things' about school. The finding of the current study suggests that there may be differences in perceived barriers to education between looked after and non-looked after children which include LAC children finding peer behaviour difficult whilst Non-LAC children reference peer level of noise, LAC children preferring alone time vs Non-LAC preferring staff intervention. The finding also highlights the potential for Art as an outlet for LAC children.

Discussion

This chapter will discuss key findings which address the following research questions;

- Do the barriers to learning, identified by children with SEMH, differ between looked-after children and non-looked after children in a case study primary school?
- What are the key themes identified, by thematic analysis of questionnaire data, that may further the understanding of barriers to education faced by looked after children?

This chapter will address the findings of the current study and then discuss these findings in context of previous research before addressing the limitations of the current study. The chapter will then conclude with recommendations for future study.

Study Findings

This study was able to identify some differences in self-report barriers to learning between cohorts. These differences are outlined in the results chapter and are discussed in detail below. These differences are important as they may help improve the experiences of these children at school and therefore their mental health.

According to Patel et al (2007), young people's mental health is a global concern. In addition to being a leading cause of death via suicide, poor mental health in young people is associated with poor academic achievement, development issues, substance use, violent behaviour, and negative mental health outcomes as adults. However, despite identification of risk factors and the development of effective interventions, mental health needs of young people remain unmet.

Only a small number of children are successfully identified and referred for treatment (Stallard et al 2014), and interventions available within schools are understudied (Neil 2009). This means the most effective in-school interventions are unknown (Neil 2009), as are the long-term impacts and values of such interventions (Stallard et al 2014).

A strong association between poor childhood mental health and poor academic attainment has been established, however a lack of understanding has led to a gap in knowledge of how these issues are related (Jackson and McParlin 2006).

The current study identified self-report barriers to learning in vulnerable children in order to further understanding of the risk factor of 'poor education' on mental health experiences in primary school aged children.

Results of the t-tests conducted, on Symbol questionnaire sections (Q1A-F, Q2A-F,) and multiple-choice questions (Q3, Q4, Q5, Q6, Q7, Q8, Q14), showed no significant differences between LAC and Non-LAC children, suggesting that any differences may have occurred by chance. This means that the results of this study (as shown in the results section) do not support the current studies hypothesis that differences exist between the two groups (LAC and Non-LAC) perceived ideas of barriers to learning. However, the current studies sample was small and so it is possible that statistically significant differences would be detected in a larger sample size.

Despite a lack of statistical significance some potentially interesting relationships were noted. When asked question 1C 'How do you feel at certain times and places?' all of the non-LAC children (n = 6) said that they felt very good whilst only half of the LAC children (n = 3) chose this option. This suggests that lunchtime is a less positive experience for LAC children. Possible reasons may include sensory issues with noise in the dinner hall, seeing

fewer familiar faces and interacting with different staff. These issues will be discussed in further detail later in the chapter.

Another question of interest was Q14 'who would you go to if you need help?' 100% (n = 6) of Non-LAC children selected the option 'family' with only one of LAC children doing the same, perhaps understandably. However, this finding is interesting as four of LAC pupils chose to confide in their teacher, suggesting that teachers act as a temporary surrogate attachment figure (Zajac and Kobak 2006). It also suggests that, in primary aged children at least, teachers are more important than peers (Hay et al 2004). The effects of attachment and attachment figures will be discussed later in the chapter.

Discussion of Open Questions

Results from the thematic analysis supported the hypothesis of differences in barriers between groups as certain answers displayed a difference in key themes. This data was collected using open ended questions and children were prompted to elaborate. This data is qualitative data rather than quantitative meaning richer responses were possible.

When questioned about the difficulties faced whilst at school, the LAC children enrolled in the current study highlighted 'Other Pupils Behaviour', 'Difficulty Focusing' 'Lack of Academic Confidence with specific subjects' as difficulties. In contrast Non-LAC children expressed difficulties with 'Other pupils' level of noise', 'Specific Subjects/ workload', and 'Difficulties forming Relationships with classmates. Identification of these themes are consistent with findings of previous research which predicts these areas will form barriers to education for children with SEMH, ADHD and ASD (Gourley et al 2013, Aviles et al 2006,

NICE Guidance Depression in Children 2019) and with previous results identified via use of the Questionnaire 'what matters to you?' (Porter 2015). The findings in the context of existing research are discussed below.

Results in Context of Previous Literature

What makes things more difficult for LAC children?

This is another open-ended question, data analysed was formed from a combination of additional information collected from Q1A and Q2B which asked, 'what makes things more difficult?'

LAC children identified the behaviour of peers as a difficulty faced at school, suggesting that the LAC participants have low resilience to the behaviours of others. LAC participants described emotional reactions to the behaviour of peers such as feelings of anger and stress.

Hay et al (2004) state that low resilience to the behaviours of others is a known difficulty faced by children with SEMH, and this is an area of focus at the case study school. They showed that children's aggressive tendencies can be increased by the presence of aggressive peers. If aggressive behaviours are considered the 'social norm' within a group, then aggressive behaviours of the individual will not lead to peer rejection and therefore aggressive behaviours and conduct disorders of an individual will be increased (Hay et al 2004). In this context it is therefore important to address levels of aggression within a classroom to inhibit the production of a classroom that accepts behavioural aggression (Hay 2004).

Although the behaviours of peers were identified by LAC children as a difficulty they faced at school and one that induced feelings of anger within the individual, the same theme was not identified by non-looked-after children which suggests a greater perceived difficulty with peer behaviour for LAC children than for Non-LAC children.

There are potential factors that may explain this difference. Although both cohorts in this study are more likely to have disordered and disrupted attachments than the general population (Bartick-Ericson 2007), LAC children are still more likely to experience insecure attachments and disorganised attachment than Non-LAC children due to early experiences of adverse childhood events (ACEs)'s (Milward et al 2006).

Children with insecure/disorganised attachments may feel unloved and unsafe (Bowlby 1969) and are more likely to display aggressive behaviours (Bartick-Ericson 2007). Studies have shown children with insecure attachments have higher base level stress leading to a more sensitive HPA axis (Bernard et al 2010). Therefore, LAC children in this study may be experiencing greater feelings of threat and emotional distress when faced with peer behaviours than Non-LAC children due to hyper-vigilance and sensitive fight or flight responses (Bernard et al 2010) and difficulties with emotional regulation (Bartick-Ericson 2007).

This result can also be viewed in relation to sensory processing difficulties. Pupils interviewed by Ben-Sasson et al (2007) explained that noise from other pupils often provoked a physical response within themselves. Non-LAC children in this study were specifically distressed by the noise levels in the classroom suggesting that sensory processing difficulties associated with SEMH are the most salient factor for them, whereas a

lower level of disordered attachment may allow children to be more resilient to the behaviour of others, as suggested by Bowlby (1965).

LAC children also discussed difficulties with focusing on lessons in class. Pupils discussed problems with level of noise, the length of time activities took and general difficulties with keeping their bodies still and minds focused. Pupils who participated in a study conducted by Ben-Sasson et al (2007) described feeling distracted by noise and also by feelings of anxiety and fatigue provoked by sensory overloads which again implicates difficulties with sensory processing. This suggests that a quieter learning environment (Ben-Sasson 2007) and shorter lessons (Walg et al 2012) could be helpful for children with these difficulties. This is supported by research which has found that children with ADHD have difficulties with time perceptions and that impulsivity may be a result of children with ADHD experiencing lessons that feel much longer to them than to other children (Walg, Oepen, and Prior, 2012).

LAC children also identified a lack of confidence in specific subject abilities, most commonly in Maths and English, as well as problems with the workload itself. Children offered feelings of frustration with their own ability rather than a general dislike of the subject demonstrating LAC pupils lack of confidence in their academic ability to engage with core curriculum subjects.

Children with disorganised or insecure attachments will often experience high levels of anxiety and lack confidence in their ability to complete tasks or handle challenges, especially if they have experienced an ACE such as sexual abuse (Solomon et al 1995). This is a potential influence on this finding in LAC children.

Looked-after children are also likely to experience significantly higher levels of SEN and mental health disorders (Ford et al 2018). The use of a matched participant design in this study may have mitigated the influence of these confounding variables.

What makes things more difficult for Non-LAC children?

All six Non-LAC children identified 'Other pupils' level of noise' as a difficulty faced in school. Although the creation of noise could also be captured under 'other pupils' behaviour', the Non-LAC cohort specifically identified noise above any other behaviour. So whilst this category overlaps with the theme 'other pupils' behaviour' identified for LAC children's answers, it is none the less an independent category as it is noise that is particularly concerning to these children rather than personal offence or feeling annoyed by others.

According to the Department for Education (2019), the primary categories for special educational needs in non-looked after children is sensory impairment, Autistic Spectrum Disorder (ASD), or physical disability. This finding is supported by previous studies.

According to Ben-Sasson et al (2007) who conducted a study of 14 pupils with ASD and found that all pupils answered yes when asked if their sensory difficulties affected their learning supporting the assertion that children with SEN, SEMH, Autism and ADHD commonly have comorbid sensory processing difficulties either a symptom of, or as well as their primary diagnosis. Sensory processing disorders have also been associated with behavioural difficulties, which also impact on educational attainment as children express distress via challenging behaviour (Gourley 2012).

This finding is therefore compatible with previous findings that indicate that Sensory Processing Disorders impact academic achievement. In the context of this study, however, it is not the teacher's pace of teaching or processing time but the existence of loud and disruptive behaviour of peers that distract and create difficulties with focus and enjoyment of the environment.

Five of the Non-LAC children volunteered concerns about a variety of subjects (English, Maths, Music and PE). A similarity with the LAC cohort is the burden of workload but an important distinction is a focus on boredom in Non-LAC children vs lack of confidence in ability for LAC children. These findings are consistent with those of Porter (2015) who found 9% of children found difficulty in English, 8% in maths and 8 % with workload.

Whilst the theme 'workload and specific subjects' was identified in both cohorts the different underlying explanations should be investigated in future studies with questions focused on curriculum subjects which could identify that LAC and Non-LAC children need different interventions to support schoolwork i.e., lack children may need to build self-esteem before tackling work.

Although only identified by three of the Non-LAC cohort, 'Difficulties in forming relationships with peers', given the small sample this means 50% of the participant's reported this difficulty which may be significant in larger study samples. Difficulties discussed include being the only female in class, feeling they chat too much to others, feeling shy and experiencing aggression from others. Problems with peer relationships can impact many areas of a child's life, young children with ASD and emotional and behavioural problems may be particularly at risk of isolation from peers due to potential difficulties with social skills, language delays and antisocial behaviours (Hay et al 2004). The development of

coping strategies can help improve peer relations and higher levels of emotional regulation have been found to be associated with higher levels of social competence (Fabes et al 1999). Difficulties with pro-social relationships can lead to increased levels of emotional and behavioural problems for the child (Hays et al 2004) and so it is important that the problems identified by the participants are addressed with urgency.

Children with SEMH diagnoses often experience unmet needs resulting in a variety of difficulties with forming relationships, concentration, and anxiety and depression (NICE Guidance SEMH 2008) as previously discussed. Dann (2011) predicts this as a factor in poorer academic attainment. Although this has been raised by the non-Looked after children it is important to remember that all children have a diagnosis of SEMH and so barriers to education are expected in both cohorts. This means that this finding is also supported by previous research.

Although any child can be affected by insecure attachment, Non-LAC children are more likely to experience secure attachment than looked-after children (Milward et al 2006). Children with secure attachments show greater emotional regulation and resilience to stressors (NICE 2015). The difference in findings between LAC and Non-LAC (behaviour vs noise) could therefore be explained by the difference in attachment styles, with LAC children having a greater emotional response and Non-LAC having a primarily sensory reaction to the behaviours i.e., noise levels are painful and distracting rather than annoying and insulting in the latter case.

Participants in the study conducted by Porter (2015) reported that the behaviour of other pupils, mainly noise, bullying behaviours, being annoying and distracting behaviours were difficulties. Porter et al (2015) states that difficulties with other children could often be split

into two categories, those who were upset by others behaviour due to personal offence and those who felt their behaviour was affecting their learning. The findings are consistent with those of the current study which also found these differences but also suggests that these differences may be explained by pupil backgrounds, specifically if a child is looked-after or not. These findings suggest that schools should work with LAC children to build emotional resilience to others behaviour so that it does not become a barrier to their education.

Porter also found that 2% of pupils expressed difficulties with emotions such as feeling lonely or sad. Comparatively, this study found that 3 in 6 LAC participants discussed emotions such as missing family, feeling mad or stupid versus annoyance and shyness in non-LAC (2 of 6 participants). (33.33%, n = 2). Although the difference in sample sizes will have an impact on this finding.

What helps LAC children at different times?

When questioned about what helps at different times, LAC children identified being alone and having moving breaks as helpful whereas Non-LAC children preferred support from staff and using sensory toys.

As previously discussed, Bowlby's (1969) theory of attachment suggests that children with insecure or disorganised attachments will have difficulties relying on others, reaching out for help, and recognizing their needs due to unpredictable and insensitive responses from their caregiver as young children and in infancy. These experiences result in confusion as to whether they will receive assistance or trauma. These children will have diminished trust in peers and caregivers and will show preference for self-sufficiency and problem solving by

themselves as this is how they have managed to meet their own needs and survive in the past. Previous research has shown LAC children are more likely to have this type of attachment. The finding of the current study is consistent with the theory of attachment behaviours and suggests that difficulty working with others and accessing co-regulation is a barrier to education for looked-after children implying that these children may benefit from 1:1 support. This is not the finding for non-looked after children.

Previous research which has investigated children with SEN, has found the need for space to work through difficult emotions, and quiet spaces outside of noisy dinner halls and classrooms are encouraged (Babbedge et al 2002). Quiet spaces are available at the sample school and the findings of the current study suggest these are a more valuable resource for the LAC children than the Non-LAC children in this study.

What helps at different times?

Non-LAC children - Staff support

Most Non-LAC children identified that receiving staff support was helpful to them during their school day. Teaching assistants have been shown to be a useful source of behavioural interventions and as a source of co-regulation (Babbedge et al, 2002).

Preferring the help of others over figuring it out for themselves could indicate a higher level of secure attachment i.e., these pupils know that adults are able and willing to support them through difficulties and these children are willing and able to accept and utilize the help available. Although these Non-LAC children will also have experienced ACEs it is likely to be at lower numbers than LAC children meaning they have greater trust in the support around

them due to previous positive experiences and attachment style than LAC children with higher levels of insecure attachment and experience of ACES.

Previous research such as that conducted by Babbedge et al (2002) has identified staff rapport as an intervention for children with emotional and behavioural problems. Findings encourage 1:1 interactions and small group work to allow the building of relationships and encourage and value individuality. In addition, staff should use 'child seeking adult interactions' as an opportunity to model behaviour and encourage open communication, aiming to create a real connection.

Porter (2015) reports that 34% of participants mentioned friends as helpful. None of the children in the current study mentioned friendships as something helpful. Another difference is 'feeling safe' and a school trips. None of the participants in the current study mentioned safety and only one participant mentioned trips as helpful.

Different break preferences between LAC and NON-LAC children

Non-LAC children also indicated that various sensory toys/aids and sensory breaks are helpful when trying to pay attention and for emotional regulation. However, LAC children specified preference for 'movement breaks', which involve the ability to move to other parts of the classroom/school at given intervals throughout the day. Movement breaks are a recommended tool for children with ADHD and other physical and mental health diagnoses as a method to aid concentration and emotional regulation (NICE 2018). The LAC children were able to identify their need for this intervention. Previous research, such as a study conducted by O'Connell (2020) has shown that physical activity is an effective tool for

improving emotional self-control, relationships with peers and motor control, in addition to reducing depression, anxiety and obesity in children. Therefore, physical activity is an effective intervention for childhood mental health disorders. This finding suggests that physical activity should be encouraged especially for children who have identified it as helpful.

This study found that Non-LAC children appear to prefer the use of physical sensory aids to help with focus and emotional regulation, in comparison to the movement breaks identified for LAC children. The participants in Porters (2015) study do not discuss these benefits. This is surprising as physically disabled people also have a higher rate of comorbid sensory processing disorders (Fried et al 2004). Although the children in this study identified sensory toys as helpful, evidence supporting their use is limited. Pfeiffer et al (2001) conducted a study measuring the effect of clinical sensory intervention on a group of children with ASD compared to a control group of children with ASD. The group which received clinical sensory intervention had significantly reduced 'autistic mannerisms' which are actually a necessary component of communication and sensory processing for some children with ASD. No significant effects were found on the social responsiveness scale or other measures, meaning there was no significant effects on sensory processing, regulation or social-emotional functioning. These results would not support the use of sensory aids, however there are methodological issues to consider i.e. the sensory aids were given in a clinical setting and are not generalisable to a school setting and the tools used did not measure long term effects.

What are you good at?

When asked 'What are you good at?' LAC children identified 3 areas of skill including Art, Sports and Specific subjects. These are interesting finding given that looked-after children have lower confidence on these areas as identified in the question 'what do you find difficult' consistent with previous findings i.e. (DFE 2019). It would be helpful for the school to identify which interventions increase self-esteem.

A pilot study conducted by Lee and Liu (2016) showed that Art Therapy can benefit the mental health of children with SEN and was an activity enjoyed and participated in willingly by the children enrolled the authors report observing improvements in emotional and behavioural outcomes suggesting Art Therapy is a potentially effective intervention. However, the researchers were unable to show significant improvements using report measures and the sample only used 6 participants leading to an underpowered study. The study was also conducted in Hong Kong which may mean results lack generalisability to children in the UK.

Waller (2006) investigated the impacts of Art Therapy including many case studies in the analysis and identified several benefits for children, suggesting that the art therapy room offers a safe place for exploration and expression of difficult feelings and that the creation of an object allows for an alternative outlet for these emotions so that they are not expressed behaviourally. Wallers finding support those of Lee and Liu (2006) which means the school could consider introducing Art Therapy. The children in the current study identified Art as an activity they enjoyed and found themselves skilled at and so art as a therapy may be beneficial even if supporting quantifiable data is small (Slayton 2010).

Non-LAC answers were vague and non-specific, some children identified being good at activities involving construction of some kind such as Lego and MagFormers. Therefore, it cannot be said whether the activities in which pupils think they excel differ between LAC and Non-LAC pupils.

If you were a superhero what would you change about school?

When asked 'If you were a superhero, what would you change about school?' children across cohorts expressed the desire to stop lessons and do no work. 50% (N:3) of the LAC children would simply close the school in one form or another and only one pupil mentioned changing anything about the school specifically. It was not surprising to encounter a similar theme throughout the cohorts of 'closing the school down' given that school is typically more difficult for children with SEN (Aviles et al 2006, DfE 2019).

Porter used a slightly different question, asking 'if you had a magic wand, what would you change about school?' which elicited responses such as easier lessons and more options to play, changing school rules and increasing the length of break and play and reducing the number of bullies. These results are richer and more varied than the results of the current study, there is potential that the different wording elicits richer responses and so in future studies this question should be used instead.

Overview of findings

Although the current study has been conducted on a much smaller scale with a difference in methods, it does appear that the results support the use of the interview tool 'what matters

to you?' Porter (2015), despite Porter not including Special school Pupils in the analysis due to receiving only 7 responses.

The finding of the current study suggests that there may be differences in perceived barriers to education between looked after and non-looked after children. LAC children are upset by the behaviour of peers whereas Non-LAC pupils are particularly upset by peer level of noise, LAC children prefer movement breaks and to be left alone when upset but Non-LAC children show preference for staff support and sensory items. The findings also highlight the potential outlet that Art is allowing the LAC participants in the study.

The identification of different preferences for breaks is interesting and potentially useful information to the participating school as it offers guidance for pupil centred care. This study offers a new finding that LAC children with SEMH prefer working alone with movement breaks compared to Non-LAC children with SEMH who prefer teacher support and sensory aids.

All the LAC children identified a specific subject as something they are good at. However, LAC children also identified subjects as a difficulty, therefore it is interesting that these participants identified as being skilled in these areas despite finding them 'hard'. This finding could imply that although participants find the subjects difficult, it is not necessarily something that affects self-esteem. However, this theory contrasts with the answers to the question 'what do you find difficult', where these pupils expressed doubt in their abilities. LAC children also identified being good at various sports or physical activities supporting the finding for the question 'what helps?'

Interestingly, many of the children did not discuss difficulties with families/care settings although family problems and care placements are known risk factors for poor academic

attainment (Douglas 2010, Cage 2018), although one child mentioned missing is family at school events and another mentioned missing his sister. These factors should be assessed with specific questions in future studies to elicit responses about these salient risk factors.

None of the children mentioned any specific diagnosis i.e., ASD/ADHD/SEMH. These diagnoses are often related to children's behavioural difficulties and are established barriers to education. Due to this association the current study expected some reference to diagnosis in the children's answers. It is interesting, therefore, that although highlighted by others as barriers, children in the study did not identify them as such. Possible reasons for this may be; lack of insight, and labels, or that diagnoses are not emphasised to the children at the case study school, the young age of participants leading to a lack of understanding of any diagnoses, and / or the inclusive nature of the school in which children are supported and not disabled/ medicalised by the environment.

Adverse childhood events are also associated with poor educational attainment (Brown et al 2018, Pecora 2012). The current study did not pose questions that addressed these topics specifically and none of the children's responses alluded to this. Although this does not mean that these issues have not affected the children's lives, it does mean that they are not important enough to them to arise organically when discussing school.

This suggests that not all risk factors for poorer academic attainment are as salient or as apparent in non-LAC. Although clear associations have been made between SEN, ACEs, mental health issues, care placement, and poverty (Meltzer et al 2003), they are not perceived barriers for the children included in the current study at the time of the questionnaire.

Limitations of the Current Study

Poverty and social disadvantage are strongly associated with mental disorder owing to food scarcity, domestic violence, poor education, and fewer opportunities as a child together with loss of employment and poor health as adults (Patel et al 2007). Despite these important risk factors the current study did not provide a measure for this.

The current study was also unable to account for race and ethnicity as the current cohort was predominantly white. Although this is representative of the school population in a small rural town in England, it is not representative of the UK's general population. Race is important to consider not just for generalisability. In a US study, Cooper et al (2013) reported that black people, whilst not at a greater biological risk for mental health disorders are more likely to be overlooked and undertreated. Black people were found less likely to be prescribed anti-depressants even when symptom severity was controlled for (OR = 0.4; CI = 0.2–0.9), and black and South Asian people were less likely to have contacted their GP about their mental health in the past year. This supports findings that people belonging to minority ethnicities are less likely to receive adequate support and treatment for mental health problems. Children from minority backgrounds are also likely to experience different cultural norms, different familial relationships and find it harder to relate to peers as a young person (Patel 2007).

Diagnosis of disorders are more common in males, i.e., ADHD is 4:1 male to female. Male children are also more likely to be diagnosed with conduct and behavioural disorders and are therefore more likely to present with aggressive/violent behaviours and to be excluded from mainstream school and attend an SEMH school. The school for the current study is representative of SEMH school populations, but the subjects are not representative of

mental health disorders in the general population. Similarly, the pupils in the present study were mostly male and it is not possible to generalise the findings to female populations given that mental health disorders show differences between gender e.g., young women are 1.5- 3 times more likely to have depression and to self-harm (McGrath 2006). According to the DfE 2020, as of 31 March 2017 56% of looked after children were male and 44% were female with a ratio of 3:2 and SEN ratio of 4:1 male to female for SEN needs (DfE 2019). This means the studies ratio of 5:1 underrepresents females in both categories.

The current study was able to address potential limitations of child participation. It was possible that answering questions about school or being faced with a questionnaire may have made the child worried or upset and so children were informed that all participation is voluntary, and they can stop at any time. They were also made aware of the school councillor and well-being team whose services they could make use of if they felt it necessary.

Environmental variables were mitigated by completing each interview at the same time of day (after lunch) and using the same interview room throughout.

This study involves a small sample size with specific characteristics, which will limit the ability to generalize the results. The current study also uses self-report methods. The accuracy of self-report methods is often questioned because of potential biases (e.g., recall inaccuracy, worry of stigmatization and desirability effects (Greenhoot 2011). To mitigate these effects children were informed about confidentiality and it was reinforced that there are 'no right or wrong answers.

Bias

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The author has experience as an assistant psychologist in clinical trials, administering rating scales and questionnaires and has training from worldwide clinical associates and pharmaceutical companies in how to reduce researcher bias, demand characteristics and placebo effects. This training should reduce researcher bias and demand effects in the current study. However, it is always important to consider that bias may have entered the data collection, especially when considering the vulnerable sample population and the inherent power relationships involved (Thomas- Hughes 2017).

Although many of the pupils were new to the school at the time of assent, the author is still an employee of the school and therefore researcher bias and demand characteristic may have been a factor. This was mitigated by requesting time from the pupil with their teacher present and by including the school wellbeing team in the consent process. These and other measures were taken to establish rapport with the pupils, both to relieve anxiety and to elicit more open and honest answers.

This study employed several methodologies for data collection, with participants self-reporting using the symbol questions and the author being dictated to and writing verbatim the answers to open questions. Whilst the latter addressed the need of the children with

processing difficulties, learning disabilities and time constraints, this approach may have involved an element of researcher bias in the data collection.

Sample size is absolutely an issue. The study population only includes only 12 pupils with 6 in each cohort. This means results may not be applicable to other schools with an SEMH population, although the results of the current study may be useful to the participating school and other schools who repeat this process.

The sample relied on gaining consent from social workers/carers and the return rate was 50%. According to Hennekens and Buring (1987), those who choose not to partake in research are usually the people with the most difficulties or the least healthy of the population meaning important information can be missed. In this case it may be that the most vulnerable children such as the youngest, those most recently taken into care and the children experiencing the most severe mental health conditions may have been 'protected' by their social workers and other staff by declining to include them in the study.

As the sample was so small it was not possible to control for the length of time each pupil had spent in care and indeed which type of placement, they were in. It was also not possible to try and match participants of ethnicity and not possible to consider socioeconomic backgrounds due to limited sample population and GDPR requirements. That means that some significant confounding factors have been left unaccounted for.

Another difficulty encountered in the study is that was very time consuming. The consent process was often prolonged and social workers acting as legal guardians often see the children only every few weeks. Legitimate queries from guardians further delayed enrolment.

In addition, the global Covid-19 pandemic hindered data collection as schools were initially closed as the UK entered the first 'Lockdown' and then again as schools were subjected to high levels of absences, bubbles, and high rates of forced and voluntary sickness. As a result, the recruitment period lasted 6 months longer than anticipated including time needed to gain ethical approval to re-send consents to a new cohort of pupils arriving after the summer holidays. This impact may have been mitigated if the current study had created online access to the questionnaire as Porter (2015) had done. However, due to factors such as the children's age ages and comprehension levels, and the desire to ensure the questionnaire was administered the same way each time, the current study had already decided not to pursue an online version of the questionnaire. Future studies could make the tool available online in order to reach a larger population, however it should be noted that Porter (2015) received only 7 responses from special schools with this approach versus the 12 consents gained by the current study in only one school.

This study would be difficult to replicate given the wide variety of disorders and experiences displayed by the current sample such as ASD, ADHD, ODD, SEMH, MLD etc.

The responses to the written/oral section of the study were short and often lacked detail, making it difficult to draw explicit relationships. This has been the experience of other researchers using active participants such as Ben-Sasson et al (2007).

Despite the small sample and limitations faced it is important to note that the study design allowed it to investigate a relationship that would otherwise be impractical or difficult to research as shown by the small response received by Porter (2015). It remains a difficulty to recruit the most vulnerable of children into research studies, especially given the overriding consideration that this is in the best interests of the child. This leads to ethical issues such as

schools feeling unsure about a researcher's intentions, a worry from social workers about the impact upon the child and the researchers concerns about the child's ability to provide informed assent.

Jackson and McParlin (2006) argue that whilst risk factors undoubtedly impact a child's attainment, it is in fact the failure of educational services to address these negative experiences that are ultimately responsible for the attainment gap. Supporting the current studies aim of identifying barriers to education by LAC whilst in the school itself.

Recommendations

The statistical analysis of categorical data shows no difference between LAC and Non-LAC children, potentially due to the small sample size. These results show that there are no significant differences between LAC and Non-LAC children regarding locations around school and feelings about different types of lessons (Q1 and Q2). The qualitative analysis does show differences in perceived difficulties and helpful interventions between LAC and Non-LAC children whilst using a matched-participant design. These results may be useful to the case study school, therefore the current study recommends the use of the tool 'What matters to you?' (Porter 2015) by other SEMH schools as a person-centred approach to students and their needs, although the study acknowledges gaining consent from such populations is difficult and creates feasibility issues (Soneson et al 2020).

A future study conducted on a larger scale is recommended to confirm the results found in the current study and to investigate the causes of the current study's findings. Identification of large numbers of eligible participants could be done so through Local Authorities, in the

manner conducted by Meltzer et al (2003). To do so, the study should aim to consider the backgrounds of the children including socioeconomic status, parental mental health, length of time in care, number of placements and most recent change in placement by incorporating additional questions to the questionnaire or a separate screening document. Collection of this type of data would allow results to be related to additional areas such as social work and give insight into the impacts of such factors on perceived educational barriers. The study should also consider methods to increase participation of females and children of different ethnicities and races to make results more generalisable. Perhaps by choosing a school in an area that is more representative and offering study information in different languages if necessary.

This study strongly recommends a face-to-face approach whilst using the tool 'what matters to you?', or other tools, with young children in an SEMH school. Not only did the children appear to feel special and to benefit from 1:1 time with a school staff member but the face-to-face approach also allowed for individualised application of the questionnaire. The author was able to observe changes in behaviour indicating that a break was needed or that feelings were being elicited and could offer emotional support. It was clear when questions were not clear, and the author could point to areas of the school in question for example. Future studies may benefit from a blind interviewer as well as blind participants to mitigate bias.

The findings of the current study support a youth-focused intervention to prevent mental health disorders in children (Patel 2007) as it shows that with the right support young children with various difficulties/ diagnoses i.e., SEMH are still capable of identifying and reporting barriers to learning with an appropriate application of the correct data tool. The

current study recommends the development of tools which focus on aspects of education which matter to the children. Although these tools may be useful for all children in primary schools the current study suggests mental health disorders may be best prevented by screening the children most vulnerable to developing mental health disorders i.e., young children living with high numbers of ACEs such as domestic violence. These children are at higher risk of suicide (Patel 2007) and mental health problems as adults (Costello et al 2006).

Whilst the current study found differences in self-report barriers it acknowledges that each school, indeed each child, is unique and therefore this type of screening may not be feasible, practical, or useful in other schools (Soneson 2020); although due to the potential benefits the current study recommends gaining first-hand information directly from pupils to identify their needs and priorities.

Conclusion

Although this study did not identify statistically significant differences between quantitative data in this study, it did find differences between written/verbal responses. Looked after children identified difficulties with other pupils behaviour, difficulty focusing, and confidence in core subjects compared to Non-LAC children who struggled with workload and difficulties forming relationships with peers. Differences were also highlighted in what the children find helpful. LAC children find that movement breaks and being left alone helps them at school but this contrasts with Non-LAC children who prefer staff involvement and sensory aids.

It is clear that looked-after children continue to perform less well academically than their peers' do, which highlights the shortcomings of the UKs educational systems that are bound to provide a good education for all. Schools should be proactive in ensuring that looked-after children are not discriminated against whilst in their care setting. Looked after children deserve for the attainment gap to be challenged, it is unacceptable that children must continue to face difficulties from childhood through adulthood due to the failings of those around them to protect them from negative experiences as children. It is imperative that effective interventions are developed so that the mental health can be improved.

This study recommends further study into the reasons behind the results of this study and advocates for primary schools, particularly special schools to use tools in order to identify LAC children's specific needs.

References

- Aviles, M, A., Anderson, R, T. and Davila, R, E. 2006. Child and adolescent Social-Emotional development within the context of school. *Child and adolescent mental health* 11(1), pp. 32-39.
- Babbedge, E., Strudwick, D. and Thacker, J. Educating Children with Emotional and Behavioural Difficulties: Inclusive Practice in Mainstream Schools. Taylor and Francis LTD. 2002 Routledge London.
- Bartick-Ericson, C. 2006. Attachment security and the school experience for emotionally disturbed adolescents in special education. *Emotional and Behavioural Difficulties* 11(1), pp. 49-60.
- Ben-Sasson, A., Cermak, S. A., Orsmond, G. I., Tager-Flusberg, A., Carter, A. S., Kadlec, M. B., and Dunn, W. 2007. Extreme sensory modulation behaviors in toddlers with autism spectrum disorders. *American Journal of Occupational Therapy*, 61, pp. 584–592.
- Berridge, D. 2012. Educating young people in care: What have we learned? *Children and youth services review* 34, pp. 1171-1175.
- Bradbury-Jones C., Isham, L. and Taylor, J. 2018. The complexities and contradictions in participatory research with vulnerable children and young people: A qualitative systematic review. *Social Science and Medicine*, 215, pp. 80-91.
- Burns, C (ED). 2009. *Disabled children living away from home in foster care and residential settings*. London: Mac Keith Press.

Cage, J. 2018. Educational attainment for youth who were maltreated in adolescence: Investigating the influence of maltreatment type and foster care placement. *Child Abuse & Neglect* 79(2), pp. 234-244.

Cameron, R. J. et al. 2009. *Achieving Positive Outcomes for Children in Care*. Cornwall: Sage.

Carroll, C and Hurry, J. 2018. Supporting pupils in school with social, emotional, and mental health needs; a scoping review of the literature. *Emotional and behavioural difficulties* 23 (3), pp. 310-325.

Chase, E. et al. 2006. *In Care and After: A Positive Perspective*. Oxfordshire: Routledge.

Costello, E. J., Foley, D. L., and Angold, A. 2006. 10-year research update review: the epidemiology of child and adolescent psychiatric disorders 2. Developmental epidemiology. *J J Am Acad Child Adolesc Psychiatry* 45, pp.8-26.

Costello, E. J., Mustillo, S., Erkanli, A., Keeler, G., and Angold A. 2003. Prevalence and Development of Psychiatric Disorders in Childhood and Adolescence. *Arch Gen Psychiatry* 60(8), pp. 837–844.

Dann, R. 2011. Look out! Look after! Look here! Supporting 'looked after' and adopted children in the primary classroom. *Education* 39(5) pp. 455-465.

Deardon, J. 2004. Resilience: a study of risk and protective factors from the perspective of young people with experience of local authority care. *Support for Learning* 19(4) pp. 187-193.

Department for education. 2003. *Every child matters*. Available at <https://www.gov.uk/government/publications/every-child-matters> [Accessed 4 December 2019].

Department for education. 2007. Care matters: *time for change*. Available at <https://www.gov.uk/government/publications/care-matters-time-for-change> [Accessed 2 January 2020].

Department for education. 2019. *Outcomes for children looked after by local authorities in England, 31 March 2018*. Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/794535/Main_Text_Outcomes_for_CLA_by_LAs_2018.pdf [Accessed 2 January 2020].

Douglas, K. R., Chan, G., Gelernter, J., Arias, A. J., Anton, R. F., Weiss, R. D., Brady, K., Poling, J., Farrer, L. and Kranzler, H. R. 2010. Adverse childhood events as risk factors for substance dependence: Partial mediation by mood and anxiety disorders. *Addictive Behaviors* 35 (1), pp. 7-13.

Evans, R., Brown, R., Rees, G. and Smith, P. 2017. Systematic review of educational interventions for looked-after children and young people: Recommendations for intervention development and evaluation. *Br Educ Res J* 43, pp. 68-94.

Fabes, R. A., Gustave, C., Liable, D. and Kupanoff, K. Early adolescence and prosocial/ moral behaviour 11. *The journal of early adolescence*. 19 (2).

Flaherty, G. E., Thompson, R., and Dubowitz. 2013. Adverse Childhood Experiences and Child Health in Early Adolescence. *JAMA Pediatr* 167(7) pp. 622-629.

Ford, T. Vostanis, P. Meltzer, H. and Goodman, R. 2007. Psychiatric disorder among British children looked after by local authorities: Comparison with children living in private households. *British Journal of Psychiatry* 190(4), pp. 319-325.

Franks, M. 2011. Pockets of Participation: Revisiting Child-Centred Participation Research. *Children & Society* 25, pp. 15-25.

Greenbank.P. (2003). The role of values in educational research: the case for reflexivity. *British Educational Research Journal* 29 (6), pp. 791-801.

Greening, L. 2002. Religiosity, attributional style, and social support as psychosocial buffers for African American and White adolescents perceived risk for suicide. *Suicide Life Threatening Behaviours* 32, pp. 404-417.

Gourley, L., Wind, C. and Henniger, E.M. 2013. Sensory Processing Difficulties, Behavioural Problems and Parental Stress in a Clinical Population of Young Children. *Journal of Child and Family Studies* 22, pp.912-921.

Hay, D.F., Payne, A., and Chadwick, A. 2004. Peer relations in childhood. *Journal of Child Psychology and Psychiatry* 45, pp. 84-108.

Hayden, C. 2005. More than a piece of paper? Personal education plans and 'looked after' children in England. *Child & Family Social Work* 10(4), pp. 343-352.

Hennekens, C, H., Buring, J.E., and Hebert, P, R. 1987. Implications of overviews of randomized trials. *Statist., MED* 6, pp. 397-402

Hillman, S., Cross, R., Anderson, K. 2020. Exploring attachment and internal representations in looked-after children. *Frontiers in Psychology* 11, pp. 464-464.

Huerta, C, M. and Borgonovi, F. 2010. Education, alcohol use and abuse among adults in Britain. *Social Science and Medicine* 71(1), pp. 143-151.

Jackson, S. & Martin, P.Y. 1998. Surviving the care system: Education and resilience. *Journal of Adolescence* 21, pp. 569–583.

Jackson, S. and McParlin, P. 2006. The education of children in care. *The Psychologist* 19(2).

Jackson, S. et al. 2001. *Better education, better futures: Research, practice, and the views of young people in public care*. Ilford: Barnardo's.

Jackson, S. et al. 2005. *The costs and benefits of educating children in care*. In Chase, E. et al. *In care and after: A positive perspective*. London: Routledge.

Kim-Cohen, J., Caspi, A., Moffitt, T. E., Harrington, H., Milne, B. J., and Poulton, R. 2003. Prior Juvenile Diagnoses in Adults with Mental Disorder: Developmental Follow-Back of a Prospective-Longitudinal Cohort. *Arch Gen Psychiatry* 60 (7), pp.709–717.

Lamond, C. 2011. Hard to teach, hard to reach, hard to justify: the challenge of participatory research with vulnerable young people. *e-journal of the British Education Studies Association* 4.

Lee, S., and Liu, H, A. 2016. A pilot study of art therapy for children with special educational needs in Hong Kong. *The Arts in Psychotherapy* 51, pp. 24-29.

Lenaert, B., Barry, T, J., Schruers, K., Vervliet, B., and Hermans, D. 2016. Emotional attentional control predicts changes in diurnal cortisol secretion following exposure to a prolonged psychosocial stressor. *Psychoneuroendocrinology* 63, pp. 291-295.

Malcom, A. 2018. Exclusions and alternative provision: piecing together the picture. *Emotional and Behavioural Difficulties* 23, pp. 69-80.

Mallon, J. 2005. Academic underachievement and exclusion of people who have been

looked after in local authority care. *Research in Post-Compulsory Education* 10, pp. 83-105.

Meltzer, H., Gatward, R., Corbin, T., et al (2003) The Mental Health of Young People Looked After by Local Authorities in England.

Meltzer, H., Gatward, R., Goodman, R and Ford, T. 2003. Mental health of children and adolescents in Great Britain, *International Review of Psychiatry* 15:1-2, pp.185-

187, DOI: [10.1080/0954026021000046155](https://doi.org/10.1080/0954026021000046155)

Department of Health (2005). Mental Capacity Act. London, HMSO.

McGrath, J, J. 2006. Variations in the incidence of schizophrenia: data versus dogma.

Schizophrenia Bull 32, pp. 195-197.

Millward, R., Kennedy, E., Towlson, K. and Minnis, H. 2006. Reactive attachment disorder in looked-after children, *Emotional and Behavioural Difficulties* 11(4), pp. 273-

279, DOI: [10.1080/13632750601022212](https://doi.org/10.1080/13632750601022212)

Munn, Z. 2011. Review Summaries: Rees R., Oliver K., Woodman J. & Thomas J. (2009)

Children's views about obesity, body size, shape, and weight: a systematic review. *Journal of Advanced Nursing* 67(5), pp. 954–960.

National Institute for Health and Care Excellence [NICE]. 2008. Social and emotional wellbeing in primary education. London: NICE. Available at:

<https://www.nice.org.uk/guidance/ph12> [Accessed: 21 September 2020].

National Institute for Health and Care Excellence [NICE]. 2010. Looked-after and young

people. London: NICE. Available at: <https://www.nice.org.uk/guidance/ph28> [Accessed: 01

January 2021].

National Institute for Health and Care Excellence [NICE]. 2015. Children's attachment: attachment in children and young people who are adopted from care, in care or at high risk of going into care. London: NICE. Available at <https://www.nice.org.uk/guidance/ng26> [Accessed 19 January 2021].

National Institute for Health and Care Excellence [NICE]. 2018. Attention Deficit Hyperactivity Disorder: Diagnosis and Management. London: NICE. Available at: <https://www.nice.org.uk/guidance/ng87/chapter/recommendations#managing-adhd> [Accessed: 11 February 2021].

National Institute for Health and Care Excellence [NICE]. 2019. Depression in children and young people: identification and management. London: NICE. Available at: <https://www.nice.org.uk/guidance/ng134> [Accessed: 22 February 2020].

O'Connell, J, K., and O'Connell, D, K. 2020. Psychological Benefits of Physical Activity in Children with Mental Health Disorders: Psychological Benefits of Physical Activity. *International Journal of Child Development and Mental Health* 8 (1), pp. 53-62.

O'Higgins, A. Sebba, J., and Gardner. F. 2017. What are the factors associated with educational achievement for children in kinship or foster care: A systematic review? *Children and Youth Services Review* 79, pp. 198-220.

O'Sullivan, A and Westerman, R. 2007. Closing the Gap: Investigating the Barriers to Educational Achievement for Looked after Children 31(1), pp. 13-20.

Parker, E. 2017. An actor-network theory reading of change for children in public care. *Br Educ Res J* 43 (1), pp. 151-167.

Pattman, R. et al. 2004. *Memories of Youth and Interviewing Young People: Reflections on*

Young People's Understandings of Drug Use in Robinson, D. et al. *Narrative, Memory and Identity: Theoretical and Methodological Issues*. Huddersfield: University of Huddersfield Press, pp. 67–75.

Pecora, P. J. 2012. Maximizing educational achievement of youth in foster care and alumni: Factors associated with success, *Children and Youth Services Review* 34, pp. 1121– 1129.

Pierrehumbert, B., Torrisi, R., Glatz, N., Dimitrova, N., Heinrichs, M. and Halfon, O. 2009. The influence of attachment on perceived stress and cortisol response to acute stress in women sexually abused in childhood or adolescence. *Psychoneuroendocrinology* 34 (6), pp. 924-938

Julia C. Poole, J. C., Dobson, K.S. and Pusch, D. 2017. Childhood adversity and adult depression: The protective role of psychological resilience. *Child Abuse & Neglect* 64, pp. 89-100.

Porter, J. (2015). *Understanding and responding to the experience of disability*. Oxfordshire: Routledge.

Porter, J., Daniels, H., Martin, S., Hacker, J., Feiler, A. & Georgeson, J. (2010). *Testing of Disability Identification Tool for Schools*. Department for Education.

Schuengel, C., Tharner, A. 2020. Patterns of parenting: revisiting mechanistic models, *Attachment & Human Development* 22(1), pp. 66-70.

Sebba, J. et al. 2015. *The educational progress of looked after children in England: Linking care and educational data*. Oxford: Rees Centre for Research in Fostering and Education and University of Bristol).

Slayton, S. C., D'Archer, J. and Kaplan, F. 2010. Outcome studies on the efficacy of art therapy; a review of the findings. *Art Therapy* 27 (3), pp. 108-118.

Solomon, J., George, C. and de Jong, A. 1995. Children classified as controlling at age six: evidence of disorganized representational strategies and aggression at home and at school. *Dev. Psychopathol* 8, pp. 679-699.

Soneson, E., Howarth, E., and Ford, T. 2020. Feasibility of School-based identification of children and adolescents experiencing, or at risk of developing mental health difficulties: A systematic review. *Prev Sci* 21, pp. 581-603.

Stallard, P., Tylor, G., and Anderson, R. (2014). The prevention of anxiety in children through school-based interventions: study protocol for a 24-month follow up of the PACES project. *Trials* 15 (17).

Thomas-Hughes, H. 2017. Ethical 'mess' in co-produced research: reflections from a UK-based case study. *International Journal of Society and Research Methods*.

Tyler J, H. and Lofstrom, M. 2009. Finishing high school: Alternative pathways and dropout recovery. *The Future of Children* 19(1), pp. 77-103.

Waller D. 2006. Art Therapy for Children: How It Leads to Change. *Clinical Child Psychology and Psychiatry* 11(2), pp.271-282.

Walsh M., Oepen J., and Prior, H. 2015. Adjustment of Time Perception in the Range of Seconds and Milliseconds: The Nature of Time-Processing Alterations in Children With ADHD. *Journal of Attention Disorders* 19(9), pp.755-763.

Woolgar, M. and Baldock, E. 2015. Attachment disorders versus more common problems in looked after and adopted children. Comparing community and expert assessments. *Child and Adolescent Mental Health* 20(1), pp.34-40.

Wickenden, M. and Kembhavi-Tam, G. 2014. Ask us too! Doing participatory research with disabled children in the global south. *Childhood* 21(3), pp. 400-417

Zetlin, A. 2006. The experiences of foster children and youth in special education. *Journal of Intellectual and Developmental Disability* 31(3), pp.161-165.

Zetlin, A. G. Weinberg, L. A. and Shea, N. M. 2006. Seeing the whole picture: Views from diverse participants on barriers to educating foster youths, *Children and Schools* 28(3), pp. 165– 17.

Appendix

Appendix A

Pupil Questionnaire 'What Works For You?'

Questionnaire

Barriers to Learning

HJH V1.0 02/01/2020

Description

The questionnaire provides a bank of questions that schools can use to explore the barriers and supports for pupils in school. It uses both open and closed questions using symbolic faces for pupils to rate their experiences as well as more conventional response options. It explores children's feelings about different times and places within the school, different types of organisation for learning. It asks about children's experience of difficulties as well as what child find supports them. It also asks them if they have any difficulty, health or medical condition or disability and if it has gone on for a long time. In this respect it asks similar questions to the parent questionnaire.

Presentation The Facilitator

Although this is an activity that pupils can complete on their own it still has to be introduced by explaining why pupils are being asked these questions, who will have access to the information and how the school will use the information to bring about change. It is also important to reinforce the notion that everybody finds some things in life difficult.

The Format

The questionnaire was designed to be used online and this allows the easy use of photographs and colourful symbols that make any questionnaire more attractive. There is some research to suggest that pupils engage more with an online format and it adds to a feeling of anonymity. In contrast a black and white photocopy may be approached as a lesson sheet and completed as compliance but without personal thought or reflection.

The Content

Schools may want to customize the questionnaire. They may wish to simplify the response format for some pupils, possibly giving three options instead of five. They may wish to slightly shorten it. It is useful to remember that easier questions should appear first on the questionnaire and that pupils may write less in the open questions towards the end of the questionnaire.

Anonymity

The advantage of a questionnaire is that the pupils' responses are not mediated by the presence of an adult. We have made the questionnaire anonymous with the option for pupils to write their name, especially if they wish to have a follow up conversation with an adult. However if schools wish to use the information to support the learning of individuals in particular need of help, they will want to weigh up whether they want to promise pupils anonymity or confidentiality. The latter has important implications for the way the data is collated and stored and who has access to this.

Collating the Answers

While questionnaires have the advantage of being easy to administer it can be time consuming to collate the answers. There are advantages therefore to making it available online where pupil responses can be collected in a data base. A database can be used to look at differences between groups in terms of what they find difficult and what is supportive. This is important as the aggregated data can inadvertently marginalise the needs of particular groups and make whole school responses inappropriate.



What works for you? - Barriers and supports at school

This is an opportunity for you to show how you feel about your experiences in school.

The school needs to know about this so that the right help and support can be provided.

What you tell us will be confidential; no one will know it was your questionnaire.

The questions that follow are for you to answer on your own. It is very important that you give honest answers. You can miss out any questions you don't want to answer.

The questions below are about how you feel about different things.

There are some faces showing different types of feelings.



Please choose the one that comes closest to showing how you feel about the following things by marking it with a **X**

1. How do you generally feel at different times and in different places?



a) During lessons



b) During break



c) At lunch time



d) Outside, moving between buildings



e) During special events (like school concerts, charity days)



f) On school trips and visits



Can you say a bit more?



What helps at different times?

What makes things more difficult?

2) How do you feel about different kinds of lesson?

a) When the whole class is working together



very good good okay not okay bad very bad

b) Working by yourself



very good good okay not okay bad very bad

c) Practical classes (like art, food tech., lab sessions and so on)



very good good okay not okay bad very bad

d) Sports, games, dance, gym



e) Tests, assessments, exams



f) Homework



Can you say a bit more?



What helps at different times?

What makes things more difficult?

The next few questions are about any difficulties you might have.

Check the answer that fits best with the way you feel.

3. Do you find it difficult to join in with school activities?

- Yes, all the time
- Yes, most of the time
- Yes, some of the time
- Very occasionally
- No, not really
- Never

4. Do you find it difficult to learn in class?

- Yes, all the time
- Yes, most of the time
- Yes, some of the time
- Very occasionally
- No, not really
- Never

5. Do you find it difficult to get on with your classmates?

- Yes, all the time
- Yes, most of the time
- Yes, some of the time
- Very occasionally
- No, not really
- Never

6. Do you find it difficult to get on with your teachers and / or other people who work in the school?

- Yes, all the time
- Yes, most of the time
- Yes, some of the time
- Very occasionally
- No, not really
- Never

7. And what about life outside school? Do you find it difficult to do the things you want to do?

- Yes, all the time
- Yes, most of the time
- Yes, some of the time
- Very occasionally
- No, not really
- Never

8. What about missing school? Do you have to take time off school?

- Yes, frequently
- Yes, occasionally
- Not very often
- Never

9. Can you say some more about the things that you find difficult?

10. Can you say something about the things that you find easy or you are good at?

11. Do you have a health or medical condition?

(This might be something like anxiety or depression, arthritis, asthma, autism, cancer, diabetes, epilepsy, hearing or visual impairment, chronic fatigue syndrome (ME), mental health difficulty, mobility problems, learning difficulty, or physical difficulties?)

- Yes
- No

Can you say some more about this?

If you answered YES to this question then please answer the next 2 questions. If you answered NO then skip the next 2 questions.

12. Would you say that your health or medical condition has gone on for a year or more?

- Yes
- No

13. Does it come and go, or is it the same most days?

- It comes and goes
- About the same from day to day
- It flares up under certain circumstances

Can you say some more about this?



14. When you need support, where are the best places to find it?

- Your classmates
- Your teachers
- Other people in school
- Your family
- Other people outside school

15. If you had special powers what is the one thing you would like to change about your school?

Filling in this questionnaire might have raised some issues which you need to think about some more.

Please indicate If you would like to talk to someone in confidence
in school at home somewhere else

Please contact..... who will support you in confidence in doing this.

But if you are happy to give your name, then you could write that instead

.....

Thanks for taking the time to complete this questionnaire.

Your responses will be used to help people think about how to improve different aspects of school life.

Copywrite www.bath.ac.uk/research/pdes

Appendix B**Re: Dissertation permissions**

Jill Porter <j.porter@reading.ac.uk>

Thu 14/11/2019 01:59

To:

- Hannah Hind <hannahhind@outlook.com>

Hallo Hannah

We are happy for you to use the questionnaire as long as you acknowledge it's origins. We used it both as hard paper copy and online using Smartsurvey. The findings are written up - probably with most detail in the 2015 book. I'm in the middle of moving house but will be back in the office next week if you have any queries.

We would be very interest to hear more about your plans.

Kind regards

Jill

Appendix C



School of Medicine
Yr Ysgol Meddygaeth

Cardiff University
Main Building
Heath Park
Cardiff CF14 4XN
Wales, UK
Prifysgol Caerdydd
Prif Adeilad
Parc y Mynydd Bychan
Caerdydd CF14 4XN
Cymru, Y Deyrnas Unedig

Monday 3rd February 2020

Hannah Hind,
Centre for Medical Education,
School of Medicine,
Cardiff University,
Heath Park.

Dear Hannah

Re: Barriers to learning: from the perspective of looked after children

SMREC Reference Number: 20/04

This application was reviewed by the Committee in January 2020.

Ethical Opinion

On review, the Committee have granted ethical approval for this study.

As condition of this approval, the Committee would ask that you review and revise for the Child's Participant Information Sheet to ensure that it is age appropriate. Also, revise the Consent Form to include a signature from the researcher. Please send all revised documents addressing the points above to the Committee Secretary, Mrs Claire Evans, via email.

Conditions of Approval

The Committee must be notified of any proposed amendments to the methodology and protocols outlined in your submission. Also, any serious or unexpected adverse reactions that may arise during the course of the study must be reported to the Committee. As a condition of this approval, the Committee retains the right to audit and review the study for our own records.

Documents Considered

Document Type:	Version:	Date Considered:
Application	No Date or Version	January 2020
Project Proposal	No Date or Version	January 2020
Legal Guardian Information Sheet and Consent	V1.0 25/11/2019	January 2020
Participant Information Sheet Assent Form	V1.0 25/11/2019	January 2020
Pupil Questionnaire	V1.0 02/01/2020	January 2020

With best wishes for the success of your study.

Yours sincerely,

Dr Jonathan Hewitt
Chair, School of Medicine Research Ethics Committee

CC: Sian Edney



Registered Charity: no. 1128910
Flower: 067493020; 0111438855

Appendix D

Legal Guardian Consent Form

Barriers to Learning

V1.0 25/11/2019

Legal Guardian Information Sheet and Consent Form

An unblinded primary research study investigating the perspectives of looked after children in an SEMH primary school regarding barriers to learning.

Investigator: Hannah Hind BSc**Consent ID** (Investigator use only): e.g **A-HJH-ELM-001****Contact info:** hindhj@cardiff.ac.uk**Participant ID** (Investigator use only): e.g **C-HJH-ELM-001**

Please use the above information to contact the researcher with any questions or concerns about this study.

NB: This is a 3-page document, please ensure all pages are present before completion.

This invitation is for the person with legal responsibility for **(insert pupil name)**.

Introduction

You are receiving this letter to inform you that the child you are legally responsible for is being invited to take part in a research study. Before you decide whether you would like to give permission for your child to take part it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please ask me if there is anything that is not clear or if you would like more information. Please take time to decide whether or not you wish your child to take part. Thank you for reading this.

Investigator Information

My name is Hannah Hind and I am currently working at Elm Tree Community Primary School. I have a Psychology BSc Honours Degree from The University of Liverpool. Prior to Elm Tree I worked in Clinical Research conducting Psychometric Testing for people with various diagnoses such as mental health conditions and dementias. I am now hoping to conduct a research project at Elm Tree Primary School in order to collect valuable information from the pupils about their experiences at the school. This study is being completed as part of a Psychiatry Masters programme with the University of Cardiff's school of medicine and is being supervised by Dr Sian Edney.

If you have any questions about any aspect of this study please contact me at hindhj@cardiff.ac.uk . It may also be possible to arrange telephone contact with by calling Elm Tree School on 01695 50924, I will be able to reach out after school hours.

What is the purpose of the study?

The main purpose of this study is to further understanding of the barriers that children with social, emotional and mental health needs may face whilst attending primary school. This study aims to identify additional barriers that looked after children may face compared to their peers. It is important to understand these barriers in order to provide support and intervention where necessary to help all children achieve their academic potential. Children should be involved in decisions about their care wherever possible and so this study aims to make the children active participants.

Participation will involve the child completing a questionnaire designed by the University of Bath and having a discussion with the investigator, which will include questions about their school experiences. Approximately 24 students will be invited to take part.

Participation in this study is entirely voluntary and your decision will have no effects on you or your child's relationship with school or staff.

Who can take part in the study?

- Children of any gender aged 7-11 years of age.
- A child who is considered 'looked after' as defined by the Children Act 1989;
 - a court has granted a care order to place a child in care, or a council's children's services department has cared for the child for more than 24 hours.
 - living with foster parents
 - living in a residential children's home or
 - living in residential settings like schools or secure units.

Or

- a child of similar age and gender at the school that agrees to participate.

Benefits of participation

There may be no direct benefit of participation in the study. However, having space to discuss opinions and beliefs about school may improve the child's self-esteem and help them feel valued at Elm Tree. The results of this study may help improve the experiences of looked after children at Elm Tree Primary School.

The results of this trial may be used to inform further research.

Potential Risks

It is possible that answering questions about school may lead the child to feel upset. At no point will the child be expected to answer any questions that they are not comfortable with. Children will be informed prior to any activity that they have the right to stop at any time.

Confidentiality

Information gathered from this study will be recorded using a unique participation number. Data collected will not be shared with any non-study related staff with a children's names attached. A copy of each consent form will be kept in order to demonstrate informed consent and to record each child's participant ID. This will be kept in a secure location and stored for at least 5 years. Personal data will be treated in the strictest confidence, no-one outside of the normal school staff will have access to yours or your child's personal information.

Consent

The information provided by you, or the child in your care, is voluntary. There is no obligation to consent, and consent can be withdrawn at any time. Consent provided by you, or the child, will not constitute an obligation to participate. If you would like to consent, then please complete the instructions on the following page and return this consent form by passing to the school escort for your child.

Your child will then be asked to participate, and you will receive a letter explaining the child decision.

Please keep the second copy of this letter for your reference.

Consent Form

Consent ID: _____

Please read the six following statements. If you agree with the statements place your initials in the boxes provided. There should be six sets of initials for consent.

Once completed, please print your name and sign and date in the spaces provided.

Please state clearly your relationship to the child, the child's name and provide date of birth for administration purposes.

Statement	Please Initial
I fully understand the information provided to me in the information sheets above dated 25/11/2019.	
I have been given ample time to read the information sheet and I have had the opportunity to ask questions.	
I understand my rights to withdraw consent at any time for any reason.	
I understand the data collected will be reported in a confidential manner.	
I confirm I have legal responsibility for the child.	
I consent to the child's participation	

Name of consenting adult (PRINT): _____

Signature of Consenting adult: _____ Date of consent (DD/MM/YYYY): _____

Relationship to child: _____

Name of Child: _____

Child's date of birth (DD/MM/YYYY): _____

Appendix E

Participant Assent Form

Barriers to Learning

V1.0 25/11/2019

Participant Information and Assent Form**An unblinded primary research study investigating the perspectives of looked after children in an SEMH primary school regarding barriers to learning.****Investigator:** Hannah Hind BSc**Participant ID** (Investigator use only):**Adult consent form ID** (Investigator use only):***NB:** This document contains 2 pages. Please ensure both are present prior to completion.***Introduction**

You are being invited to take part in a project being conducted at your school. This study is looking at the opinions of different pupils who attend Elm Tree Primary School in order to understand your experiences better. Your parent or guardian knows that you have received this invitation.

What would I need to do?

If you would like to take part, you will be asked to fill in a sheet and to have a conversation about school.

The questionnaire will take a few minutes to fill out. The discussion may take a few minutes or more depending on how much you would like to talk about school.

You do not need to take part and will not be in any trouble if you decide that you would not like to. Even if you decide to take part you are free to change your mind later.

Confidentiality

Confidentiality means that your answers will be kept safe. They will not be shown to anybody else at school. A report will be written after everybody's answers have been looked at, but your name will not be included. This means that you do not need to worry about your answers getting you into any trouble.

Safeguarding Officer

The normal school rules still apply, and so information will be shared if you are in any danger or at risk of not being safe.

If you need to talk about anything then we can ask Jane Brownbill to talk to you. If you feel later on that you need to talk please let your class teacher know and we can arrange a discussion.

Benefits of participation

You may not benefit from being in this study, but hopefully you will feel that your opinions are valued and your answers may help children at Elm Tree have a more positive experience in the future.

Potential Risks

It is possible that answering questions about school may make you feel sad. If this happens you can stop at any time.

Assent Form

Please put your initials in the boxes below if you agree with what is written.

Statement	Please Initial
I understand that I will be asked to complete a questionnaire.	
I understand that I can chose not to answer any question	
I understand that I will be asked to take part in a conversation about school.	
I understand that my answers won't be shared with my name on them.	
I understand that I can change my mind about taking part at any time and do not need to give a reason.	
I have been given enough time to think about taking part in this study.	
I have asked any questions I have and I know that I can ask any questions that I need to whilst taking part.	
I am happy to take part in this study.	

Please write your name here if you agree to take part: _____

Another adult can sit with us if you would like them too.

Accepted

Declined

Investigator Use only

Pupils name:

DOB:

Date of assent:

Appendix F
Raw T-Test Data

Table 6. to show results of independent t-test conducted on data for Q1A-Q1F entitled 'How do you feel at different times and places'.

Independent Samples t-test for Questions 1A-1F										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Q1A	Equal variances assumed	0.031	0.863	0.516	10	0.617	0.50000	0.96896	-1.65898	2.65898
	Equal variances not assumed			0.516	9.633	0.617	0.50000	0.96896	-1.67019	2.67019
Q1B	Equal variances assumed	0.250	0.628	-0.500	10	0.628	-0.33333	0.66667	-1.81876	1.15209
	Equal variances not assumed			-0.500	9.901	0.628	-0.33333	0.66667	-1.82078	1.15411
Q1D	Equal variances assumed	0.194	0.669	-0.752	10	0.469	-0.83333	1.10805	-3.30223	1.63556

	Equal variances not assumed			-0.752	9.966	0.469	-0.83333	1.10805	-3.30338	1.63672 Continued
Q1C	Equal variances assumed	15.000	0.003	1.936	10	0.082	1.00000	0.51640	-0.15061	2.15061
	Equal variances not assumed			1.936	5.000	0.111	1.00000	0.51640	-0.32744	2.32744
Q1E	Equal variances assumed	0.380	0.551	0.000	10	1.000	0.00000	0.76739	-1.70985	1.70985
	Equal variances not assumed			0.000	8.298	1.000	0.00000	0.76739	-1.75859	1.75859
Q1F	Equal variances assumed	2.500	0.145	-0.632	10	0.541	-0.33333	0.52705	-1.50767	0.84100
	Equal variances not assumed			-0.632	6.098	0.550	-0.33333	0.52705	-1.61798	0.95132

Table.7 results of an independent t-test for Q2A to Q2F entitled 'How do you feel about different lessons?'

Independent Samples Test for Q2A-Q2F										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	Df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Q2A	Equal variances assumed	10.417	0.009	1.071	10	0.309	0.83333	0.77817	-0.90055	2.56721
	Equal variances not assumed			1.071	7.139	0.319	0.83333	0.77817	-0.99951	2.66618
Q2B	Equal variances assumed	0.030	0.865	-0.614	10	0.553	-0.66667	1.08525	-3.08476	1.75143
	Equal variances not assumed			-0.614	9.912	0.553	-0.66667	1.08525	-3.08769	1.75435
Q2C	Equal variances assumed	1.750	0.215	0.307	10	0.765	0.16667	0.54263	-1.04238	1.37572
	Equal variances not assumed			0.307	6.963	0.768	0.16667	0.54263	-1.11781	1.45115
Q2D	Equal variances assumed	0.120	0.736	0.611	10	0.555	0.66667	1.09036	-1.76281	3.09614
	Equal variances not assumed			0.611	9.969	0.555	0.66667	1.09036	-1.76385	3.09718 Continued

Q2E	Equal variances assumed	0.138	0.718	-0.131	10	0.899	-0.16667	1.27584	-3.00942	2.67609
	Equal variances not assumed			-0.131	9.903	0.899	-0.16667	1.27584	-3.01320	2.67987
Q2F	Equal variances assumed	0.038	0.850	0.644	10	0.534	0.83333	1.29314	-2.04797	3.71464
	Equal variances not assumed			0.644	9.952	0.534	0.83333	1.29314	-2.04987	3.71654

Table.8 shows results for Q3 'Do you find it difficult to join in with school activities?', Q4 'Do you find it difficult to learn in class?', Q5 'do you find it difficult to get on with your classmates, Q6 do you find it difficult to get on with staff and Q7' outside of school, do you find it difficult to do the things you want to?.

Independent Samples Test for Q3, Q4, Q5, Q6, Q7										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Q3	Equal variances assumed	0.161	0.697	0.150	10	0.883	0.16667	1.10805	-2.30223	2.63556
	Equal variances not assumed			0.150	9.966	0.883	0.16667	1.10805	-2.30338	2.63672
Q4	Equal variances assumed	0.593	0.459	-0.663	10	0.522	-0.66667	1.00554	-2.90715	1.57382
	Equal variances not assumed			-0.663	9.448	0.523	-0.66667	1.00554	-2.92503	1.59169
Q5	Equal variances assumed	2.000	0.188	-1.225	10	0.249	-1.00000	0.81650	-2.81927	0.81927
	Equal variances not assumed			-1.225	9.615	0.250	-1.00000	0.81650	-2.82918	0.82918
Q6	Equal variances assumed	0.000	1.000	-0.582	10	0.573	-0.66667	1.14504	-3.21797	1.88464 Continued

	Equal variances not assumed			-0.582	9.997	0.573	-0.66667	1.14504	-3.21807	1.88474
Q7	Equal variances assumed	0.052	0.825	1.398	9	0.196	1.70000	1.21610	-1.05100	4.45100
	Equal variances not assumed			1.393	8.509	0.199	1.70000	1.22066	-1.08577	4.48577

Table 8. shows t-test results for Q3, Q4, A5, Q6, Q7. shows results from a t-test conducted on data for Q1A-Q1F. shows results from a t-test conducted on data for Q1A-Q1F. No significant effect of being a LAC child was found between the mean answers of the 6 LAC children and 6 Non-LAC children. None of the t statistics had a significance of $p < 0.05$ or below and so none of the results meet the confidence levels set by the current study. CI intervals for all questions cross the range of 0, indicating that any differences between answers may be none. The following table shows results for Q14 of the questionnaire.

Table 9. Results of an independent t test for Q14 'When you need support, where are the best places to find it?'

Independent Samples Test for Q14										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Q14	Equal variances assumed	25.974	0.000	-2.150	10	0.057	-1.16667	0.54263	-2.37572	0.04238
	Equal variances not assumed			-2.150	5.000	0.084	-1.16667	0.54263	-2.56153	0.22820

The answers from LAC children (N6) were compared to the answers of the 6 Non-LAC participants (M=-1.16667, SD= 0.54263) with t (5) =-2.150, p=0.084.

