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A Focused Ethnographic Study of Children's Perspectives and Experiences of Being Obese and Participating in an Obesity Intervention Program

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Abstract

Childhood obesity has risen dramatically and become a global health issue, with significant physical and psycho-social health consequences. Although there has been significant research on childhood obesity and its management and treatment, there have been very few attempts to investigate the experience and perception of children living with obesity as well as their intervention experiences. Understanding the perceptions of children with obesity is necessary for developing and improving strategies for tackling childhood obesity.

A focused ethnographic study was conducted with thirteen children aged 10 to 15 living with obesity. Data was collected using demographic information forms, observations, semi-structured interviews, talk-and-draw sessions, and diaries between the 8th May and 17th July 2019 (eleven weeks), when the psycho-social intervention (PSI) programme was started in the SHINE (Self-Help, Independence, Nutrition, and Exercise) Health Academy. During the data collection period, seventeen interviews were conducted with thirteen children. A thematic analysis approach was used to analyse the data.

Findings from children's accounts reveal that obesity affects every aspect of their lives (e.g. physical, social, individual, and psycho-social) lowering their everyday activity, quality of life and well-being. Children were more concerned with the psycho-social implications of their weight-related difficulties rather than the physical.

The findings also demonstrate that children's expectations of a multidisciplinary intervention programme are related to improving and overcoming weight-related difficulties. Children described how the intervention has enabled them to gain a clear understanding of how to manage obesity in relation to a healthy and balanced diet in order to achieve their desired goals, as well as reducing the psycho-social impact of obesity to them. They demonstrated physical, individual, emotional, and psycho-social beneficial improvements by applying the information and receiving support they gained from the programme to their life.

This study demonstrates that when children with obesity are approached with an appropriate strategy based on their experiences of being obese and intervention, favourable effects are attained. Therefore, this study may help inform policymakers and intervention programme providers for better understanding weight-related difficulties and intervention experience that children encountered and develop a more holistic treatment plan. Greater effort must be made to mitigate children's weight-related difficulties and increase their engagement in the programme.

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Abbreviations

WHO	World Health Organization
NCMP	National Child Measurement Programme
BMI	Body Mass Index
CDC	The Centres for Disease Control
IOTF	The International Obesity Task Force
UK90	The UK National 1990 growth reference
NICE CG	National Institute for Health and Care Excellence Clinical Guidelines
NHS	National Health Service
WMS	Weight Management Services
zBMI	BMI adjusted for age and sex
HRQOL	Health-related Quality of Life
UNESCO	The United Nations Educational, Scientific and Cultural Organisation
ECCE	Early Childhood Care and Education
UNICEF	The United Nations International Children's Emergency Fund
UNCRC	The United Nations Convention on the Rights of the Child
SHINE	The Self-Help, Independence, Nutrition, and Exercise Health Academy
DBS	Disclosure and Barring Service
PSI	Psycho-social Intervention
TIDieR	The Template for Intervention Description and Replication
DoH	Department of Health
SCA	The Stepped Care Approach
BEACH	BEACH (Behaviour Modification, Exercise, Anxiety Management, Confidence Building and Healthy Eating)
GP	General Practitioner

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PREFACE

My decision to pursue a PhD in children living with obesity stems from my belief that every child is unique and that we need to understand children's well-being in the light of their rights. This thesis incorporates the ideas, beliefs, and individual social realities of children living with obesity, as well as my interpretivist epistemological stance of knowledge based on the children's perceptions and experiences. Therefore, this thesis presents the perspectives of children living with obesity and their participation in an obesity intervention programme through the lens of my own experiences. Accordingly, I briefly introduce myself below.

I qualified as a nurse from Karadeniz Technical University (Turkey) in 2009 and as I carried out clinical placements, I realised that Paediatric Nursing was where I wanted to focus my career. While adults can articulate their emotions and needs, a child may struggle to express theirs. As a paediatric nurse, I realised that we were the voice of children seeking health and well-being, and that care for children entails collaborating closely with parents or guardians.

My personal interest in the topic of children living with obesity developed while working as a nurse at a family health centre in a primary care health service between 2013 and 2016. During this period, I developed expertise and knowledge in the field of healthy child screening. I learned about variations in children's growth and development, the impact of social structures on children, and the importance of children's relationships with their peers. The experience gained in a family health centre undeniably shaped this doctoral study. While working in this role, a major issue in Turkey caught my attention: childhood obesity.

My eagerness to pursue my nursing education and my interest in childhood obesity led me to being awarded a full scholarship from the Turkish Ministry of Education for my PhD studies on Paediatric Nursing. After being a successful applicant I began focusing on my area of interest and found that there is no systematic national studies investigating the prevalence and trends of childhood obesity in Turkey and how to deal with children living with obesity. Also, the voices and rights of children and children living with obesity have tended to be neglected.

Children living with obesity in Turkey were often perceived as healthy by their relatives, particularly, by their grandparents, and seemed unaware of the potential obesity-related health difficulties they might face in the future. Additionally, the Turkish family structure mostly sees family members residing with their elders, and although families agree about

working in collaboration to improve their children's health, grandparents are known to overfeed grandchildren.

Similarly, when I recall my childhood, being overweight was associated with being healthy and well cared for. During primary school years, I was a 'big' girl, and my family and the elders often complimented me on how wonderful I looked and gave praise to my appearance. For a while during high school I was 'skinny', and I can state that when I was 'skinny', I was subjected to more bullying than when I was obese, particularly by those who were middle-aged and elderly. Deep down, I have continued to struggle with my appearance later on in life past childhood due to conflicting views and perceptions held around me. As a nurse, I am aware of the implications of what being overweight means, but then the Turkish culture and society I am accustomed to, praise the appearance of individuals who carry more weight. These are my lived and professional experiences which connects me to the topic of interest studied, and why I decided to explore the lived experiences of children living with obesity through qualitative research methods.

CHAPTER ONE: BACKGROUND

Introduction

Despite preventative intervention initiatives, childhood obesity continues to be a significant and distinctive global health threat, including in the UK. Existing literature concerning childhood obesity has tended to focus on children's guardians or gatekeepers rather than considering children's own thoughts and rights regarding living with obesity. However, in order to tackle childhood obesity and enhance the approach of intervention programmes, children's experiences of living with obesity, and of their obesity intervention participation experiences, need to be understood from their perspective. This thesis therefore focuses on children's perspectives on living with obesity and their experiences of participating in an obesity intervention programme. In doing so, it hopes to make a contribution to help understand and address childhood obesity and the challenges that lie ahead for managing and treating this epidemic. To do this, I first critically examined existing understandings around childhood obesity and its treatment by scoping the literature to help identify relevant research gaps. Following this, I identified a research question and then situated the thesis within a focused ethnographic approach. This approach understands and accepts children as active agents in order to study their experiences of being a child. It also emphasizes the importance of children's positionality in health-related research, which Prout and James (2015) refer to as the "New (middle-aged) Sociology of Childhood."

1.1 The prevalence of childhood obesity

Obesity is defined by the World Health Organization (WHO) (2017) as a physical condition caused by excessive fat accumulation stored in the body. According to WHO latest measurements in 2016, its prevalence has become a global public health concern which affects more than 650 million adults (aged 18 and over) and 124 million children aged 5-19 (WHO, 2020). Based on this data, the prevalence of obesity in adults is greater than in children. However, although the rate of obesity has nearly tripled in adults between 1975 to 2016 (WHO, 2020), this rate has increased more than 10 times in children in the same period, from 11 million to 124 million (WHO, 2020; Federation, 2019; Brogan, 2017). According to 42-year (from 1975 to 2016) estimated trends from 200 nations, obesity in children and adolescents aged 5-19 years dramatically increased from 0.7% in 1975 to 5.6% in 2016 in females and from 0.9%

in 1975 to 7.8% in 2016 in boys (NCD Risk Factor Collaboration (NCD-RisC), 2017). Although there is a lack of standardization to assess the comparison of prevalence data in children and adolescents around the world (Bosch et al., 2004), these alarming figures have made childhood obesity one of the greatest public health issues of the twenty-first century, impacting every country in the world (WHO, 2020; Federation, 2019).

One of the countries with high rates of childhood obesity is the UK. The obesity crisis began in the mid-1980s in the UK (Pearce, Webb-Phillips, & Bray, 2016; Reilly, 2007). According to an updated action plan to tackle childhood obesity in the UK in 2017, childhood obesity figures indicate that about a third of children between the ages of 2 and 15 are overweight or obese (Department of Health, 2017). According to the National Child Measurement Programme (NCMP) (2020) child obesity profile, the proportion of obese and overweight children in reception year was 22.9% in 2006/7 and had increased to 23.0% in 2019/20, however that of children in year 6 was 31.7% in 2006/7 and it has reached 35.2 in 2019/20. Notably, although the percentage of overweight children in year 6 remained the same at 14.2%, the proportion of obese children in year 6 rose from 17.5% to 21%, between the same year (NCMP, 2020b). According to NCMP statistics, (Lifestyle statistical team & NHS Digital, 2019) in both age categories, boys had a greater prevalence of obesity than girls in 2018/19 school year. In reception, 10.0% of boys were obese, compared to 9.4% of girls. In year 6, 22.5% of boys were obese, compared to 17.8% of girls. Ongoing studies suggest that most children who are obese are also obese as adults. (Ward et al., 2017; Gulati, Kaplan, & Daniels, 2012; Reilly, 2007; Reilly et al., 2002). Therefore, those statistics show that the obesity prevalence among children will continue to be a major health threat in the UK and also globally.

1.2 Obesity definition, classification and the usage of the Body Mass Index (BMI)

The terms obesity and overweight are a clinical definition of the amount of excess body fat (adiposity) in the body. The classification of adiposity, namely obesity or being overweight can be classified by using cut-off points of Body Mass Index (BMI); the ratio of one's weight in kilograms to height square in metres (kg/m^2). While it has been validated for adults, the relationship between adiposity and BMI cut-off points in childhood varies according to gender and age (Ells et al., 2015; Must & Anderson, 2006; Cole et al., 2000) and BMI cut-off point criteria are often evaluated in percentiles in children's growth charts (Ells et al., 2015). Therefore, as Ells et al. (2015) point out, there are no universal BMI standards for determining childhood obesity, since some countries developed and use their own growth references, such

as The Centres for Disease Control (CDC) growth reference for US (Canada also use the same reference) (CDC, 2002), The International Obesity Task Force (IOTF) growth reference for Brazil, Great Britain, Hong Kong, Singapore, United States, and The Netherlands (Kêkê et al., 2015), WHO growth reference for children aged 5 to 19 years (WHO, 2021) , and the UK National 1990 (UK90) growth reference (Cole, 1997).

In relation to discussing children's weight status by age and sex, UK90 definitions are utilised, and frequently used for growth charts in England (Ells et al., 2015). The UK90 measurement chart was produced using population monitoring cut points from multiple surveys conducted 1978-90, rather than clinical cut points (Sweeting, 2007). In the UK, normal weight has been classified as being at or above the 5th and less than the 85th percentile of BMI taking into account children's and adolescents' gender and age (Sarafrazi et al., 2014). If the BMI is between the 85th and the 95th percentiles for a child's age and gender, they are defined as overweight (Sarafrazi et al., 2014; Cole et al., 2000). Obesity is defined as being at or above the 95th percentile of BMI (Jotangia et al., 2005; Cole et al., 2000) and lastly, a BMI-for-age-and-sex above the 99.6th percentile defined severely obese (Ells et al., 2015). This measurement therefore meets the requirement for the classification of young people's weight diagnosis.

Despite the fact that BMI is frequently used to diagnose childhood obesity, it has been criticised. Since BMI does not directly assess the fat percentage in the body (Brambilla et al., 2013; NICE, 2006), the usage of BMI raises the question of whether it is an effective tool for detecting childhood obesity or not (Vanderwall et al., 2017; Brambilla et al., 2013; Saelens et al., 2007; Widhalm & Schönegger, 1999). The main limitation of the usage of BMI is that it cannot tell the difference between excess fat, muscle or bone (Etchison et al., 2011; Freedman & Sherry, 2009). Therefore, BMI may lead to misclassification of those with increased fat-free mass (such as bone and muscle) and/or muscularity such as in the case of athletes (Chu & Timmons, 2019; Etchison et al., 2011; Sweeting, 2007; Jonnalagadda, Skinner, & Moore, 2004). For example, in Etchison et al.'s (2011) study with 33896 adolescent athletes aged 11 to 19, 62% of the athletes were classified as obese based solely on BMI, which was a false positive. Similarly, 9.7% (n=14) of 203 male rugby players aged 15-18 years were categorised as overweight due to their body fat percentage, indicating that these players were misclassified as overweight due to excessive body fat (Walsh et al., 2011).

However, the variation in sex and age makes the BMI measurement of children more complex that of adults. While adults' BMI does not take age or gender into consideration, children's

BMI cut-off point is interpreted using growth percentile references in relation to age and sex, which strengthens the BMI interpretation in predicting childhood obesity. For example, Vanderwall et al., (2017) found that age has a strong interaction with total fat mass in 663 overweight and obese youth aged 4-18, and BMI z-score is a strong measurement for total fat mass over 9 aged, but not for those under 9 years old; this is BMI limitation. Similarly, Freedman and Sherry (2009) found that BMI-for-age has a high (70-80%) sensitivity and predictive value in identifying childhood obesity. Therefore, evidence-based research have demonstrated that when measured and interpreted sensitively, BMI is an effective measurement tool for diagnosing obesity in children (Gier et al., 2020; Vanderwall et al., 2017; Simmonds et al., 2015; Doak et al., 2013; Freedman & Sherry, 2009).

However, there are also alternative measurement to BMI for diagnosis of childhood obesity. Some research highlighted that identifying body adiposity with body composition (muscle mass and body fat percentage) would be a better indicator of obesity (Gier et al., 2020; Chu & Timmons, 2019). To do this, direct measuring devices such as bioelectrical impedance analysis (BIA) and dual x-ray absorptiometry (DXA) provide accurate measurements to asses body composition (skeletal muscle mass and body fat percentage) (Gier et al., 2020; Khan et al., 2020). In addition to BMI, indirect anthropometric measurements such as skinfold thickness, waist, and waist-hip ratio used to detect children with high BMI who have health concerns such as cardiovascular disease or hypertension (Casadei & Kiel, 2020; Sweeting, 2007; Must & Anderson, 2006). However, when compared to direct measurement, the indirect measuring equipment is a simple, easy to access, and affordable (Trandafir et al., 2020). According to Taxová Braunerová et al.'s (2021) study with 38,975 children aged 7 from 10 WHO European countries, in addition to BMI, waist circumference provided accurate findings in identifying children who are obese and at risk of cardiovascular disease. Similarly, referring to Etchison et al.'s (2011) study that found that skinfold testing is more accurate than BMI in physique assessment in adolescent athletes. Therefore, in children, BMI-age-and-sex with waist circumference, or skinfold testing are an effective and better obesity measure for classifying children's weight state and for preventing long-term health-related problems (Trandafir et al., 2020; Etchison et al., 2011). However, NICE only suggests using BMI in children and interpreting it with caution (NICE, 2014a). NICE also does not advocate other metrics (such as waist measurement) as a routine measure, although they can be used to provide additional information on the risk of developing long-term obesity-related health problems (NICE, 2014a).

1.3 Obesity related health problems

As concerns about the prevalence of obesity increases, so do its health-related effects, (Tiwari & Balasundaram, 2021; Feeg et al., 2014). Obesity in children can underlie and lead to the development of potential life-threatening health problems and preventable diseases including cardiovascular problems, type 2 diabetes mellitus, hypertension, stroke, asthma, sleep apnoea, orthopaedic and fatty liver disease (Faienza et al., 2020; Pearce, Webb-Phillips, & Bray, 2016; Sahoo et al., 2015; Davison & Birch, 2001) which are well documented in the literature. Additionally, research has indicated that childhood obesity, particularly in girls, causes early onset of puberty, which is associated with an increased risk of developing disease later in adulthood life (Kansra, Lakkunarajah, & Jay, 2021; Heras et al., 2020; Nieuwenhuis et al., 2020; De Leonibus et al., 2014). Physical health issues associated with childhood obesity are similar to those observed in adulthood obesity which means childhood obesity is the greatest predictor of adulthood obesity (Faienza et al., 2020; Vanderwall et al., 2017; Simmonds et al., 2015; Widhalm & Schönegger, 1999) with increased mortality and morbidity (Sutin, Stephan, & Terracciano, 2015).

Besides the physical health implications of childhood obesity, psycho-social (dys)functioning is also increasingly cited as a detrimental consequence of childhood obesity and overweight (Kansra, Lakkunarajah, & Jay, 2021; Bosch, Stradmeijer, & Seidell, 2004) that have a major impact on children's quality of life and well-being (Sagar & Gupta, 2018). Many researchers report that obesity reduces children's quality of life in different domains such as low self-esteem, social limitations, bodily discomfort (Van der Heijden et al., 2021; Blanco et al., 2020), psychological distress (depression, anxiety, and stress) (Blanco et al., 2020; Lin et al., 2020; Axsel, Myburgh, & Poggenpoel, 2016). As Blanco et al's. (2020) research highlighted in their case-control study with fifty preadolescents with obesity and fifty preadolescents without obesity aged 8-12, children with obesity have higher rates of anxiety, depression, weight-related teasing and low self-esteem compared to their normal weighted peers. These psychosocial signs can vary, so a wide range of studies has focused upon particular psychosocial challenges. In a similar way, there is a growing body of research that suggests those children with psycho-social (dys)function are more likely to have the same condition in adulthood (Blanco et al., 2020; Sanderson et al., 2011). Sanderson et al.'s (2011) 20-year cohort study with children with obese and overweight aged 7-15 years, found that childhood obesity increases the incidence of mood (major depression) and anxiety disorder in adulthood.

Therefore, these data highlight the need to prevent and treat childhood obesity in order to safeguard future public health.

1.4 Why treat obesity in children?

According to the data from 195 countries on the health effects of overweight and obesity, childhood obesity has increased globally over the last 25 years, affecting a total of 107.7 million children in 2015, and the rate of increase in childhood obesity in many countries has been greater than that of adult obesity (The GBD 2015 Obesity Collaborators, 2017). This data suggests that the rate of childhood obesity and its physical health and psycho-social related consequences track strongly to adulthood and are a global health concern, which cannot be ignored. Since obesity is not easily treatable as a condition and should be addressed before it becomes a lifetime health issue in children, preventive and treatment programmes should be given priority in public health services (Bosch, Stradmeijer, & Seidell, 2004; MacKenzie, 2000). It is also acknowledged that treating childhood obesity is complicated and costly (Department of HM Government, 2018; Summerbell et al., 2013; Ells et al., 2005). Although, childhood obesity is already a public health issue in England, it has mostly focused on prevention, and treatment services for children who are obese, and overweight have not been adequately considered (Viner et al., 2018; UK, G., 2014). Therefore, taking everything into account, the childhood period appears to be an essential era in terms of obesity prevention (Ells et al., 2005). Long-term preventive and intervention strategies are thus the most obvious and effective ways of preventing and treating existing obesity.

1.5 Childhood obesity prevention and treatment in the UK

This section will demonstrate the development of policies concerning childhood obesity prevention and treatment.

The UK government has prioritised the prevention and treatment of obesity in the general population and in children in particular. To do this, the National Institute for Health and Care Excellence (NICE) Clinical Guidelines, No 43 (CG 43) declared the first prevention, identification, assessment and management guideline related to overweight or obese children and adults (NICE, 2006). The guideline aimed to; prevent the rising the prevalence of obesity and related to disease, to increase the effectiveness of obesity intervention programmes and to enhance the care of children and adults who are obese, particularly in primary care. This guideline highlighted the specialist treatments for children who are obese and overweight as

well as those who have complex needs or have significant comorbidity. NICE CG 43 (2006) further added that the treatment decision-making process should be made in cooperation with health care providers and the patients, and that treatment plans should address individual needs, which is known tailored multicomponent approach and includes strategies such as stimulus control, self-monitoring, goal setting, rewards for reaching goals, and problem solving (NICE, 2006, p.115). However, because of this plan and the varied approaches to obesity across the country , a multidisciplinary approach was required (Royal College of Physicians, 2013). Following this, in 2013, the Action on Obesity report from Royal College of Physicians proposed multidisciplinary services to provide effective weight management services (WMS) that included a tiered system. In 2014, the tiered intervention system took the form that is still used currently (see Table 1 below) (Hazlehurst et al., 2020; NICE, 2014c; Council, 2014).

The various tiers cover different care pathways. NICE (CG 43) (2006) recommended that weight management programmes focus on behavioural change in obese or overweigh children to increase physical activity, decrease sedentary behaviours, improve eating habits and reduce energy intake. Since these behavioural changes are part of daily life activities, the main component of tiered intervention services focuses on lifestyle behaviour changes of children and their families. By doing so, the emphasis is on the attainment and maintenance of healthy weight. Therefore, the lifestyle intervention programmes, provides children with the awareness and ability to make changes or improvements to prevent additional weight gain. Tiered lifestyle WMS are;

Table 1 Tiered system

Tiered System	Explanations
Tier 1	Lifestyle behavioural changes for those who are below the overweight limit and covers universal obesity prevention services (such as promote healthy life; healthy eating and physical activity or primary care),
Tier 2	Weight management service: Preventing and treating obesity that covers lifestyle WMS for who are defined as overweight, and their needs directed intervention/s in the community,

Tier 3	Specialist obesity service is clinician led multidisciplinary WMS for who are very obese or morbidly obese individual with complex needs as well as who was unresponsive tier 2 service and whose needs are not met and
Tier 4	This covers bariatric surgery supported by tier 3 service and for whom are very or morbidly obese and who engaged with tier 3

Since 2006, management of Tier 4 surgical intervention is not generally recommended in children or adolescents, only in exceptional cases and may be considered for teenagers if they have reached or nearly reached physiological maturity (NICE, 2014c). All lifestyle weight management programmes should be designed with a multidisciplinary approach, taking into account the views of children and young people and families (NICE, 2017). In order for obese or overweight children and young people to benefit from Tier 3, they must first meet the criteria for not receiving tier 2 response and for the evaluation of both physical (such as cardiovascular disease, hypertension, or orthopaedic problems) or severe psychological comorbidities (such as low self-esteem, self-confidence, bullying) (NICE, 2014c).

Although the NICE guideline clearly outlined the tiered WM services, there is a lack of implementation and understanding of how intervention programmes work, as Brown et al. (2018) highlighted in their rapid systematic review. They also indicated that the qualifying requirements for tier 3 WM services child users are still not standardised. These notions indicate that assessing the effectiveness of Tier WM services challenging. Additionally, although obesity has both physical and psycho-social consequences, the efficacy of intervention programmes is usually measured by the physical change in children's BMI. For example, according to a literature review conducted by Zolotarjova, ten Velde, and Vreugdenhil (2018) between 1995 and 2017, from sixteen eligible studies with morbidly obese children aged 4-18 years who attended multidisciplinary therapy intervention programme (physical exercise, nutrition education, behavioural change, and family involvement), the children's BMI dropped, resulting in weight reduction and improvement in physical health (if measured cardiovascular risk factor). However, no data on the psychological development of the children was represented. On the other hand, according to data Anderson et al. (2017) collected from 223 children and adolescent with obesity who participated in a multidisciplinary community-based obesity programme (physical activity, dietary advice, and psychology sessions) with a mean age of 10.6 years, these children and adolescent had low health-related

quality of life (HRQOL) and a concerning level of psychological difficulties, and thus they added that the necessity of the improvement of HRQOL should be one of the main aim of the intervention programmes. In a similar way, Ells et al. (2018) addressed the lack of data indicative of children's quality of life and psycho-social well-being based on findings of a recent evidence synthesis investigating interventions for the treatment of children and adolescents living with obesity and overweight. Also, the majority of research, such as Zolotarjova, ten Velde, and Vreugdenhil (2018) and Anderson et al. (2017), do not reflect children's personal viewpoints directly, instead providing anthropometric measurements (such as BMI) (e.g. Doak et al., (2006) Sabin et al., (2007)) or data base on questionnaires (e.g. De Sousa et al., (2017)) respectively. As a result, additional evidence-based research is needed to better understand Tier 3 WM's effectiveness and the experiences of child users (Coulton et al., 2015). Therefore, this thesis intended to enhance our understanding of the experiences of children with obesity and their needs, contributing to what is known about their expectations and experiences of an obesity intervention programme in the UK.

Understanding Children and Childhood: Positionality

While there has been much research about the effects of obesity and potential treatment options, there have been very few studies which focus on children understanding and experience. Thus, in this section, I discuss the notion of research involving children that has been presented through the concept of (New) Social Studies of Childhood.

1.1 Criticism of Being a Child in Adult-Dominant Society

Throughout history, children have been discussed or mentioned in different academic disciplines such as biology and social sciences (Panter-Brick, 1998). However, it is difficult to say that children were the main focus of such research. Children's feelings, lived-experiences and daily lives have tended to be conveyed by their legal guardians, such as their families (Panter-Brick, 1998). The perspectives and understanding of adults took priority over those children's lived experiences (Christensen & James, 2017; Kellet, 2010; Matthews, 2007; Panter-Brick, 1998). Children's personal and emotional development and parenting issues took precedence over their own lived experiences or relationships with their peers or adults (Panter-Brick, 1998). They were understood to be vulnerable, incapable and dependent on their families as a consequence of their age and cognitive development level (Woodhead, 2006; Kehily, 2004; Mayall, 1998). Children, therefore, were not the main focus of the study, and they rarely actively participated in research (Kellet, 2010). In a similar vein, research studies tended to portray the child as a passive object; hence, children were often disempowered in research (Christensen & James, 2017; Kellet, 2010; Matthews, 2007; Barker & Susie, 2003). According to Kellet (2010), quantitative methodology was used in numerous research to observe various aspects of children's health, nutrition, and vaccine-preventable diseases. Kellet (2010) emphasised that this research yielded a wealth of useful information, ranging from children's physical well-being to a decrease in the proportion of infant and child mortality. As a result of this dominant paradigm, children are perceived as research object. Reflecting an adult-dominant society, most of the research being focused "on" children, rather than doing research "with" children (Kellet, 2010; Punch, 2002a).

Before the 1950s, development psychology and sociology were the predominant disciplines in the concept of childhood studies (McNamee, 2016; Burke, 2004). However, scholars are confronted with the challenge of the developmental method (Burke, 2004). This challenge led to the idea moving from the child to understanding childhood as being socially, culturally and

historically constructed (McNamee, 2016; Montgomery, 2008; Burke, 2004). From the 18th century onward, there was a shift in thinking about childhood and children, which became known as the dominant framework (Woodhead, 2006). It has mainly focused on infant and childhood development stage by stage, such as their dependency, growth, learning and cognitive development (Woodhead, 2006; Burke, 2004). This dominant paradigm began to be challenged in the late twentieth century, within the discipline of psychology and from post-modernist, social constructionist theories, along with from development studies (Woodhead, 2006).

Throughout the 20th century, there has been renewed interest in research involving children in research. Childhood research has gained a new perspective in this century. According to Kehily (2004), different academic disciplines have been interested in the study of children and childhood. He asserted that each academic discipline (such as sociology, cultural etc. studies) has variously developed its own methods. Unlike the dominant paradigm, childhood is understood as a concept that is socially, culturally and historically constructed, rather than only a natural or biological phenomenon (McNamee, 2016; Montgomery, 2008; Christensen & Prout, 2005; James, 1998). Children have started to be understood within a cultural and social context (James & James, 2012). Interpreted another way, this implies that children are a part of the society (McNamee, 2016). Therefore, the concept of childhood has been given a new meaning instead of solely being a biosocial human, and has brought in a difference between child, children and childhood.

Concurrently, as the child-centred approach was on the rise, children were recognised as having agency with the power to affect their own lives and surroundings (Montgomery, 2008). This perspective puts an emphasis on children's rights. Due to these rights being a fundamental necessity, the United Nations International Children's Emergency Fund (UNICEF) introduced a convention known as 'The United Nations Convention on the Rights of the Child (UNCRC)' in November 1989. According to the UNCRC, every human being under the age of 18 is considered a child, and the UNCRC emphasised the significance of all children enjoying equal rights without any discrimination (Article 2) (Poretti et al., 2014). A child, thus, has been legally accepted as a competent social actor who has the right to decide and practise on behalf of themselves (McNamee, 2016; James & James, 2012). On the basis of this legislation, children are thought of as a social group, supporting the awareness of belonging to a minority group (McNamee, 2016; Mayall, 2002).. Lastly, the concept of childhood is that it is a social phenomenon that has a diverse range, from time to space, based on historical and cultural

settings (McNamee, 2016; James & James, 2012; Montgomery, 2008). Therefore, With the help of legislation, there was a legal move to understand children and interpret them within their own rights, which encourage involving children in research actively (Morrow & Richards, 1996).

1.2 A New Understanding of Childhood Studies

Developmental psychology and the sociological approach have dealt with children or childhood in different ways, such as age, physical development, cognitive ability or socialisation. These two different approaches have underpinned the drive towards the new ("now middle aged") (Thorne, 2016)) social study of childhood (Kehily, 2004). Towards the end of the 20th century, the (middle aged) social study of childhood paradigm emerged (James, 1998). Prout and James (2015) stated that the social study of childhood research approach is still under the construction. However, on that basis, the aim of this paradigms is to understand children, childhood studies, and their own experiences of childhood, within the context of children's rights. Therefore, Prout and James (2015) summarised this paradigm into six fundamental key features:

1. Childhood is a socially constructed concept. Childhood is influenced by the structural and cultural context of society.
2. Childhood is a social analysis variable that includes gender, class, or ethnicity. It is more of a cultural and social phenomenon, than universal occurrence.
3. Children's social connections should be evaluated in the context of their own rights, rather than from the perspective of an adult.
4. Children must be viewed as active participants in the development and determination of their own social lives, environment, and societies. They are not a passive component of the societal structures and processes.
5. An ethnographic approach is an effective research method for studying childhood. It encourages children to actively participate in research, allowing them to communicate and express their own social lives experiences.
6. Studying childhood via the implementing of the new paradigm is a part of the process of reconstructing childhood in society.

The main theoretical movement in social studies involving childhood was social constructivism (Prout & James, 2015; Christensen & Prout, 2005; Prout, 2000). Social constructivism refutes

childhood as a natural and biological phenomenon (Christensen & Prout, 2005). Through this, Prout and James (2015) have drawn attention to childhood as a product of social, cultural and historical intuition. That is why it is difficult to create a universal definition of childhood as it is socially and culturally constructed (Farley & Garlen, 2016; James, 1998). Because of this, the concept of childhood shows differences since it has cross-cultural variability. In a similar vein, childhood, can be experienced in children's lives within their culture (Montgomery, 2008). This is owing to the fact that every child's experience, even if they are brought up in the same area, varies immensely (Prout & James, 2015). It ought to be noted that the sociology of the childhood approach is focused on "the plurality of childhoods" (Matthews, 2007, p.325; Bohm, 2005, p.122), and there is a plurality of comparative and cross-cultural analyses and a variety of childhoods within cultures (Prout & James, 2015; Bohm, 2005). Therefore, it will help scholars to understand and analyse the notion of childhood within children's own individual life experiences.

Prout and James' (2015) paradigm has advocated children's autonomy in social studies (Christensen & Prout, 2005). In other words, social constructivism articulates children's agency (Christensen & Prout, 2005). Thanks to this, the importance of enabling children to be more active in research is recognised, and children are given direct attention rather than deferring to a proxy such as a family member or teacher (Christensen & Prout, 2005; Christensen, 2004). Beyond the social studies of childhood, children are accepted and understood in terms of "being a human" rather than "human becoming" with childhood seen as a developmental phase that marks the formation of adult's cognitive and social abilities (Matthews, 2007; Balen et al., 2006; Thorne, 2006; Christensen & Prout, 2005; Mayall, 2000). This change has refuted children's dependency on adults and given them a voice. Each of the features in the new paradigm support the idea of accepting children as individuals in society, who have the ability to make decisions about their own lives (McNamee, 2016; Harcourt & Sargeant, 2012; Thorne, 2006). As reported by Thorne (2006), the central theme of this explanation is that children's agency, direct voices and active participation in the process of social research are taking priority. That is to say, it is an approach in which children's competence and capacity for decision-making rejects the interpretation of adults in social studies (Harcourt & Sargeant, 2012; Balen et al., 2006).

1.3 Childhood Diversity

James & Prout (2015) highlighted that children are not only different from each other, but they also have vastly different childhoods . As a result of this , it is important to emphasise that the notion of a universal and homogeneous childhood, and its analysis for the understanding of childhood, does not represent the experiences of many children throughout the world (James & James, 2012; Montgomery, 2008). Additionally, Burke (2004) stated that these challenges put stress on scholars to ponder childhood studies ethnographically, culturally and anthropologically. She added that this recognition has led to divide views that question the structural norm of childhood and lead to a theoretical position on childhood pluralism. Therefore, it is important to remember that every child should be evaluated as an individual rather than universal to understand what is like to be a child when growing up. (James, 2013; James & James, 2004).

A considerable amount of literature has been published on socially constructed childhood. McNamee (2016) illustrated the social construction of health and illness within childhood. She points out that health is a socially constructed and embodied experience cross-culturally. She also highlighted that it is important for societies to ensure and maintain children's health for future health issues. As stated by Graham & Power (2004, p.2), there is an interaction between childhood and adulthood health. As an illustration, it is an interconnected process that childhood disadvantage constitutes a basis for poor health in adulthood. In that case, childhood and adolescent obesity can result in long-term health problems such as hypertension, diabetes or cardiovascular diseases in adults (Daniels, 2006; Graham & Power, 2004; Dietz, 1998).The quality of some adult health may be based on early childhood lived experiences such as cognition and education, social identities, health behaviour and physical and emotional health in childhood (Graham & Power, 2004). That is why children can be seen as an investment for the future adults of society (McNamee, 2016). Therefore, to maintain the healthy life of the children, the influence of society on health and illness experiences individually should not be ignored.

Additionally, children's lived experience is not only shaped by different cultural context but also embodied by social relations. For instance, Gittins (1998) stated that adult's perspectives embodied the meanings of childhood and children by time and place and how those meanings are reflected on children's lives. In other words childhood is moulded by their social relationships such as with adults, their family, siblings, teachers, and peers. These interactions

have a great impact upon children (James, 2013; Matthews, 2007; Woodhead, 2006). Briefly, children experience childhood in terms of individually, culturally, socially and historically (McNamee, 2016; Graham & Power, 2004). Therefore, when childhood is viewed from children's viewpoints, childhood is more meaningful and diverse from their perspectives and experiences rather than adults' prejudice.

1.4 Children in Health Research

There has been growing research involving children, including their rights in the field of health (Morrow & Richards, 1996). Implementing the (middle aged) social study of childhood paradigm, embodies the idea of granting children equal rights and freedoms, especially in social study matters such as health and illness (James & James, 2012). The focuses of childhood studies, particularly, have shaped child-centred approaches (Kehily, 2004; Harden et al., 2000). However, there was still a lack of knowledge about children's understandings of their social positioning (Mayall, 1998). The fact that they are assessed as immature and dependent, due to their age and state, means that they are deprived of their fundamental rights, and the focus has been on their needs as a minority group (Mayall, 1998). This dualism served adult world interests, instead of focusing on children's own worlds.

However, according to Mayall (1998) children's participation is a key point when evaluating their health status and welfare. It can provide an understanding of their developmental health (physical, cognitive, and emotional) (Graham & Power, 2004). For instance, in Christensen's (2004) research involving children, she stated that children were aware of the differences between adults and themselves. The complexity of childhood relationships, thus, cannot be addressed only by viewing children or applying adults' views. Thereby, to understand children's health rituals, children should be given a voice in research. On a final note, it would be useful to conclude with the study by Mayall (1998). Mayall (1998) found that children know from an adult viewpoint how children should be or are, and how to deal with the child-adult relationship. She added that there is an interaction between children's social positioning and competence and their healthcare practice and knowledge. Children thereby have enough cognitive development to build their own worlds and express themselves within their own words. Hence, they should be recognised as social actors who can take on that role actively.

There have still been some barriers to the active participation of children in research for example, children's lives are interpreted from adults' viewpoints (Kellet, 2010; Mayall, 1998).

Many health realted studies involving children have been managed by their gatekeepers, such as their mother, father or school authorities, because of this adult-centred supposition (Christensen & James, 2017; Harcourt & Sargeant, 2012; Kellet, 2010; Matthews, 2007). For example, although there have been relatively few attempts to explore children's own perspectives of being an overweight or obese child, previous studies have largely been conducted with mothers, teachers or peers rather than exploring obese or overweight children's own points of view (Suiraoka et al., 2017; Robinson & Sutin, 2016; Wilson, Smith, & Wildman, 2015; Jones et al., 2011; Warschburger & Kroller, 2009; Zeller, Reiter-Purtill, & Ramey, 2008; Young-Hyman et al., 2000). As a result, much of the literature reports studies carried out with adult proxies rather than children themselves.

To enhance our understanding of child wellness in light of their rights, they should be taken into account as a subject, not as a passive object, in research (Kellet, 2010; Christensen, 2004; Barker & Susie, 2003). Children, in particular, should be given a voice in research related to their own life such as health and well-being (Mayall, 2002). Fortunately, new social studies on childhood have created a climate for reconsidering children's rights, children as social actors, and the diversity of childhood. On that account, child-centred studies related to their health or well-being have been represented (Prout, 2005; Mayall, 2000). Particularly, Prout (2005, p.7) highlighted that children were repositioned "as more active, knowledgeable and socially participative" compared to the previous paradigm.

Chapter Summary

The chapter emphasises the prevalence of childhood obesity and its substantial physical and psycho-social consequences, as well as the prevention and treatment options and their efficacy in the treatment of childhood obesity. Furthermore, this chapter highlighted the importance of children's individual views in improving health services and their health, as well as their limited active involvement in health-related research relating to their health. In the light of the background chapter, the importance of children's own perspectives and the lack of research focused on children's experiences influenced the development of this study. The study is designed to address this omission by recognising the importance of children's own perspective and experiences.

Thesis Outline

Chapter two: focuses on the literature review. It covers two different scoping review related to the experience of children living with obesity and their experience of participation in an obesity intervention program.

Chapter three describes my justification for using focused ethnography as a methodology I utilised to guide this thesis. This chapter also covers the method and gives some insight into the design of an observational study and creative way of data collecting by including children's drawings and its analysis. It also provides the reflective discussion section, which includes my experiences and decision while carrying out this study. Ethical considerations are also provided within this chapter.

Chapter four contains my observational notes, which describe the research setting, and intervention programme in line with the TIDier (Template for Intervention Description and Replication) checklist (also see Appendix R).

The conclusions of the data analysis are the subject of **Chapter Five**. It addresses children's perceptions and narratives of their understanding and experience of being a child with obesity, including how they perceive themselves and how obesity impacted their everyday practise.

Chapter six provides the second part of the findings. It describes children's perceptions and experience of participating in an obesity intervention programme, including their expectations of the programme, perspectives on what they learned from the programme, and changes in their everyday practise.

Chapter seven discusses the thesis findings in the light of existing literature, as well as thesis's contribution to knowledge and policy linked to childhood obesity.

Chapter eight summarises the outline of my key findings. Then it discusses the thesis's strengths and limitations. Finally, it offers the implications and recommendations for future research, policy and practice.

CHAPTER TWO: LITERATURE REVIEW

Introduction

This chapter presents two scoping reviews of literature that discusses a) children's perspectives on being obese and b) their perspectives on participating in an intervention for obesity. This chapter first provides a justification for the application of the scoping reviews. The next part outlines the steps and process undertaken to conduct the scoping review including inclusion and exclusion criteria, search strategy, analysing studies. This chapter also provided selected studies overview such as study's type, origins, data collection methods, and samples characteristics. The result of the critical evaluations and synthesis of two reviews are then provided. Following this, it presents the rationale for the development of this thesis. Finally, the chapter will end by a section that frames the research questions of the study.

2.1 Scoping review approach

Literature reviews provide a "systematic, explicit, and reproducible method for identifying, evaluating, and synthesizing the existing body of completed and recorded work produced by researchers, scholars, and practitioners" (Fink, 2005, p.3). They involve making a comprehensive search and clear interpretations about a specific topic (Aveyard, 2014). Such comprehensive searching is complex but important in identifying gaps in the literature and thereby helping to generate appropriate research questions.

Selecting the most appropriate search methodology helps researchers to clarify the quantity and quality of previous research on the topic in question (Booth, Papaioannou, & Anthea, 2012). Several systematic approaches were defined in a typology of reviews compiled out by Grant and Booth (2009). Despite their different names, all of the approaches share some key characteristics such as collecting, evaluating and presenting available research evidence (Munn et al., 2018). For this current study, a scoping review was employed as the most suitable systematic research approach to the topic.

Although a scoping review is a comparatively novel approach to the synthesis of evidence, it is an ideal tool for assessing the breadth or the coverage of a collocation of literature in respect of a given subject. They provide clarity about the amount of available literature and studies along with a summary of the focus of this available work (Munn et al., 2018). A scoping review

enables researchers to prepare an initial report (Grant & Booth, 2009) on comprehensive topics which describe the evidence present in the area, to clarify key concepts, discuss how the research is conducted in a specific field, and identify and analyse any information discrepancy (Munn et al., 2018). Arksey and O'Malley (2005) list the four most common reasons for undertaking a scoping study. First, it is a useful way to examine research findings in detail enabling an investigation into the range of previous research. Second, it provides a systematic basis for a preliminary mapping review. Third, it is an effective technique for summarising and publishing the obtained research findings. Fourth, a scoping study will help to identify gaps in the literature on a particular topic through the ongoing process of reviewing the evidence base.

This scoping review was based on the framework by Arksey & O'Malley (2005). Since the technique was first introduced, it has been further developed and enhanced by a number of scholars making it more transparent and trustworthy in line with updated methodological guidance for the conduct of scoping reviews by the Joanna Briggs Institute Reviewer (JBI) (Peters et al., 2020). JBI was based on the existing Arksey & O'Malley, (2005) framework with recommendations added to them. One of the debates centres around the use of evidence quality assessment in scoping reviews. Some suggest this does not form a part of scoping review as the aim of scoping reviews is to access the available literature on the topic (Verdejo et al., 2021; Arksey & O'Malley, 2005). Indeed, the majority of scoping reviews report that they do not include a quality evaluation of primary studies as it is not a priority in scoping reviews (Verhage & Boels, 2017; Pham et al., 2014). In a similar way, my aim was to provide in-depth coverage of all relevant literature while also addressing broader topics regardless of study design (Peters et al., 2020; Arksey & O'Malley, 2005), thus I did not apply quality assessment for the included research papers within the thesis. Rather than limiting or seeking out the best answer in the available literature based on the quality of the included studies (O'Brien et al., 2016), the scoping review assisted me in systematically gathering and summarizing what is known about the perspective and experience of children living with obesity and their experience of participating in intervention programs, as well as identifying possible research gaps. Therefore, the purpose of this current scoping review is therefore to provide an overview of the available literature on the impact on children of the physical/embodied and psychological effects of living with obesity and on their experiences of participating in an intervention programme.

Since there are relatively few studies addressing both obesity and intervention experiences of children in literature, it was more meaningful to divide the review into two sections to explore two topics;

1. The perspective of children about being obese
2. The perspective of children participating in an obesity intervention programme

2.2 Scoping review one: Children's perspectives about being obese

2.2.1 Inclusion / exclusion criteria

Childhood obesity has been extensively studied in recent years, however few studies have focused on children's own perspectives and experiences of being obese. The population-exposure-result (PEcO) framework was used to develop the key concept of the topic and to help identify the main search terms and to establish inclusion and exclusion criteria.

'Obese children' for the purpose of this review refers to every person below the age of eighteen years as defined in the Convention on the Rights of the Child (Article 1) (Poretti et al., 2014), in the introduction section of which, children with a BMI $\geq 95^{th}$ percentile are accepted as obese (Jotangia et al., 2005; Cole et al., 2000). These parameters are accepted as this review's main focus.

Preliminary searches showed that the number of studies on childhood obesity has increased since 2004. Accordingly, to ensure good, contemporary coverage of the subject, only studies undertaken since 2004 are included in this review. Additionally, there are cultural differences in body perception between western and non-western countries. In western cultures obesity is the indicator of poor health, however, it is often the opposite in non-Western cultures, such as in both Iran and Cameroon where it represents wealth, strength and good health (Amiri et al., 2011; Dapi et al., 2007). Similarly, body weight is accepted as a feminine standard in some customs. For example, Bush et al. (2001) asked South Asian and, Italian migrants and general population women in Britain which silhouette photographs reflects the possibility of eating healthy food, giving birth to healthy children and being a healthy woman. They found that South Asian participants chose a woman's silhouette with BMI>28, however, very few Italian and general population women chose the same silhouette. From a different perspective, Arab women prefer a heavier body silhouette for men than women, reflecting the perception of being healthy and attractive (Musaiger, Shahbeek, & Al-Mannai, 2004). For this reason, non-western

countries have been excluded since sociocultural factors have an impact on body shape preference and will normalize opinions about being obese. Therefore, studies carried out in the UK, the US, Canada, Australia, New Zealand and European countries and published in English are included. The following inclusion and exclusion criteria were therefore set and grouped according to population-exposure-outcome (PEcO) framework;

Inclusion Criteria

- ✓ **Population**: children aged eighteen and below of any gender, what is the effect of
- ✓ **Exposure**: being obesity or overweight
- ✓ **Outcomes** or themes: in regard to the issue I want to examine a focus on the experience, attitudes and perspectives of children who were obese;
- ✓ published only in English since the start of 2004;
- ✓ a focus on primary research and review; and
- ✓ based in the UK, the US, Canada, Australia, New Zealand or European countries.

Exclusion Criteria

Studies were screened in terms of title and abstract, but the body of studies was still unmanageable without additional restrictions. Some articles were therefore excluded on the basis of the following additional exclusion criteria:

- ✓ to focus solely on the daily life experience of obese and overweight children. Therefore studies with/on children diagnosed with an eating disorder (such as anorexia, undernutrition or malnutrition), or any genetic disorder affecting their weight (such as Down's syndrome), or learning disabilities are excluded as were;
- ✓ proceedings papers, meeting abstracts, unpublished theses, editorial material, poster presentations and letters.

2.2.2 Search strategy and study selection process

To identify relevant studies, the search technique included creating a list of appropriate keywords and phrases, typical abbreviations of words and alternative spellings (UK and US). The analysis of keywords highlighted in relevant research articles and reviews also helped to identify appropriate search terms.

Individuals under the age of eighteen are described as children (Poretti et al., 2014) but children are also differently classified according to their period of development and biological change,

such as ‘adolescent’ (WHO, 2009). So in order not to miss any studies on or with children, children of different age groups were also added the search terms of the study such as ‘adolescents’ in the 10 to 19 age group, ‘youths’ as the 14 to 24 age group and ‘young people’ as the 10 to 24 age group (WHO, 1989, p.5).

As already stated, overweight and obese children and their experiences of being overweight or obese were the principal focus of this scoping review, so the alternative searched terms “child”, “obesity” and “experience” and related synonyms along with truncations (denoted as * see below) enabled the different constructions of the chosen words to appear in the results. The combinations of syntax to combine these search terms, such as NEXT/X, AND and OR were applied to the following databases: Medline, the Cochrane, Web of Science Core Collection, PsycINFO, ASSIA and CINAHL. For instance:

((Child* OR adolescen* OR “young people” OR youth*) NEXT/3 (obesity OR obese OR overweight OR weight)) AND (experience* OR perception* OR attitude*)

Electronic databases were comprehensively searched up to and including 2018. The searches yielded 14,907 references (see Appendix A)**.** All citations were exported to Mendeley, a reference manager software package, to help manage, organize and store the studies. From the original 14,907 references identified, 7,388 remained after the removal of duplications. All titles were then screened for their compliance with the inclusion and exclusion criteria. When titles did not include adequate detail about the study, the abstracts of those studies were reviewed. Following the review of titles, 7,294 studies were excluded due to being irrelevant to the topic. The excluded articles were mostly related to obesity statistics, obesity prevention interventions, nutrition education programmes, dental problems, obesity and non-communicable disease, bariatric surgery, exercise and dietary intake, treatments and family, Health Care Professional and teacher perspectives or roles in an intervention programme for childhood obesity without the views of children. After the removal of studies which did not meet the criteria defined above, 94 articles remained. The abstracts of these 94 studies were reviewed first and when the abstracts did not provide sufficient information, the full text paper was thoroughly considered. This process resulted in 77 studies being excluded. These exclusions were mainly on the grounds that the papers did not consider the children’s own perspectives or experience but only those of family members, HCPs, teachers and stakeholders. This elimination left seventeen articles which were eligible for this review. A flow diagram of the study selection process is shown in Appendix A**.**

The same search was re-run between 1 and 15 November 2020 in order to update the review from 2018. The same data management steps were undertaken as outlined above, and no further articles were identified which fitted the inclusion and exclusion criteria. In total, therefore, seventeen were selected and the data extraction table with the first author, study purpose, methodology and key findings is provided as Appendix B.

2.2.3 Analysing the relevance of the included studies

This study considered children with a BMI≥95th percentile or BMI>30 as obese according to sex and age (Cole et al., 2000). Of the sixteen studies selected as eligible as a result of the literature search, only eight had actually been conducted solely with obese children; Snethen et al., (2007), Davis et al., (2008), Skär et al., (2008), Curtis (2008), Griffiths et al. (2008), Ashcraft (2013), Randall-Arell et al. (2014), Oen et al. (2018). The remaining studies were quantitative or qualitative studies with obese, overweight and normal weight children.

2.2.4 Overview of the included studies

2.2.4.1 The type of studies

Twelve[1] of the seventeen included articles had employed qualitative research methods (Oen et al., 2018; Reece, Bissell, & Copeland, 2016; Andersson, Shadloo, & Rudolfsson, 2016; Randall-Arell & Utley, 2014; Ashcraft, 2013; Holland, Dallos, & Olver, 2012; Griffiths & Page, 2008; Curtis, 2008; Davis & Davis, 2008; Skär & Prellwitz, 2008; Snethen & Broome, 2007; Wills et al., 2006), one was a systematic review of qualitative studies (Lachal et al., 2013) and four studies had used quantitative methods (Waasdorp, Mehari, & Bradshaw, 2018; Gibson et al., 2017; Harrist et al., 2016; Fonseca & De Matos, 2005).

2.2.4.2 Origins of studies

Five of the studies had been conducted in the UK (Holland, Dallos, & Olver, 2012; Griffiths & Page, 2008; Curtis, 2008; Wills et al., 2006), six in the US (Waasdorp, Mehari, & Bradshaw, 2018; Harrist et al., 2016; Reece, Bissell, & Copeland, 2016; Randall-Arell & Utley, 2014; Ashcraft, 2013; Davis & Davis, 2008; Snethen & Broome, 2007), two in Sweden (Andersson, Shadloo, & Rudolfsson, 2016; Skär & Prellwitz, 2008), and one each in France (Lachal et al.,

[1] Reece, Bissell and Copeland's (2016) and Andersson, Shadloo and Rudolfsson's (2016) studies were also included in the second literature review, as they included both children's experience of being obese or overweight and their participation of an obesity intervention programme.

2013), Germany (Gibson et al., 2017), Portugal (Fonseca & De Matos, 2005) and Norway (Oen et al., 2018).

2.2.4.3 Data collection method used in studies

Qualitative data had been collected using individual interviews (Oen et al., 2018; Andersson, Shadloo, & Rudolfsson, 2016; Reece, Bissell, & Copeland, 2016; Randall-Arell & Utley, 2014; Ashcraft, 2013; Holland, Dallos, & Olver, 2012; Curtis, 2008; Skär & Prellwitz, 2008; Snethen & Broome, 2007), focus group interviews (Curtis, 2008; Davis & Davis, 2008), and one study used individual interviews with observation field notes and a self-report assessment instrument called 'kid play profile' (Skär & Prellwitz, 2008).

Quantitative data had been collected using questionnaire and body silhouettes (Fonseca & De Matos, 2005), anthropometric assessment, loneliness and social dissatisfaction questionnaire (LSDQ), weight-related teasing subscale of the perception of peer teasing survey, pictorial scale of perceived competence and social acceptance, sociometric nominations (for peers), perceived peer status (for teacher), behaviour assessment system for children, 2nd ed. (teacher), modified child depression inventory (child) (Harrist et al., 2016), youth demographic characteristics, exposure to bullying, forms of bullying, weight status, internalizing symptoms (youth self-report), school-level covariates (Waasdorp, Mehari, & Bradshaw, 2018), and anthropometry, the children's depression inventory, the self-perception profile for children, child quality of life (PEDSQL), bullying questionnaire for children, students' life satisfaction scale, the child eating disorder examination (interview), the children's body image scale (Gibson et al., 2017).

2.2.4.4 Characteristics and size of samples

Sample sizes and age groups in the qualitative studies were eight young women aged 13-16 with BMI varying from 29.1 to 45.9 (Holland, Dallos, & Olver, 2012), thirteen males aged 13-17 with BMI>95th percentile (Ashcraft, 2013), eight adolescent girls aged 11-18 with BMI ≥30 (Randall-Arell & Utley, 2014), one nine-year-old-boy diagnosed with obesity and his mother and his teacher (Skär & Prellwitz, 2008), 36 young people (eighteen girls and eighteen boys) aged 13 or 14 with 18 participants with 'normal' weight and eighteen overweight with BMI>25 or obese with BMI>30 (Wills et al., 2006), eighteen young people with obesity aged 10-17 (Curtis, 2008), seventeen children aged 8-12 with BMI ≥95th percentile (Snethen & Broome, 2007), seventeen African-American children with BMI ≥95th percentile aged 8-11 (Davis &

Davis, 2008), five young female people aged 12-18 with BMI ≥95th percentile (Griffiths & Page, 2008), six obese adolescents (five girls, one boy) with >30-isoBMI aged 12-15 (Oen et al., 2018), twelve participants (8 females, 4 males) aged 11-16 with BMI>91st percentile (Reece, Bissell, & Copeland, 2016), and five female adolescent aged 12-18 with BMI≥30 percentile (Andersson, Shadloo, & Rudolfsson, 2016). In the quantitative studies, 1164 children were 49% male and 51% female with a mean age of 6.88 years (severely obese, n=67; obese n=125; overweight n=204 and non-overweight, n=768) (Harrist et al., 2016), 212 healthy-weight (girls n=61, boys n=53) and overweight/obese children (girls n=48, boys n=50) aged 6-13 together with their parent(s) (Gibson et al., 2017), a total of 43,282 youths, of whom 21.2% of 26,494 high-school youths were obese and 22.4% were overweight, 7.5% of 16,749 middle-school youths were obese and 10.4% overweight, and the rest of the sample were normal or underweight (Waasdorp, Mehari, & Bradshaw, 2018), and of 5697 adolescents aged 11-16, 89 were obese, 822 were overweight, and 4875 were not overweight (Fonseca & De Matos, 2005). Further characteristics of the included studies such as their aim and key findings are presented in Appendix B.

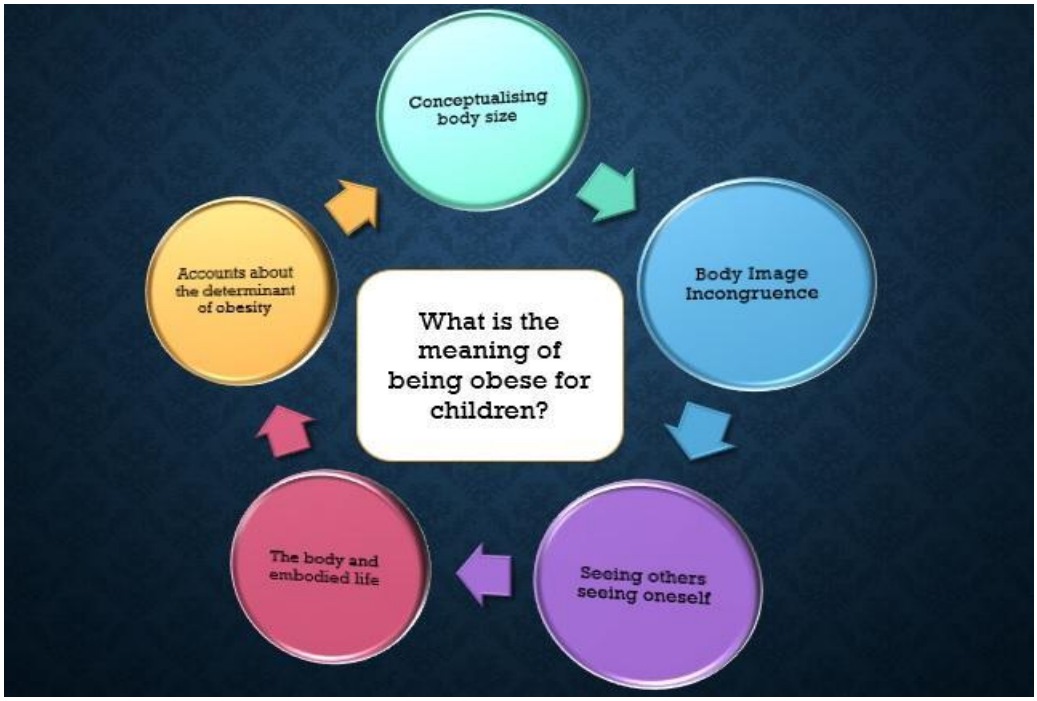
2.2.5 How the scoping review findings were structured

A review procedure was devised to classify the relevant themes for the analysis of the included studies. There are many computer-assisted software (CAQDAS) tools available that can assist in analysing qualitative data, such as NVivo, ATLAS.ti or word-processor software (Microsoft (MS) Word or Word Perfect) or Excel. These programmes do not analyse the data but are a helpful tool to help keep data organised and facilitate access (Burnard et al., 2008). They are supportive programmes that enable researchers to save time, particularly when dealing with large amounts of data (Seale, 2013). However, the use of computer-based programmes does not imply the scientific value of the analysis or that they are highly reliable (Burnard et al., 2008), as it is the researcher who ultimately completes the analysis. Therefore, this type of programme usage depends entirely on the researcher's preference, the size of data and resource availability (Taylor-Powell & Renner, 2003).

Although the University of Sheffield provide access for NVivo, I preferred to conduct my analysis using MS Word I adopted Braun and Clarke, (2006) 6-step thematic analysis; familiarizing yourself, generating initial codes, searching for themes, reviewing themes, defining and naming, and producing report. First, I carefully read the studies several times to become familiar with them and highlighted their main findings. Then, I copy-pasted the

research findings into MS word with their citations. Following this, while continuing iterative reading, I started to combine the findings that related to each other and extracted similar keywords and differences. In this way, I became more familiar with the key findings and outcomes of the scoping review. By combining similar findings, potential themes began to be developed. I created a mind map of these early theme developments (see Figure 1 as an example) and reviewed this multiple times to ensure that all data is working in relation to emerging themes. This included critically evaluating emerging categories and themes to explore relationships between the data. Finally, key themes relating to the scoping review topic were developed from this process.

Figure 1 An example of a mind map used to refine the themes



As a result, three key themes and seven sub-themes were identified:

1. The meaning for children of being overweight or obese;
2. the cyclical nature of psychosocial experiences (with three sub-themes: bullying, coping strategies for bullying used by obese children and emotional status changes), and

3. social relationships (with three sub-themes: the issue of social acceptance, sports activity and clothing).

2.2.6 Theme 1: The meaning for children of being overweight or obese

What stands out from this literature review is that for children, being obese is not about commonly used metrics, but how they perceive and label themselves. They make sense of their weight by comparing their appearance with that of their friends or family members.

The children participating in the research studies never mentioned BMI or other weight measures when they referred to themselves. Rather, their judgement on their excess weight was based on the visual aspect of their appearance, such as having a 'flabby body' or 'sagging skin' (Lachal et al., 2013), being 'fat' (Ashcraft, 2013; Wills et al., 2006), 'chubby' (Holland, Dallos, & Olver, 2012; Wills et al., 2006) or 'heavy' (Wills et al., 2006).

Some children described being overweight or obese in terms of their whole body appearance, such as 'it means that I'm fat' (Ashcraft, 2013), whereas others referred to their obesity by highlighting different parts of their body such as a 'fat belly' and 'big legs or arms' (Snethen & Broome, 2007; Wills et al., 2006). Wills et al. (2006) identified that the body parts which the children complained of, or felt uncomfortable with, suggested that they wished to change or lose weight from that part of the body. Their concept of being obese was represented by particularly visual images of the body parts about which they were concerned.

A few studies demonstrated how children made sense of their own weight by comparing themselves with peers or family members. Oen et al. (2018) found that the participants wished to be similar to their peers in terms of body size and shape. Similarly, according to Snethen and Broome's (2007) study, 12% of participants compared themselves to their peers at school and rated themselves as being in the normal weight range or 'just a little' overweight. However, they added that 20% of their peers at school weighted the same as the participants. They also found that their participants were comparing themselves with their peers' clothing and physical performance. Wills et al. (2006) reported that one participant said that her friends could run faster than her and that this was because they were taller and thinner than her, and that was how she made sense of her own weight. In addition, some participants in the same study perceived themselves to be average when they compared themselves with family members. Some participants in Randall-Arell and Utley's (2021) and Reece, Bissell, and Copeland's (2016) studies also mentioned family resemblance . One study, Andersson, Shadloo, and

Rudolfsson (2016) highlighted that the children never considered that obesity was a problem until they were being subject to teasing and exposed to others' gaze, particularly by their peers. It therefore, seems that children's sense of being obese or overweight was linked to their social circle and relationship, and this is something which needs to be explored further.

Lastly, some studies asked children, who are aware of their body size, about the factors causing their obesity (Oen et al., 2018; Andersson, Shadloo, & Rudolfsson, 2016; Randall-Arell & Utley, 2014; Lachal et al., 2013; Wills et al., 2006). Some children stated that the reason for their obesity was their resemblance to family members; that is, there was a genetic factor as well as their personal eating habits (Oen et al., 2018; Reece, Bissell, & Copeland, 2016; Randall-Arell & Utley, 2014; Lachal et al., 2013; Wills et al., 2006). However, children in only one study, , Reece, Bissell, and Copeland (2016), attributed their obesity to their increased eating habits relating this to negative emotional waves causing an energy imbalance in body. Here, obesity was associated with over-eating which, in turn, was related to unhappiness, negative experience, boredom and reluctance to be active when they were sad. The more they feel down or sad, the more they reported eating; this is also known as emotional or comfort eating.

2.2.7 Theme 2: The cyclical nature of the psychosocial experience

A key theme within the review relates to how children with obesity or overweight experienced psychosocial difficulties (Reece, Bissell, & Copeland, 2016; Randall-Arell & Utley, 2014) and that that these are often linked to their relationship with their non-obese peers. These psychosocial difficulties are presented here as three sub-themes: bullying, coping strategies for bullying used by obese children, and emotional status changes.

2.2.7.1 Bullying

The literature identifies that almost every single child with obesity or overweight was exposed to social disapproval (Lachal et al., 2013) and this topic was extensively covered under the 'bullying' or 'teasing' topics. Waasdorp et al.'s (2018) cross-sectional study of middle- and high-school children investigated the risk of obese/overweight children becoming victims of bullying in comparison with normal-weight children. Of this demographic, 7,681 (17.7%) were overweight, 6,862 (15.9%) were obese and rest were normal weight. They found that obese and overweight youths reported considerably more bullying and victimisation than their normal-weight peers. Harrist et al. (2016) similarly identified perceptions of peer teasing, social

preference, social impact, being made fun of, teacher-rated liking/disliking, teacher-rated being picked on or teased and teacher-rated withdrawal. A significant difference in each measure was found between normal-weight and severely obese children. Severely obese children's scores for each measure reported more adverse interpersonal interactions than normal-weight children. Except for social preference, social impact and being made fun of, these parameters varied in the different weight groups. For example, severely obese children were worse off compared with overweight children in each of these interpersonal parameters. Specifically, they experienced more peer bullying than obese children. The major contribution of the quantitative analysis here is that it enables us to identify the prevalence of bullying in children who do not conform to social weight norms. However, as previously stated, the children described themselves in their own words and not by numbers; quantitative research can therefore be limited in its ability to elicit a meaningful understanding of children's perceptions of the personal impact of such bullying.

The findings showed that the children were subjected to bullying mostly in school environments (Oen et al., 2018; Waasdorp, Mehari, & Bradshaw, 2018; Harrist et al., 2016; Curtis, 2008; Wills et al., 2006), at lunchtime and during physic education (PE) lessons by their peers, or at home, generally at dinner time (Curtis, 2008), by their family members (Holland, Dallos, & Olver, 2012; Curtis, 2008). The frequency and form of bullying differed depending on the gender of the child in a school setting (Waasdorp et al., 2018), and it was found that obese girls tended to be subjected to bullying more than boys. The same study also found that obese/overweight females were more likely to experience all forms of bullying relative to males except for physical victimization (such as being kicked) and that white youths faced a greater risk of bullying compared with other ethnicities. Middle-school youths were also more likely to face being bullied compared with high-school youths, excluding cyberbullying. Griffiths and Page (2008), however, found that bullying was more common in primary school than at other grades. They also found that all five of their participants had experienced verbal and relational bullying. These findings demonstrate that both genders were bullied because of being obese and overweight, that being a victim of bullying starts when their peers see them as different from themselves, and that such bullying often lasts throughout their educational life.

The different types of bullying or teasing to which children were found to be exposed to were:

- Verbal: being taunted and called names related to weight (such as 'big cow'); (Oen et al., 2018; Waasdorp, Mehari, & Bradshaw, 2018; Randall-Arell & Utley, 2014;

Ashcraft, 2013; Griffiths & Page, 2008; Curtis, 2008; Davis & Davis, 2008; Snethen & Broome, 2007; Wills et al., 2006),

- Relational: being subject to the spread of rumours or lies, or social exclusion; (Waasdorp, Mehari, & Bradshaw, 2018; Lachal et al., 2013; Griffiths & Page, 2008; Davis & Davis, 2008; Snethen & Broome, 2007),
- Physical: being kicked, pushed or beaten (Waasdorp, Mehari, & Bradshaw, 2018) and
- Cyber: being affected by the posting or sending of electronic messages and pictures (Waasdorp, Mehari, & Bradshaw, 2018).

The findings showed that obese or overweight children were not just exposed to bullying because of their weight and appearance but also because their personality was perceived as being lazy and unintelligent by others (non-obese people) (Randall-Arell & Utley, 2014). Randall-Arell and Utley (2021, p.8) found that their eight adolescent girl respondents reported that they had been called 'lazy' and 'stupid'; for example "You're a baby and you're stupid' and 'They [non-obese girls] think we're big, stupid, lazy, [and have] no emotions and feelings, no brain. It's wrong'. Wills et al. (2006) similarly found that the majority of their participants stated that even if they changed their bodies, they would continue to be bullied for no reason at all. These findings were an indication of how, regardless of their weight, obese children are still stigmatized, and this warrants further investigation.

Obese children were also marginalized because they did not conform to the social norms of their peers. Curtis (2008, p.414) reported one participant as saying:

> "... you were classed, if like in the first year, it was decided that you were one of the outcasts, you weren't the same as everybody else, you were pushed to the outside and you weren't let in and then everybody on the inside looked to the people on the outside and went 'Ha ha, you're different, you can't be like us, we've pushed you out.'"

Similarly, Oen et al. (2018, p.6) found that a girl had been told 'You're ugly'. It therefore seems that obese children first become a target of ill-treatment by their peers because of their weight but are also stigmatized in terms of their appearance, motivation, and assumed intelligence level. The experiences and impact of such marginalization from the perspective of obese children has only just begun to be explored and is something which requires further research.

2.2.7.2 Coping strategies for bullying used by obese children

Coping strategies to avoid being bullied were found to be an important issue for children with obesity or overweight. Obese or overweight children developed different coping strategies for preventing or avoiding bullying, including; seeking out social acceptance, making a compromise such as losing weight, changing school, being active in social life and eating.

Social acceptance plays a key role for some children with obesity or overweight in terms of avoiding bullying. Griffiths and Page (2008) and Curtis (2008) found that social networks can help children to develop their confidence and can have a strong impact on preventing bullying. For example, one participant in Wills et al.'s (2006) study was part of a large and popular friendship group so she stated that she was not exposed to bullying. Curtis (2008) and Griffiths and Page (2008) made similar findings. Additionally, some obese or overweight children believed that they had to make a concession to avoid being bullied. For instance, Randall-Arell and Utley (2021) found that participants believed that being overweight or obese is an obstacle to being loved by someone, so they had to become thin to deserve it. They also believe that if they can lose weight or be thin, there is no reason to be bullied by peers (Reece, Bissell, & Copeland, 2016). Wills et al. (2006) found that some participants had had to change their school because of being victims of bullying. Curtis (2008) made a similar finding, that participants wanted to avoid going to school in order to evade being bullied. In general, if they wanted to avoid being bullied, they had to be a part of a friendship group or they would have to make concessions (Skär & Prellwitz, 2008) such as losing weight or changing school. Finally, some obese or overweight children had discovered that having an active social life prevented bullying from peers. For example, Griffiths and Page (2008) found that coping strategies varied from doing sports to performing arts. One participant was taking judo classes, and a girl participant had joined a women's defence class to overcome bullying. One participant noticed that after taking a part in a drama performance at school, she felt more confident. The author interpreted her willingness to perform like a 'jolly fool' in drama in front of her peers perhaps aided in looking more confident. Interestingly, some respondents had pretended to ignore their peers who were bullying them; they acted as if the bullying was not affecting their mood and developed this pretence as a self-defence from bullying. For example, one participant stated that (p.S42);

> I'm not as affected by mocking and stuff like that. It's just not an issue for me. When I was little I got mocked so much I know more fat jokes than anybody else going. I'm better at it than they are. I spent just such a long time being bothered by

> it and I got so low on so many occasions. Now it's just like, 'You have a problem with me, that's your problem'. Ultimately, mocking doesn't get them anywhere, not anymore.

These negative interaction experiences of bullying and marginalization involve emotional ups and downs, and some children prefer to eat as a means of coping with negative feelings such as depression, unhappiness, loneliness and boredom. This topic was widely covered by Holland et al. (2012, p.543), who reported one participant describing how she calmed her anger by eating: "Whatever emotion I'm in, just eating makes me like a release, and it just makes me feel like, well I can be angry and eat and just take my anger out on chewing the food instead of like going out and punching something, I'll just chew …". Another participant (p.543) stated, "Something I could pass the time with and comfort me like, you know, make me feel better, like a chocolate bar or something like that, you know, just make me feel happier in myself". Whenever they experienced unpleasant situations, particularly bullying, or feeling isolated, they were more inclined to eat because they felt that eating would comfort (Oen et al., 2018; Reece, Bissell, & Copeland, 2016; Randall-Arell & Utley, 2014; Lachal et al., 2013; Holland, Dallos, & Olver, 2012; Wills et al., 2006).

Emotional eating was also found by Oen et al. (2018) and Reece, Bissell, and Copeland (2016) to be a method of suppressing children's negative emotions. Eating became an escape for some children from their negative emotional states. When they felt down, they ate to make themselves more comfortable, happy and better, which meant that they put on weight. Emotional eating does not therefore seem to be an effective way of coping with children's emotions.

As shown, children develop coping strategies to help shield themselves from harmful events to which they have been subjected. The research suggests that they mostly believe they have to make changes in themselves to overcome the source of negative experiences. The decision-making processes in their own lives remain under the shadow of their negative experiences, and they develop coping mechanisms accordingly. The self-agency of children with obesity, particularly how their decision making is affected by bullying and marginalization, could be investigated further.

2.2.7.3 Emotional status changes

The literature reviewed suggest that bullying and maltreatment by others (peers, teachers or family members) can drive children to various internal crises. For instance, obese children

began to develop negative feelings about their own appearance, such as being dissatisfied with their body and ashamed of their appearance, and this was followed by lower self-esteem as a consequence of constant bullying because of their appearance (Gibson et al., 2017; Andersson, Shadloo, & Rudolfsson, 2016; Lachal et al., 2013; Griffiths & Page, 2008; Fonseca & De Matos, 2005). The more they felt insecure about their bodies, the more their self-value decreased (Andersson, Shadloo, & Rudolfsson, 2016). Therefore, the first thing they want to change about their lives is their body. For instance, when children were asked what they would want to change about themselves in Davis and Davis's (2008) study, one participant wanted to change his weight, stating that he was bigger than a hippopotamus, and another wanted to change his body because his non-obese peers said that when he runs, an earthquake occurs. Similar findings were made by Griffiths and Page (2008), and Fonseca and De Matos (2005) who found that both obese and overweight adolescents reported having a poor appearance more frequently than their non-obese peers.

The findings also highlight that constant bullying has an impact on children's psychosocial life by causing depression (Gibson et al., 2017; Harrist et al., 2016; Ashcraft, 2013; Holland, Dallos, & Olver, 2012), anxiety (Lachal et al., 2013), social isolation (Oen et al., 2018; Fonseca & De Matos, 2005), and loneliness (Harrist et al., 2016; Holland, Dallos, & Olver, 2012). Gibson et al. (2017) investigated the psychosocial functioning of obese and overweight children and found that overweight/obese boys reported lower physical image self-esteem and higher signs of eating disorders and body dissatisfaction than boys who were at a healthier weight. Similarly, overweight/obese girls demonstrated greater drawbacks than healthy-weight girls in all of these areas (Gibson et al., 2017). Body dissatisfaction also increased as BMI z score increased in both overweight and obese children, with no gender differences. Gibson et al. (2017) concluded that psychosocial functioning indicators were also relatively constant over the two-year sample span for overweight/obese and normal-weight children of both genders. It seems obvious that weight affects the way that children view themselves.

Another significant negative consequence of being bullied and teased is that children felt more sad and upset (Reece, Bissell, & Copeland, 2016; Ashcraft, 2013; Holland, Dallos, & Olver, 2012; Griffiths & Page, 2008; Skär & Prellwitz, 2008; Wills et al., 2006). In addition to those findings, the findings also showed that when children are bullied and teased, they tend to exclude themselves from social life and this leads them to feel lonely, or to become more introverted (Waasdorp, Mehari, & Bradshaw, 2018; Holland, Dallos, & Olver, 2012; Griffiths & Page, 2008; Curtis, 2008). Holland et al. (2012) reported that children with obesity felt

visually different from their peers, which make them feel isolated. Obese and overweight children also experienced somatic complaints and depressive symptoms (Ashcraft, 2013; Harrist et al., 2012; Griffiths & Page, 2008). One participant in Griffiths and Page's (2008, p.S42) study said, “I was really miserable … I was depressed because of bullying”. Clear emotional changes in children with obesity or overweight were also highlighted by Lachal et al. (2013) who found that being bullied by peers resulted in anxiety, body dissatisfaction, low self-confidence, isolation and depression. Another study highlighted how children who have experienced psychological difficulties, did not attempt to seek help even though they noticed something was not right about their lives (Andersson, Shadloo, & Rudolfsson, 2016). These findings expand our understanding of how children with obesity or overweight feel about being bullied and how it affects them in terms of their psychosocial well-being. These long-term emotional status changes can cause psychological problems and effect help seeking behaviour.

2.2.8 Theme 3: Social relationships

A further theme arising is that obese or overweight children experienced social acceptance difficulties with their non-obese peers, which is very much interlinked with the bullying theme. These difficulties were divided into two sub-themes: the issue of social acceptance, sports activities and clothing.

2.2.8.1 The issue of social acceptance

Children who were marginalized because of their body size and shape were mostly ignored by their peers (Harrist et al., 2016) and therefore found it difficult to bond with their friends or to make friends (Oen et al., 2018; Gibson et al., 2017; Holland, Dallos, & Olver, 2012; Fonseca & De Matos, 2005). For example, Skär & Prellwitz (2008) studied one nine-year-old obese child in Sweden and found that his peers usually ignored him and that he often felt that they disregarded him on purpose. As a result, he created imaginary friends to play with. Similarly, Curtis (2008) found that being ignored by their peer group results in children not having a strong friendship bond. Similar findings were made by Holland et al., (2012). Fonseca and De Matos (2005) summed up this issue in their finding that obese/overweight children found it more difficult to make friends compared with their non-obese/overweight peers.

Harrist et al. (2016) also added that actively being ignored and excluded by peers had a more negative influence on children than bullying or teasing as it pushed them to live a solitary life. Socially rejected children had difficulty in maintaining peer relationships (Griffiths & Page, 2008) and this led them to become more introverted (Snethen & Broome, 2007). Furthermore, bullied youths did not want to go to school because of being victims of bullying (Curtis, 2008). Those who were exposed to bullying, teasing or taunting tended to narrow their social circle and become less active in social life. This cycle of being bullied, becoming isolated, becoming introverted and staying at home are interlinked and can lead to the emotional status changes noted in the previous section.

In addition, the fear of being judged by revealing their vulnerability often prevents children from fully connecting with their friends. One participant explained her superficial relationship with her friends as follows (Oen et al., 2018, p.7): "I am embarrassed and I don't dare reveal how it feels to be bigger than the others … I don't want them to know that I feel bigger than them. I want this to be private".

Overweight or obese participants reported that they wanted to be socially accepted by their peers and relatives (Reece, Bissell, & Copeland, 2016). Likewise, Griffiths and Page (2008) found that obese children generally wished to have a supportive friend who is good company. This highlights how being a part of a community can help make obese children feel peaceful and happy. The feeling of belonging has a powerful impact on children who are obese or overweight and supports their well-being.

2.2.8.2 Sports activity

Participating in sports activities is an important aspect of social inclusion and acceptance. However, obese/overweight children had a fear of being teased by peers while they were doing sports that limited their ability to enjoy and/or join in sports activity. For example, some studies showed positive correlations between being overweight or obese and an unwillingness to taking part in sports or PE. Some participants felt very slow compared with their peers (Wills et al., 2006). For others, physical activity was quite difficult because their weight made them feel uncomfortable (Snethen & Broome, 2007). The findings also suggest that obese children were mostly ignored by their peers when it came to letting them take part in sports or to join a team, so they preferred more individual sports than team sports (Skär & Prellwitz, 2008). Skär and Prellwitz (2008) found that one participant's mother did not let her son go and play with his peers in order to shield him from maltreatment thus endorsing their exclusive practices.

Specifically, in PE they were exposed to teasing, bullying or staring because of their body size and often limited physical capabilities (Griffiths & Page, 2008; Snethen & Broome, 2007). Curtis (2008) found that the participants mainly tried to avoid strenuous exercise such as running and trampolining because of the fear of being teased. One participant added that "she 'couldn't run' and when she ran 'it sounded like an earthquake'" (p.413). Curtis (2008) also reported that obese and overweight children did not have a friend to play with or they had difficulties finding a place to play with their friends. Finally, participants faced challenges when wearing sports kit because it was tight or too short, and they preferred not to show their body in this way (Curtis, 2008). So although they found doing sports helped them to lose weight (Wills et al., 2006), these obstacles tended to cause obese or overweight children to avoid taking part in sport.

2.2.8.3 Clothing

This problem with clothing was not confined to sport. Indeed, Wills et al. (2006) reported that one of the main challenges faced by children who are obese or overweight was limited clothes choices because of their body size and shape. They therefore bought clothes not because they liked them but because they would hide their body (Snethen & Broome, 2007). Snethen and Broome (2007) reported that one participant had stated that it was quite difficult to find a suitable size in the children's section, so she had to wear an adult size. Clothing can be seen as a form of self-expression, particularly among teenagers. If one cannot wear the 'right' clothing, then they do not feel that they fit in or feel that others perceive that they do not fit in.

There might be a link then between clothing and social rejection or isolation. Teenagers with obesity or overweight not only struggled to find age-appropriate clothes but also had a fear of trying on new clothes in front of their peers (Curtis, 2008) or did not want to go shopping with their friends (Wills et al., 2006). Some participants had explained that they even wanted to wear the same size clothes as their peers (Wills et al., 2006). Clothing can play a key role in the construction of individual and social identity, and therefore might be considered a necessary signifier of belonging to a particular peer group. Not being able (because of size) to wear specific clothes can then lead to further marginalization and the psychosocial consequences of this outlined earlier in this chapter.

2.2.9 Literature review summary

This review focused on existing research concerning the experiences and perspectives of children classified as obese or overweight. These children often associate their excess weight with the parts of their bodies which they do not like. Furthermore, they make comparisons with their friends and peers in terms of their appearance, physical performance and clothing.

The principal finding shows how children who are obese or overweight were frequently bullied, marginalised and stigmatised by their peers, teachers and family members not only for their excess weight but also for an assumed laziness and/or lack of intelligence. Some studies found that obese children were subjected to bullying because of their appearance and for not conforming to their friends' norms and expectations. Different mechanisms were used by the children to try and cope with bullying, most notably; finding ways to become accepted within a social group, changing or avoiding school and comfort eating – some of which act to compound the difficulties experienced.

Such bullying, teasing and marginalization negatively affected children's self-perception and could cause them to develop psychosocial disorders including depression, anxiety, social isolation, loneliness and sleeping disorders. These factors affected the children leading them to isolate themselves from the social environment and live a more solitary life. Findings also emphasize how obese or overweight children are not accepted by society, particularly by their peers, because of their body size and shape. Children's relationships with their peers were therefore often very superficial and influenced by their past negative experiences. Difficulties encountered when engaging in sports (because of limited physical ability and being self-conscious of body size) led some to withdraw from sports activities. Such relationships were further affected by the difficulties in finding age-appropriate clothes that would fit that would allow them to identify with their peer group leading to further marginalization.

2.3 Scoping review two: The perspective of children participating in an obesity intervention programme

Introduction

This section provides a scoping review on children's experiences of participating in an obesity intervention programme. The same review steps have been implemented exactly as in the previous review that formed the first part of this chapter. The following inclusion and exclusion criteria were developed:

2.3.1 Inclusion / exclusion criteria

As stated, the aim of this literature review is to explore what is known about the intervention experiences of obese children under eighteen years of age with BMI≥95th percentile. The primary emphasis of this review, therefore, is studies that give children a voice and provide children's own viewpoint of intervention programmes.

I did initial search only on obese children, however this provided only very limited data; Hester, McKenna, and Gately (2010), Pearson, Irwin, and Burke (2012), Andersson, Shadloo, and Rudolfsson (2016), Campbell-Voytal et al. (2018), Staniford, Copeland, and Breckon (2019). I, therefore, chose to extend it to overweight and obese children with BMI≥85th and BMI≥95th percentile, respectively.

According to NICE (2006), the first obesity treatment guideline of current tiered WMP focuses on lifestyle behavioural change including; dieting, healthy eating, increasing physical activity and reducing sedentary life. Tier 3 multidisciplinary and component services are designed for obese children with complex psychological needs; however, intervention programmes define their focus as lifestyle (behavioural) changes rather than Tier 3. Another word, many intervention programmes do not differentiate as lifestyle interventions (Tier 2) and specialist WMS (Tier 3) [see Appendix D] and mostly recruit children and young people who are overweight and obese. Therefore, only studies focusing on obesity intervention or treatment programmes using lifestyle changes are included.

Studies related to WMPs have increased since NICE published the first obesity management guideline in 2006. Therefore, in order to include more up-to-date results, only studies carried out since 2006 have been included. Additionally, studies published only in English were also

considered for inclusion criteria. In order to synchronize the findings between the two scoping reviews, only western countries were included in the study as they were in the first review [see detail in previous literature review inclusion criteria section]. These included the UK, the US, Canada, Australia, New Zealand and European countries. The following inclusion and exclusion criteria were therefore set.

Inclusion criteria

- ✓ Obese and overweight children aged eighteen and below of any gender with BMI≥85th percentile
- ✓ Intervention programme using multicomponent approach that aim to treat childhood obesity using lifestyle behavioural changes including diet, physical activity and behavioural change
- ✓ Studies which include obese children who report, in their own words, their experience, perception or viewpoint of the obesity intervention programme.
- ✓ published only in English since the start of 2006
- ✓ a focus on primary research and review methods and;
- ✓ based in the UK, the US, Canada, Australia, New Zealand or European countries

Exclusion criteria

In addition to the inclusion criteria, additional exclusion criteria have been developed. For example, the intervention experience of obese children with diabetes may vary significantly from that of obese children without diabetes. A more tailored intervention programme could be required for children with obesity and diabetes. Therefore, these exclusion criteria were developed for the purpose of understanding obese children's intervention experiences.

- ✓ intervention programmes aiming to treat diseases that cause obesity such as genetic syndrome or diabetes etc.
- ✓ intervention studies targeting children with obesity and severe learning difficulties (these groups might require a special intervention programme)
- ✓ Clinical trials
- ✓ pharmacological and other non-behavioural focused interventions treating obesity
- ✓ A focus on pre-or post-measures of anthropometric variables such as BMI, z score, abdominal adiposity or skinfold thickness etc. rather than focusing on children's perspectives.

2.3.2 Search strategy and study selection process

Appropriate search terms were defined in conjunction with relevant research articles and reviews, as in the previous literature review, in order to obtain relevant studies.

As already stated, the alternative search terms in the previous review, for instance; “child”, “obesity” and “experience”, the synonyms associated with the “intervention” with its abbreviations (shown as *) have also been added to existing search terms. The same links were used, such as NEXT/X, AND and OR were applied to the following databases: Medline, the Cochrane, Web of Science Core Collection, PsycINFO, ASSIA and CINAHL. For example:

((Child* OR adolescen* OR “young people” OR youth*) NEAR/3 (obes* OR overweight)) AND (experience* OR perception* OR view* OR perspective*) AND (intervention* OR treatment* OR “tier 3” OR “weight management” OR “lifestyle intervention” OR “weight loss” OR multidisciplinary)

As in the previous review, these electronic databases were searched up to and including 2018. The initial search yielded 7,262 references. After duplicates were removed, 3,471 references remained. As a first step, all titles were checked according to the inclusion and exclusion criteria. After title screening, 3,341 further studies were omitted. These omissions included papers focusing on obese children with health problems including dental, diabetes, cardiovascular and endocrine disease etc., studies on intervention policy development, studies focused on the cost-effectiveness of childhood obesity intervention programme, and studies linked to maternal obesity. If the title did not give sufficient information about the study, the abstract of the studies was checked. As a result of this process, 130 studies remained. Where abstract and title did not give sufficient information about the study, the full paper was checked and studies that did not explicitly meet the criteria for inclusion, or that showed existence of one of the exclusion criteria, were excluded. At this stage, full text papers were excluded that focused on anthropometric improvement in obese children - including BMI, adiposity, blood pressure or weight reduction. Additionally, several full text papers were excluded that did not explore young children’s intervention experience from their perspective and that focused on only the perception of families, caregivers, teachers or stakeholders in the childhood obesity intervention programme. Intervention studies focused on physical activity programmes interested in increasing children’s physical activity were also excluded. Six studies were eliminated due to age limit. Eleven articles remained after applying the inclusion and exclusion

criteria through the process outlined and these are shown in the flowchart of the study selection process in Appendix C. Therefore, in total, eleven articles were included, and the data extraction grid showing first author, purpose, intervention programme detail, methodology and key findings is provided in Appendix D.

2.3.3 Overview of the included studies

2.3.3.1 The type of studies

Ten of the eleven[2] articles used qualitative research methods (Staniford, Copeland, & Breckon, 2019; Campbell-Voytal et al., 2018; Howie et al., 2016; Reece, Bissell, & Copeland, 2016; Andersson, Shadloo, & Rudolfsson, 2016; Watson, Baker, & Chadwick, 2016; Schalkwijk et al., 2015; Pearson, Irwin, & Burke, 2012; Meaney, Hart, & Griffin, 2011; Morinder et al., 2011; Hester, McKenna, & Gately, 2010). Of these three used different qualitative research approaches or methods; two case study (Meaney, Hart, & Griffin, 2011; Hester, McKenna, & Gately, 2010), one an inductive and qualitative approach (Andersson, Shadloo, & Rudolfsson, 2016), and one a phenomenographic approach (Morinder et al., 2011). The other study used mixed methods (Howie et al., 2016).

2.3.3.2 Origins of studies

Four of the studies were carried out in the UK (Staniford, Copeland, & Breckon, 2019; Reece, Bissell, & Copeland, 2016; Watson, Baker, & Chadwick, 2016; Hester, McKenna, & Gately, 2010), two in the US (Campbell-Voytal et al., 2018; Meaney, Hart, & Griffin, 2011), two in Sweden (Andersson, Shadloo, & Rudolfsson, 2016; Morinder et al., 2011), and one in each in Canada (Pearson, Irwin, & Burke, 2012), Netherland (Schalkwijk et al., 2015), Australia (Howie et al., 2016).

2.3.3.3 Data collection method used in studies

Nine out of eleven studies used semi-structured individual interviews to gather data (Staniford, Copeland, & Breckon, 2019; Campbell-Voytal et al., 2018; Andersson, Shadloo, & Rudolfsson, 2016; Howie et al., 2016; Reece, Bissell, & Copeland, 2016; Watson, Baker, & Chadwick, 2016; Schalkwijk et al., 2015; Meaney, Hart, & Griffin, 2011; Morinder et al., 2011; Hester, McKenna, & Gately, 2010), two studies used focus group interviews (Howie et al.,

[2] Although Staniford, Copeland and Breckon's paper was published in 2019, the work was completed in 2018, thus it matches the review timeline.

2016; Pearson, Irwin, & Burke, 2012), and one study used the satisfaction survey in addition to focus groups and individual interviews (Howie et al., 2016).

2.3.3.4 Characteristics and size of samples

The age range of the children varied between 11 and 18 years. Though two studies focused on the ages 8-14 (Pearson, Irwin, & Burke, 2012) and 7-14 (Staniford, Copeland, & Breckon, 2019).

Children who were obese (with BMI≥95th percentile or BMI≥30) were included in five [3]studies (Staniford, Copeland, & Breckon, 2019; Campbell-Voytal et al., 2018; Andersson, Shadloo, & Rudolfsson, 2016; Pearson, Irwin, & Burke, 2012; Hester, McKenna, & Gately, 2010). The remaining studies included overweight and obese children with BMI≥85th percentile or BMI≥20 (Howie et al., 2016; Reece, Bissell, & Copeland, 2016; Watson, Baker, & Chadwick, 2016; Schalkwijk et al., 2015; Meaney, Hart, & Griffin, 2011; Morinder et al., 2011).

The sample size in the studies varies greatly as follows; five participants (three males two females) (Hester, McKenna, & Gately, 2010), thirty-one children (Pearson, Irwin, & Burke, 2012), five female adolescent (Andersson, Shadloo, & Rudolfsson, 2016), ten children (three males and seven females) and ten parents of the same children (Staniford, Copeland, & Breckon, 2019), one-hundred-thirty-six American adolescents and their caregivers (Campbell-Voytal et al., 2018), twelve participants (8 females, 4 males) (Reece, Bissell, & Copeland, 2016), fourteen children (six females, eight males) (Watson, Baker, & Chadwick, 2016), eighteen children (10 females, 8 males, aged 8-15) and twenty-four parents (seventeen mothers and seven fathers) (Schalkwijk et al., 2015), eighteen adolescents (12 females, 6 males) (Morinder et al., 2011), thirty-seven teens (n=34 with BMI≥95th percentile, n=3 with BMI≥85th percentile) and their parents (n=33) (Howie et al., 2016), sixty-seven participants (thirty-six females, thirty-one males; third, fourth and fifth grade) (Meaney, Hart, & Griffin, 2011).

2.3.3.5 Features of the intervention programmes included in the studies

The eleven studies included thirteen different intervention programmes. Typical aspects of these intervention programmes included; dietary regulation, physical activity, healthy life style education and behavioural modification (control of stimulus, environmental restructure,

[3] Hester, McKenna and Gately (2010) did not give the BMI value of the children in their study, however they mentioned that the children who participated in the study were obese.

management of contingency). Several programmes - Carnegie International Camp (Hester, McKenna, & Gately, 2010), the Getting Our Active Lifestyles Started (GOALS) (Staniford, Copeland, & Breckon, 2019), families Improving Together (FIT) for Weight Loss programme (Campbell-Voytal et al., 2018), Curtin University Activity, Food and Attitudes Programme (CAFAP) (Howie et al., 2016) - also focus on individual realistic goals setting. .

Only five studies stated that intervention programmes are family-centred; The Children's Healthy and Activity Modification Programme (C.H.A.M.P)(Pearson, Irwin, & Burke, 2012), GOALS (Staniford, Copeland, & Breckon, 2019), FIT (Campbell-Voytal et al., 2018), The Mind, Exercise, Nutrition, Do it (MEND) Programme (Watson, Baker, & Chadwick, 2016), youth health care, primary health centre, and paediatrics obesity treatment programme (Schalkwijk et al., 2015).

Finally, two studies, a weight loss programme (Andersson, Shadloo, & Rudolfsson, 2016) and a paediatric clinic (Morinder et al., 2011) indicated that a multidisciplinary clinical approach was used during the intervention programme that included dieticians, nurses, physiotherapist, psychologist (Andersson, Shadloo, & Rudolfsson, 2016; Morinder et al., 2011), physicians and health promoters (Morinder et al., 2011) and an adolescents' custodian (Andersson, Shadloo, & Rudolfsson, 2016). The content details of the intervention programme in which the studies were carried out are described in Appendix D.

2.3.4 How the scoping review findings were structured

As with the first review, a thematic analysis of Braun and Clarke, (2006) was used to interpret and synthesize the data of included studies in this review. As a first step, I read the studies several times to gain insight and become familiar with them. All data was then uploaded to qualitative data analysis software NVivo. I generated initial codes, and then explored relationships between the codes, to build initial themes. Following this, I reviewed these initial themes further refining and merging aspects to help ensure clear definition and coherence.

As a result of this process, four key themes and eleven sub-themes were identified:

1. Children's expectations of the obesity intervention programme
2. Children's accounts of the benefits of the obesity intervention programme (with five sub-themes: awareness, personal empowerment, changing eating habits, gaining physical strength, self-esteem)

3. Children's perceptions of programme delivery (with four sub-themes: Individually tailored programme, active learning, activities as a source of distraction, Participation in interventions as an opportunity to make new friends, emotional burden that developed with participating in the programme)
4. Support (with two sub-themes: The intervention programme as a source of support for children, family support)

2.3.5 Children's expectations of the obesity intervention programme

The first theme in this review highlights how children have certain expectations and concerns before starting intervention programmes.

These expectations of the intervention programmes were shaped according to their previous experiences such as bullying, body dissatisfaction (Reece, Bissell, & Copeland, 2016; Schalkwijk et al., 2015; Pearson, Irwin, & Burke, 2012). Almost all children expected to lose weight (Andersson, Shadloo, & Rudolfsson, 2016; Reece, Bissell, & Copeland, 2016; Schalkwijk et al., 2015; Pearson, Irwin, & Burke, 2012; Hester, McKenna, & Gately, 2010), and the children were often focused on the changes in their lives that will come through this weight loss. Many children reported that they were not confident in the appearance and expressed a desire to lose weight to fit in clothes better (Pearson, Irwin, & Burke, 2012). They also expected to feel good about themselves after the programme (Andersson, Shadloo, & Rudolfsson, 2016) with some children describing how feeling good in themselves would help them socially 'fit in', to become more like their peers, to be socially involved and ultimately to end bullying (Reece, Bissell, & Copeland, 2016, p.5).

In Schalkwijk et al.'s (2015) study with children and their families participating in three different intervention programme (youth health care, primary health centre and paediatrics), they found there was no difference between the expectations of children and their families from these programmes; both sides expected to lose weight and that this would stop bullying. However, these findings gave voice predominantly to families rather than the children themselves. Families wanted their children to lose weight, they wanted to have a healthy child and to see their child slimmer, whereas the children's viewpoint was not taken into account to the same degree in this study. While there some studies covering the expectations of children, in the studies conducted with children and families, the opinions of the children are not given sufficient emphasis.

Staniford, Copeland, and Breckon (2019) investigated the causes of drop out from the GOALS intervention programme for children and their families. They found that one of the most common reasons for leaving was that initial expectations did not match with the treatment result, leading to a lack of motivation. However, again, the children's perspective was not sufficiently included in the research findings, but rather emphasis was placed on the families own perspective.

Additionally, children from two of the included studies reported fear of attending an intervention programme (Meaney, Hart, & Griffin, 2011; Hester, McKenna, & Gately, 2010). The study that explored the BEACTIVE after school and summer school intervention experience Meaney, Hart, and Griffin (2011) identified the children's preconceptions regarding the programme structure and the programme climate. According to these findings, few children predicted that the programme would be fun where they can laugh and do sports. Rather, the majority of children expressed initial concerns about the programme schedule suggesting that it would be like a camp with strict rules, and describing it literally as a "fat camp" based on a heavy exercise programme (Meaney et al., 2011, p.401). Other concerns for children attending a weight loss camp was the fear of only being provided with "rabbit food" and small portion sizes (Hester, McKenna, & Gately, 2010, p.309). In addition, most children had concerns about the programme climate including a fear of being bullied by others, and of being the only oversized ones among other participants (Meaney, Hart, & Griffin, 2011). This concern reflects their personal fears, anxieties, low body image. Considering the findings of the earlier review relating to bullying, it is not surprising that children had such fears given the traumas they have experienced in the past.

2.3.6 Children's accounts of the benefits of the obesity intervention programme

Given these preconceptions, a further important theme relates to the benefits of the intervention programmes that the children highlighted. Children described these benefits in terms of: awareness, personal empowerment, changing eating habits, gaining physical strength, self-esteem.

2.3.6.1 Awareness

Children from three different intervention programmes emphasized the value of nutritional information and increased awareness of what foods should be consumed in moderation (Howie et al., 2016; Pearson, Irwin, & Burke, 2012; Meaney, Hart, & Griffin, 2011). This knowledge

included increased awareness about; portion size, cooking, reading a food label, healthy eating (Howie et al., 2016; Pearson, Irwin, & Burke, 2012; Meaney, Hart, & Griffin, 2011), balanced diet (Reece, Bissell, & Copeland, 2016; Pearson, Irwin, & Burke, 2012; Meaney, Hart, & Griffin, 2011), and the importance of drinking water (Pearson, Irwin, & Burke, 2012; Meaney, Hart, & Griffin, 2011). Additionally, children emphasized that they gained awareness about the long-term health problems caused by obesity (Staniford, Copeland, & Breckon, 2019; Andersson, Shadloo, & Rudolfsson, 2016). These information elements provided by the intervention programmes appear to provide a good platform for increased individual responsibility for the children, giving them the tools to take control of their dietary habits.

Indeed, in other studies the children stated that they experienced enough awareness to take responsibility to make changes in their lives (Campbell-Voytal et al., 2018; Reece, Bissell, & Copeland, 2016; Pearson, Irwin, & Burke, 2012; Morinder et al., 2011). These included, greater understanding of the importance of one's own engagement to lose weight effectively actioned as increased willingness to do sports, making health changes, understanding of health benefits, positive attitudes (accepting self and capabilities, being kind to self), and trying to avoid unhealthy choices (food or being inactive) (Pearson, Irwin, & Burke, 2012; Morinder et al., 2011). However, whilst for some children, it becomes "easier" to follow the healthy life rules (Campbell-Voytal et al., 2018, p.840), for others, it remained very difficult to make a commitment to adopt these changes even if they were aware of the consequences of being obese (Staniford, Copeland, & Breckon, 2019). For instance, some children stated that even when aware of the health benefits of weight loss, they did not want to give up the activities they enjoy life, such as going to "McDonalds" (Staniford, Copeland, & Breckon, 2019, p.6). It seems then that children's readiness for change is also an important factor in taking steps to make changes in their lives that could lead to weight reduction.

2.3.6.2 Personal empowerment

Another positive aspect children gained from intervention programmes is personal empowerment. Morinder et al. (2011) explained personal empowerment from children's viewpoint showing how the information gained from the programme, increased their authority to make decisions about themselves and therefore increased their ability to control their own lives. Similarly, Pearson, Irwin, and Burke (2012) highlighted how, as children were informed, their authority to make decisions about themselves increased and that they adapted information according to their lifestyle. Such decisions included, making healthier food choices (Reece,

Bissell, & Copeland, 2016; Pearson, Irwin, & Burke, 2012; Morinder et al., 2011), living healthier, making a sport more enjoyable - such as swimming a different style (Watson, Baker, & Chadwick, 2016), and sharing knowledge with their family and friends (Pearson, Irwin, & Burke, 2012).

However, some children in Howie et al.'s (2016) study also stated that that they could not always apply what they learned from the programme and could not manage to maintain their healthy eating habits, particularly when they were under pressure, such as during exams. Similar maintenance challenges were highlighted by children in Hester et al.'s (2010) and Reece, Bissell, and Copeland's (2016) studies. However, children in both studies mentioned that they managed to 'get back on track' afterwards. It appears that what children learn in the programme was not temporary and they gained the knowledge and tools from the intervention programme to build skills to make changes in their lives.

In a similar way, Watson, Baker, and Chadwick (2016) highlighted that children gained more personal autonomy as they put into practice what they learned from the programme. For example, the children demonstrated monitoring own heart rate when doing physical exercise following the education, they received about circulation system in the programme. Likewise, Meaney, Hart, and Griffin, (2011) added a different perspective on increased personal autonomy showing how, based on the flexibility and options offered by the programme, such as letting or asking them to choose a game, it enabled the children to make decisions about themselves. The training provided in the interventions respects and encourages the children's own viewpoints and thereby helps generate individual empowerment.

2.3.6.3 Changing eating habits

Children stated that they modified their dietary patterns habits following awareness they gained from the programmes integrating changes into their everyday lives. For example, reading food labels when they go shopping, choosing healthier options and staying away from unhealthy, fatty, sugary and junk foods, while preparing their lunch bag (Howie et al., 2016; Pearson, Irwin, & Burke, 2012; Meaney, Hart, & Griffin, 2011), and eating regularly and not eating at night (Meaney, Hart, & Griffin, 2011). It was also highlighted by children how they remembered what they learned even after programme completion (Howie et al., 2016; Meaney, Hart, & Griffin, 2011). In Howie et al.'s (2016) study, the children who finished the CAFAP intervention programme maintained what they learned in the programme (such as reading food label, reducing junk food, portion size) even 12 months after programme completion. Similar

findings emerged in Meaney, Hart, & Griffin, 2011).

2.3.6.4 Gaining physical strength

As mentioned earlier, the majority of weight loss research has been done on interventions focused exclusively on physical exercise or has focused solely the physical activity experience of children in the intervention programme. These studies predominantly defined sports as a fun activity from the view of the participants (Howie et al., 2016; Pearson, Irwin, & Burke, 2012; Meaney, Hart, & Griffin, 2011; Watson, 2011). However, each study does not necessarily conceptualise 'fun' in the same way.

Children described how they had not previously considered physical activity as fun due to their physical limitations and the social stigma attached to this [also see the earlier review section; the perspective of children about being obese]. Morinder et al. (2011, p.1002) listed these problems from the perspective of children as follows; physical condition such as low fitness, pain in the back and joints. Concordantly, the children whose physical endurance increased during their participation in the programme stated that activities became "easier" (Pearson, Irwin, & Burke, 2012, p.386) and they started to enjoy physical activity (Pearson, Irwin, & Burke, 2012; Watson, 2011). Children explained how their physical strength improved with different approaches in Pearson, Irwin, and Burke's (2012) and in Andersson, Shadloo, and Rudolfsson's (2016) studies. Some associated this with weight loss (Pearson, Irwin, & Burke, 2012), while others compared it to their physical condition before joining the programme, stating that they were now able to last longer without getting tired (Andersson, Shadloo, & Rudolfsson, 2016). In summary, children highlighted that doing activity they had not considered possible before joining the intervention programme, brought feelings of fitness, happiness (Andersson, Shadloo, & Rudolfsson, 2016) accomplishment (Andersson, Shadloo, & Rudolfsson, 2016; Pearson, Irwin, & Burke, 2012; Meaney, Hart, & Griffin, 2011; Watson, 2011), and motivated them as well as increasing their confidence regardless weight loss (Pearson, Irwin, & Burke, 2012; Watson, 2011). The review therefore highlights that activity for children is not only an essential consideration for physical development, but also for psychological well-being.

2.3.6.5 Self-esteem

As a further positive benefit of the intervention programme, children reported that their self-esteem improved (Andersson, Shadloo, & Rudolfsson, 2016; Pearson, Irwin, & Burke, 2012;

Meaney, Hart, & Griffin, 2011). Children in the study of Pearson, Irwin, and Burke (2012) drew attention to feeling better about their appearance and they recognised that their self-esteem improved as they no longer hid themselves at home or behind oversized clothes. They affirmed that their confidence increased due to clothes fitting better extending the choice of clothes available (Pearson, Irwin, & Burke, 2012). Similarly, children in Andersson, Shadloo, and Rudolfsson's (2016) study also addressed noted that their self-value and confidence improved with their physical changes after losing weight. They further stated that the recognition of their physical changes by others also increased their confidence and gave them a sense of pride. This led to them becoming less isolated, gave them increased feelings of being "normal" (Pearson, Irwin, & Burke, 2012, p.387) and made them feel happier compared to before attending programme (Reece, Bissell, & Copeland, 2016).

2.3.7 Children's perceptions of the intervention programme

How children perceived the obesity programme, and its environment was another important theme and impacted on the benefits noted in the previous theme. The thoughts and feelings of the children about the programme were explained as five sub-themes: individually tailored programmes, active learning, activities as a source of distraction, participation as an opportunity to make new friends, and the emotional burden of participating in the programme.

2.3.7.1 Individually tailored programme

Intervention programmes were often perceived by the children as flexible being tailored and adapted to individual needs (Andersson, Shadloo, & Rudolfsson, 2016; Reece, Bissell, & Copeland, 2016; Pearson, Irwin, & Burke, 2012; Meaney, Hart, & Griffin, 2011; Morinder et al., 2011). Some children in Morinder et al.'s (2011) study considered the guidelines and treatment goals approach provided by the paediatric obesity intervention clinic to be practical and realistic. Similarly, the children in Reece, Bissell, and Copeland's (2016) study evaluated the community-based intervention programme as responsive to their individual needs and appropriate for their age. Children also added that the majority of intervention programmes were designed for older age groups (aged between 11-16) (Reece, Bissell, & Copeland, 2016). Similarly, parents and children in Staniford, Copeland, and Breckon (2019) study stated that they wanted to receive education from the intervention programme separately, such as children with their peers and families with other families rather than children and families together. It might be an important first step then to recognise the importance for children in participating

with other children of their age range, and not including their families alongside them in programme delivery.

Some children perceived the hospital-based programme delivery as complicated, with too much information, and somewhat (Morinder et al., 2011). In Morinder et al.'s (2011) study, children emphasized how receiving too much advice on a subject was very confusing making it almost impossible to implement in real life. Additionally, some children who attended this hospital based intervention programme added that the programme just focuses on weight loss rather than providing emotional support and this does not address to individual needs (Morinder et al., 2011). Even though they wanted to lose weight, they also stated that they wanted to "feel good" about themselves as an initial individual (Morinder et al., 2011, p.1004). However, there is insufficient information to determine whether the hospital-based intervention does not provide sufficient emotional support or whether children perceived hospital visits more as clinical treatment.

2.3.7.2 Active learning

The review findings suggest that children mainly enjoyed participating in the intervention programmes (Howie et al., 2016; Watson, Baker, & Chadwick, 2016; Pearson, Irwin, & Burke, 2012; Meaney, Hart, & Griffin, 2011; Hester, McKenna, & Gately, 2010). Practical activities, including exercising, seemed to be a powerful factor fostering a positive environment and a sense of fun (Howie et al., 2016; Watson, Baker, & Chadwick, 2016; Pearson, Irwin, & Burke, 2012; Meaney, Hart, & Griffin, 2011; Hester, McKenna, & Gately, 2010). For example, the children in Howie et al.'s (2016) study highlighted that learning with games makes activity or learning more fun. Similarly, children Watson, Baker, and Chadwick (2016) study highlighted that children preferred the interactive intervention programme education rather than school classroom education implying the latter was passive boring learning where they were obligated to sit, watch, and observe. The enjoyment of the children from the activities reflected their satisfaction with the whole programme represented as noted in the satisfaction questionnaire in Howie et al. (2016) mixed methods study. Having fun then is an important theme for children allowing them to enjoy their time in the intervention programme generating a positive attitude that increased their engagement with the programme.

Children highlighted that they enjoyed the education delivery that supports being active and that involves active interaction with other participants in the programme (Howie et al., 2016; Watson, Baker, & Chadwick, 2016; Pearson, Irwin, & Burke, 2012; Meaney, Hart, & Griffin,

2011; Hester, McKenna, & Gately, 2010). For instance, Watson, Baker, and Chadwick's (2016) study related active interaction delivery to active learning, where children can become part of a group and take on actions such as experimenting, testing things (different food etc.) and doing things while learning together. Such active learning, that provides active interaction with other participants, also increases satisfaction and engagement with the programme.

2.3.7.3 Activities as a source of distraction

In addition, the children described this physical activity and interaction as an enjoyable outlet, a form of distraction that keeps them away from their inner world. It helps divert attention from destructive emotions, thoughts or worrying about themselves, (Watson, Baker, and Chadwick (2016). Children who became fully engaged in the physical exercise and activities felt that, overtime, a sense of fun replaced the depressive emotions such as worrying, negative thinking or feelings, and a self-focus on body and mind pain (Watson, Baker, & Chadwick, 2016). Similar findings are reached in Pearson et al.'s (2012) study. Children here also highlighted that physical activity is the distraction form boredom (Pearson, Irwin, & Burke, 2012) which previously could lead to comfort eating or temptation (Andersson, Shadloo, & Rudolfsson, 2016).

The children noted that doing physical activity with a community of individuals who come together for the same reason as themselves makes this activity enjoyable (Watson, Baker, & Chadwick, 2016; Meaney, Hart, & Griffin, 2011). Exercising with someone they feel comfortable and confident with increased the sense of fun from that activity and reduced their physical anxiety. Unlike school physical education (PE), children stated that they feel physically equal to their peers and, more importantly, they were not exposed to peer criticism during physical activity in the programme (Meaney, Hart, & Griffin, 2011). Similar finding were highlighted by children in Schalkwijk et al.'s (2015) study where working together with others who are going through the same thing offered a sense of equality. The children in Morinder et al.'s (2011) study also noted that what often prevents them enjoying or doing sports is a fear of being judged, of being body consciousness, of feeling insecure in trying new activities, and in to the difficulty of finding an activity where they feel they fit in. The children in the Meaney, Hart, and Griffin's (2011) study highlighted that judgements relating to physical activity are mostly school-based. They mentioned that school PE is competitive, there was limited time to practice games, they could not exercise to the same extent as their slimmer peers, as all resulting in an unwillingness to do exercise. The intervention programme delivery

provides children with equal education conditions, it minimises competition and motivates the children without judgment, and creates an atmosphere that helps them feel valued as an equal.

2.3.7.4 Participation in interventions as an opportunity to make new friends

The importance of making new friends by participating in programmes was something highlighted by the children (Watson, Baker, & Chadwick, 2016; Meaney, Hart, & Griffin, 2011). They noted that it was easy to connect with other participants since the intervention programmes provide a positive atmosphere and an environment of commonality that brings together individuals who have encountered similar challenges (Reece, Bissell, & Copeland, 2016; Schalkwijk et al., 2015; Pearson, Irwin, & Burke, 2012; Morinder et al., 2011). In one study, the children defined themselves "one big family" (Pearson, Irwin, & Burke, 2012, p.389). Additionally, as noted earlier, children confirmed that being with people who have similar concerns, makes them feel equal (Schalkwijk et al., 2015) and not alone (Watson, Baker, & Chadwick, 2016). This provides a safe and comfortable environment where they do not have a fear of being judged (Howie et al., 2016; Watson, Baker, & Chadwick, 2016; Pearson, Irwin, & Burke, 2012). (Howie et al., 2016). This enabled them to develop a sense of belonging and increased bonding with other participants (Watson, Baker, & Chadwick, 2016; Meaney, Hart, & Griffin, 2011). This was in stark contrast to how many children felt in the school environment (Howie et al., 2016). Making friends was effective in developing a sense of trust, comfort, and belonging and building new friendships made it easier to adapt of the intervention itself.

2.3.7.5 Emotional burden that developed with participating in the programme

Acknowledging the obligation and responsibility to participate in intervention programmes caused some emotional burden on children such as failure, embarrassment, disappointment, body or weight consciousness, and pressure. Children noted that they were worried that they would not lose weight after participating in the programme which would reinforce a sense of failure (Staniford, Copeland, & Breckon, 2019; Morinder et al., 2011). In one study, loosing less weight than expected led to a sense of failure and undermined self-confidence (Staniford, Copeland, & Breckon, 2019). Besides, participating in obesity treatment programme increased body awareness and weight (Reece, Bissell, & Copeland, 2016; Morinder et al., 2011) and thus it affected their self-esteem. Children also highlighted that they did not want to share their participation in the programme with anyone except their close friends and relatives as they

thought people might consider that participating obesity treatment programmes itself represented a failure as well as being a source of stigmatisation (Staniford, Copeland, & Breckon, 2019; Morinder et al., 2011). Additionally, some children perceived that leading a healthy lifestyle, including doing exercise and eating healthily, was boring and limited their freedom to behave like their peers (Staniford, Copeland, & Breckon, 2019). Dietary restrictions were considered an indication that they were different from their peers, for example, saying no to treats offered by peers generated feelings of embarrassment (Schalkwijk et al., 2015). Even when health behaviour changes is supported by their peers, this support itself was perceived as 'peer pressure' by some of the children (Watson, Baker, & Chadwick, 2016, p.412).

Children were generally aware that obesity treatment is an ongoing, long-term process (Reece, Bissell, & Copeland, 2016; Morinder et al., 2011). However, despite this, lack of weight loss still often generated a sense of disappointment, failure and shame in themselves (Morinder et al., 2011). In addition, they also felt guilty that their families might be held responsible for the consequences of their failure. These negative feelings are often seen after programme where children struggle to lose further weight or to maintain a healthy lifestyle (Hester, McKenna, & Gately, 2010).

2.3.8 The importance of social support

Evidence from this review demonstrates that children valued the social support of intervention facilitators, peers, as well as support from home in order to change their lifestyle effectively. This support is presented under two sub-themes: The intervention programme as a source of support and family support.

2.3.8.1 The intervention programme as a source of support

The children highlighted how they valued counsellors' ongoing support during their participation in intervention programmes (Andersson, Shadloo, & Rudolfsson, 2016; Pearson, Irwin, & Burke, 2012). Children stated that counsellors in the programmes had a positive impact by increasing their interaction with other peers as well as involving them in exercise and dietary advice (Andersson, Shadloo, & Rudolfsson, 2016; Pearson, Irwin, & Burke, 2012). Children found it motivating to be assessed by professionals (Andersson, Shadloo, & Rudolfsson, 2016; Howie et al., 2016; Pearson, Irwin, & Burke, 2012), particularly when this was done in a non-offensive and non-judgemental way (Schalkwijk et al., 2015). One participant in Meaney, Hart, and Griffin's (2011, p.403)study reflected on the programme

facilitator saying; “Actually treated like people”. The children appreciated, and found supportive, the professional approach that acknowledges their opinion, understands them, addresses their individual needs (Andersson, Shadloo, & Rudolfsson, 2016; Reece, Bissell, & Copeland, 2016; Pearson, Irwin, & Burke, 2012; Meaney, Hart, & Griffin, 2011; Morinder et al., 2011), and encourages them to try their best (Reece, Bissell, & Copeland, 2016; Pearson, Irwin, & Burke, 2012).

Morinder et al. (2011) highlighted how the trust of the children in the facilitators increased compliance to the treatment programme. In contrast, the children noted that meeting different professional teams in a hospital-based programme, prevented them from developing a rapport with staff and resulted in feelings of neglect and disappointment (Morinder et al., 2011). Conversely, Howie et al.,'s (2016) study emphasised that a well-established bond with facilitators and their approach to children had a significant impact on children interacting even twelve months after the programme had ended. Howie et al. (2016) further recognised that children found it motivating to keep in constant contact with the facilitators, even after programme completion. Seeing other participants and facilitators from the programme at the assessment period was inspiring and kept them socially interactive. The children in Reece, Bissell, and Copeland's (2016) and in Andersson, Shadloo, and Rudolfsson (2016) studies also noted the importance of long-term support for successful weight loss and in maintaining healthy lifestyle changes. None of studies in this synthesis mentioned emotional support that children received from the programme.

Children found intervention environments particularly supportive when they can have fun and build friendly relationships without a competitive environment (Pearson, Irwin, & Burke, 2012; Meaney, Hart, & Griffin, 2011). They appreciated the social atmosphere of programmes, particularly the peer relationships as one of the most important motivators and sources of support (Andersson, Shadloo, & Rudolfsson, 2016; Watson, Baker, & Chadwick, 2016; Schalkwijk et al., 2015; Meaney, Hart, & Griffin, 2011; Morinder et al., 2011). Some tudies recognised that children felt empowered by talking about the same problem they have with others (Schalkwijk et al., 2015) by building connections (Reece, Bissell, & Copeland, 2016; Pearson, Irwin, & Burke, 2012), by cooperating with others (Pearson, Irwin, & Burke, 2012) and by motivating each other during the programmes (Morinder et al., 2011). They were also inspired by success stories about other peers, like them, who lost weight as this helped them feel they could achieve the same(Andersson, Shadloo, & Rudolfsson, 2016).

2.3.8.2 Family support

Children mentioned that family support and family dynamics have an impact on their behavioural and emotional status (Campbell-Voytal et al., 2018; Watson, Baker, & Chadwick, 2016; Pearson, Irwin, & Burke, 2012). After participating in programmes, some children found their families advice beneficial and (Andersson, Shadloo, & Rudolfsson, 2016; Schalkwijk et al., 2015). The adaptation of families to the healthy life change process of the children, sharing responsibility and accompanying the children in this process, was considered a strong source of support for the children (Campbell-Voytal et al., 2018; Andersson, Shadloo, & Rudolfsson, 2016; Schalkwijk et al., 2015). Pearson, Irwin, and Burke (2012) study highlighted that children valued how proud their families were of them and considered this a source of inspiration. Campbell-Voytal et al.'s (2018) study, reported that children who were the most successful in losing weight during the programme have more motivating relationship with their families and added that their families cooperated with them.

In contrast to this, children mentioned that non-collaborative families acted as an obstacle and a barrier to maintaining a healthy lifestyle (Staniford, Copeland, & Breckon, 2019; Campbell-Voytal et al., 2018; Howie et al., 2016; Reece, Bissell, & Copeland, 2016; Pearson, Irwin, & Burke, 2012; Hester, McKenna, & Gately, 2010). For example, some children in Schalkwijk et al.'s (2015) and Staniford, Copeland, and Breckon (2019) studies participated in family-centred intervention programmes where is families actively engaged in the intervention sessions. Children here stated that they had difficulty maintaining their new healthy lifestyle changes when soft drinks and chips were readily available at home. Similarly, Hester et al. (2010) studied children who attended the 8-week residential programme. The camp living affected participants positively; however, they had difficulty maintaining what they had learnt and their new healthier lifestyle at home. Participants stated that the camp environment was appropriate for them to change their lives and that they adapted to change quickly. However, they had trouble integrating what they learn at the camp at home as they did not receive the same support from their families as when they started the programme. Similar challenges confronted by children in Reece et al.'s (2016) study. Therefore, healthy life changes obviously need support and families have a significant role in this respect. Without these changes can be reversed and relapse into old lifestyle patterns can occur.

2.3.9 Second review summary

This second review explored children's perspectives of participating in an obesity intervention and several key findings are of note. First, the review showed that there are only a limited number of studies that explore children's own experiences of participating in obesity interventions (Staniford, Copeland, & Breckon, 2019; Campbell-Voytal et al., 2018; Andersson, Shadloo, & Rudolfsson, 2016; Harmsen et al., 2015; Pearson, Irwin, & Burke, 2012). Most studies were conducted with children participating in intervention programmes using a family-centred approach, only two studies were carried out in hospital-based intervention programmes (Schalkwijk et al., 2015; Morinder et al., 2011). Data was predominantly collected from children through semi-structured interviews and only three studies were conducted with children along with their caregivers (Staniford, Copeland, & Breckon, 2019; Campbell-Voytal et al., 2018; Howie et al., 2016). However, in the findings of these three studies, the perspective of the children tended to be overshadowed by those of their families or caregivers.

Second, the review highlighted how children expect to achieve their personal goals by participating in intervention programmes. These personal goals mainly related to weight loss that could be demonstrated through fitting into clothing similar to those worn by peers which allowed them to be welcomed as members of their peer society and to avoid being bullied. These goals may stand in contrast to those of the interventions that usually encourage a focus on a healthy lifestyle and facilitate weight loss for health reasons. However, there is limited exploration of these issues as there are only three studies (Reece, Bissell, & Copeland, 2016; Schalkwijk et al., 2015; Pearson, Irwin, & Burke, 2012) that explored children's expectations of interventions, and one of these focused on parents' rather than children's perspectives. Similarly, only two studies explored children's concerns before attending the intervention programme and such concerns included; doing intensive fitness and eating less, fear of being bullied as well as of being the only 'big-sized kid' in the programme. However, the review findings also highlighted how children's expectations can foster their motivation to engage with the programme. From the limited literature within this review, it seems that the pre-intervention expectations of the children have not been adequately addressed in previous research.

Third, the majority of literature identified that children evaluated intervention approaches as suitable for their needs by being flexible and easy to apply in their daily life One study (Reece,

Bissell, & Copeland, 2016) though pointed out that it is important for children to participate with their own age range and that existing programmes are often designed for older age ranges because children are familiar with being educated at the same age usually relate each other in this way. Additionally, this review indicated a distinction made between hospital and community-based intervention programmes. While the community-based interventions were perceived as flexible and focusing on the individual needs, hospital-based interventions were often perceived as complex, difficult to implement, and focusing directly on weight loss rather than on individual needs concerning feeling good about themselves. While both programme types provide information, support and education, about it is not clear whether the emotional needs of the children are met, particularly in hospital-based programmes.

Fourth, and linked to the previous key finding, the review highlighted how children enjoyed active learning that encourages play, rather than sitting and observing like school education. The more interaction and fun they had during their participation, the greater their engagement and satisfaction with the programme. This sense of fun was seen to provide a distraction that keeps children away from negative feelings, such as body consciousness, self-focus, social fear as well as from emotional eating. Enjoying this interactive engagement, including becoming part of a non-competitive team, may be a key finding that helps prevent children dropping-out of intervention programmes. The strength of this finding was limited in this review pointing to the need to explore this of sense of belonging in more detail in future research.

Fifth, the review highlighted the increased knowledge and awareness children received from the programmes in areas such as physical activity, balanced diet and broader health issues. The fun encountered during interaction with peers during the programmes, alongside the information provided, often changed previously negative views about physical activity, empowered the children to engage in such activity, and helping to build confidence and raise self-esteem. This empowerment and improved esteem improved personal autonomy and increased the children's authority to make decision about themselves. While some children take responsibility for changing their lives in the light of the information given, there are also those who remain unready to take this responsibility. For some children, changes made often endured for months even after programme completion, while others discontinued their participation or could not sustain change after programme completion. Therefore, individual readiness for change is an important factor, yet little was reported in the studies reviewed about whether the children applied to the treatment voluntarily or not.

Sixth, the review highlights the importance of programmes providing a non-competitive environment in which children can feel equal with their peers, especially physically. Providing children with a comfort zone where they can be a part of group and develop shared social identity through trusting relationships was paramount to how the children perceived successful programme delivery. Such an environment provides the children with a comfort zone where they can join in activity without fear of being judged, stigmatised or bullied.

Finally, an interesting finding from the review relates to the emotional burden that programme participation can place on the children. Despite the mainly positive experiences reported in the studies, the responsibility of participating in programmes could also cause fear of failure, fear of being stigmatized, and fear of guilt and shame if participation did not lead to the desired and expected outcomes, especially weight loss. The importance of building trusting relationships with the facilitators to provide adequate support is necessary for children to engage successfully with programmes and to help maintain healthy behavioural change. Similarly, family and peer support are equally important in achieving sustained change. Therefore, even after programme completion, long-term support is perceived as a requirement by children.

The rationale for the current study

Having reviewed work looking at the perspectives of children about being obese and on their experiences of participating in obesity treatment programmes, it is clear that there are limitations in the research conducted with children with BMI≥95th percentile. Although studies with obese children have been reviewed, the majority of studies included 'obese *and* overweight' children, and these were therefore also included in order to best scope existing research in this field. In addition, the reviews only identified two studies covering children's perspectives on being an obese or overweight child *and* their participation in an obesity treatment programme. There is therefore a need to explore obese children experiences alongside their intervention journey.

Through the exploration of the background literature, several gaps were identified in current knowledge relating to the perspectives of children on being obese and their perspectives and experiences of participating in obesity intervention programmes. Generally, the reviews suggest limited research on the perspectives of children who are coping with obesity and engaging in intervention programmes. Specifically, there is a lack of relevant research which gives these children a voice and that explores their agency within everyday life and within

intervention programmes. The current study aims to help bridge this gap by addressing the following questions.

Research questions

These gaps guided the development of the following research questions:

- How do obese children describe themselves and their experiences?
- What are children's expectations and hopes for the obesity intervention programme?
- What are the children's experiences of the programme?
- How do they perceive the impact of the programme?

CHAPTER THREE: RESEARCH METHODOLOGY and METHOD

Introduction

As noted in the literature review, no clear or sufficiently comprehensive studies have focused on the experience of children of being a child with obesity and their obesity intervention programme experience. Therefore, given that the intention of this study is to seek an in-depth understanding of the experiences of children living with obesity who are enrolled in an obesity intervention programme, a qualitative study using a focused ethnographic design was adopted.

The first section of this chapter will address the research's theoretical perspective within ontological and epistemological frameworks of positivist and interpretivist considerations, respectively, and will provide a rationale for choosing the qualitative research. Then, the next section of the chapter will reflect on why a focused ethnography was chosen as the best approach for guiding the thesis towards answering the research questions and discuss the chosen methodological approach.

The second part of the study focuses on data generation, which is presented in three phases. Phase one will give the reader an outline regarding gaining access to the field along with obtaining ethical approval, and a general context of the research setting where the data collection was performed. Phase two will provide details of the sampling and recruitment process. The third phase will then provide details about the data generation process, along with my original strategy, how to plan and to gather data and my initial expectations.

In the third part, a concise report on each step of the data analysis is presented by using a thematic analysis approach. This is followed with a section on maximising trustworthiness of the study, where justifications on how the study was conducted rigorously are presented in detail. The final part of this chapter presents the ethical issues revolving around the topic, including critically assessing my actions, decisions, and working processes from an ethical perspective when designing and carrying out this study.

3.1 Theoretical perspective

The philosophical principles and the theoretical assumptions in a research design must be understood to provide a deeper interpretation of social research and generate more insightful

knowledge (Moon & Blackman, 2014). Researchers should define their research philosophy in order to clarify the method of obtaining knowledge regardless of their enquiry (Mason, 2018; Moon & Blackman, 2014). According to Crotty (2003, p.10) every theoretical viewpoint includes a specific understanding of *what is* (ontology) and *what it means to know* (epistemology). These different ontological and epistemological orientations are often contrasted and presented from the perspective of a conflictual understanding between positivist and interpretivist approaches. After formulating my research questions through reviewing the extant literature, I sought to consider my epistemological and ontological stance in order to identify an appropriate methodology for this study (Mason, 2018).

3.2 Positivist and interpretivist considerations

Theoretical paradigms, in general, shed light on researchers' endeavours to understand the social world by framing arguments and theorising norms about social entities (Crotty, 2003). By focussing on the theoretical foundations of research methodologies, Bryman (2016) highlights that qualitative and quantitative research methodologies differ according to their epistemological and ontological basis of interpretivist and positivist approaches respectively.

On the one hand, the positivist paradigm excludes subjective experiences and interpretation of individuals and, instead, takes an objective stance (Stanley & Wise, 1983). One of the most salient discourses of positivism argues that there is only one form of reality that can be discovered (Oakley, 2000; Stanley & Wise, 1983). Social phenomena and their core meanings then become independent on social actors (Bryman, 2016; Scotland, 2012; Cohen, Manioin, & Morrison, 2011). In other words, reality is grounded in the social world and is awaiting discovery through the application of scientific methods. Attainable knowledge is then an explicit fact and reality is argued to be objective and verifiable (Weaver & Olson, 2006, p.460).

Moreover, positivists argue that the world and researchers are independent entities; therefore, the process of obtaining knowledge of the world around us should not be affected by researchers (Scotland, 2012; Snape & Spencer, 2003). The epistemological stance of positivism, in this sense, is to discover the absolute knowledge of objective reality that is grounded in external facts that are free from social or individual interventions (Bryman, 2016; Scotland, 2012). This implies that the researcher seeks to determine an objective reality through value-free research in which social actors or researchers have no influence on the nature of

reality and truth (Scotland, 2012; Snape & Spencer, 2003). Thus, the knowledge always exists independently of human beings and can be accessed through research (Scotland, 2012).

On the other hand, interpretivism, as a theoretical paradigm, is based on the idea that there are differences between the objects that natural sciences deal with and the social realities that are created by people's interactions (Bryman, 2016; Snape & Spencer, 2003; Guba & Lincoln, 1994). Bryman (2016) explained that Weber (1864-1920) articulated the main idea of interpretivism though the notion of *Verstehen*; he argued that emphasis should be on understanding differences in the perception of social reality. From an ontological (relativist) position of interpretivism, it infers that reality is more subjective and constructed individually. From this point of view, therefore, there is no consistent 'truth' waiting to be known, the truth and its meanings are continually worked upon and changed by social actors (Bryman, 2016; Scotland, 2012; Bunniss & Kelly, 2010).

Furthermore, the role of interpretivist epistemology, in this regard, is to explore the differences shaped by different human relations. As Bunniss and Kelly (2010) state, there are two fundamental keystones which emerge as a result of exploring this perspective. Firstly, the first keystone applies a subjective epistemology, which provides various and multiple interpretations of reality instead of focussing solely on revealing general norms about the truth. It refers to the fact that knowledge and its meaningful reality are constructed and transmitted by the interactions of social actors with the social and physical world (Scotland, 2012; Crotty, 2003). Secondly, an interpretive approach comprises an effective basis for understanding how a particular phenomenon is understood and perceived by the individual who experiences it. In other words, the perspectives of individuals who are experiencing a phenomena should be taken into account in order to understand that particular social phenomena (Cohen, Manioin, & Morrison, 2011). It is therefore inevitable that findings can be affected by research interpretation (Snape & Spencer, 2003). Since reality is built by the interactions between social actors and individual perceptions (Scotland, 2012), researchers have to understand and interpret the subjective meaning of interaction of social action (Bryman, 2016).

In general, all paradigms can use qualitative and quantitative data (Scotland, 2012), however positivist and interpretive paradigms are closely related to quantitative and qualitative research respectively. (Bryman, 2008). Considering the analyses of positivism and interpretivism outlined above, this research adopts a theoretical paradigm that is very much influenced by the tenets of interpretivism. First, my aim was to explore how children describe themselves and

their experience of being obese as well as their experiences of an obesity intervention programme. In stark contrast to the realist paradigm which proposes one single truth or identifiable reality, my stance corresponded with an interpretivist ontological position. By doing so, this research sought to reflect the multiple realities which were fluidly constructed by children with obesity as they lived their individual lives (Patton, 2015; Moon & Blackman, 2014; Lincoln, Lynham, & Guba, 2011).

Secondly, I acknowledge the importance of the subjectivist epistemology by being concerned with participants' perceptions and experiences of being obese along with how an obesity intervention programme is understood and experienced by them. The aim of investigating this approach was to understand obese children's experiences through their own words and accept them as a social actors rather than excluding them from the research (Bryman, 2016). Accordingly, my own epistemological position was based on the understanding that different individuals construct and experience the social reality of being a child with obesity in diverse ways. This study therefore aimed to adopt an interpretivist epistemology and develop knowledge by interpreting the perceptions and experiences of the participants. In conclusion, I explored the childrens' social worlds through interpretation of co-constructed meanings among children, generated with obese children and myself.

3.3 Qualitative methodology

Based on the theoretical perspective outlined in the previous section, a qualitative approach was appropriate for this research. Perceptions or experiences are at the core of qualitative research in order to understand social and individual behaviour (Hennink, Hutter, & Bailey, 2011). Herein, a discussion of the rationale for opting to use qualitative methods for this study is provided.

Firstly, one of the aims of quantitative research is to produce a theory that can be tested and evaluated: a deductive approach (Bryman, 2006, 2016; Scotland, 2012). This provides a basis for prediction and generalization (Scotland, 2012); and thus, quantitative methods mostly rely upon data reduction, represented through statistics or numbers (Scotland, 2012; Oakley, 2000). However, one of the objectives of this research project is to generate ideas and explore a topic about which there is little known, that is, how obese children experience an obesity intervention programme and what it is like to be a child with obesity from their perspective. Qualitative research focuses on in-depth understandings rather than generalization of findings, making it

appropriate for the exploration of obese children's experiences (Cruz & Higginbottom, 2013). Qualitative approaches can help explore participants' responses to emotional issues, their thoughts, meanings they attach to events, experiences and behaviours. Therefore, qualitative research is well suited to my research aim.

Secondly, from a quantitative perspective, scientific methods strive for value-free objectivism (Bryman, 2006, 2016; Ormston et al., 2014; Scotland, 2012). This study, however, has embraced the idea of value-laden rather than value-free methods. Knowledge is recognised to be actively constructed through the historical and social interactions of humans (Cresswell, 2014; Ormston et al., 2014). Qualitative approaches to both interpreting data and gathering information from participants reject the possibility of value-free research and neutrality (Ormston et al., 2014). In this sense, this study accepts children as social actors, and hence focuses on individual experiences and their natural settings. The data, therefore, will be shaped by their experience and the researcher's interpretation, own experiences and background (Cresswell, 2014).

3.4 Ethnographic research

Having outlined my theoretical perspective and presented the reasons why a qualitative approach was chosen for this study, I now discuss my choice of a specific methodology for generating data for this research. Qualitative research is an overarching term that includes various research approaches. Here I provided a justification for why I chose to adopt an ethnographic approach and the data generation methods that I utilised.

Ethnographic research is based on anthropological origins that try to understand the social world through spending long periods of time immersed in a research setting and then describing the social actors, their culture, beliefs and values (Denscombe, 2014; Creswell, 2013; Della Porta & Keating, 2008). Ethnography is both a process and a product (Schwandt, 2007; Roper & Shapira, 2000). Ethnography refers to the process in which a researcher interacts with participants by observing and participating in their own natural environment or field to compile information. The data is acquired from participant observations, interviews, and additional sources, such as field notes, which are then analysed to disclose answers to the questions asked by the researcher (Richards & Morse, 2013; Hammersley & Atkinson, 2007; Higgenbottom, 2004; Roper & Shapira, 2000; Long, 1984). The result, namely product, is a written account, which describes and interprets cultural behaviours (Schwandt, 2007; Roper & Shapira, 2000).

An ethnographic approach, thus, allows the researcher to obtain profound and rich insights into the attitudes and values of individuals by engaging in their social world (Roper & Shapira, 2000).

Additionally, ethnography provides a detailed description of a culture or social group (Fetterman, 2010). This context is interpreted as a 'thick description' by Geertz (2008) and Denscombe (2014). The basis of the context involves understanding and interpreting the meaning of the situation or behaviour within the context (Denzin, 2001; Geertz, 1973). Firstly, as mentioned, "thick description" involves interpreting social interaction within the appropriate context in which the social interaction occurred. The core differences between those are well listed by Ponterotto (2006). Secondly, it conveys to the reader the sense of the thoughts, emotions, perceptions, and web of social interactions that the research participants experience. The third core aim of the interpretation of social action is to thoroughly understand the society or individuals who are part of the social action. It is not only about interpreting and understanding the social actions of people in a culture, but also about their intentions. Fourthly, as the detailed description of the context of the social action is being described by the researcher's account, the reader experiences a sense of reality. Lastly, 'thick description' of social actions provides meaningful and interpreted data while conveying findings to readers. According to Denzin (2001), the best way to define 'thick description' is to contrast the concept to 'thin description'. Compared to 'thick description', 'thin descriptions' simply report facts, focus on the summary of the social actions, which does not explore the meanings of cultural members and does not present lived experience (Ponterotto, 2006; Denzin, 2001). Thus, with the help of the 'thick description' orientation, the researcher can discover much interrelated information among observed research participants and their environment (Fetterman, 2010).

Inherently, ethnography allows the researcher to understand complex issues through the research relationship between researcher and participants, considering both 'emic' (insider) and 'etic' (outsider) perspectives and postulating the existence of multiple realities (Fetterman, 2010; Roper & Shapira, 2000). The emic perspective of reality is effective in understanding culture from the native's point of view and describing it in their own terms, through observing what is happening and asking the 'native' about what was seen and done (Fetterman, 2010; Roper & Shapira, 2000; Morris et al., 1999). The etic perspective follows the idea of making sense of what is seen by identifying patterns of behaviours (Roper & Shapira, 2000; Morris et al., 1999). Both emic and etic perspectives embrace the existence of multiple realities that have a critical role in understanding the differences between the way people think and the ways in

which they act. With the help of these perspectives, fieldwork involves an insightful and sensitive cultural interpretation (Fetterman, 2010). Therefore, this combination allows the researcher to supply a more accurate description from the native's point of view and what is happening in an action (Wolcott, 2008).

3.5 The suitability of a focused ethnographic approach for this study

Polit and Beck (2008, p.224) divided ethnography into two main categories: 'macroethnograpy' or 'anthropological ethnography' which is concerned with 'broadly defined culture', and 'microethnography' or 'focused ethnography' which focuses on 'more narrowly defined cultures'. Like macro ethnographies, focused ethnographies conduct an intensive participatory observation activity in a natural setting, asking questions to learn what is going on, to interpret the information "which are then interwoven to allow broad and deep understandings of people and how they interact in their social world" (Roper & Shapira, 2000, p.9-10).

In the field of health research, focused ethnography has been frequently utilised by nurse ethnographers as it allows "a focus on a distinct problem within a specific context among a small group of people" (Roper & Shapira, 2000, p.7) who share some feature or features (Richards & Morse, 2013). Such studies reveal culturally embedded norms that guide the action of individuals in a given culture, and thereby make health-care provision culturally acceptable (Morse & Field, 1996). With the ethnographic approach, researcher can focus on the specific context within which individuals' common behaviours and experiences manifest to discover how people from various cultures integrate health beliefs and practice into their lives (Richards & Morse, 2013; Roper & Shapira, 2000). Such studies through focused ethnography are appropriate when researchers have a specific research purpose in mind before going to the field of study, and when the obtained knowledge from the field is expected to be useful and practical for health professionals (Muecke, 1994). Since the aim is to concentrate on very particular questions, focused ethnographic research can be completed successfully in a short time period compared to traditional ethnographies (Roper & Shapira, 2000). This is a key reason why a focused ethnographic study was adopted for this research project.

3.6 Methods of data collection in ethnography

Ethnographic research enables us to learn about people's lives (or some aspects of their lives) from their perspectives and within the contexts of their own experiences, cultures and social worlds (O'Reilly, 2012; Sharkey & Larsen, 2005). O'Reilly (2012, p.84) stated that undertaking ethnographic research 'involves not only talking to them and asking questions (as we do in surveys and interviews) but also learning from them by observing them, participating in their lives, and asking questions that relate to the daily life experience as we have seen and experienced it'. Similarly, I did not want to just interview children. I was eager to understand children more holistically. Therefore, I employed observation in addition to interviewing, in order to be included in children's social environments to gain a better understanding of them, to observe their feelings closely and even to get to know them better. Below I critically discuss and present the rationale for the selected methods; observation, interviews, and interviews supplements; diary and 'draw and talk'.

However, interviewing children has its own challenges. In order to reduce potential power imbalances between a researcher and a child, the researcher can employ 'child-centred' and participatory research methods to investigate and discover children's perspective and experiences such as play, participant observation, diaries, play-and-talk and so on (Holland et al., 2010; White et al., 2010; Edmunds, 2008; Morrow & Richards, 1996). To accomplish this, I employed a talk-and-draw session, which assisted me in both articulating the interview and minimising the power gap and the pressure on children by making interview schedule flow more natural. For those children who did not choose to participate in the talk-and-drawing session, a researcher should be flexible when dealing with them particularly, and incorporate their decisions by providing them the choices of freedom to focus their interest on the study. For this reason, children were also given a notebook as a dairy, which they were offered to keep to aid their participation in the interview.

In conclusion, data were generated between the 8th of May and 17th of July in 2019 (eleven week), the period in which the PSI programme started and finished in the SHINE (Self-Help, Independence, Nutrition, and Exercise) Health Academy. Data were collected using demographic information forms, observation, interviews, talk-and-draw sessions, and diaries.

3.6.1 Demographic information form: About my child

In order to explore the potential intersections between children's experiences and perspectives

and socioeconomic position and ethnicity, parents asked to complete “about my child form” (Appendix L) detailing this data on behalf of their children. Parents were asked their own name and children’s name to identify which child’s family I am talking to and their phone number to arrange interviews with their children. Additionally, I preferred to ask parents their children’s ethnicity, as children may not know what ethnicity means. For socioeconomic positioning, parents were also asked to provide a postcode (first, one or two letters indicate the city or region, followed by one or two digits signifying a locality/ area or neighbourhoods in that city/ region such as S11 or DN1 etc.). This information would then be used to investigate a link on whether multiple deprivation data in the local area is associated with childhood obesity. Parents were asked to provide this information due to the diversity of children's ages and their potential variable knowledge of this demographic information.

3.6.2 Observation

Observation is a central factor of ethnographic research. It gives an ethnographer the opportunity of directly observing behaviours, instantly capturing the event in the natural settings (Richards & Morse, 2013; Fetterman, 2010; Watson, Booth, & Whyte, 2010; Hammersley & Atkinson, 2007). The primary purpose of observation as a data collection tool is to understand the field of study in-depth (Watson, Booth, & Whyte, 2010).

Observations are used in research in a variety of ways, from being completely unstructured to highly structured. This distinction is based on the theoretical paradigm of the study. The positivist researcher commonly uses structured observation (Watson, Booth, & Whyte, 2010; Mulhall, 2003) and requires a validated structured checklist to collect data (Watson, Booth, & Whyte, 2010). From the other perspective of the interpretivists, the focus is on understanding and interpreting social behaviours that accept information constructed through the interaction between the researcher and the 'researched' by taking advantage of the flexibility of a less structured observation schedule usage (Watson, Booth, & Whyte, 2010; Mulhall, 2003). Observation is, therefore, a systematic procedure for all types of data collection and analysis.

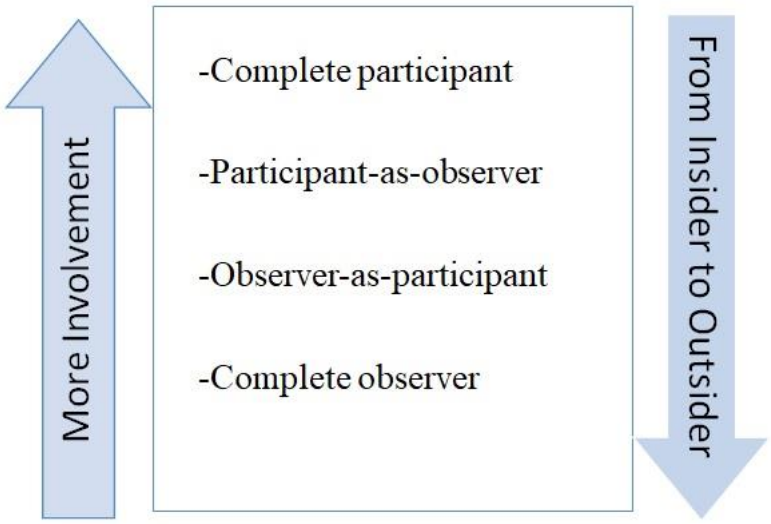
However, unstructured observation can become more systematic and structured by specifying which information, such as when and where to observe, what specific features of the environment or behaviour, will be observed, and how observations are made and recorded. In this study, I prepared a list to guide my observation (see field notes section on page 91). By doing so, it was possible to systematically gather detailed information by making sense of information from social contexts and interactions. Therefore, this study used semi-unstructured

observation to make sense of information and understand in-depth children's perspective in the context of being obese and their interactions within the obesity intervention programme.

3.6.3 Participant observation

In ethnography, the researcher observes the participant in their natural setting by being involved and playing a role (Fetterman, 2010; Roper & Shapira, 2000). However, the researcher can have varying positions depending on the degree of involvement in the research group. There are four distinct roles of the observer; *complete participant, participant as observer, observer as participants and complete observer* (Flick, 2014; O'Reilly, 2012; Roper & Shapira, 2000; Long, 1984). Those positions vary from the full presence of the researcher in the activity and being a part of it *(complete participants as an insider)* to the complete observation by staying out of the activity of those being observed with no interaction *(complete observer as an outsider)* (Watson, Booth, & Whyte, 2010; Roper & Shapira, 2000; Spradley, 1980). (see Figure 2)

Figure 2 Observational role in the fieldwork



Spradley (2016), Higginbottom, Pillay, and Boadu (2013), Fetterman (2010), Roper and Shapira (2000) offer many recommendations on the use of field notes that guide researchers in their use in this study (Spradley, 1980)

- *The complete participant* role is that the participants are not aware of the observation and research conducted since the researcher is completely engaged with those being observed and becomes part of the activity as an insider. It raises some ethical

implications, such as participants may not have agreed to be involved in the study (Roper & Shapira, 2000) and also full participation can prevent the researcher from interpreting the events objectively (Long, 1984). Since observation was included in the obesity intervention programmes, it would not have been appropriate for me to in a *complete participant role* as I seemed to be an outsider for those children participating in the programme. Besides, it would be difficult for child participant to see me as part of their group since I did not come to the intervention programme for the same reasons as they were, and I was not of the same age group as they were.

- *The participant-as-observer* role is that, like the complete participant role, the researcher still becomes a part of activities of those being observed; however, the researcher's purpose and the role is known by those being observed (Watson, Booth, & Whyte, 2010; Mulhall, 2003). That is where the researcher spends time and builds relationships with those being observed. Hence, the task is focused on developing a relationship of trust so that those being observed can reveal their true nature (Gold, 1958).
- *The observer-as-participant* is that the researcher participates in activities on a limited basis than either the complete participants or the participant-as-observer role. The researcher mainly focuses on the observation on the behaviour of those being observed or events in the setting rather than participating.
- *The complete observer* does not interact with those of being observed and only focus on observation or listening.

Although there are different observation roles, Roper and Shapira (2000) highlighted that the role of a researcher can be altered as the study progress as a participant or an observer in the context. For this research, I firstly considered an *observer-as-participant* role that did not directly involve children's activities and observe their behaviour and interaction within the context of the intervention programme. Therefore, I joined the obesity intervention programme in the first three months of 2019 as a volunteer to become familiar with the programme and its environment before starting data collection from April to June. I was also introduced to the programme as a volunteer as well as a researcher. I joined every session of the programme, so I was accustomed to the environment and with those being observed. During this three-month period, I became part of the programme and took part in the activities of those being observed when necessary. For instance, I was sometimes invited to the games by the children in order to equalize the number of group members during the sports or classroom activities in the research

setting. The fact that I had worked as a volunteer before the programme helped me to develop a positive relationship with those being observed. Additionally, my intention was to explain the purpose of my study and my role to the participants and carry out my study after being approved by them. Considering all, my role has changed from the *observer as participant* to *participant as observer* according to the needs of the study. Participants were aware that I was observing them, and I participated in activities and developed an ongoing positive relationship with the environment and those being observed and building trust. As Fetterman (2010) remarked, I had a chance to internalize the participants' behavioural and cognitive ritual context. Therefore, the *observer-as-participant* and *participant-as-observer* roles were adopted during the fieldwork, where observation was carried out in various ways and according to the observed events' degree of participation.

3.6.4 Semi-structured interviews

A semi-structured interview is a research tool that helps a researcher to explore participants' ideas and probe their stories for further information (O'Reilly, 2012; Snape & Spencer, 2003). Semi-structured interviews provide flexibility to the researcher by providing an interview guide instead of pre-determined closed questions, such as a questionnaire or a highly structured interview schedule. Waterman, Blades, and Spencer (2001, p.475) conducted a study where children aged 5-8 years asked nonsensical yes/no questions "Is a jumper angrier than a tree?", and they were also asked to explain their answer. They found that children attempted to guess the answer if the questions require yes/no answer, even when the true answer is not obvious. When children were asked to explain their reaction, the children clarified that the question was complicated and nonsensical. They also stressed that the researchers found that children who were asked closed nonsensical questions induced the misinterpretation of the data since it did not give an insight whether the children had completely understood the questions. They highlighted that the closed questions caused tension for children, and those children also had difficulty interpreting and understanding closed questions. In light of this information, while interviewing children, attention should be paid to the way the question is asked so that the question can be understood by them. Semi-structured interviews provide flexibility to the researcher to examine the subject and guide the interview's direction with prompt interview questions. The semi-structured interviews enable us to obtain content enriched with the children's own interpretation to explore the individual's perspective. As the flexibility and sensitivity of the researcher interviewing children are essential roles (Hill, Laybourn, &

Borland, 1996; Mayall, 1994), therefore, I used a semi-structured interview schedule to benefit its flexibility while articulating sensitive issues.

3.6.5 Development of the interview schedules

Two interview schedules (see Appendix E and F respectively) were developed in collaboration with the supervisory team, taking into account the perspectives of authors, such as Faux, Walsh, and Deatrick (1988), O'Reilly and Dogra (2018), Dogra (2018) and Punch (2002). The first interview schedule explored children's experiences of being an obese child, the second was to explore children's experience of participating in an obesity intervention programme. Both interview schedules were open-ended and designed using the funnel approach (Faux, Walsh, & Deatrick, 1988), which means that interviews began with a wide inquiry about the subject and then gradually narrowed the scope of the question until a very precise point was achieved. In addition to this, as stated before, diaries and drawings were used as an interview supplement to reduce pressure on children as well as making the interview more interesting. Although the children were previously given a notebook for diary or drawings, alternative questions were also generated to collect the same data from those who did not want to keep a diary or drawings. Therefore, being flexible was a key principle of working with children in this study.

Using age-appropriate language is important to make sure that children understand what has been asked. I was conscious of the fact that the language I used were basic and non-judgemental since the children may be even more sensitive and vulnerable (Hill, 2005) to some concerns, such as having excessive weight. Therefore, while preparing the interview schedules, I tried to avoid using some words that are potentially sensitive such as "obese" or "obesity". For example, instead of directly asking 'how do you feel about your weight or being an obese child', I formulated questions indirectly, such as 'how do you feel about yourself' and chose carefully while exploring their experience of being obese and the obesity intervention programme experience.

Once the data collection methods were chosen and designed, the next step was to enter the field to apply the methodology. The following section describes the way the methods are implemented. It presents the implementation of the study from the introduction of the field to gaining access through to the collection and analysis of data.

3.6.6 Interviewing children: Power imbalance

Undertaking research interviews with children and young people may be challenging for various reasons compared to doing interviews with adults. Children may not feel comfortable in the presence of an adult, particularly during one-to-one meetings. One of the reasons for this is that the child may perceive the adult existence as an authority figure due to the age difference (Waterman, Blades, & Spencer, 2001; Faux, Walsh, & Deatrick, 1988). It may be because children perceive the adult roles as authoritative figures in social life where they surrounded by an adult such as a father and mother figure at home, a teacher at school, doctor and nurse at a hospital. The age difference and the adopted role of authority in society create the power imbalance between the child and the adult, which may cause pressure on children. Therefore, a researcher should reflect on the potential power relationship between child and adult and, where necessary, reduce the power imbalance between them while conducting the research interview with children.

Researchers must be sensitive to the power imbalance. A researcher can minimize the power imbalance by making the interview context more natural (Eder & Fingerson, 2001). Eder and Fingerson (2001) suggested that group interviews might be a better approach while conducting interviews with children to reduce power imbalances and pressure on children. They also argued that children might feel empowered by the presence of other peers and their stories, and that group talk offers a more informal atmosphere for children. However, in this study, children may find the weight-related conversation distressing and offensive, hence some children may not prefer to be interviewed in a group and disclose their personal information or feelings. As a principle of working with children, children were given the right to choose an individual or group interview. Also, as described in the previous section, a semi-structured interview was chosen to make the children's interview flow more naturally and reduce the stress of the interview on children.

Additionally, to reduce the power imbalance between a researcher and child, a researcher can use various methods or interview supplements such as participant observation, diaries, play-and-talk or storytelling. (Holland et al., 2010; White et al., 2010; Eder & Fingerson, 2001; Faux, Walsh, & Deatrick, 1988). It is essential that these methods use age-appropriate language and that the chosen instrument reflects the child's perceptions, attitudes and knowledge on the subject (Holland et al., 2010; White et al., 2010; Eder & Fingerson, 2001; Faux, Walsh, & Deatrick, 1988). Concordantly, the interview schedule and information sheet have been written

in plain language so that children can readily understand. Similarly, when preparing the interview schedule, I planned the order of the questions in line with the least and most sensitive order to reduce pressure on children during the interview.

The data generation of this study was based on 'creative', 'child-friendly', and 'task-based activities' (Veale, 2005; Punch, 2002a) to equalize the power imbalance and strengthen my understanding of children, such as participant observation, diaries and talk and draw (Holland et al., 2010; White et al., 2010). Such methods, when used as a stimulus to a conversation, can be more valuable and less problematic data collection methods with children (Hill, Laybourn, & Borland, 1996). For example, Mériaux, Berg and Hellström (2010) studied the everyday lives of overweight children using body pictograms and drawings as interview supplements in their research. One research participant preferred a smaller body form on the pictogram than their current body shape, saying that she would look thinner if she resembled that shape. The use of pictograms aided in the representation of the ideal body shape in the children's mind on paper. Mériaux, Berg and Hellström (2010) also used drawings as an ice breaker instrument at the start of the interview, but even so, the findings did not include any drawings created by participants. Nonetheless, pictograms enabled the children to express themselves more concretely, which improved the study content.

Considering all these points, while interviewing the children, I employed a diary/drawing notebook and talk-and-draw methods (see Appendix H and I), which prove to be effective in minimizing the power inequality and the artificiality of interviews by embedding them into those methods as keeping children engaged along with enriching the study's context

3.6.7 Interview supplements: Diary and "Draw and Talk"

I designed my research with a specific focus on working 'with' children rather than 'on' children. I paid as much attention as possible to my data generation tools so that children would have fun, and actively engage with them. My aim for the diary is to focus on child-centred activation and to communicate with them interactively through the diary by focusing on the issues of children's lives, especially their daily experience. Therefore, children were given a notebook and were free to use it as a diary or drawing pad as soon as they consented to join the study. I also placed some prompt questions in the notebook to help the children structure their diaries/drawings while taking notes about their everyday experiences and emotions. For instance, 'what has been the best thing that happened to you today at school/home/weekend

days?' and 'what has been the worst thing that happened to you today at school/home/weekend days?'.

Additionally, if they do not feel like writing anything in their notebooks, they do not have to. I was prepared to lead the interview with the draw-and-talk participatory research method for both groups regardless of whether they had filled in a diary to cover the same questions with all participants. It was a bottom-up approach based on the participant's active involvement in the research process (Caraher, Baker, & Burns, 2004). I encouraged my participants with my prompt questions for the draw-and-talk session to understand children's perspective. During the draw-and-talk session, they were free to do all kinds of exercises on paper; writing, drawing, colouring, or do nothing. They behaved as they could express themselves freely at that moment. They were all given the opportunity to share the stories behind what they had written or sketched on paper with reflective questions.

3.6.8 Piloting the interview schedules

Prior to initiating data collection, I conducted one interview with a nine-year-old child in order to assess the applicability and understanding of the interview questions and also to practice my interviewing skills. I transcribed the interview and double-checked its accuracy with my supervisors. I felt that conducting a pilot interview enhanced both my interviewing abilities and confidence in managing an interview by allowing me to discuss it with my interviewee and in receiving feedback from my supervisors.

3.7 Generating Data

3.7.1 Phase One: Entering the field

3.7.1.1 Gaining Access and Ethical Approval

In order to recruit children, various "gatekeepers" were identified (University of Sheffield, 2012; Heath et al., 2007), such as the intervention programme providers and children's guardians. In July 2018, preliminary discussions were held with the organizations working with obese children asking permission about the possibility of conducting the study in their organisation. The SHINE Health Academy has given their approval, in principle, for the study to take place in September 2018.

First and foremost, The University of Sheffield Research ethics policy (2012, p.1) states that a researcher should strive to maintain high standards of the participant's dignity, rights, safety, and well-being in any research undertaken. I acknowledge that the weight-related conversation can potentially be distressing. I considered that maintaining participants' wellbeing and ensuring no harm was one of the ethical core in this study (University of Sheffield, 2012; Vanderstaay, 2005). The University of Sheffield Ethics Committee was consulted to protect and inform the participant and to cooperate with them voluntarily, and ensure their anonymity and confidentiality. I also provided my disclosure and barring service (DBS) enhanced certificate to prove that I am suitable for working with children or vulnerable adults (see Appendix J) in May 2018. Therefore, I submitted my ethics application to the Division of Nursing and Midwifery of Health Sciences School, University of Sheffield Ethics Committee on 12 March 2019 and received approval on 29 April 2019 (see Appendix K).

3.7.1.2 The Research Setting

This focused ethnographic study took place at the SHINE Health Academy that provided access to children with obesity during the 3-month PSI period between the 8th of May and 17th of July 2019 (eleven weeks). To convey the entire study well, one of the characteristics of the ethnographic study is the definition and description of the study setting. Since this study was carried out with children participating in The SHINE Academy PSI programme, a transparent and comprehensive reporting of the intervention programme will help benefit both an improvement of the quality of care (Borek et al., 2015) and the presentation of research findings. Hoffmann, Erueti, and Glasziou (2013) found out that only 53 (39%) of 137 non-pharmacological interventions, defined as intervention including surgery, technical, procedures, devices, rehabilitation, psychotherapy, behavioural intervention, and complementary and alternative medicine, were adequately described; although this figure was increased to 81 (59%) by contacting 88 authors, 63 of whom responded. Due to the poor quality of the intervention programme definition, the TIDieR checklist and guide have been developed to improve the completeness of reporting and provide a clear structure (Poduval et al., 2020; Hoffmann et al., 2014). It consists of twelve items, including the brief name of the intervention programme; the rationale, theory or goal; the procedures and materials and activities used in the intervention; the intervention provider(s); the modes and location of delivery; the number of sessions delivered in the intervention; if the intervention is tailored, if any changes were made; if adherence was assessed, and the extent to which the intervention was delivered as planned. There is no obligation to present information as presented in the TIDieR checklist

(Appendix R); the different items can be combined if appropriate (Hoffmann et al., 2014). Therefore, I tried my best to present the intervention programme and the research setting in the best structure that the reader can understand by referring to each item in the TIDieR guideline and checklist. The TIDieR checklist has also been added to the appendix and can be practically followed. Before moving forward, I presented a brief description of the SHINE Health Academy below.

3.7.1.3 The SHINE Health Academy

The SHINE aims at assisting young people to understand weight problems and educate them in how to manage their problem more effectively and independently by providing an educational programme, and by using psychosocial approach (The SHINE Academy, 2019a; Nobles et al., 2016). The PSI programme runs over a 3-month period, three times each year (from January to March, April to June and September to November). The PSI programme combines educational and behavioural components within a cognitive framework to sustain healthy life changes, targeting the broader implications associated with obesity rather than focusing solely on weight loss. It consists of three tasks: (1) nutritional therapy (nutrition and healthy eating, portion controls, healthy body and mind), (2) physical activity (active lifestyle, sports and bullying) and, (3) behavioural intervention, including psychological therapies to resolve problems related to body image, low self-esteem and confidence, anxiety, depression, and bullying. The programme is designed as a family-oriented approach; therefore, family(s)/caregiver(s) attendance is required. The main purpose of the family-centred approach is to increase family bound as well as collaboration at home. The programme is delivered to both groups separately in the SHINE building. For example, while children were taking their training session in the training room, their families were taking the same course in the reception area [see the physical description of the study setting, in Chapter Four]. The PSI programme is also delivered within the context of the Tier 3 programme. A Tier 3 service is defined as a service that includes specialist, multidisciplinary WMS (Brown et al., 2018; NICE, 2014b). Accordingly, SHINE caters for children with complex issues (BMI/waist circumference ≥99.6th centile, with or without comorbidities), including psychosocial issues associated with bullying and emotional status changes (Sharman & Nobles, 2015). Therefore, the SHINE Academy PSI programme enrols severely obese children and young people (aged between 10 and 18) who require multidisciplinary intervention defined as Tier 3. The age limit, as mentioned above, can be changed according to demand as well.

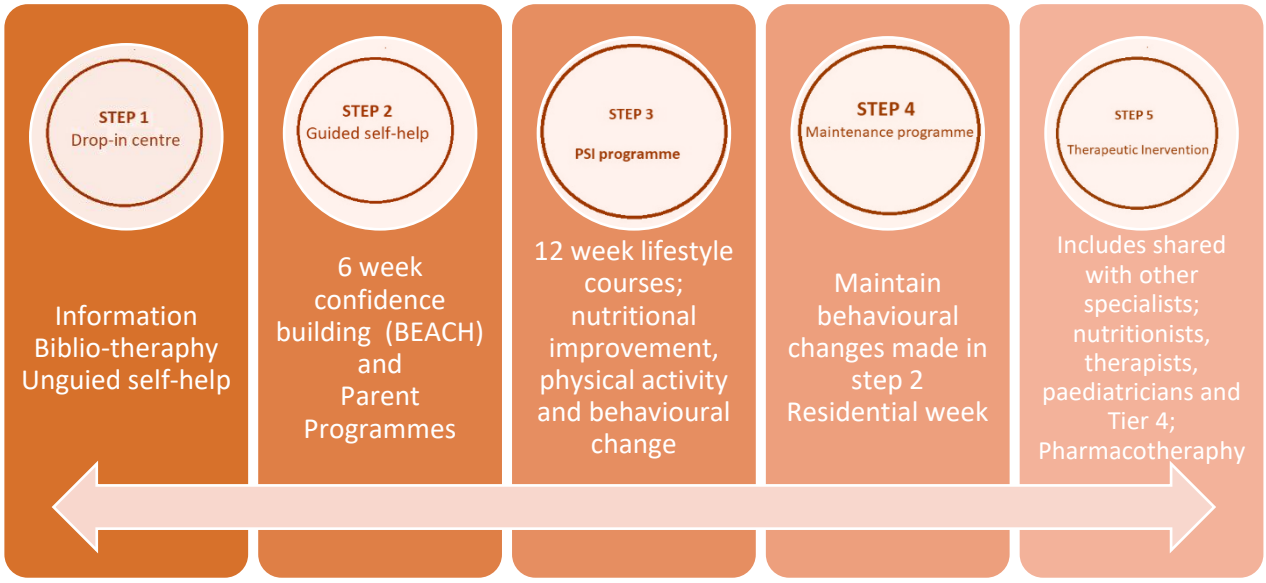
SHINE is a not-for-profit community-based organisation which is run voluntarily since 2003 that does not rely on outside resources to support its needs. The team consists of a director, a managing director secretary (nurse and child and adolescent therapist), a volunteered qualified paediatric nurse, therapist (British Association for Counselling and Psychotherapy (BACP) accredited and cognitive behaviours therapist (CBT) specialist), counsellor, four staff members and graduate youth workers. The training of staff training includes a 5-day workshop, a 12-week phase two module observation, a 12-week module with supervision, and then every new volunteer shadowed at each step of the stepped care approach (SCA). For each PSI programme session day, there are at least three volunteers and the SHINE manager (Kath Sharman), who was always taking her place in each session throughout the PSI programme.

Since the intervention programme settings and description included the observation reports, I decided to present the intervention programme in-depth in a separate chapter named "The description of the research setting" in Chapter Four.

3.7.1.4 The SHINE Care Pathway and Programmes

SHINE accepts both self-referrals, for someone who acknowledges requiring complex needs and is seeking information, help or further action from children or young people along with their families and referrals from general practitioner (GP) and other organisations such as school (Sharman & Nobles, 2015). As mentioned in the previous section, only participants with BMI≥99.6th centile by using the UK90 reference data (Cole, Freeman, & Preece, 1995). The first step after a referral is to make a comprehensive assessment that includes a physical, psychological, sociological assessment to determine appropriate treatment options for the individual (Nobles & Sharman, 2016). This initial assessment is provided by nurses or therapists (Sharman & Nobles, 2015). This step includes a family-oriented approach that children and families are informed about the severity of obesity in an empathic and insightful manner. Therefore, they can decide how to pursue a weight management pathway to improve future wellbeing (Sharman & Nobles, 2015). This face to face interview is carried out with the introduction of the intervention programme prepared using the SCA (Sharman & Nobles, 2015) that provides a care pathway to deliver and monitor treatments of individuals. A SCA is one of the integrated and tailored intervention methods for severely obese children and their families. As the severity of obesity increases, so does the intensity of SCA intervention (Nobles & Sharman, 2016). SHINE SCA developed according to NICE (2013) guidelines [see Figure 3 below]

Figure 3 SCA adopted by SHINE[4]



Step 1: Drop-in centre is accessible for children and young people and their families and is offered twice weekly. This session includes a bibliotherapy approach that provides participants with informative materials, such as a self-help book or brochure, they have chosen, and the depth of understanding of the informative source of the children is evaluated on the selected material, receiving feedback. Depending on children's needs, they can visit the centre weekly, fortnightly, or monthly for review, support, and assistance.

Step 2: Guided self-help is a six-week preparation course for children who do not feel comfortable joining a large group due to lack of confidence and social anxiety for an intervention programme. This short course provides BEACH (Behaviour Modification, Exercise, Anxiety Management, Confidence Building and Healthy Eating) approach. This approach includes an interactive approach to increase the confidence and social skills of individuals and their self-care in small groups (3-6 children or young people). Children who finished the guided self-help may continue participating in the PSI programme or continuing a drop-in centre/clinic.

Step 3: PSI is a phase in which participants actively participate in an intensive training program to address the participants' psychological and social needs and stop weight gain. It is a twice-a-week programme that runs for 12 weeks. This step is structured according to NICE's Tier 3 guideline and used by SHINE since 2003. It targets individuals' nutritional improvement

[4] See www.SHINEacademy.org.uk for further details of the SCA

(portion control, food labelling, healthy alternatives, etc.), physical activity and behavioural change, and improving psycho-social impact of obesity such as self-esteem, body image perceptions, stress management and support. The PSI programme also includes an extended maintenance programme of up to 1 year when required and depends on the person who wishes to continue. Otherwise, individuals are free to leave the group and continue with the drop-in centre/clinic.

Step 4: The maintenance programme is a 12-week programme and also known as a maintenance stage, is the stage of maintaining the behavioural changes made in step 3. It also includes managing healthy lifestyle and social relationship. It is also a range of maintenance intervention that includes residential. Residential is held one week annually, and it is for participants who attended at least a two-step care approach; two and three. This one-week intensive programme focuses on resistance and barriers against weight gain (The SHINE Academy, 2019b). It is an interactive course on daily basis, which is combined psycho-educational programmes with a physical activity programme to increase motivation for challenges. When required, step care four and five can be combined.

Step 5: Therapeutic interventions, which are more intense than PSI, are useful in the case of individuals who have had failed weight management attempts in the past and result in having resistance to change, low motivation and little expectations. It is provided by three different specialists: nutritionists, therapists, paediatricians. The SHINE nutritionists focus on children's behavioural and emotional eating behaviour and educate them about the benefits of a healthy diet. The SHINE therapists provide counselling sessions to children to explore their psychosocial issues related to their weight, such as depression, low self-esteem, and anxiety. Therapists use various approaches; Person-Centred Counselling, Psychodynamic Therapy, Cognitive Behavioural Therapy and Play and Creative Therapy. Paediatricians use pharmacotherapy if necessary, for children in cases where nutritional, behavioural and psychological treatment is insufficient. Pharmacotherapy is offered for Tier 4 intervention according to the NICE guideline.

3.7.1.5 The PSI Programme Participants

This study was conducted with children who participated in the initial and maintenance PSI programme, namely step care 3 and 4, between 8 May and 17 July 2019 (eleven weeks).

The maintaining PSI programme participants that completed the PSI programme before 2019 or completed the first trimester of 2019 and continued the programme on the ***8th of May 2019***

was called the maintenance PSI group (MG). MG group was sub-divided into two groups in order to reduce the density of the classroom-based sessions of **MG**. The group's division was made between children who went a 1-week residential and those who did not. The majority of the children who went to the residential week were older children. This group is known as a **residential maintenance group *(RMG)***. The rest were young children who did not want to leave their families for a 1-week residential programme were formed as a ***non-residential maintenance group (Non-RMG***). They joined their classroom-based session on the same day but in a different time slot, such as for Non-RMG from 04:45 p.m. to 05:30 p.m. for RMG from 5:30 p.m. to 06:30 p.m.

At the beginning of the programme, there were no participants for ***the initial PSI programme*** due to the inadequate number of applications. However, during the research period, a new four-person group started the initial PSI programme. This group was not ready to join the PSI programme directly; therefore, they first joined step care 2; guided self-help six-week session then moved on to the stepped care three initial PSI programme on **3rd of June 2019** (4 weeks after this study started (8th July 2019)). Since they started in the mid-programme schedule, it lasted seven weeks, and their classroom-based sessions intensified for 1.5 hours a day. Since they have just started the programme, this group will be referred to as the initial PSI programme ***beginner group (BG)*** in this study.

3.7.2 Phase Two: Sampling Strategy and Recruitment Process

3.7.2.1 Sampling and Sample

There are different non-probability sampling strategies than can be used in qualitative studies such as purposive, snowball and theoretical sampling. They are used to select according to the population's characteristics (Ritchie, Spencer, & O'Connor, 2003). There are well suited for small-scale in-depth studies (Cruz & Higginbottom, 2013; Ritchie, Spencer, & O'Connor, 2003). Purposive sampling is defined as judgemental sampling that participants will be chosen strategically regarding the research's objectives and questions (Bryman, 2016). As I initially planned to recruit participants through the SHINE Health Academy, purposeful sampling was used in this study. I invited participants with specific knowledge or experience as defined by the questions and purpose of the research (Bryman, 2016; Higgenbottom, 2004; Roper & Shapira, 2000; Coyne, 1997). Also, participants' homogeneity was aimed at using purposive sampling to generate rich and detailed information on a selected specific subject (Ritchie, Spencer, & O'Connor, 2003; Patton, 2002). Therefore, in this study, participants were selected

from children participating at SHINE Academy obesity intervention programme deliberately following the research criteria, using purposeful sampling. As a result, the inclusion criteria were the SHINE's inclusion criteria, which is as follows:

- ✓ Children with BMI/waist circumference ≥99.6th centile.
- ✓ Children aged 10-18 years who require multidisciplinary intervention defined as Tier 3. (the aged limit can be changed according to demand)

In addition to SHINE Academy inclusion criteria, this study added:

- ✓ A purposive sampling approach was used to recruit all children of any gender for in-depth interviews and observation from the SHINE Academy.
- ✓ To participate, children should not have any eating disorder, learning disability and any genetic disorder that affects their weight.

Table 2 below presents a brief description of participants' structures obtained from the About My Child (Parent/Guardian) form in the Appendix L, in recruitment order, the number of interviews conducted, and in which group they were. All names are pseudonyms and were self-assigned by participants themselves.

Table 2 Sample details

Participant Number	Pseudonym	Sex	Age	Ethnicity (Family reported)	Period of participation in a continuous or intermittent programme	Group Name	The number of interviews
1.	Harry	Male	14	White British	Eight months	RMG	2
2.	Max	Male	15	White British	One year	RMG	
3.	Emma-mea	Female	14	White British	Eleven months	RMG	2
4.	Phoebe	Female	10	White British	Two years	RMG	2
5.	Emily	Female	14	White British	One year	RMG	2
6.	Megan	Female	10	White British	Eleven months	Non-RMG	2
7.	Emma	Female	10	White British	-	Non-RMG	1
8.	Muhammed	Male	11	Mixed Race	Two years	RMG	1
9.	Aundrey	Male	12	White British	Two years	Non-RMG	1
10.	Isla	Female	10	Dual Heritage	One and half years	Non-RG	1
11.	Chloe	Female	14	White British	Four years	BG	1
12.	Jess	Female	14	White British	Eight weeks	BG	1
13.	Imiayah	Female	14	English-Caribbean	About two or three years	BG	1

3.7.2.2 Data Saturation

The concept of data saturation, explicitly or implicitly understood as 'no new information or themes', emerges as a way to explain and rationalize sample size in qualitative research (Braun & Clarke, 2021; O'Reilly & Parker, 2013). Braun and Clarke (2021) and Guest (2015) offer recommendations for describing how data saturation is achieved in an enriched and cohesive way. The process and techniques I utilise to achieve data saturation in the light of these recommendations are summarised below.

First, as a researcher, my understanding of data saturation is crucial. As mentioned in the beginning of this chapter, my ontological (relativist) and epistemological (interpretivist) approach was driven by generating ideas and exploring the topic in-depth from the perspective of children living with obesity. It implies that data-driven and raised by participant as defined: an inductive approach. In this case, I recognized that participants understood the phenomena and prioritised the development of full understanding of the phenomena until no new information and themes arose, thus data saturation was attained.

Secondly, the sampling method can be identified as one of the elements influencing data saturation. Considering that this thesis aimed to investigate the experience of children living with obesity and their experiences of participating in an obesity intervention programme, a purposive sampling method was used. Given the circumstances, no sample size was initially given since it is impossible to determine the sample size in advance in qualitative studies (Braun & Clarke, 2021; O'Reilly & Parker, 2013). In this respect, the number of participants (thirteen) that I interviewed and observed was heavily influenced by the practicalities of the project and who wanted to participate in this research. However, when it came to data thematic analysis, it became apparent that a number of themes were recurring among the participants. Although I did not use data saturation as a primary criterion for terminating data collection, the presence of these recurring elements strongly suggests that saturation was present. I recognised that purposive sampling helped provide homogeneity, another important factor in acquiring a group perspective on a particular phenomenon in a short amount of time that is therefore beneficial in attaining data saturation (Guest (2015).

Finally, displaying the coding process and highlighting the significance of thorough contemplation on, and involvement with, data is considered part of data saturation for reflective thematic analysis (Braun & Clarke, 2006, 2019); the analytic process used in my study. I was

transparent regarding how the data was coded and clearly outlined my level of involvement with the data (see 3.9. Data Analysis Section), including my reflexive interpretation (see Chapter Five and Six). Furthermore, to improve the quality of reporting of this research, the Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups was used (see Appendix S) (Tong, Sainsbury, & Craig, 2007).

3.7.2.3 Recruitment Process

The SHINE Health Academy was informed after this study's objective and methodology after gaining ethical approval, as they had previously agreed to collaborate. Although it could be argued that children's consent should take precedence, since this study was to take place in the SHINE Health Academy, family consent was the SHINE Health Academy requirement. Therefore, the consents were opt-in and obtained from children and their parents.

The focus was on recruiting each child participating in the programme. In the beginning, I designed the recruitment process in general as followed; (a) make initial contact with all children and their legal guardians, introduce my study by giving individuals information sheets, make sure children understand the study and give a consent form (b) give participants time to absorb the information and make decisions (c) start receiving consent forms from children (Appendix M) and their parents (Appendix O) as soon as the program starts, (d) start receiving consent forms from children and their parents as soon as the program starts (8th May 2019), kindly remind parents who have forgotten the form, (e) do not forget recruitment is an ongoing process, keep recruitment. As a qualitative researcher, I acknowledge that qualitative research is not a linear process and can confront unexpected situations and challenges (Bryman, 2016). Therefore, as planned, the recruitment of individuals was an ongoing process which was conducted throughout the PSI programme, as presented below.

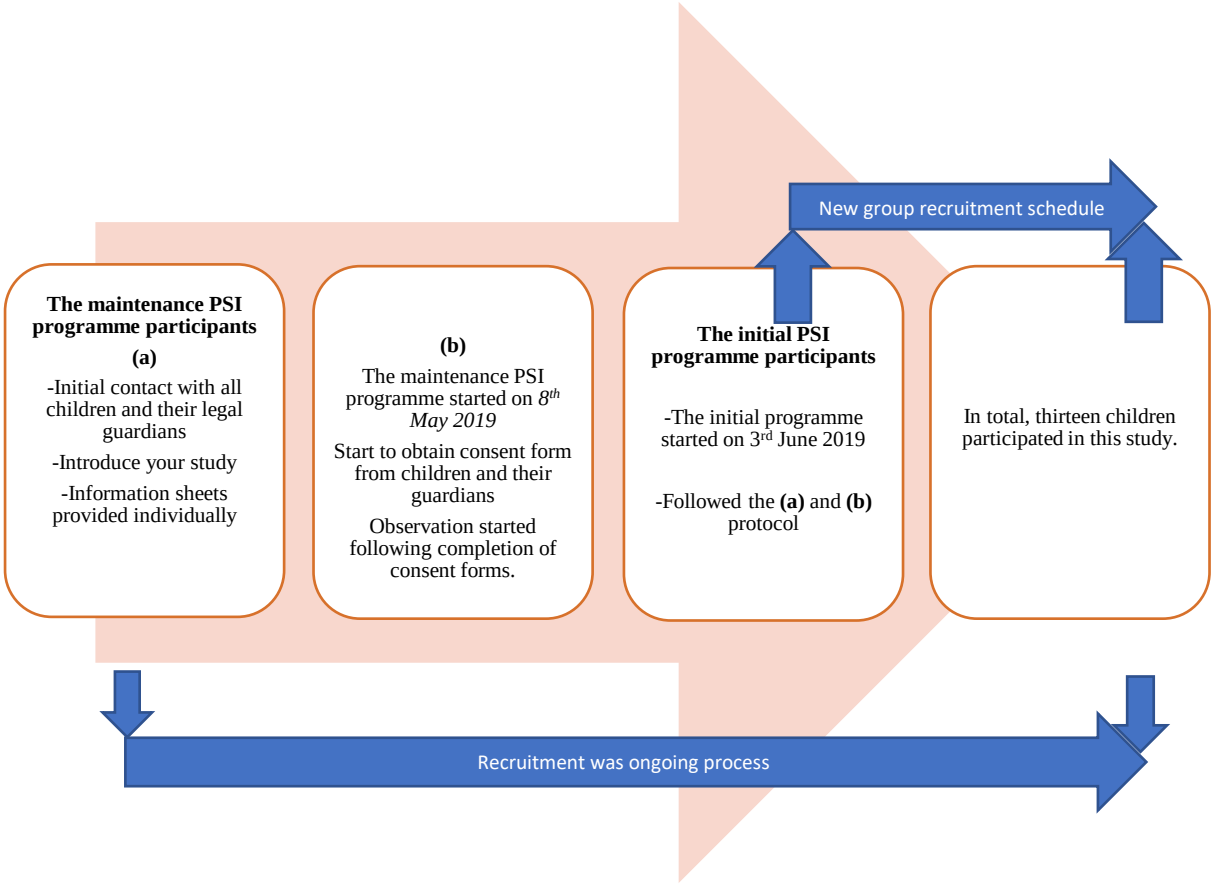
According to the plan, I initially met with some of the children and their families on induction day, held on 29th April 2019. On that day, the children in the previous PSI programme had their physical assessments (weight, height and waist measurement) before attending the maintenance PSI programme. They arrived, were measured, and they left. It was a very child- and family-friendly environment. On that day, I was given the opportunity to meet with seven children and their families individually in a manager's room or reception area (detail given in the physical description of the study setting section). I presented myself to explain my research and what the project means for each child and their guardians. I concentrated mostly on making sure that children understood the study aim. I also highlighted that it is purely optional to

participate in this study. They would still be able to come along to the SHINE Health Academy whether or not they participated.

Followed the initial meeting, children and their guardians received age-appropriate information sheets (see Appendix N and P, respectively), two copies of consent forms for each child and their guardians (see Appendix M and O, respectively), and demographic information forms: About my child (for families) (Appendix L) One original signed consent form was collected while they kept the other copy. They indicated they would sign it as soon as possible in the meantime. After this process, I had the chance to get in touch with the rest of the families and I was planning to obtain consent forms in the two weeks before the program started (from 29th April to 8th May 2019). As I mentioned before, the recruitment did not go as planned and continued throughout the program. One of the main reasons for this is that the SHINE Health Academy was accessible only one or two days before the program started and was opened three days after the program started. Therefore, there was limited time to reach children and their families. Another reason is that whenever I had the opportunity to meet the children and families, I kindly reminded them of the consent forms, and some families stated that they left the forms at home. Upon this, I started to carry some spare information sheets and consent forms just in case. As I volunteered for the previous PSI programme, the children and their guardians were already acquainted with me. Both children and their guardians clearly showed that they were interested in giving consent to carry out the study. Hence, the children and guardians who forgot the consent form at home and seemed willing to participate in the study signed the spare one that I had within my possession. Therefore, in the maintaining PSI programme group, I managed to recruit ten participants out of fifteen and two children were over seventeen years old, and they did not join the PSI programme actively.

Concordantly, at the outset of the programme, there was no participant for the initial PSI programme. Four weeks after the maintenance PSI group started, a new group of five people started the initial PSI programme. After the first classroom-based session of the initial PSI programme, I introduced myself and my study to the new participants and their guardians. One of the members in the 5-person group dropped out the programme because of psychological reasons; three of the remaining four agreed to participate in this study. The recruitment process continued throughout the programme and the following figure 4 shows the recruitment process. However, in total, thirteen of the seventeen children who regularly attended the programme participated in this study (see Table 2 in the sampling section).

Figure 4 The process of recruitment



3.7.3 Phase Three: Data collection

3.7.3.1 Conducting the Interviews

Semi-structured interviews were conducted either with children individually or in a peer group of two, depending on their preference. Interview appointments with the children were arranged through the families' contact numbers provided in the demographic document 'About my child'(Appendix L). I held these interviews at an appropriate time and place for the participants, in the dining room of the SHINE Health Academy building to ensure the privacy, comfort and safety of both the participant and I. In order for the children not to take their time off from different days, each meeting was scheduled when they came to the SHINE building, or either before or after the programme classroom sessions.

At the beginning of the research, there was only the maintenance group at the start of the programme. I intended to interview each child twice during the programme. The first interview would take place in the first half of the programme between the 4th and 6th weeks with the first interview schedule (see Appendix E) to discover details about being an obese child. The second

interview would be carried out in the second half of the programme; between the 9th and 11th weeks, the second interview schedule (see Appendix F) was about children's intervention experience.

As planned, two interviews were carried out with six out of ten participants from the maintenance PSI group. An individual interview was held with four children, and two children opted to participate in the interview together. Besides, the first or second interview could not be held with the remaining four participants due to private family issues. Therefore, fourteen interviews were held with ten people from the maintenance PSI group in total.

However, during the mid-term phase of the maintenance PSI programme, a new group for the initial PSI programme started. Since they began in the mid-term, the original 12-week initial PSI program has been delivered intensively within seven weeks. Due to the limited amount of time, only an individual interview with the three participants from the initial PSI programme was scheduled. Having interviewed the new group once, I prepared a third interview schedule (see Appendix G), consisting of the first and second interview schedules, to explore children's experience of being obese and their participation in the intervention programme. The initial PSI programme group, who was not familiar with that sort of group disclosure, preferred to participate individually in the interview. In total, seventeen interviews carried out by me with thirteen participants (see Table 2. Sample details, in the Sampling and Sample section, page 82) and the duration of each interview ranged 30 min or 45 min.

During each interview, I ensured the following principles were maintained and shared with the participants before the interview:

- Each interview started by introducing myself and identifying my position as a PhD student at the University of Sheffield.
- Since our interview was on record (via Olympus DS-3500 encrypted digital voice recorder), I supported them to find their own pseudonyms that were used throughout the interview. All participants were willing to choose their own pseudonyms.
- I highlighted that the interview schedule did not have a right and wrong answer, and it was a guide about what we could talk about through the interview.
- I bought a notebook of my own to take note of the pseudonyms they gave, and I also informed them that I sometimes took note on keywords to remember what we talked about during the interview. I kept the notebook on the table as the participant would see.

- The digital voice recorder was left in the middle of the participant and myself to reduce pressure on them and give them control over the recording (Oliver, 2010). For instance, they were free to pause or stop or playback recording whenever/if they want.
- Lastly, I kindly stated that since English is my second language, I might not understand what they meant and therefore, I could ask them to repeat what they said or speak slowly as much as possible to understand them better.

During the interview, the individual's diaries were also used to collect data. As soon as I received the children's consent, a notebook was given to the children to keep as a diary or for drawing. There were two children who wanted to participate in this study, although they did not want to keep a diary. As I stated, this study's principle was that keeping a diary was an optional research tool, and they were free not to keep a diary. The same two children did not want to participate in the draw-and-talk session during the interview. Only two of the thirteen participants, who were the youngest, kept a diary, which they did not keep on a regular basis. The diaries provided information about their daily life and feelings.

Additionally, during the interview, children predominantly attended the draw-and-talk session. One child did not reach the draw-and-talk session because of time constraints (his PSI session was about to start). Two children actively rejected to join the draw-and-talk session. In total, seventeen interviews were made with thirteen children, two children kept a diary, and fourteen pictures were obtained from ten children during draw-and-talk sessions (see Table 3 for detail information).

Table 3 Interview date, attendants and the number of interview and supplements usage

Participant No	Participants	Interview date, attendants and when using draw-and-talk sessions and diaries			
		First Interview	Second Interview	Draw and Talk	Diary
1 and 2	Harry and Max	05.06.19	26.06.19	Rejected	
3	Emma- mea	23.05.19	11.07.19	☺☺	
4	Phoebe	10.06.19	10.07.19	☺☺	♣
5	Emily	05.06.19	26.06.19	☺☺	
6	Megan	05.06.19	03.07.19	☺☺	♣
7	Emma	22.05.19	*	☺	
8	Muhammed	*	11.07.19	☺	
9	Audrey	12.06.19	*	Time out	
10	Isla		26.06.19	☺	
11	Chloe		15.07.19	☺	
12	Jess		08.07.19	☺	
13	Imiayah		01.07.19	☺	
Total	13 participants	17 interviews		15 drawings	2 diaries

Participant could not attend the interview due to family issues

3.7.3.2 Conducting the Observations

Observations were conducted over ten weeks (one-week participants went for residential), four days a week during the whole PSI programme, at different times of the day and at different times of the week, including weekends.

The observation took place in the SHINE Health Academy building two days a week. The maintenance PSI programme group classroom-based session started at 5:30 pm and the latest finish at 7:00 pm for ten days. Similarly, on a different day, the initial PSI programme group started at 5:30 pm and ended at 6:30 pm or 7:00 pm for seven days. The observation commenced in the reception area, stairs, training room, dining room, kitchen (see the introducing the study setting for detail). The building of SHINE Academy building was opened no more than 30 min before the sessions started, so I was generally in touch with the SHINE secretary who opened the building for access. I was present as soon as the building became accessible. I stayed in the building until all of the participants left the building. I often stayed to assist with tidying up, rearranging furniture, filling up the documents about children and preparing the next session materials or an upcoming organisation. Sometimes, observation notes were revised by visiting the manager's office occasionally.

Similarly, a sports session in the sports centre generally lasted between 11:00 am and 12:00 p.m., and those who wanted to swim remained in the building till 1:00 p.m. Therefore, participant observation in the leisure sports centre conducted between 11:00 am and the latest finished 1:00 p.m. for ten days. I always arrived at the sports centre 15 min in advance and attended sessions and stayed in the building until every participant left the building.

Concordantly, the leisure park observation session usually began at 4:30 p.m. and finished at 5:45 p.m., lasted seven days, three sessions were cancelled since two sessions coincided with extreme rainy weather and one session due to the residential week. Likewise, I always took my place 15 min in advance and stayed in the field until the last participants left the park.

In total, in 34 days, 44 hours of observation were undertaken (see table 4); 23 hours were at SHINE Academy building across seventeen days, 13 hours at the leisure sports centre across ten days, 8 hours at the leisure park across seven days.

Table 4 The observation timeline

Venue	**Hours**	**Group**	**Start date**	**End Date**	**Observation in days**	**Observation in hours**
SHINE Health Academy Building	Between 1h and 1h30mins	The maintenance PSI Group	8th May 2019	17th July 2019	10days in 10 weeks	15h
		The initial PSI group	5th June 2019	17th July 2019	7days in 7 weeks	8h
A leisure sports centre	1h or 2h	Both groups	8th May 2019	17th July 2019	10 days in 10 weeks	13h
A leisure park	1h15mins or 1h30mins	Both groups	8th May 2019	17th July 2019	7days in 10 weeks	8h
Total					**34 days**	**44h**

Observation ranged from sitting in the reception area, in the training room and sports area. For instance, I would often sit in the reception area until the PSI training session started to observe participants' action and their interactions involving their families, peer group, and with the SHINE facilitators. In this sense, my observation focus was shaped by the dynamics between the participant and the group and the response of the PSI programme. Therefore, multiple events were observed during the observation period. As Roper & Shapira (2000) recommended, my principle purpose of participant observation was shaped by participants' activity, identifying an interesting task or participants' response, and asked them to explain its meaning from their perspective. In other words, during the PSI programme, I talked with participants whenever I had a chance to ask questions about what they understood from the training session, or I took notes of their verbal and non-verbal responses while the training session or sports session was being delivered. At the end of the study, my observation was shaped by the definition of the research settings, how participants' actions and interactions were each other, how participants experienced the PSI programme, and how these interactions have been changed the group dynamics.

3.7.3.3 Observational data collection: Field notes

Field notes are also one of the meaningful data collection tools on the basis of participant observation and intensive fieldwork (Sharkey & Larsen, 2005). During the fieldwork, a notebook was used to record the observations. Field notes were usually written immediately as an event happened but also after the observations. Relevant information from the document, such as the material used in the PSI training session, posters and the documents filed by the participants, were also recorded in the field diary. All participants were anonymous in all field notes diary process and then changed with the pseudonyms that were self-assigned by participants themselves.

While carrying out fieldwork, I took verbatim notes about descriptions of participants, their behaviour and interactions with one another in their natural setting. It is also a set of notes that includes what is spoken, heard, seen, and sensed, including the researcher's perspective, sense, and comments related to events in the settings. Additionally, it includes the description of the environment, the programme's flow, the content, schedule or the routine (if any) to better reflect and understand the cultural setting. It also reflects upon the researcher's perspective, feelings, and comments related to events in the particular setting. Spradley (2016), Higginbottom, Pillay, and Boadu (2013), Fetterman (2010), Roper and Shapira (2000) offer many recommendations on the use of field notes that guide researchers in their use during their study. The things I pay attention to while taking field notes in light of these recommendations are summarized below.

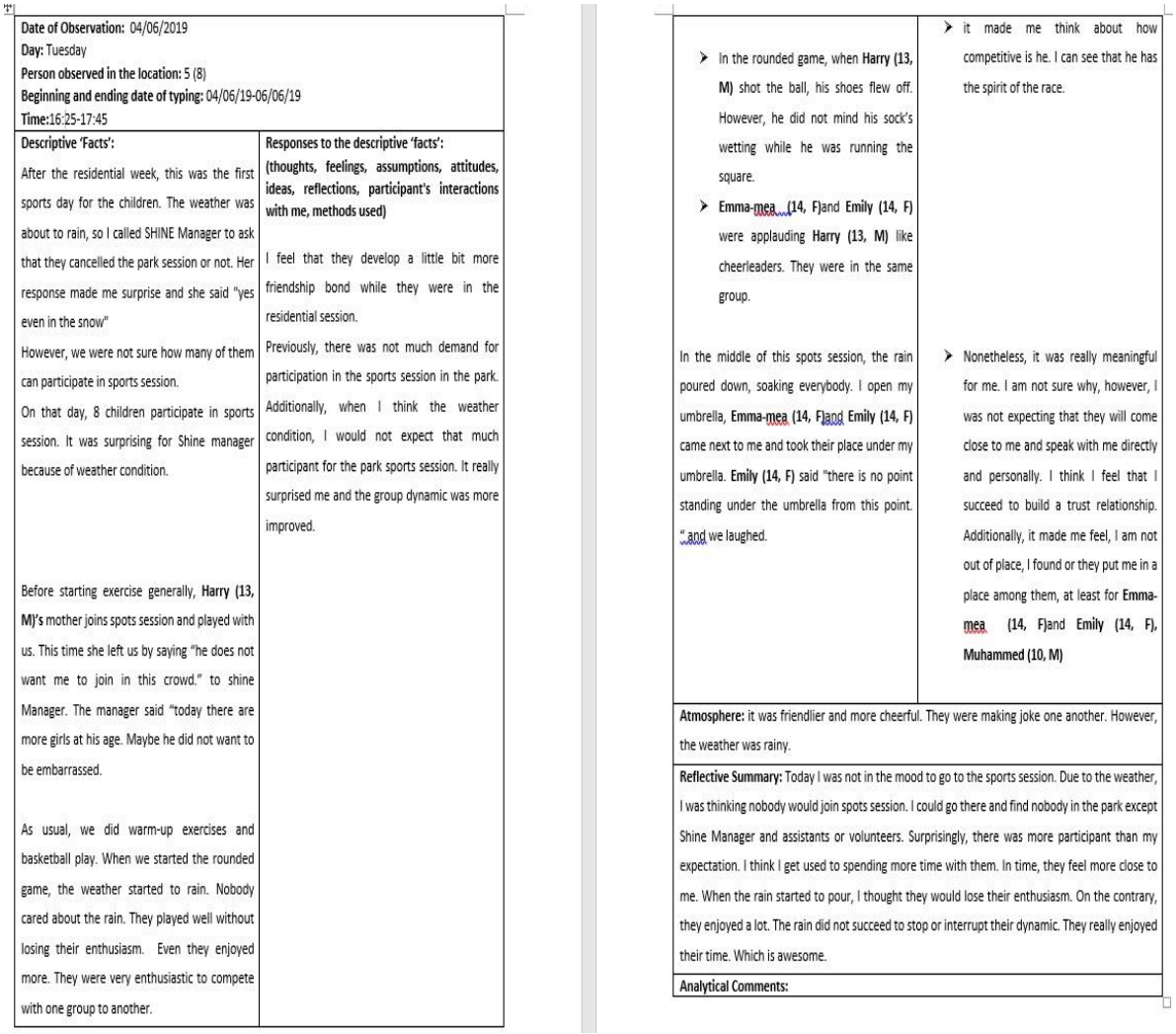
- Always take your journal/diary and pen,
- Record the date, time, and location,
- Be anonymous
- Jot down short notes, key words not to miss any data in the field or not to destroy natural flow, as well as participants, comfort zone,
- Jot down the observations and any interaction within any relevant contextual information,
- Jot down the difference between what children say and do and pay attention to their body languages, such as gesture and facial expression.
- Jot down your own experience, thoughts, and feelings about events,
- Each day, expand handwritten notes including your thoughts as soon as possible,
- Read-in your extended detailed observation report and stored it in a password-protected computer as soon as arriving home that day.

Considering all the intricacies of field note taking, I provided a detailed report including physical surroundings of the SHINE building and leisure sports centre (such as room, space and comfort), daily routines of SHINE PSIs to guide and understand the structure of the PSI programme. I observed a focus on participants' verbal and non-verbal behaviours and recorded them as near verbatim as possible. Verbal behaviours included their communication with each other in the presence of the SHINE tutor either inside or outside the classroom, and the meaning of the activities for them. Those non-verbal behaviours included any positive/negative body language in response to PSI's instructions inside/outside their classroom and sports activities such as facial expressions or body language as well as their interactions with one another: what they are saying and what they are doing (Higginbottom, Pillay, & Boadu, 2013; Fetterman, 2010; Roper & Shapira, 2000).

All field notes have been written according to chronological order, including the date, location and any interaction within any relevant contextual information (see figure 5 below). While observing, I took short notes in my notebook that included some keywords rather than writing in full since it would cause me to miss any data in the field and would destroy my participants' comfort zone, which would prevent children from behaving naturally. After each daily session, I expanded my handwritten notes, from what I have captured during my observation within detailed descriptions, in an unused room, generally in the manager room, in the SHINE building or when I arrived home on that day. Afterwards, my handwritten notes were typed up into an extended detailed observation report and stored in a password-protected computer when I arrive home that day and the following day. This helped me distinguish myself from the field and analyse and interpret what I saw in the field. All field notes were documented in Microsoft Word files and stored within a different file as shown in Figure 5 below.

In both the handwritten field dairy and the extended detailed field notes in computer, the detailed descriptions and explanations have been written to make the notes understandable to the reader, while attempting to provide an immersive reading experience portraying the observed events. To achieve this, I tried to remember and write down the details of the participants and events that convey the sense and nature of the events. For example, their interactions with people around them, how they used tone of voice when talking, their facial expressing and body language during the events, their reactions and actions to the environment and the PSI programme. These detail descriptions helped me portray the series of events, the moments, and even the day and convey the meaning of the actions and interactions that I observed.

Figure 5 Example of extended typed up field notes



Date of Observation: 04/06/2019
Day: Tuesday
Person observed in the location: 5 (8)
Beginning and ending date of typing: 04/06/19-06/06/19
Time:16:25-17:45

Descriptive 'Facts':	**Responses to the descriptive 'facts': (thoughts, feelings, assumptions, attitudes, ideas, reflections, participant's interactions with me, methods used)**
After the residential week, this was the first sports day for the children. The weather was about to rain, so I called SHINE Manager to ask that they cancelled the park session or not. Her response made me surprise and she said "yes even in the snow" However, we were not sure how many of them can participate in sports session. On that day, 8 children participate in sports session. It was surprising for Shine manager because of weather condition.	I feel that they develop a little bit more friendship bond while they were in the residential session. Previously, there was not much demand for participation in the sports session in the park. Additionally, when I think the weather condition, I would not expect that much participant for the park sports session. It really surprised me and the group dynamic was more improved.
Before starting exercise generally, **Harry (13, M)'s** mother joins spots session and played with us. This time she left us by saying "he does not want me to join in this crowd." to shine Manager. The manager said "today there are more girls at his age. Maybe he did not want to be embarrassed. As usual, we did warm-up exercises and basketball play. When we started the rounded game, the weather started to rain. Nobody cared about the rain. They played well without losing their enthusiasm. Even they enjoyed more. They were very enthusiastic to compete with one group to another.	➢ In the rounded game, when **Harry (13, M)** shot the ball, his shoes flew off. However, he did not mind his sock's wetting while he was running the square. ➢ **Emma-mea (14, F)**and **Emily (14, F)** were applauding **Harry (13, M)** like cheerleaders. They were in the same group. In the middle of this spots session, the rain poured down, soaking everybody. I open my umbrella, **Emma-mea (14, F)**and **Emily (14, F)** came next to me and took their place under my umbrella. **Emily (14, F)** said "there is no point standing under the umbrella from this point. " and we laughed.
	➢ it made me think about how competitive is he. I can see that he has the spirit of the race. ➢ Nonetheless, it was really meaningful for me. I am not sure why, however, I was not expecting that they will come close to me and speak with me directly and personally. I think I feel that I succeed to build a trust relationship. Additionally, it made me feel, I am not out of place, I found or they put me in a place among them, at least for **Emma-mea (14, F)**and **Emily (14, F), Muhammed (10, M)**

Atmosphere: it was friendlier and more cheerful. They were making joke one another. However, the weather was rainy.

Reflective Summary: Today I was not in the mood to go to the sports session. Due to the weather, I was thinking nobody would join spots session. I could go there and find nobody in the park except Shine Manager and assistants or volunteers. Surprisingly, there was more participant than my expectation. I think I get used to spending more time with them. In time, they feel more close to me. When the rain started to pour, I thought they would lose their enthusiasm. On the contrary, they enjoyed a lot. The rain did not succeed to stop or interrupt their dynamic. They really enjoyed their time. Which is awesome.

Analytical Comments:

Finally. each field note was given a number, researcher initials, as well as date within the year, month, day such as [FN15-MC-20190604].

3.8 Reflection on Using Data Collection

This part of the chapter includes a critical review of the research design and a critical appraisal of my experiences during the data collection and the changes made during the fieldwork. It contains my critiques of the approach and methods used to address the research questions and my thoughts on their applicability and efficacy with children along with their practicality and utility.

During the recruitment stage of this study, I initially targeted all children who attended the PSI programme at the SHINE Health Academy. However, I confronted unexpected difficulties despite having worked voluntarily in the previous 3-month PSI programme. When I first introduced my study, before starting data collection (08 May 2019), children and their guardians were keen on taking part in this study. However, when I contacted them again, some expressed that they no longer wanted to participate in the study. In some cases, guardians wanted their children to participate in the study; however, my priority was the voluntary participation of children. If the child did not want to participate in the study, I did not insist the child to attend. Two children were very enthusiastic about participating in the study; however, they forgot to bring their guardians' consent forms, or I could not get the consent forms because their families were not participating regularly in the programme. Upon this, I decided to offer additional consent forms (that I always carried with me) to guardians who forget the forms. Fortunately, in this challenging process, I managed to recruit more than half of the active participants in the programme.

Interviewing with children: At the beginning of the interview, I was concerned about whether children would communicate explicitly with me during the interview or not. They could have felt sensitive about their experiences or be uncomfortable with the research questions. However, listening to children talking about what they were going through as an obese individual and their emotional state and their experiences of the obesity intervention, including nutrition, exercise, as well as psychological journeys, challenged my preconceived notions that children are passive when in fact that they had a lot to say. This scenario, of course, did not affect my perspective and research ethics towards children, and I tried to retain my sensitivity to children as much as possible throughout my work. In general, they freely shared how they felt about very delicate matters, such as self-harm; if I were in their shoes, I would not have articulated myself as openly as they did. As a result, contrary to my concerns, the children involved in my study were courageous and capable of expressing themselves.

Another concern I had was that I would be unable to understand how children pronounce English while interviewing them. As previously stated, English is my second language. When speaking with, or listening to adults in academics and social life, I have no concern. However, I found that the children were speaking in a Yorkshire accent when I voluntarily worked in the intervention programme. For this reason, before beginning interviews, I asked the children to speak slowly and simply if possible, and on top of that it was as if we had changed roles. They became my mentor, and while children were expressing themselves, they asked me some reflective questions to make sure that I understood the terms they used, such as "Distraught. Do you know what that means?". When I requested them to repeat or explain what they meant, they interpreted what they meant and explained in detail. They had so much fun explaining the "terms" they had used and taught me. In general, it became a fun activity for them both talking about their own experiences and trying to teach me some English words, for instance, "Do you know what melancholy means? (he laughed) Sad (I think he enjoyed teaching)" (Aundrey aged 11). It turned out that being an outsider had its positive side. By doing so, it helped me understand the 'descriptive terms' they used as they were describing themselves and what their experience meant to children. While analysing data, it also helped to verify what children really wanted to say, convey their feelings and experience verbatim as well as helped to develop rapport with the participants.

Interviews became so interesting to most of them that if we had time the interview could take more than 45 minutes. Unfortunately, I had limited time and I had to give priority to cover research questions. However, it was sometimes challenging to keep them on the topic. They were eager to talk about their experiences, sometimes lost in the details when answering the question and even forgot which question, they were answering by saying "I forgot the question" [Muhammed aged 11]. I had to repeat the question a number of times to keep them on the subject and remind them what we were talking about. After each interview, I asked how the children felt about the interview schedule and whether they had any questions that they would like to add. A participant added as a follow-up question to ask others: "I think, how they feel when they go out somewhere to eat? Like if they feel comfortable." [Harry aged 14].

Additionally, I also asked each child if they felt comfortable or if there was something that made them uncomfortable during the interview. They were of the opinion that interviews were completely natural, and they were comfortable. One participant even added: "No, not really, because I know, I feel, I also feel because I am not using my real name [trust building]" (Megan

aged 11). This gave me the sense that I had developed a trusting relationship with children and that they understood everything in the consent form regarding the anonymity of their participation.

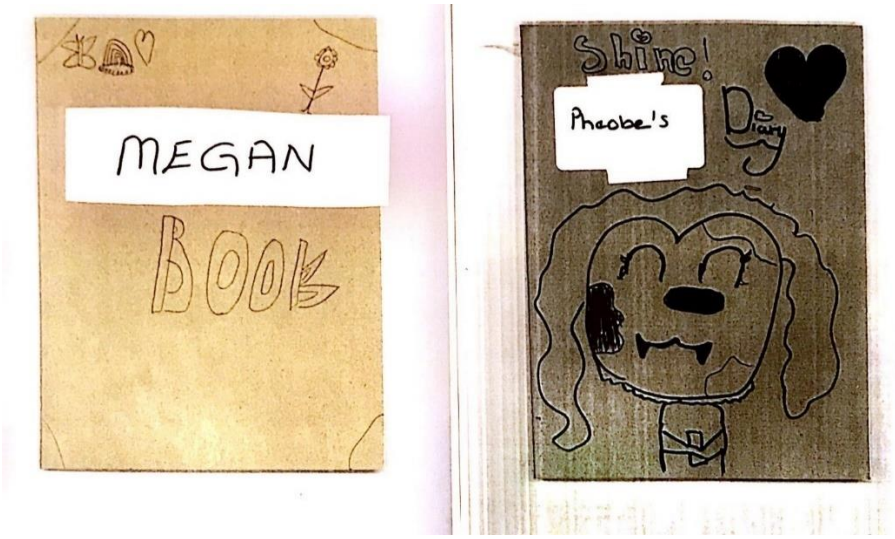
Individual or group interviews reflection; Children were free to participate in the interviews both individually and in a group. Almost all children preferred individual interviews and only one male participant opted to be interviewed together with another male participant in the intervention programme. The main reason he gave for preferring the group interview with a specific person was that he (Harry aged 14) described himself as "shy" and felt more "comfortable" with his peer (Max, aged 15) of similar age. One of the oldest female participants (Emma-mea aged 14) had requested to be interviewed with another older female participant (Emily aged 14) she had chosen from the class, however, she opted to participate in the interview individually since their availability did not overlap.

Some children are better and more relaxed in group interviews when they are together with their peers rather than being alone with an adult, and it is also critical for minimising the power imbalances, as Einarsdóttir (2007) and Eder and Fingerson (2001) indicated. All children who participated in the interview, whether individually or as a group, expressed themselves quite comfortably. The possible explanations for the children participating in the individual interview are that the children may have had a lot of fun with the drawing and talk session, and they did not perceive me as an adult threat and developed a trust relationship. Another potential explanation is that the children who took part in the group interview were empowered by the friend they were with and, unlike those who participated in individual interview, they did not want to participate in a draw-and-talk session.

Even though two group interviews with the same participants were held, I expected the group interviews to be more effective than the individual interviews. I thought that when one voiced his opinion, the other would feel courageous and develop his viewpoint in response to the stimulation. However, the group interviews were more challenging than the individual interview. The main challenge was the fact that one echoed almost the same thing as the other said. Even if I switched the order of the questions when leading them, the outcome remained the same. Possible reasons are that the topic of the interview is sensitive or that, as he previously said, he is a timid individual so he might be more inhibited in a group. On the contrary, individual interviews were lively and enjoyable. The children were generally talkative and comfortable in expressing themselves.

I was disappointed that most of the participants did not want to keep a diary. I always reminded myself that the study's principle was to be flexible; therefore, keeping a diary was optional. However, even though I expected more, it was their own decision to participate in this study, not keeping a diary was again a decision taken by their own free will. Just two young children among all tried to log in a diary; however, they made few entries in their diary. Albeit it was a short period, it was well-received by those who chose the diary option. I was surprised by how children personalised their diaries (see figure 6 below). I could not imagine that they would embrace the diaries that much, as there were very few participants who kept diaries.

Figure 6 An example of diaries



On the other hand, during the draw-and-talk session, children had a lot of fun drawing and mostly had bursts of laughter beyond my expectations. The children described their experiences and conveyed their feelings in detail through their drawings or writings instead of giving a specific answer. These sessions worked better than diaries and gave the children the power to express themselves freely and helped me take advantage of their creations by moving away from some stereotyped definitions. The individual differences of the children became more pronounced with their own imaginations. This helps me to provide uniqueness in the interpretation of the data.

Observational roles and relationships as research progressed: I initially concentrated on fitting in with facilitators and became acquainted with the intervention programme while working voluntarily. I used to wear a t-shirt with the SHINE Health Academy logo printed on it, which, along with an ID badge, specifically marked me as a volunteer. Although I have intentionally been introduced as a researcher and volunteer before fieldwork, when families

and children visiting the SHINE academy started asking me questions about the programme, they thought I was one of the facilitators. On the one hand, this situation gave me the pleasure of recognition; however, it also made me concerned that the children would embrace me as one of the volunteers and would not talk to me freely as I began gathering data. I personally noticed that the facilitators of the SHINE Health Academy established a trusting relationship with children and families. The facilitators had a positive impact on the children, and they were at peace with their surroundings. Working with children, as I understood from the literature, is focused on building a trustworthy relationship, so the children's trusting friendship with the facilitators inspired me even more. Therefore, working voluntarily prior to beginning the data collection was the most significant commitment I made in my career in order to develop a bond with children, and establish relationships with facilitators and families.

Based on the needs of the study, taking a role in the obesity treatment intervention programme setting involved varying degrees of roles throughout the duration of my participation in the programme and my research, such as between as an *observer-as-participant* and a *participant-as-observer* (see detail explanation in Participant observation section). In my own way, I took a series of steps to raise awareness about the difference between my position as a researcher and volunteer. Before starting the data collection process, I explicitly outlined my researcher identity and the reason for my participation in the programme, as previously stated. Before performing interviews with children, I took off my SHINE-branded t-shirt. I only used a name badge that reveals my researcher identity. Although I tried to stick to the *observer-as-participant* as much as possible, I attended children's activities when they invited me, as participating in their activities helped me communicate with them in a more natural way. This flow of variance in roles, position and degree of engagement corresponds to the approach referred by Roper and Shapira (2000) and Spradley (1980), who agreed to a continuous negotiation about when and how observation and interaction occurs, understand the behavioural reasons of participants in the intervention programme and the culture of more complex social worlds.

3.9 Data Analysis

All data were collected through audio recordings of interviews, interview supplements, drawings and diaries, written observation notes and general field notes. As an ethnographer, I used a variety of data collection techniques. However, as stated by Braun and Clarke (2006; p.79), for analysis, there were two data sets, fieldnotes and interviews, which are a component of the data corpus (all data) used for a particular analysis. As mentioned in Chapter Three, (Interviewing Children: Power imbalance, page 72, and Interview supplements: Diary and "Draw and Talk", page 74) children's drawings and diaries were used a prompts for interviews rather than being distinct data collection instruments. Throughout the interview, the children talked about their own drawings and diaries, which allowed them to express their views more freely and analyse their own drawings and diaries, providing their own interpretations and explanations. In this sense, the children analysed their drawings and diaries for me rather than my conducting a separate analysis. As a result, since I did not analyse drawings as distinct data, I did not apply data triangulation or integration to drawings and interviews.

One of the most important aspects of ethnographic data analysis, and one of the most debated topics, is how to interweave different data sets (Strøm & Fagermoen, 2012). In ethnography, there is no one form or process of analysis; rather, numerous forms of analysis are required (Fetterman, 2010; Angrosino, 2007). The analysis of observational field notes and interviews is usually, initially, performed separately and the researcher then combines the codes in a later stage of the analytic process (Strøm & Fagermoen, 2012). Some studies, such as Li, Zhou, and Hesketh, (2016), Hjalmarson, Ahgren, and Kjölsrud, (2013), and Skär and Prellwitz (2008), are predominantly interview-focused, with less emphasis on observation in data analysis and presentation to interview transcription. However, Angrosino (2007) suggest that field-based researchers should maintain a constant validity check, which mostly entails going back and forth between emic and etic viewpoints. As a result, I endeavoured to assign equal weight to both observation and interview data, emulating this iterative movement, in order to provide a more complete picture of the social contexts (Strøm & Fagermoen, 2012; Fetterman, 2010).

Strøm and Fagermoen (2012) also point out, that it is important that the researcher clarify how the data is intertwined, the complementarity of the data types, as this increases its transparency for further theoretical analysis and interpretation. , Angrosino's (2007; p.68-74) suggestions for analysing ethnographic data aided me in integrating the observational fieldnotes and interviews. These are as follows;

-This ethnographic study is a method of portraying a social pattern using emic and etic perspectives. As a result, I read the entire data set back and forth to understand the disparities between how children living with obesity think and how they act.

-Look for both consistency and inconsistency in what children said during the interview and how they acted in field; investigate multiple realities that have a critical role understanding the patterns.

-Check what children living with obesity said about behaviours or events against other evidence, if available (e.g. observational fieldwork notes, their drawings). However, keep in mind that if what individuals say is totally different, their opinions are not unimportant; attempt to understand why they have different opinions.

-Be receptive to 'false evidence'. If you come across a situation that contradicts your evolving etic view, attempt to figure out why there is a discrepancy. For example, is it a reflection of your own lack of understanding of the community?

- Be flexible and experiment with alternative interpretations for patterns that appear to be forming. Do not commit to a single analytical framework until you have all of the data.

A thematic approach of the entire data set (interviews and observational fieldnotes) was employed to identify the predominant or important themes. Thematic analysis provides practicality and flexibility in the analysis of extensive data has been deemed appropriate. The nature of an ethnographic study focuses on socio-cultural context, instead of focusing on a solely individual story. In essence, my main emphasis was on discussing the co-constructed story of children being obese and participating in an obesity intervention programme by providing individual accounts. To present all data obtained from the research setting in a rich and detailed manner, they were analysed using the thematic analysis as described by Braun and Clarke (2013). Although the implementation phases and product of thematic analysis vary among projects, it is crucial that researchers provide a detailed explanation of their approach to the analysis to provide transparency to the reader (Braun & Clarke, 2006). Therefore, I presented a comprehensive report on each phase of the analysis as in the following sections.

3.9.1 Phase One: Transcription of Audio Recordings

Transcription of data is an essential process for the researcher to immersion in the data (Lathlean, 2010); as such, the transcription process is described as a part of the analytic process

(Braun & Clarke, 2013). All interviews were conducted in English, and the audio-recorded interviews were also transcribed in English. It is highly recommended that the researcher should run this process by themselves as much as possible without using the assistance of any service (Lathlean, 2010). Concordantly, I was aware that collecting data in a non-native language requires comprehensive and diligent transcription work, and this process requires time and effort. Although I did not have problems speaking, writing, listening and understanding the English Language in everyday and academic life, there were some challenges while transcribing audio recordings. First of all, there were significant differences in the way children and adults speak. For example, even though the children spoke in an explanatory manner because they knew that I am not native, they sometimes used slang or a 'Yorkshire' accent, which I was not familiar with. During the interview, they explained what they meant, however, during the transcription process, it was a little bit challenging what they talked about. The other challenge was that some children spoke whisperingly; therefore, it was difficult for me to hear or understand the audio recordings afterwards.

Due to the amount of audio recording and being a non-native speaker, I decided to receive a little support during the transcription process from a website named 'happyscribe' (website link: https://www.happyscribe.com) to save time. Also, it was not possible to employ a transcription service due to resource limitation. This website is an automatic transcription software and transcribes audio recordings to text in the English Language. The website was accessed with a password developed by me, which means the data was kept securely. It was quick, efficient and easy to use and edit data with timecodes and frames with data subtitles and transcript. By utilising this web-based service, it increased the speed of transcription and was cost-effective compared to traditional operator-based service. However, there were some limitations, resulting in my involvement in transcribing. For example, the software could not detect a particular statement of the interview or punctuality of the text in most cases. Therefore, I needed to check each transcription thoroughly and make corrections where necessary. I also highlighted the text that I did not understand in the interview file. I reviewed it many times by slowing the speed of the audio recording. Also, I checked all interviews one by one at least four times for the sake of accuracy. I made sure that the interviews were transcribed verbatim. While correcting my transcriptions, I also removed all identifying information from the transcripts. I also added descriptive details related to interviews, such as the participant's pauses and tone (laughs) and my observational feelings notes that I had during the interview.

After completing all corrections, each interview was reviewed for accuracy by my supervisors. The accuracy of the interviews was confirmed.

3.9.2 Phase Two: Familiarisation with Data:

The familiarisation phase is the process that you immerse yourself in the data while repeatedly reading the data and gaining a comprehensive knowledge of the entire data (Maguire & Delahunt, 2017; Braun & Clarke, 2006, 2013). However, as I stated in the transcription section, the familiarisation stage, namely immersion, started while transcribing my audio-taped and re-writing my observational notes into the field notes. Once all data, observational notes from the research setting, interview transcriptions, drawings, and diaries came together, each file was systematically revised many times one by one. The revision process took place in the following order; (a) The transcriptions were reviewed by listening to the audio recordings; this enabled me to remember all the emotions and stresses linked to certain words or expressions, resulting in increasing the reliability of the meaning on the topic. (b) The children's drawings were compared while reading the transcription, and (c) field notes were reviewed again. Therefore, re-reading the entire data set, in order to become totally familiar with the data, helped me understand how children's accounts could best be summarized.

While reading and researching all data's meanings and patterns, I also took notes of my first impression and critical ideas about data (Maguire & Delahunt, 2017; Holloway & Todres, 2010; Braun & Clarke, 2006). Then, each interview file, its summary, as well as observational field notes (if any) in relation to participant were attached to the final participant interview transcription file. This review revived all my memories of the data collection process and relived those moments again. This was a good technique for providing quick information about each transcript or observed case rather than reading the transcripts and field notes repeatedly to find a specific related information such as reason for children's feelings, their reaction during the intervention programme etc. This process helped me understand which data or remarks indicated a social interaction process in each children's experience of being an obese child and participating in an obesity treatment programme. Also, this method assisted in considering and condensing the transcripts and field notes into a more manageable format that was ready for the next step of analysis.

3.9.3 Phase Three: Generating Initial Codes

After familiarising the data and initial notes and ideas, the complete coding of the data was undertaken. First of all, all data (interviews, field notes, drawings and diary) were imported into Computer-assisted qualitative data analysis software (CAQDAS) program, namely NVivo (QRS International, Victoria, Australia), which is used to code the data and to write memos (Woods et al., 2016). Thorne (2000) suggests that ethnographic analysis is an iterative process that entails sorting through and organizing data to find and understand theme categories, search for inconsistencies and contradictions, and develop conclusions about what happened and why. In line with Thorne's (2000) view, I identified the repetitive patterns and feelings of interesting segments in the field notes and those described by the children throughout the data (Braun & Clarke, 2013). As Coffey and Atkinson (1996) suggest, there is no need to privilege either participant observation or interviewing as the prime source of data, once one recognizes that spoken discourse always takes place within forms of action or performance. In line with Coffey and Atkinson's suggestion, in relation to the context of my research questions, each data pattern and section was coded (Herzog, Handke, & Hitters, 2019; Braun & Clarke, 2013). Also, I coded individual extracts and observational notes of data in a variety of themes where appropriate, allowing them to be coded once or several times. As in every step of my doctoral research, my doctoral supervisors have helped me to move forward with more confidence by giving feedback about the initial coding I made on the data. Once I finished coding, I read through the whole data again to see if any data had been neglected in the code by the initial theoretical approach. At this point, the encoding highlighting function of NVivo also helped me not to lose any uncoded data; therefore, all data were collected in each code.

3.9.4 Phase Four: Searching for Themes

After completing the initial coding and collation of the entire data, it is the stage of focusing on a broader picture of the data. I re-read each code, and it helped me built a relationship among datasets. At this stage, I also wrote down each code on paper to give me an idea of how the codes relate to each other. It also gave me an idea about possible themes and their sub-themes. All related codes and data extracts grouped into different identified themes. At the end of this phase, all quotes from each interview transcript, observational field notes, drawings and diary were collected within potential themes and sub-themes (Braun & Clarke, 2006).

3.9.5 Phase Five: Reviewing Themes

After gathering themes and sub-themes, it is the stage of the refinement of those themes. I completed this stage in two steps. Firstly, I checked the encoded data extracts for each theme to decide if there was any consistency or discrepancy between the data extracts. During testing of the encoded data extractions, I had to re-encode several times; this process continued until I found a suitable location for each data, even throughout the study analysis (Braun & Clarke, 2006). When I felt confident that the data extract appeared in a consistent pattern, I did a similar procedure for individual themes to check if each theme functioned with the included encoded data extracts. In addition to this, I paid attention to see whether there is enough data extract to represent a theme or not. In the end, each code fitted in each theme within the sub-theme.

3.9.6 Phase Six: Defining Themes and Reporting

In this phase, I identified what each theme is about before telling the overall story. Each theme was first evaluated and ranked according to what it offers about the research questions and how I want to present the data through themes (Herzog, Handke, & Hitters, 2019; Braun & Clarke, 2006, 2013). Then, each theme was named briefly and made concisely informative in the sense that it gives the reader an idea about themes (Braun & Clarke, 2006, 2013). After clearly stating the themes, I moved on to writing the final report.

The purpose of writing the final report was to give the reader a clear understanding of the story presented by the data in line with recommendations from (Braun & Clarke, 2006, p.93), "Extracts need to be embedded within an analytic narrative that compellingly illustrates the story you are telling about your data, and your analytic narrative needs to go beyond the description of the data, and make an argument in relation to your research question.". However, one of the challenges in analysing ethnographic data was demonstrating the disparity between what participants said and the way they behaved during fieldwork, as different data sets might be contradictory as well as complimentary. According to Angrosino (2007), some researchers are sometimes focusing on human interactions (such as words, gestures, body language), or a particular context, in a way that promotes a common picture of reality; evidence that appears to contradict the shared vision is either disregarded or somehow rationalized into the dominant system. My research aim, on the other hand, was to present a comprehensive picture of children living with obesity and their involvement in an obesity intervention programme. In this thesis, I used observation to make sense of what the children were saying and to better understand

where my observations aligned or did not align with what they reported. I did my best to give equal weight to both observation and interview data, merging one to another in the way described above. However, there were some instances where observational data did not align with the interview data. Rather than surpassing observational or interview data that did not correspond to the dominant context, I have provided this data with plausible interpretations in Chapter Five and Six (such as see page 137, 154 and 195 respectively). In other words, I tried to present my final report to the reader in a fluent, concise and consistent manner. I also used children's quotes, drawings, diaries, and my field notes to demonstrate the prevalence and justification of each theme. Finally, each participant's quote was represented with their pseudonym, gender, age and in bracket their name, age and interview order, such as Emma [F, 10/1st interview].

3.10 Maximising Trustworthiness of the Study

This thesis aims to provide high-quality interpreted ethnographic data reflecting the experiences of being an obese child and that of intervention programme by presenting an accurate interpretation of the data collection and analysis process derived from the actions and interactions of the subjects taking place in the research areas. The literature contains reviews on how to evaluate qualitative research in terms of quality and evidence presentation. However, qualitative research has been profoundly affected by quantitative research to enhance the quality, validity and legitimacy of findings. This is partly due to the theoretical approach of the study in being crucial in the assessment of the credibility of the study. In this sense, trustworthiness or credibility of the study stems from the debate about the objectivity (positivism) and subjectivity (interpretivism) of science, that is, from the position where 'subjectivism' is described as a breach of validity and reliability in presenting the state of knowledge. However, trustworthiness in qualitative research can be demonstrated by factors such as credibility, transferability, dependability, and confirmability that corresponds to the criteria used by quantitative researchers recommended by (Guba, 1982);

- **credibility** (in preference to internal validity); refers to confidence in the 'truth value' of research findings.
- **transferability** (in preference to external validity/generalisability); showing that what extent the findings have applicability in other settings
- **dependability** (in preference to reliability); refers to the findings that could be repeated
- **confirmability** (in preference to objectivity); refers to the degree of objectivity

-how each of these parameters were used in this study is considered below.

Credibility is critical and is the way of presenting true values accurately, implying that social phenomena have not been misreported or interpreted (Green & Thorogood, 2004; Shenton, 2004; Lincoln & Guba, 1985). One way to maximise credibility is to gain familiarization with the research setting and participant before data collection starts (Shenton, 2004). Guba (1990, p.84) elucidates this as "prolonged engagement', that is, having sufficient knowledge about research field or organisation to gain better understanding and establishing a trusting relationship with participants to obtain more accurate information. As I previously said, I volunteered for a period of time in the organization prior to gathering data to obtain understanding of the organisation and familiarisation with the research environment and the participants, which aided me in the development of trusting relationships with participants.

In order for the readers to judge the credibility of the data and its interpretation, the data collection methods - observation, interviews, diary, drawings - and the analysis process were explained in depth in the methods section so that readers could assess the study process and how the study questions were addressed. The analysing and interpretation of data was reviewed step by step in cooperation with my supervisors. Also, the quotes, drawings and diary obtained from participants and observation notes generated from the field works were used to present findings to increase credibility (Braun & Clarke, 2006). Thus, the interpreted and original information was transparently presented to the reader.

Also, when working with children, some consideration must be taken to ensure valid and reliable outcomes (Punch, 2002a). These considerations include the power disparity between the child participant and the researcher, as well as the suitability of the data collection method for children; these details are also given in the Method chapters.

Transferability concerns whether one study's findings could be applied to other organisation settings, situation or group (Stenfors, Kajamaa, & Bennett, 2020). However, unlike the positivist approach, this research is based on interpretivist theoretical approach. The aim was not to predict or generalise the findings but rather to focus on representing small groups and understanding individuals in depth (Cruz & Higginbottom, 2013; Scotland, 2012) by accepting the knowledge as co-constructed through researcher and participants (Watson, Booth, & Whyte, 2010; Mulhall, 2003). However, to extend transferability and credibility, a detailed description of the research setting is essential to convey the actual situation under investigation and the context (Shenton, 2004). Concordantly, I provided detailed description of the research

such as research settings (SHINE Health Academy and PSI programme), context, sampling and data collection procedures and period to enable reader to make sense how the research was performed and how this shaped the findings so that they can relate findings to other or similar research settings.

Dependability: To ensure dependability, the research process should be sufficiently described to enable another researcher to replicate the study despite the possibility of reaching different conclusions (Stenfors, Kajamaa, & Bennett, 2020; Shenton, 2004). Credibility, transferability, and dependability are closely related so that the study can be correlated in detail. As I noted above, I recorded step by step various aspects of research design and implementation and presented my critical thoughts on the advantages and limitations of the research process in the relevant sections so that the reader can understand the techniques and their efficacy. I also provided the strengths and weaknesses of each method I used while collecting data and how they were used with children, and were also discussed in detail in the 'data collection reflection' section.

Confirmability: The concept of data confirmability is related to the extent to which the findings of the study are evaluated objectively and how much researchers get involved in shaping the data and findings (Stenfors, Kajamaa, & Bennett, 2020; Shenton, 2004). Since this study is based on an interpretative approach, it is challenging to maintain real objectivity. There are some steps that can be taken to improve confirmability when interpreting research findings as objectively as possible. Using different data collection instruments provided a good understanding of the different perspectives of an investigated phenomenon that play a crucial role in addressing confirmability. Additionally, as an ethnographic study, the actions and perspectives of the participants were the focus of this thesis. Accordingly, fieldnotes that verbatim described the participants' behaviour in the field, my supervisors checking the transcripts for accuracy and discussing and improving the data analysis all assisted in conveying the real meaning of the terms used by the participants. The 'Data Analysis' section provides a detailed description of this event stream. As a whole, I presented each data extraction as evidence while presenting the findings to maximise confirmability.

3.11 Ethical Consideration

Ethical evaluation of a study is an essential component of any study design. The study of ethics helps me look at my study critically and evaluate my action, decision and study method choices while designing and undertaking this study. This section addresses the value of ensuring a rigorous ethical evaluation and sensitivity when coping with ethical issues that might emerge through this study. The most often used outline of the ethical consideration is consent and choice, privacy and confidentiality, and possible harm or distress. A researcher, on the other hand, can develop a basic outline based on the needs of the study (Scally, 2014). Since this was an ethnographic study with young people, it was necessary to include extra concepts in addition to the appropriate general framework, as well as the involvement of young people in the research (Hill, 2005) and the ethics of observing young people (Fine & Sandstrom, 1988).

3.11.1 Involvement of Young People in the Research

The main difference in social studies involving either children or adults are that child-centred research has more ethical challenges. Research with children is considered to be more sensitive due to children's capability in terms of decision making on whether or not to take part in research, or their immaturity, vulnerability and powerlessness in physical terms (Hill, 2005; Morrow & Richards, 1996). Pondering all ethical challenges, I acknowledge that the research with children is generally sensitive (Øen et al., 2018; Rees et al., 2009). As a paediatric nurse, I have dedicated my professional life to advocating for children in various ways to provide care, protect their rights, and ensure that their needs are recognised and met by minimising the risk (Howlin, 2008; DoH, 2004). Concordantly, as a researcher, I accepted children as social actors with their rights, experiences and understanding regarding the UNCRC (1989), in particular, those section emphasizing children's participation rights (Christensen & Prout, 2002). I accept children as active individuals in all aspect of their lives. I believe that only children can provide valid data related to their world (Morrow & Richards, 1996), even if they might have difficulties expressing themselves as a child (Øen et al., 2018; Edmunds, 2008).

However, in this study, children had complete autonomy in deciding whether to participate in the research. The fundamental principle of this research is children's willingness to collaborate in this study, as I discussed in the consent and choice session. Additionally, I adapted the context of the study in a way that children can understand (Hill, 2005) based on their interest

and comprehension level depending on their age. These adaptations included preparing the interview schedules, informed consent, and information letter so that children can understand.

Moreover, another ethical dilemma that emerges in adult and child research is power inequality. As I mentioned before, the disparities in power are mainly related to the status between adults and children (Hill, 2005; Morrow & Richards, 1996). Many children are not familiar being asked for their opinion, so they may feel the researcher's authority during the interview and can perceive adults' existence as a threat (Hill, 2005; Christensen, 2004; Morrow & Richards, 1996). In order to reduce the power imbalance and overcome ethical dilemmas in that point, I prepared data collection instruments, diaries, and 'draw and talk' sessions. With the help of these instruments, I investigated and discovered children's point of view and experiences with the aim of piqueing their imagination and encouraging them to use these instruments in a fun way. These interview supplements helped children alleviate adult pressure on them by making the interview more fluid, natural and enjoyable. However, they also helped me reduce the anxiety I felt during the interviews. This strategy also kept children's interest active in the research process as well as made the study acceptable for them (Christensen, 2004). It also helped me to detach from my adult roles of authority (Eder & Corsaro, 1999). With the help of all sensitive approaches that were used in this study, I always prioritized children's rights and I did my best to maintain a holistic perspective to overcome all ethical challenges.

3.11.2 Consent and Choice

The United Nations Convention on the Rights of the Child (UNCRC, 1989) states that children are members of the society and any child who can articulate their own point of view, has the right to be heard and granted the freedom to express themselves in all matters affecting them (Article 2,3). In other words, in all proceedings involving children, the child's decision should primarily be considered. Although children's consent should take precedence, research with children often involves gaining access through gatekeepers (Heath et al., 2007). In this case, while children were capable of making decisions independently, families were also considered legally responsible before conducting research with children since family approval was a requirement of the SHINE Health Academy. Therefore, information sheets (Appendix N and P, respectively) and consent forms (Appendix M and O, respectively) were prepared for children and their families.

An informed consent declares that participants understand and agree to participate in research voluntarily (British Educational Research Association [BERA], 2018; Einarsdóttir, 2007). As

this is an essential requirement of research, several steps were undertaken in this study to obtain informed consent. Since the children are accepted as social agents and are capable of making decisions about whether or not they want to participate in research, the research background needed to be comprehended by children in particular (Einarsdóttir, 2007).

Firstly, before asking children to participate in this study, I, in cooperation with my supervisors, designed the information sheets and informed consents in a simple way that is appropriate for children's development so that children could understand what the content of the study was about and what their involvement entailed (Scally, 2014; Hill, 2005; Hill, Laybourn, & Borland, 1996). Notably, the informed consent features were visually prepared to attract the children's attention, and the main themes were highlighted with images (see Appendix M) such as getting informed about the study including recording, observation, confidentiality, and being free to ask questions and to withdraw from the study at any time without giving any reason.

I provided two copies of written information sheets with informed consent for each child and family; one copy was kept by the participants and the other by me, and I also explained the study context verbally for children with their families (Scally, 2014). This interactive communication included a statement of the aim and procedure of this study, how data would be collected (observation, interview, diary, draw and talk), interview topic, recording, confidentiality, that participating is voluntary, who would access to the records and what is going to happen and for how long (Einarsdóttir, 2007). The children were also informed of what will be expected of them, the consequences and possible risk [if any] of being a participant, what will happen to the data and how the results will be used (Einarsdóttir, 2007). In addition to written consent, each participant's verbal consent was recorded before interviewing as well.

Additionally, due to the topic of research being a very sensitive subject, children may not have felt comfortable being continuously studied or being recorded. Because of that, I ensured that children understood that they are free to decline to participate in research or withdraw at any stage of the study (University of Sheffield, 2012; Hill, 2005; Christensen & Prout, 2002). To understand if the children were still willing to participate in this study, I always asked children whether there was any situation that bothered them, especially during the interview when we were one-to-one. I also took account of their non-verbal expression such as not smiling, unwillingness, or frowningly short response with gestures, even though they gave verbal and

written consent (Harcourt & Conroy, 2005). During the study period, I did not confront such a situation that made me think that children did not want to participate in the research.

3.11.3 Privacy and Confidentiality

I worked as a paediatric nurse at a hospital for nearly seven years, and one of my priorities in my professional life was to respect my patients' privacy and confidentiality. Concordantly, I respected and maintained my participant's right, privacy and confidentiality of information in every stage of my study (Scally, 2014; Vanderstaay, 2005). Therefore, anonymity and confidentiality were an ongoing process in this study.

Firstly, the interviews were conducted in a private room (dinner room, see the physical description of the study setting section for detail) on the SHINE building's first floor. Interviews took place either before or right after the classroom-based session ended. Hence during the interview, there was no crowd, and also nobody was allowed to access upstairs, so the interview was not interrupted by any noise or anyone.

Secondly, all interviews were recorded by an Olympus DS500 encrypted digital recorder. To preserve anonymity and confidentiality, pseudonyms that the children picked for themselves were used during the interview. They were guaranteed that even if their name was accidentally pronounced while recording, anonymity will be protected in the transcription. All transcriptions were done by myself and with the help of a password-protected transcription website named 'happyscribe'. All transcriptions were checked in terms of accuracy and anonymity either by me and by my supervisory team (Prof. Penny Curtis, Dr Hannah Fairbrother and Dr Jill Thompson) as I informed my participants that only the researcher (me) and my supervisory team would have access to the anonymised recordings and transcripts via University network with Google Drive. For example, any potentially identifiable information, whether personal or non-personal, were removed from the transcription and was shown as '[name removed]' in brackets. Likewise, the anonymization process was considered and carried out while taking the field notes. During the fieldwork, I always carried a small notebook in which I jotted down keywords in the field. I converted my handwritten field notes into detailed observation reports and stored them in a password-protected computer at the end of each observation day.

All data generated from the field, such as electronic data (recordings, transcripts, field notes) and hard copies (diaries, drawings, demographic information form: About my child, consent

forms) were read in a password-protected computer. All recordings stored in an encrypted folder, and each file were kept password protected. As soon as transcription was completed, the audio files were erased permanently from the digital recorder, the computer as well as the transcription website named 'happyscribe'. All hard copies were stored in my private locker when they were not in use. Therefore, all data has been used in accordance with the principle of anonymity, privacy and confidentiality as stated in the participant information and consent forms.

Additionally, I informed my participants and their families that their personal and non-personal record or identifiable data are not be disclosed to anyone, even with their family, without their consent (University of Sheffield, 2012; Hill, 2005). I also highlighted that they would be anonymous in all data analysis and reporting of the research. However, I openly discuss with children in line with the National Children's Bureau Guidelines for Research (Hill, 2005) that the only exception to this is if they divulged any information that raises child protection concern, in which case the information will be passed on to the SHINE manager, and I would then let them know before forwarding the information on to someone else.

3.11.4 Possible Harm or Distress

Many scholars agree that it is possible to consider possible physical damage in advance of medical research; unlike possible physical harm, emotional issues are invisible and unpredictable (Powel et al., 2012; Alderson & Morrow, 2011; Hill, 2005; Neill, 2005). As this study involved children who were considered to be a potentially vulnerable population, I needed to be more attentive as a researcher to potential emotional stress such as "distress and anxiety, embarrassment and loss of self-esteem" as highlighted by (Alderson & Morrow, 2004, p.27) for social research. I acknowledged that a weight-related subject could be sensitive, and children might find it upsetting, offensive or distressful, and even talking about a sensitive subject might cause children to recall unwanted traumatic experience (Scally, 2014; Holland, Dallos, & Olver, 2012; Mériaux, Berg, & Hellström, 2010; Parry, Saxena, & Christie, 2010; Hill, 2005). Evidently, this was supported by Curtis (2008) and Hayden-Wade et al. (2005) who found that children felt more uncomfortable and sensitive while talking about their weight, body or body shape. Considering these potential emotional issues, I was prepared in terms of emergency plans before starting the study and addressing these potential emotional issues.

First of all, I avoided using any 'potential offensive terms' related to body weight that might be distressing or upsetting to children, as I described in the development of the interview

schedule section. As children used these terms to describe themselves, I asked reflective questions to better understand their understanding, such as ‘what makes you think in that way?’. Since my study focuses on how children were feeling about themselves and viewed the intervention programme, I also tried to remain in a neutral zone during the interview so as not to affirm or challenge as much as possible while the children were asking about the ‘balance diet’, ‘eating fast food’ or ‘doing sports’.

I was concerned about whether children would be stressed while sharing their stories about their negative experience as obese children. However, I was astonished by how children spoke honestly about their unpleasant, overwhelming experience. One participant even said she used to self-harm before attending the intervention programme. Despite their young age, they seemed to me to be strong children who had confronted many difficulties. Their unpleasant experiences made me feel emotionally distressed. I sensed that only two children could not speak openly about their unpleasant experience, such as “bullying”, at the beginning of the interview. Even though we talked about friend relationships, they avoided explaining in detail. However, they said they wanted to lose weight so as not to be exposed to bullying.

One child became visibly distressed before the interview started because of misunderstanding. He came to be interviewed an hour before starting a classroom-based intervention session. He was very enthusiastic about participating in my study; however, he seemed uncomfortable around me on that day. When I invited him upstairs to the dining room for an interview, he ignored me and just focused on his game on the phone. When his mother encouraged him to come with me, he became furious and refused to be interviewed. Then, his mom took the device from his hand and insisted on him communicating with us. He put his hands in his pocket and shook his shoulders which was a sign that he was totally closed to communication. I just stood back; I did not want to interrupt at first because I did not understand whether his reaction was to me, or a family issue. I accepted that this was his valid refusal to be interviewed (Medical Research Council, 2004) until the child and his mother asked me whether I was going to film or not. The SHINE Health Academy had been planning to produce a documentary with children by videotaping children in the previous week. He confused the interview with the documentary and stated that he did not want to be videotaped. I clarified that the only thing I was going to record was our conversation on an audio recorder. Oliver (2010) indicated that voice recording might sometimes create stressors for the participant and suggests that participants should be given complete control over the recording. Therefore, I reminded each participant that they could pause or stop or playback recordings whenever they want. He was pleased to hear that

he was in charge of the audio-recording. I also added that he might be my English language teacher to teach me some English words at some point. He really liked the idea and followed me with a smile. At the end, we had a laugh during the interview, and he stated that he enjoyed participating in the interview.

I also prepared an action plan in case children were likely to be distressed. Although all participants attended a 6-week individual guided preparation course to reduce the anxiety problem before joining a group-based initial PSI programme, due to the lack of self-confidence or self-worth of children, I acknowledged that children might find the weight-related conversation potentially distressing. All interviews were conducted in the SHINE building, and if any child became upset or distressed during the interview, I would have stopped the conversation if they wished to take a break or offered to interview at another time. I would also follow the SHINE Health Academy's crisis management procedure led by the SHINE manager. She is a qualified therapist and counsellor and was there all the time for crisis management throughout the PSI programme. The manager and I were agreed that if a child would get distressed during the interview, I would stop the interview and would receive support from the manager. Fortunately, I did not confront a situation that would require us to use this plan.

3.11.5 The Ethics of Undertaking Observation of Young People

Observation is one of the ethical dilemmas in any ethnographic study. An ethnographer spends a great amount of time with the participant to develop trust and must also be careful not to interrupt the natural flow of events (Atkinson, 2009). However, since fieldwork can be 'unpredictable and ambiguous,' certain experiences during observation are inevitable (Oliver, 2010), particularly with children (Fine & Sandstrom, 1988), so researchers ought to take into account some values and general principles when designing the context of the study (Atkinson, 2009). As a result, accounting for those variable aids in conducting research in a more sensitive, humane, and controlled manner with positive values (Atkinson, 2009).

I was aware that developing and maintaining a trusting relationship with children and seeking their acceptance is crucial for successful research (Fine & Sandstrom, 1988). Although children are already considered a vulnerable group by nature, living with obesity can make them feel much more vulnerable in terms of self-concept, self-esteem, self-image, and self-awareness. Straightforwardly observing children as an outsider could be counter-productive, particularly in these children who are highly self-conscious about their body. In order to be as embedded into their usual dynamic as much as possible, as I stated previously, I opted to be a volunteer

for three months in the obesity care intervention programme before beginning the data collection stage. I observed what other volunteers were doing in the program, and I opted for the same level of participation and duties as an active one. Organizing pre-/post-session class, attending each session, assisting programme facilitators, welcoming children and their families into the building, helping out filling document and engaging in whatever case the programme is engaged in were only a few examples. As a positive return, I was accustomed to the programme flow and the children who participated in the programme. I sensed that children accept me as a part of the programme so whatever they used to ask the programme facilitator, they started to ask me the same questions. I assumed that the children became familiar with me and built some boundary. Spending time with children in their natural environment contributed to building trust and boundary and the intact natural flow.

Another point of ethical concern in the sense of participant observation was the role of the researcher in the setting. While inviting children into my study, I presented myself to the children and their families as a researcher who was interested in their thoughts, point of view, action, as well as how they interact with one another during their participation in the programme. I explicitly depicted the aim of the study and why I have carried out this study, as stated in the information sheets and informed consent. I made it clear to the children that I will be observing them in their natural environments and take some notes. Undoubtedly, anonymity and confidentiality and consent to be observed are the key principles of the observation notes as they are the basis of this study. Besides, not all children in the programme participated in this study. Hence, no observation notes were taken about the programme participants who did not wish to be included in the study and any interaction with these children were not included in the study. I took care not to disturb the comfort zone of my participant and non-participant. Fortunately, the majority of the programme participants accepted to be a participant in this study, so I did not have any conflicts on this issue. If I was requested not to listen to them, I was willing to give them space and privacy if they would not wish to be observed.

Another action that might raise ethical concerns was taking observation notes. Taking field notes in front of children could be awkward, and the majority of children with obesity in the literature have been subject to their peers' scrutiny. They might have developed a sensitivity to surveillance or they might have interpreted my note-taking behaviour as a criticism. As a programme requirement, children were given a pen and paper in the classroom-based sessions, and as I participated in the same session, I was given the same as well. As a result, taking notes in the regular classroom-based session was in harmony with the natural flow. During the sports

session, programme facilitators were always with pen and paper, and they were also taking some note; therefore I kept pace with the flow. As I described in the field notes and observation section, I extended my notes in a private space out of anybody's sight.

CHAPTER FOUR: THE DESCRIPTION of THE PSI PROGRAMME

Introduction

In this section I describe how the SHINE health Academy delivered both the initial PSI and maintenance PSI programmes in accordance TIDieR checklist (see Appendix R). The way the programmes is presented includes its subjects, contents, and its tailored nature as well as the physical description of the study setting.

4.1 The Delivery of the PSI Programmes

The SHINE programme is based on behavioural change theory, which is a collection of approaches or activities designed to assist people to change their behaviour in order to improve their health (NICE, 2013; Michie, Van Stralen, & West, 2011). The SHINE programme was inspired by and developed using the Prochaska and Di Clemente's (1982) model. This model was originally designed to assist smokers in modifying and changing their smoking behaviour and is also used in many behaviours modification programmes, including dealing with obesity. This behavioural change theory places a strong emphasis on 'education and training' for individuals in order to meet their desire to modify their healthy behaviour. Also, each SHINE session is structured in accordance with NICE (2014b) guidelines, and includes stimulus control (applied behaviour analysis), self-monitoring, goal setting, rewards for reaching goals, problem solving, praise achievements and encouraging parents to be role models for desired behaviours. Therefore, the SHINE approach, and session formats, were developed by blending Prochaska and Di Clemente's model and the NICE public health guideline and further strengthening them.

The PSI programmes delivered immersive face-to-face group sessions in a classroom and a leisure sports centre and sports park. The PSI classroom sessions were held at the SHINE building and sports sessions were at a leisure sport park and centre in Sheffield (see the physical description of the study settings section in detail). The classroom-based sessions and sports sessions were approximately one- or one-and-half-hour training course (such as between 5:30 p.m. and 6:30 p.m.). Classroom based training was once a week, sports sessions were twice a

week on different days. Therefore, the initial and maintenance PSI programmes are structured, three times in a week, twelve-week[5] programme that enrols up to 10 children per group.

The initial PSI programme sessions[6] are active sessions that promotes interaction with other group members, and is based on helping children to achieve their healthy lifestyle changes or goals, by providing nutritional/dietary (food groups within alternative choices, reading food labels, cooking, practical aspect of preparing snack/meal), exercise-mind-body relation, individual goal-setting, maintaining progress and also psychological/motivational discussion about information and guidance theme sessions. The subjects who finished the initial PSI programme were eligible to continue for *the maintenance PSI programme*. If they did not want to, they had to continue drop-in clinic visits once a month. It is imperative to be able to follow children who are obese.

The maintenance PSI programme is a continuation of the step care 3 PSI programme. The maintenance PSI classroom-based theme sessions are slightly different from the initial programmes. The maintenance PSI courses aimed to give children how to maintain a healthy lifestyle what they have learned from the initial PSI programme. The classroom sessions are active sessions based on improving the children's life skills such as first aid course, emotional control, body positivity, developing coping strategy, nutritional/dietary (reminding them what they have learned during the initial session, cooking, preparing snacks), exercise-mind-body relation, individual goal-setting, motivational discussion and guidance theme sessions.

The Sports sessions are held twice a week in different venue for one hour. These sessions were open for all participants in both programmes. If it was possible, participants were expected to participate in two sports sessions. However, the demand for the sports session was not much so there were not many children who participated in the sports session.

4.1.1The PSI Programme Content

SHINE PSI programmes, the initial and maintenance PSI programme, is structured, three times in a week, twelve-week[7] programme that enrols up to 10 children per group. Since the

[5] This maintenance PSI programme lasted eleven weeks due to national holidays and school summer holiday.

[6] The copyright of the details of the program is reserved and cannot be shared. See www.SHINEhealthacademy.org.uk for further detail.

[7] The initial PSI programme lasted seven weeks and maintenance PSI programme lasted eleven weeks due to national holidays and school summer holiday. For further detail please check The PSI programme participants in Chapter Three.

initial PSI programme started in the mid-program schedule, it lasted seven weeks and their classroom-based sessions intensified for 1.5 hours a day. However, both programmes' frameworks were similar to one another; one classroom-based session, two sports session, at least one consultation session (the number of consultation session can be change according to children needs) in a week. Each session lasted 60 min[8]. Classroom-based educational sessions followed the same general structure: (a) a 5 min brief review of the previous week session theme in a group-based discussion and the goal-setting board of the previous week was visited by individuals [see Figure 11: goal-setting example, in tailoring session below], (b) a 40 min interactive education session and theme-based worksheet was given, (c) a 10 min question, answer, reflection or motivational discussion session, (d) a 5 min overview of the following week's session theme(s), if there is an announcement about that or next week, it was shared.

As the classroom-based education used practical applications according to the theme of the each session, children used all kinds of materials related to the session theme. The materials used by the intervention programme vary from pens and paper, to newspaper news, to kitchen gadgets and all food related. For example, when the session theme was related to emotional distress, children expressed themselves with pen and paper (Figure 7, picture 1). While the children learned to make snacks for themselves, the kitchen tools and ingredients were used under supervision (Figure 7, picture 2). Practical instructions on actual products were offered in order to teach the importance of sugar in nutrutions and to read the labels of the items in the stores (Figure 7, picture 2, 3). Booklets or newsletter about themes were given to children during the each session.

[8] Only the first session of the initial PSI programme lasted 1h30mins

Figure 7 Materials used during the sessions

Besides, each participant who enrolled actively in the programme was given a portion size meauserement tools to support them in applying what they learned outside of the programme such as at home. Also, a basic pedometer was given to encourage them to be active outside the programme such as completing 10,000 steps in a day.

4.1.1.1 The PSI initial programme sessions descriptions

Week 1- getting started. The first week served as an introduction and icebreaker. Participants sought to get to know one another and shared their expectations from the intervention programme. This session also briefly summaries the answers of 'what do I need to know?, and how can I make a healthier change?

Week 2- Food group/healthier choices. It covers to teach participants portion size and food groups within alternative choices, cooking, and practical aspect of preparing snack/meal. The goal of this session was to develop awareness in children about how much they ate during mealtimes and which portion size suitable for their age. This session included using visual demonstrations of using a spoon, portion size measurement cup and a bowl of rice. Children were asked to voluntarily demonstrate how much rice they consumed during the meal. Chloe [F,14] voluntarily put fourteen spoonfuls of rice on her plate and said that she ate that much rice. The rest of the children agreed as well, confirming that they ate the same amount of, or more, rice on a regular basis. Some even stated that they consumed more rice. Then the facilitator measured the amount of the rice on Chloe's plate using an age-appropriate portion size cup to determine how many portions were on her plate. There were precisely 4 portions of rice on the plate. Chloe [F,14] and other children discovered that they were consuming four

times as much as they should have each day. When children realised the disparity, they looked at each other in surprise.

Also, during this session children managed to try different food options particularly, fruits and breakfast alternatives such as cereals and smoothies. For example, children prepared smoothies, fruit bars and skewers (see figure 8) by using different fruits. Therefore, in this session the children worked together interactively to learn new skills and ways to prepare their own meals or snacks. They got to try different fruits and learnt a variety of ways to prepare fruits for eating.

Figure 8 Intervention programme cooking session

Week 3- Benefits of physical activity. This session highligted the importance of exercise; exercise-mind-body relation.

Week 4- Danger of sugar diet. This session provided the basis of the children's learning about the importance of sugar limitation and this session's aim was to change children sugar usage practice in everyday life. For example, the session began with learning about the sugar limit for their age. A captivating anecdote was reflected in my ethnographic observations during the session:

Facilitator: How to use sugar in your daily life? How much sugar should you consume a day? One teaspoon of sugar is four grams.

Chloe [F, 14]: [interrupted] I put three teaspoons of sugar into the coffee.

Jess [F, 14]: I don't drink coffee

Facilitator: No more than six teaspoons of sugar a day [and turned Chloe and also everyone in the class added:] it means two cups of coffee a day for you, however we supply our sugar not only from coffee but also from other foods.

The children were then shown how to read food labels and sugar levels in processed foods through classroom-based interactive learning so that they could choose the healthier alternatives. In this session granule sugar, a teaspoon, and beverages were utilised for demonstration in this session. In addition, the children were asked to rank the beverages based on their sugar content, as seen in the figure 9 below.

Figure 9 The intervention Programme sugar session

Picture 1: Children's order: Sugar level from lower (left) to higher (right)

Picture 2: The facilitator's order: Sugar level from lower (left) to higher (right)

Week 5- Why do I eat. This session was related to how emotional state affect eating behaviours. This session's purpose was to raise children's understanding of the foundations of their eating behaviours, particularly emotional eating.

Week 6-7 combined- How can I increase my self-confidence, How can I maintain my progress and award ceremony. When week 6 cancelled by majority of children Week 6th and 7th subjects combined. It included a serious of interactive communication with children combined with different games such as storytelling, persona demonstration, completing sentence with their own words.

4.1.1.2 The PSI maintenance group session description

Week 1-2-3-5-First Aid was covered. During these sessions, children obtain information about how to cope with an emergency situation. They taught fundamental golden principles such as assessment, make sure it is safe for yourself to help someone, emergency call (999), get first aid kit. They emphasised about the importance of communication and casualty care. They also discussed what should be included in a first aid kit. Each session included part of first aid session, such as minor injuries, cardiopulmonary resuscitation (CPR), heat fatigue etc.

Week 4- Residential week. See Chapter three, The SHINE care pathway and programmes section, page 77, for detail information.

Week 6- Residential week feedback. Children and facilitators shared their perspectives on their residential experiences. They discussed how they worked as a team by cleaning, cooking, walking, assisting one another, and playing together. After the residential week, I observed that children's group dynamics positively had improved, and they formed strong bond. This week has also had an impact on the rise in demand for participation in classroom-based and sports session.

Week 7 and 8- Body image positivity. This workshop helps children express themselves by using various photos or articles from magazines or newspapers, a method known as collage art technique. (see figure 10 below, also see figure 22 and 23, in Chapter Six, Resilience building as a result of participation in the intervention programme session, page 193 and 194)

Figure 10 Body positivity session from Megan's perspective aged 11

Week 9 and 10- Weight stigma and cooking. This session featured an interactive communication with children about the 'weight stigma' as well as storytelling. Practical food preparation in the kitchen was also addressed (see figure 8 Intervention programme cooking session)

Week 11 Final assessment and award ceremony: All children physically examined, and all children received awards for completing the intervention programme.

The Sports sessions were the same general structure: (a) a 15 min warm up exercise and general information was given about the importance of warm-up exercise, each warm-up exercise was led by a participant, (b) a 45 min group-based fun activity done, (c) for sports centre, additional a 45 min was given for those who want to join a swimming session at the sports centre. Additionally, all sports-related materials, such as football, basketball, cricket bat and balls and gym equipments, were used during the sports sessions as required and detailed information was provided in the physical description of the study setting session below.

The sports sessions held on a sports centre and a leisure park. ***In the sports centre***, children were mostly divided into two groups according to their preference to encourage teamwork. While some of them were working with sports machines such as treadmill, stepper/rower and cross trainer machine, the other group were doing sports with the SHINE assistants. Each day

the SHINE assistants set up a sports session with different aims for the rest of them and it changes each week. For instance, one session consists of 6 different sub-sessions including boxing, skipping, side leg (both) raises exercise weight, lifting (1kg), aerobic step, bouncing a ball, boxing. Both groups try to complete each sports series in two minutes as intensive as possible. This sports centre session was a kind of high-intensity training (HIT) session for all participants. The last 5 min was a free session, so children play or do sports whatever they want to. After this session, the participants would join the swim session if they wanted.

In the leisure park, as soon as they arrive at the playground, they do warm-up exercises. Then they were divided into two groups and competed for one another. The only aim of the competition session was to encourage children to move more and built more teamwork. Every week the SHINE assistant set up different game and sports. As a park sports schedule, for example, they lined up into two rows as two teams. They passed the ball each other and the last person who received the ball bouncing the ball through into the middle of the field then came up next to basket hoop and tried basket. This action has been repeated three or four times. The second sport was cricket. First, they made a border shaped square. The wicketkeeper threw the ball and the striker hit the ball. Until the wicketkeeper or his/her team reached the ball, the striker has to run over the square border. When the keeper reached the ball, the striker has to stop. This routine had been completed three or four times. After this part, they played a free session to complete the 1-hour exercise. Male children mostly spent their time playing football. When the sports session was over, they walked throughout the car park, encouraging the children to move as much as possible.

4.2 Tailored PSI Programme

Self-assessment: In order to address individual needs, children are subject to regular physical, psychological and sociological evaluations before and throughout the programme.

Children are physically (BMI, waist circumference, body fat and peak flow) assessed three times throughout the programme; before starting the programme, in the mid-programme assessment (5^{th} or 6^{th} weeks), and final assessment at the end of the programme (10^{th} or 11^{th} week). The second physical assessment of children were not discussed with children and particularly their families in order not to disturb the motivation of the children.

Before and after maintenance PSI programme, psychosocial measures such as Hospital Anxiety and Depression Score, Rosenberg Score for Self-Esteem and Emotional Eating Questionnaire, are collected.

Based on these measurements, each participant's essential needs and support are reviewed.

Counselling service: The children benefit from the ongoing counselling service as they enter the programme. This service is mostly focused and evaluated on the cause of the difficulties experienced by children with obesity such as psychologically and sociologically.

Stepped-care decision for participant: In the light of self-assessment, the personal needs of children are determined, and they are encouraged to use the appropriate obesity treatment service as mentioned in procedure section.

Expectation: At the beginning of the programme, participants are asked about their expectations from the programme.

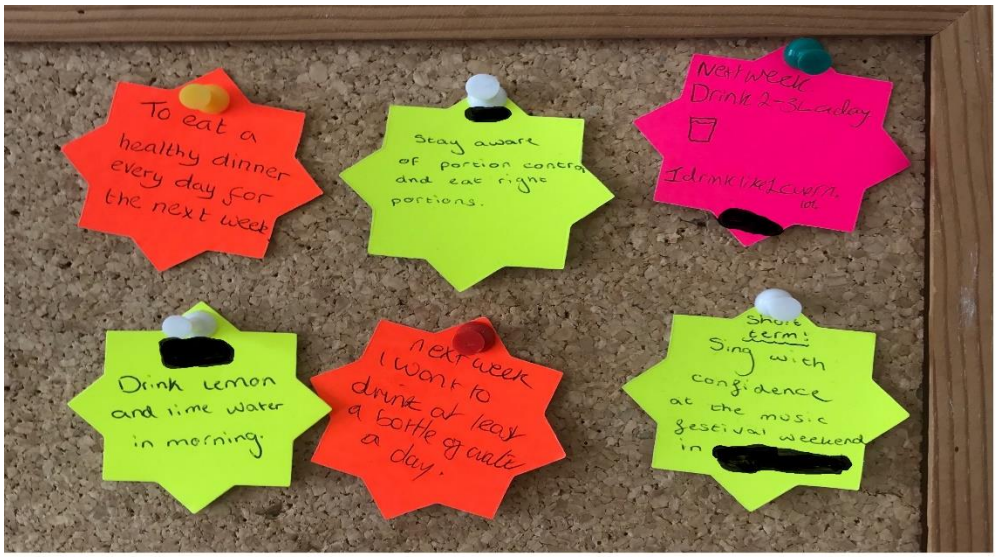
Knowledge assessment: The classroom-based educational session themes studied in the previous week was briefly reviewed every week. In addition, the appraisal questionnaire was used to reinforce what children have learned about the weekly session themes, such as first aid, and nutritional knowledge. These questions were answered collectively in the classroom. A small assessment questionnaire was carried out at the end of the programme on how much of the training offered in the classroom was memorised by the children.

Personalised feedback: Feedback has been defined as a positive criticism that is part of self-assessment to improve learning and the outcomes. It is interactive face-to-face meeting that provides information about learning gaps and provides instructions on how to improve learning to increase individual motivation. One-to-one feedback was provided to children to record success and learning progress. Similarly, children's legal guardians were given one-to-one feedback in order to improve collaboration between children and their guardians.

Goal-setting, action planning and reviewing goals. The overall programme included behavioural modification assistance in the areas of healthy balanced diet and physical activity. To customise the intervention and encourage behavioural change, goal-setting were employed as behaviour modification strategies. Participants were urged to create precise, measurable, achievable, realistic, and time-bound (SMART) goals (Bjerke & Renger, 2017). Goal-setting were created for weekly instructional subject including healthy eating, portion control, water

intake, physical exercise, and sleeping (See Figure 11 goal-setting example). Participants were invited to revisit each week to either to update an existing objective or set a new one.

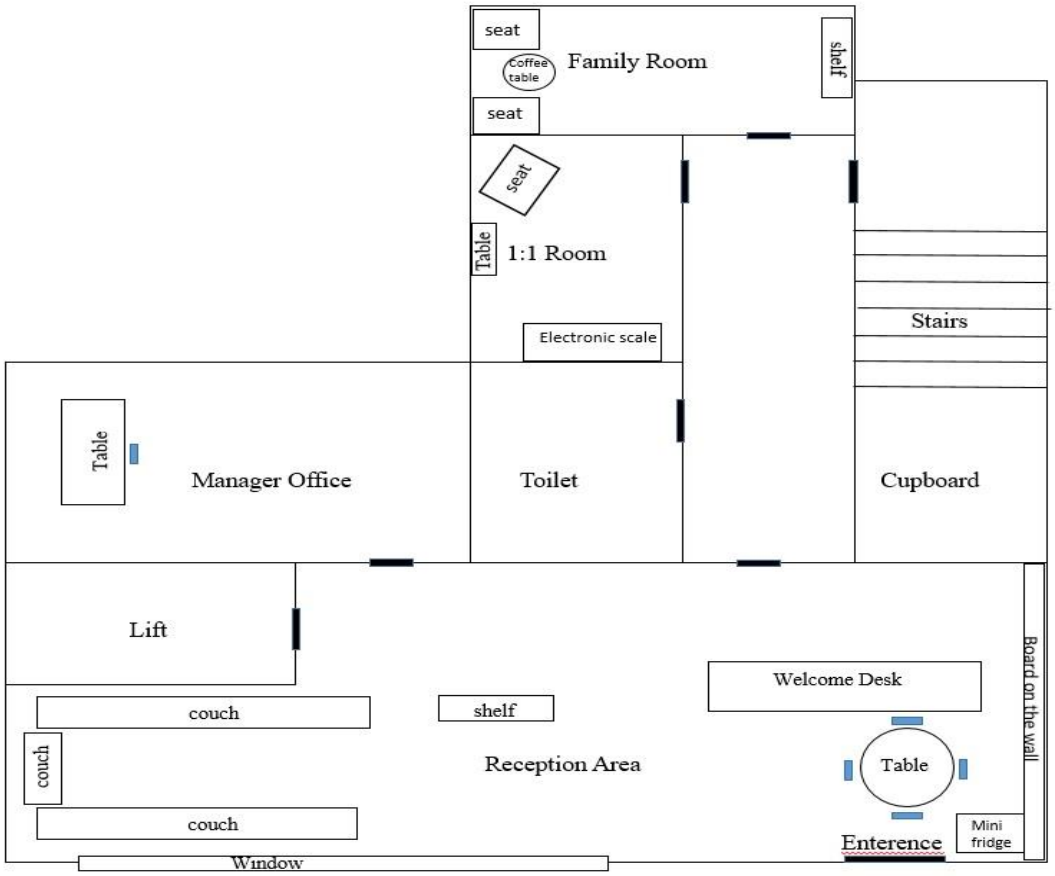
Figure 11 Goal-setting example



4.3 The physical description of the Study Setting

The SHINE Academy building was a small two-storey detached building. As showed and described below.

Figure 12 Ground floor of study setting



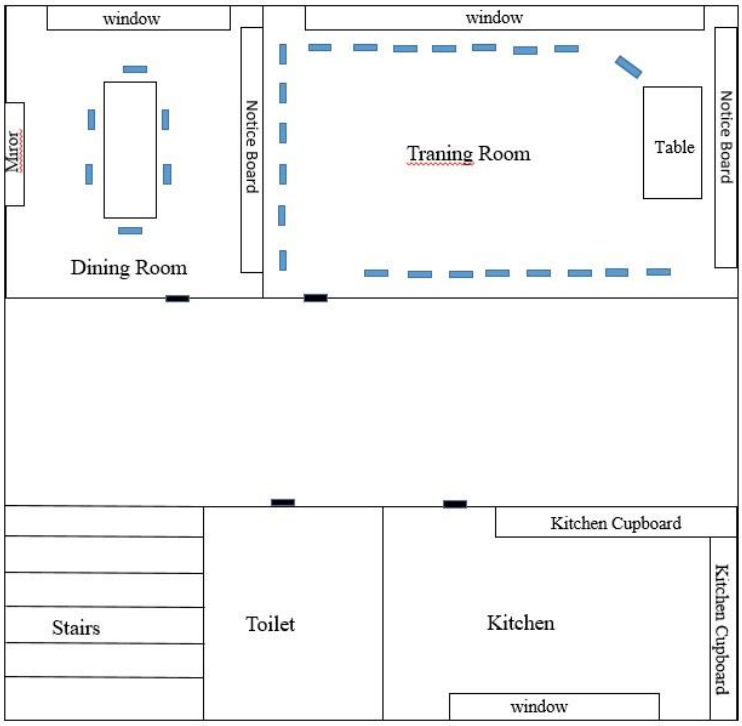
On the ground floor of the building, there was a reception area, a manager's room, a 1:1 room, a family room and a toilet. Rooms were typically bright and light. As soon as you enter the building, the reception area greets you. On the left of this room, there was a corner couch and everyone who came to visit the SHINE Academy was welcomed in this room. This area was also used as a break area for all children and families who participate in the SHINE PSI programme. It was decorated with a desk, a table, a few chairs, a mini-fridge and a shelf containing different booklets related to healthy diet and exercise. There was a notice board located on the right of the entrance door. This notice board included different newspaper papers that were related to childhood obesity issues not only in the UK but also around the world. There were also pictures of children and staff who had participated in the PSI programme before on the notice board. All the documents on notice board have predominantly conveyed the messages not only related to obesity but also related around self-care (including self-confidence, the importance of doing exercise, eating habit, being healthy as well as many

positive messages to encourage children's stamina). There was a mini-fridge to the right of the entrance door. It contained different diet or sugar-free refreshment for guests. Next to the mini-fridge, there was a table used for coffee or tea services for guests. Then, there was a desk for SHINE assistants. All the documentary work has been done on this desk. On the left of this desk, there was a small room. This room was defined as a manager room including a table and a chair and a computer. This room only was used for private conversation such as a phone call when the reception area is empty. Behind the desk, there was a door opening from the reception area to a short hallway.

There was a toilet on the left after the hall entrance door. The toilet was so bright and decorated with flowers, hand towels like a real home toilet. There was a small room next to the toilet. This room is for 1:1 consultation for the BMI measurement or the health assessment of the children. The room has a single-seated unit, a small table, an electronic scale, a measuring tape and this room was surrounded by positive messages related to body image. Opposite the hall entrance door and next to the 1:1 room, there was a room defined as a family room that mostly used to inform families. There were two single chairs, a coffee table in the middle, and a mini shelf. The room was decorated with very warm and soft colours like pale pink. The buildings wall was surrounded by leaflet or any material to give motivational messages (see the figure 13 below) related to positivity, body image or confidence, nutritional information and weight-related news. This room is also used for consultation as well. A certain volunteer consultant routinely came every Thursdays to meet children. This consultancy service determined the needs of children and was delivered periodically in this room. There were stairs to the first floor next to this family room entrance.

Figure 13 The SHINE motivational messages

Figure 14 The first floor of study setting



On the first floor, there was a dining room, a training room, a kitchen and a toilet. Rooms were typically bright and light. The dining room welcomed you after the stairs. All interviews have taken place in this room. There was a rectangular shaped dinner table with 6 green chairs. The table was made of glass. The room was very bright and has a large window with brightly patterned curtains. The front of the window was decorated with vases with flowers. This room had equally colourful walls, a welcome change dominated by a minimalism decor.

The left of the room wall was covered with colourful (claret red, purple and off-white) lined patterned wallpaper. The rest of the room wall was covered with yellow. There was a small mirror on the left wall. On the right sight, there was a notice board. On the board, there were different document-related portion size, food pyramids, portion control for dairy products and fats and sugar, being healthy was related to eating healthy, body image from thin size to big size (it was like demonstrating the process if someone consumes too much fat and sugar). Children who attended the PSI programme were learning portion size and table manner such as eating a meal at least in 20 minutes in this room.

Next to the dining room, there was a training room in which the PSI programme was delivered to children. The room was in a square-shaped. Opposite the room's entrance door, there was a large window from wall to wall and has brightly patterned curtains. Next to the window on the

right, there was a big notice board from wall to wall. There were 15 chairs or more, surrounded around in the shape of the room and facing with a notice board. In front of the notice board, there was a table for the assistant to put their notes to give participants.

Opposite of this room, a small kitchen was located. In this kitchen, participants were learning how to prepare their lunch box or low-calorie meal for their life. In the kitchen, there were all kitchen appliances that must be in the kitchen of a normal house.

4.3.1A Leisure Sports Centre

There was a room in the gym, which was always reserved for SHINE academy. This square-shaped room was reserved at a specific day and time of the week for SHINE Academy participants. Two sides of the sports room were surrounded by windows on the top and the room was big and bright. From the entrance door of the room, the left wall surrounded by the mirror from wall to wall. On the corner, there was a lifting shelf. From this corner to another corner, there was 10 cycling machines. On the right wall, there was a shelf full of Pilates balls and aerobic stepper type of equipment. The next side, there was one treadmill, stepper/rower and cross trainer machine. When more machines were needed, sports centre assistants immediately provide it. On the right wall next to the entrance door, many matts were hanging on the walls. In this sports centre, there was also a swimming session. Participants are free to join this session and while they were swimming, their families and SHINE team was able to watch them via a window stage.

4.3.2A Leisure Park

SHINE Academy goes to the park once a week (always the same day) to do sports. The park was round-shaped. One side of the park there was a car park, the other side of the park there were two pitches. Walking around the park takes nearly 30 – 40 min. For example, from the car park to the basketball pitch was taking 15 – 20 min by foot. From the opposite direction, it takes 15 – 20 min from the pitch to the car park as well. All SHINE Academy participants and assistants meet at the car park, then walk throughout the pitch, and after doing the activity they walked back to the car park from a different direction.

CHAPTER FIVE: FINDINGS ONE

A description of children with obesity of themselves and their experiences of being obese

Introduction

One of the main objectives of this project was to explore the ways children who are obese describe themselves and their experiences of being obese. This chapter is divided into two sections. The first section explores how obese children perceive themselves in relation to their personalities and bodies. It also explores their feelings about themselves within the context of social interaction and what makes them happy.

The second section focuses on how and to what extent children perceive their obesity to affect their everyday lives. Clothing choices, daily life activities and social relationships are all discussed. The chapter also explores children's experiences of being bullied, the emotional impact of this and their coping strategies.

5.1 How children describe themselves

Children described themselves in relation to their personality, their bodies, their social interactions and what makes them happy.

5.1.1 Children's descriptions of their personality

The children during this study described their personality based on how they felt about themselves, how they interacted with others and their ideas about how other people perceived them. When the children were first asked how they would like to describe themselves from their perspective, they all positively characterised themselves as "kind", "friendly", "caring", "supportive", and "helpful". For example, Muhammed [M, 11/1st interview] said the following lines; "(…) I do describe myself kind of kind and I do like to help out sometimes like if there's a problem. I'd like to be there for people sometimes if it's good happening, bad happening. (…)".

However, according to the interviews and ethnographic observational data, the way they described themselves was often influenced by the social context, including the people they are

with and the occasion. This affects how they interpret and understand situations, and the way they behave. For example, the children were asked how they would describe themselves on social media in comparison to 'real life'. There was often a contradiction between how they viewed themselves during the interview and how they would like to represent themselves on social media, where they usually described a character they aspired to be. For instance, Emily [F, 14/1st interview] portrayed herself as "outgoing" on social media, but she admitted that she tended to "shy away" from going out or was "timid" around other people:

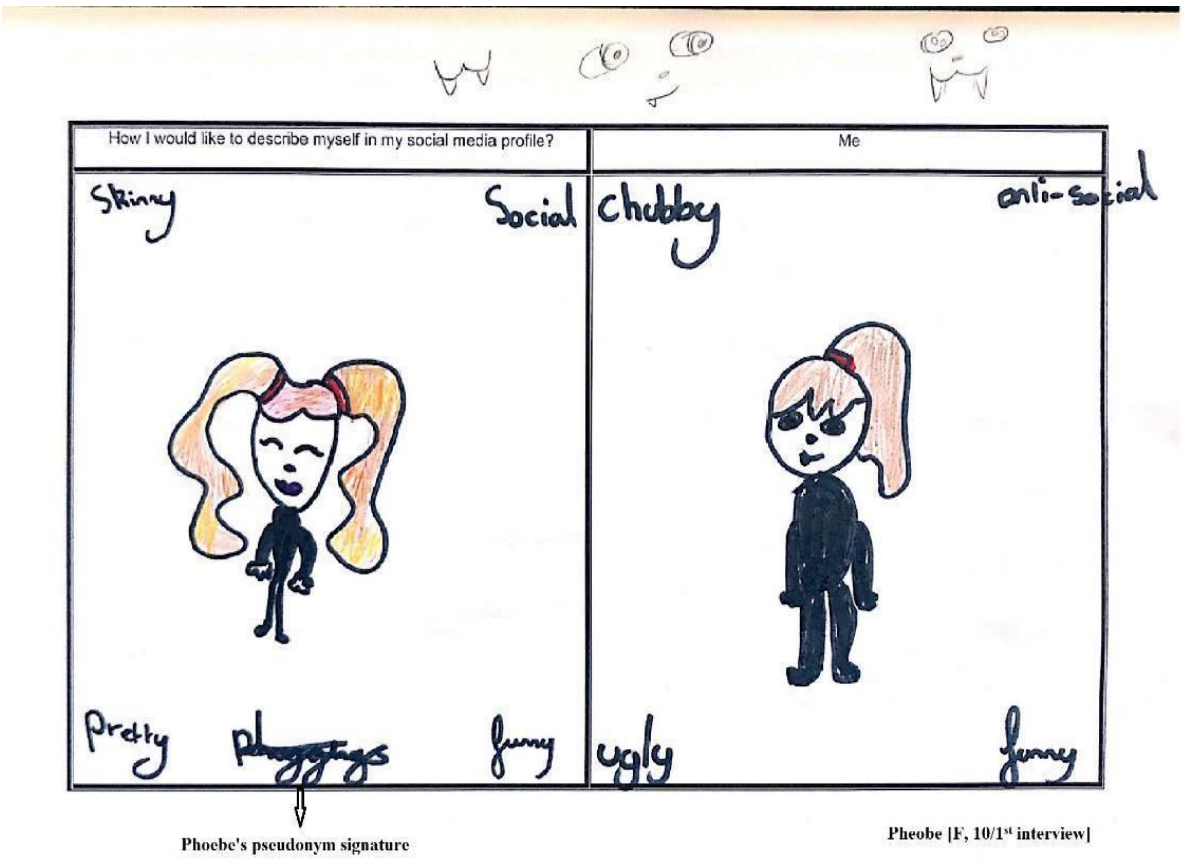
> Emily: On social media I'd say that I'm happy, creative and fun and up for anything and I'd act a lot more outgoing and then in real life I act a lot more timid and shy away. How do I describe myself in real life? [reminding herself of the question] Sociable but at the same time timid and funny. That's all I can think of.
>
> Interviewer: How do you feel when you are describing yourself?
>
> Emily: Awkward [laugh]. You've never known what's bringing you down or what's putting yourself down, so you don't know what to say.
>
> Emily [F, 14/1st interview]

Similarly, Phoebe [F, 10/1st interview] highlighted differences between her persona on social media and in 'real life' during the draw and talk session [figure 15]. On social media she described herself as "skinny, social, pretty and funny", but during the interview she described herself as "chubby, anti-social, ugly and funny". Her perception of being "anti-social" potentially derives from her inability to feel comfortable in a crowd and make friends as she says:

> I'm a little bit of a 'stay away from people person' […] It's just that I just don't really like people much because they make me feel a bit crowded […] It's so hard for me [to make friends]. I just get a bit shy.
>
> Phoebe [F, 10/1st interview]

The only description term she used to describe herself earlier verbally and in her drawing was "funny". As highlighted by Emily and Phoebe, almost all children emphasized that the only personality traits that remained consistent were 'shy' and 'funny'.

Figure 15 Phoebe's drawing aged 10 from the first interview



Furthermore, Phoebe also portrayed her body image on social media differently than she did in 'real life'. For instance, her drawings diligently included details such as eye and hair colour, yet there is a significant difference between two pictures in terms of body size and shape and paid little attention to facial expression [figure 15]. and shape. Therefore, she was asked what it meant to her to be "skinny" in order to understand if she recognised the distinction between her social media persona and how she portrayed herself to me during the interview. She emphasized that being "skinny" means "small [she was squeezing her belly]" which she portrayed in her drawings as her social media character. This was, indeed, consistent with observational and interview data indicating that she was dissatisfied with her body shape and size.

Children sometimes described being confident and funny on the one hand but when discussing their bodies and their appearance, they described not feeling confident i.e. when focusing on their bodies they felt less confident in themselves. For example, Jess described herself as a

confident and funny person: “I like my personality. Like I think I'm quite a confident, funny person but then sometimes I can be a bit mean [laughs] but isn't everyone.”. However, she was less confident when she was talking about her appearance: “I didn't really like how I looked, and I don’t really have much confidence”. The children were largely dissatisfied with their body image due to having excessive weight, which took a toll on their self-confidence. As a result of their poor body esteem, almost all children described a tendency to isolate themselves. Harry’s [M, 14/1st interview] description was typical:

> I feel quite confident in it, yeah. [pause] I don't really know what else, I feel quite happy, I just, I've always got a smile, I'm always funny to be around, but I'm not that confident with my body image. […] I think my personality is really good, but it's just my body that I'm not that confident with. It makes me a little less confident […] It's just sometimes like, feeling to hide away at times, I don't feel confident. […].
>
> Harry [M, 14/1st interview]

As a result, the data shows that their description of their personalities is linked with how they feel about their body. Children were generally happy with their personal traits however when they were talking about their bodies, they portrayed different personal traits than they used to be. Obesity has been found to obscure children's true identities because they experience body dissatisfaction as a result of their excessive weight, which decreases their self-confidence.

5.1.2 How children describe their bodies

While all participants were classed as clinically obese, during the interviews none of the children used the term ‘obese’ to describe themselves. Although the children had been told about ‘obesity’ and its associated problems, and were familiar with the word ‘obese’, they never used the word for themselves. Rather, they described their body as “a bit chubby”, “a bit big”, “a bit wobbly” and “a bit overweight”. Max’s [M, 15/1st interview] description of himself highlights this well:

> Sometimes I'm not so confident with my body image, but I'm happy with myself in general. So, like, I'm not that ideal body image because I'm a bit overweight. So, it can make me less confident. Just looking like everybody else, so a little bit skinnier.
>
> Max’s [M, 15/1st interview]

Some aspects of their bodies, including their stomach and legs, caused children particular concern:

> I don't know. [she laughed] It's, I like how I look but I'd prefer if I wasn't like how I am. Like I like some parts, maybe other parts I don't like. Like I like my face, but I don't like my legs and then I don't know, I like my hair but then I don't like my stomach area. It's like a balance.
>
> [Jess, F, 14/1st interview]

Similarly, Harry [M, 14/1st interview] observed that his stomach area had a negative effect on his body image balance by saying; "I've always got a smile, I'm always like funny to be around, I think my personality is really good, but it's just my body that I'm not that confident with my body image. I'd like to just be a little bit thinner. A little bit like, weight a little bit less, probably just my stomach area".

Muhammed [M, 11/1st interview], on the other hand, highlighted that having excess weight made him the "strongest but slowest" one. In a similar way, Harry [M, 14/1st interview] also described as his "arms" and "face" as favourite parts of his body, despite his lack of confidence in his body image. Max [M, 15/1st interview] additionally indicates that his stomach area decreases his body image ratio, implying that he is alright with overall appearance by saying "Just around stomach. Not all big. That's all about it." These findings revealed variations in body perception between female and male participants. While having excessive weight sometimes represented strength for male participants, it was often associated with being "ugly" for female participants. For example, Phoebe's [F, 10/1st interview] negative self-perception of herself as "ugly" was strongly link to her weight, as she characterised herself as "chubby" in 'real life', while being "skinny" was related to being "pretty" on social media. Similarly, Emily (F, 14/1st interview) remarked: "So, I was obviously overweight, ugly." So, children's descriptions of how they felt about their bodies perhaps echoed differences in masculinity or feminine beauty-ideal differences. However, for both genders, carrying excessive weight on the stomach area was described as problematic.

Furthermore, another parameters that caused the children to assess their own appearance differently was that first clothing which they were no longer fitted in their previous clothes after a period of time and they compared their size to their peers in photos where they realised they were overweight as Chloe [F, 14/1st interview] typically described:

> Well, I realised the clothes were getting too tight so then, also in photos I looked a bit bigger than my friends and you could see that there was something, but it wasn't dramatic. I'm overweight, I need help and stuff, you've just, I'm a bit chubby, like I'm different, (..) It's like 'hmmm you're a little bit bigger than others' like you'll grow out of it, that kind of.
>
> Chloe [(F, 14/1st interview)]

Children also did not feel they fitted in with their peer group identity. Phoebe's [F, 10/1st interview] description of herself in relation to her friends was typical: "My friends are smaller than me in (.), just like me but smaller [in] size. Like, some are taller than me, but some are skinnier than me." She also described her weight as "Coz [because] I'm a bit piyuuu [sound] [showing her cheeks (big)]". During the interview, her body language with the sequence of gestures and expression involving constant squeezing of her cheeks and legs in an attempt to make them look smaller seemed to reflect her negative self-perception towards her body image. She even repeated similar movements and facial expressions more during the interview while comparing her appearances to that of her peers, which strengthens the notion that she has a negative body image.

Only one participant, Isla, compared her body with that of her family members. Unlike Phoebe and others, when asked how she [F, 10/1st interview] perceived herself, Isla demonstrated a very positive body perception:

> Isla: Erm I don't know cos [cause] erm on my dad's side of family, they're all black, it's like they really care about how big I am stuff like that and they always say things to me "you're supposed to be skinny" and "oh don't eat this, don't eat that". But on my mum's side, coz [cause] my nana's, my nana's a big girl and so was my mom and they don't really care what size I am.
>
> Interviewer: […] how do you perceive yourself?
>
> Isla: Erm actually normal.

Isla was also the only one who described herself as content with her body, seeing herself as "normal". She identified herself as a happy person and described herself as being at peace with her body. Observational data echoed this as she was full of life with a smile on her face and a happy attitude, as well as wearing colourful bright clothing. Her body language and gestures

during the interview, such as placing her right hand on her chest and saying "I'm happy with myself" were positive.

However, although she stated that she felt "normal", this did not mean that she was not concerned about her physical appearance at all. Isla stated that "Some days I feel good when I like to lose weight and stuff like that." All children, including Isla, expressed a desire to look like their peers who were not overweight. For example, Imiayah [F, 14/1st interview] "they [my friends] know that I wanna be like them [my friends], like the same weight". They also stated that how losing weight will make positive differences in their self-perception. So alongside positive descriptions of their personalities, the majority of children were dissatisfied with their body and desired to be slimmer. Imiayah [F, 14/1st interview] summarised this sentiment neatly: "I like myself for who I am, but I prefer to be slimmer than what I am, but overall, I like myself. Like thinner, like not as big as I am now." Imiayah [F, 14/1st interview].

5.1.3 Children's thoughts about how others perceive them

Children's perceptions of themselves were strongly related to how they thought other people perceived them. For example, when Phoebe [F, 10/1st interview] was asked how she felt about herself, she explicitly said that she was dissatisfied with her body and described how other people had told her she needed to lose weight. This reinforced her negative feelings towards herself:

> "In the middle. I like myself and then I don't like myself 50-50. What I don't like is how I look like, my face, cheeks [squeezing her cheeks] and my eyes. […] Other people said I just need to be a bit more [squeezing her cheek] instead of pufff [making her cheek big]. Like [squeezing her cheeks]."
>
> Phoebe [F, 10/1st interview]

In the second interview, when asked what she liked about herself, Phoebe described how she felt when she was playing with her peers when she was six years old, they called her "ugly" and that was the beginning of her negative feelings towards her body:

> My perspective, the only thing I know I am good at is being negative, that'snot a good thing [laughs]. I always didn't like myself except once and that was before I turned six. I was playing on a road and then I got called 'ugly' and I got told to go look at myself in the mirror so I went in and did it then (…)

Phoebe [F, 10/2nd interview]

In a similar vein, Emily [F, 14/1st interview] described her feelings as "not good". From her perspective "any teenager doesn't like themselves" and she normalised her negative feelings about herself. However, the underlying reason for her resentment and low self-esteem was related to negative interactions with her peers:

> "How do I feel about myself? Now, not good [smiled]. I don't think any teenager likes herself, but I just don't like myself. I guess because obviously my life, everyone, most people in my life have always been negative and told me "you shouldn't like yourself and you're not a good person and you're this and that.". So, I take their comments and that's what stuck with me."

Emily [F, 14/1st interview]

In response to a question about whether she had received any constructive comments about her weight, she stated that her therapist and her family were very supportive and foregrounded her strengths. However, Emily described how negative comments resonated with her more than any constructive, positive feedback:

> They [her therapist and family] say I'm a nice person, I'm strong and I'm a fighter. (…) I don't know, they see what I've considered as my insecurities and they just come back to them with positivity so you're beautiful, stuff like that. I guess because there's been more negative comments and, because not all the negative comments were coming from friends or people my age. So, I don't know why I think in general, people like if you're walking down the street and someone says 'I like your hair', but then earlier that day someone said 'your hair is disgusting'. You're obviously gonna stick with the disgusting one but nobody knows why.

Emily [F, 14/1st interview]

Children highlighted that constant criticism perpetuated negative self-beliefs and body dissatisfaction. They described second-guessing what other people were thinking about them. Jess's [F, 14/1st interview] explanation was typical: "[…] I like my personality. […]. Except from like, how I feel, I look; like when other people look at me I feel like they're thinking what I'm thinking is disgusting and fat,but that's about it.".

5.1.4 Children's perspectives about what makes them happy

As an individual can define herself in a variety of ways, their interests are also part of their identity. All children described how some activities, such as "drawing", "colouring", "cycling", "listening to music", "playing an instrument" "doing sports" or "walking" made them happier. However, the definitions of happiness took different forms in different situations. For some children, activities provided a creative outlet for their current negative emotions. For instance, whenever Andre [M, 11/1st interview] felt angry, drawing is the best way to calm him down by saying; "Yeah and the good things to calm me down for my anger, I do like drawing". While for others, activities provided an escape or refuge from the outside world. Emily described this well:

> I don't know. I guess it's just an outlet. It's [hobbies] a way to escape from school or from your mind, like drawing; you can just get it out on a piece of paper, walking; you can just clear your head. It's just clearing your mind
>
> Emily [F, 14/1st interview]

Jess's description went further than Emily's as she described how taking part in activities could take her away from her worries but also enable her to take on a new identity in which she could comfortably blend in with the crowd:

> I don't, it's hard to explain, it's like a change into a different person. Like when I'm singing it feels like nobody else around me. Ermm and then when I'm doing drama, I'm a lot more confident because I love it, I'm doing what I love and I'm around people that also love it. So, it's like a really happy environment. And when I'm singing everyone else loves singing as well. So, it's a happy environment so I'm just happier being around that's sorts of people.
>
> Jess [F, 14/1st interview]

The satisfaction of being able to achieve more than their own individual abilities made them happier. In other words, developing a skill or their stamina, that they thought were not able to do before, gave them a sense of joy and accomplishment. For example, Megan [F, 11/1st interview] did not feel that she was capable of her peer's stamina, due to her health condition. For example, she had difficulty participating in high-intensity activity, such as running, football or group competition. Therefore, she preferred to do individual low-intensity sports or do sports with her family rather than doing team sports. From observational data, she always appeared

to try very hard during sports sessions. Hence, from her viewpoint, happiness is to be diligent in working on and completing her ambitions, and finding more ability on herself so she might do further as she stated by the following lines;

> Like normal, like being happy that I've done it and then I've achieved my goals and I know I could do it, me knowing my happiness like I can do it and I didn't give up that I can do more things. Yeah. I'm not just, I think I could do a lot more than what I can, do a lot more stuff.
>
> Megan [F, 11/1st interview]

All children, without exception, were of the opinion that spending time with their family or friends, people they knew well, helped them to feel confident and happy. For example, Max [M, 15/1st interview] highlighted that he likes to be social with his friends whom he could express himself comfortably and made him feel more involved:

> Just being around other people, I feel confident with. When I'm in new environments I feel a bit awkward, it makes me feel out of place, it just makes me feel like, I don't belong there, [..] just being around other people, I feel confident with.
>
> Max [M, 15/1st interview]

Similarly, Chloe [F, 14/1st interview] highlighted that feeling a sense of belonging to a group or being with a group of friends with whom she shared common interests made her feel "happy" and "confident".

> I enjoy playing musical instruments, enjoy singing and acting and I like going out for walks in the countryside and being on fields sounds really like (..) yeah. [both laughing] I like going out with friends because it makes me more confident around people and it just makes me happier.
>
> Chloe [F, 14/1st interview]

These findings indicate that almost all children enjoyed and wanted to be sociable and felt the benefits of this. However, they mostly kept their social surroundings narrow because of their fear of other people's reactions to them:

> It depends on who I'm with and what I'm doing. If I feel more comfortable [with the right people, close friends etc]. But sometimes I don't like talking and I don't like people to pay attention to me but when I'm with the right people, I'll be open and I am a chatty person.
>
> Imiayah [F, 14/1st interview]

5.2 The everyday impact of being obese

The children's description of themselves highlighted how their perceptions of being obese impacted upon many aspects of their lives and that this has already been explored to what extent in relation to their personality traits, their body image and what they enjoy doing/what made them happy. However, the impact of obesity was particularly evident in relation to four domains of children's everyday life; clothing, everyday activities, relationships and bullying.

5.2.1 Clothing

The children were asked if their weight affected anything they did. The most common response was that they felt that their weight influenced the clothes that they could wear. Clothing, according to nearly all children, was one of the reasons that led to increased body dissatisfaction in their daily lives. Interestingly, both boys and girls wore dark coloured, oversized tops throughout the intervention programme, but it was only girls that described how their weight affected their clothes choices. Therefore, particularly female participants often complained about both being unable to wear the clothing that they choose and having difficulty finding clothes for their size or their age due to their weight:

> I really like going shopping. It [weight] does affect me a bit then, when I see a nice top but they don't have it in my size or if they have it in my size, I have to go to a shop that sells clothes for bigger people. And they're more expensive so I can't get as many clothes as I normally would. And it sometimes affects me then. But that's it.
>
> Imiayah [F, 14/1st interview]

Clothing was one of the significant parameters that caused the children to realize their excessive weight as Chloe [F, 14/1st interview] described how she perceived herself as overweight due to no longer fitting in her previous: "Well, I realised the clothes were getting too tight so then, [...]". Concordantly, they also described how difficult it was to find age-

appropriate clothing and how this profoundly affected their mental state when they could not find clothes that fit. Emily drew attention to this issue:

> Emily: Because I go into a shop and then I just have a complete breakdown and have to leave.
>
> Interviewer: So are you using the child or adult session?
>
> Emily: Adult.
>
> Emily [F, 14/1st interview]

Instead of dressing age-appropriately, children described being forced to choose clothes from adult aisles, making them unhappy with their bodies. Children described how they could not wear certain clothes, which increased their body dissatisfaction and shame:

> Because I can't get into like belly tops and that, [she used to wear a self-styled cropped t-shirt in the sports session] some jeans don't go to my sizing. […] Yeah cos [because] at the minute, I won't wear a full bikini, I am wearing shorts. So I want to be able to wear a full bikini, not bikini top and shorts, like a full bikini [interviewer: So you will be more (..) (she completed the sentences)] Confident.
>
> Emma-Mae [F, 14/1st interview]

Almost all children stated that wearing clothes that revealed or highlighted their body shape made them feel worse. For example, Max's [M, 15/1st interview] said: "Sometimes I'm not so confident in me swimming because I've got to show me [his body] just, but apart from that not really." In a similar vein, Emily said that she disliked wearing the sports uniform during the PE classes at school because they increased her body-consciousness. She was also the only participant who was forced to leave schools due to being subject to frequent verbal and behavioural bullying. Therefore, her new school administrator demonstrated compassion by allowing her to wear anything she wished during the PE session:

> It's [PE session] one of the things you dread because you have to wear a uniform that might show your skin a bit more. (…) Yes.I don't [like to wear PE clothing]. I just wore a T-shirt and jeans. I don't wear the uniform because I feel too uncomfortable in it. [Q:Is it mandatory to wear PE clothes?]. Yes it's mandatory but I get away with not wearing it [she laughs]. I don't know how.

Emily's [F, 14/1st interview]

Children described dressing more modestly to conceal their weight. Jess [F, 14/1st interview], for instance, shared that she opted to choose a dress that could hide her body since her excessive weight affected her confidence and mood:

> I didn't really like how I looked and I didn't really have much confidence [before SHINE]. Like even when I'm out my friends I'd like wear a massive jumper or even in summer I'd still find a way to wear a jacket or a jumper, and I just didn't really feel good about myself like I wouldn't imagine myself going out in shorts

Jess [F, 14/1st interview]

Also, my observation notes repeatedly showed that nearly all children preferred oversized tops that covered their hips. Children also predominantly wore black or dark-coloured clothes except Isla, who portrayed body positivity. They mostly wore the same outfit throughout the intervention programme, including classroom-based and sports sessions. For example, one child came to the programme wearing the same dark-coloured hoodie and never removed her hood from her head until the last week of the programme.

5.2.2 Everyday activities

Children emphasised that one of areas where their weight has the most impact was in their everyday activities, describing it clearly as "I can't run very fast", "I can't walk fast" or being "the slowest". These children often compared themselves to their non-obese peers:

> Muhammed: Yeah I do feel like my weight sometimes gets in the way because like, I'm always one of the slowest in my school. The strongest but slowest.
>
> Interviewer: Ok. strongest but slowest.
>
> Muhammed: Yeah.
>
> Interviewer: How did you decide you are the slowest one?
>
> Muhammed: Because, I've had a lot of races with my friends, at the races, like the first one is here or there.

Muhammed [M, 11/1st interview]

In addition, children stated that their weight made them feel more exhausted than their peers, causing them to fall behind in the activities they want to do in their everyday lives. As a consequence of this constant comparison, some described their feeling of inadequacy relative to their peers:

> It's just, cause [because] of my health problems that come with it [weight]. It [weight] does also affect not being able to do things as good as my friends or do things up to the certain ability that my friends can do it. And like people around me walking uphill and then they'll be like, "oh come on Jess" and then I'll be like huffing and puffing [she laughed] like not been able to breathe and so it does affect me, but I try not to let it get to me [affect me]
>
> Jess [F, 14/1st interview]

PE classes were a focal point for comparison. According to the children, the competitive atmosphere of PE classes made them feel pressured and focused attention on their physical endurance and body shape:

> It's [PE] a lesson that everyone enjoyed. But when you're overweight, (…). You have to run in front of everyone, and it's just a test of you was physically able as your classmates, and it can just be very embarrassing.
>
> Emily [F, 14/1st interview]

Although not being able to perform or participate in activities as much as their peers and the exhaustion induced by weight had an impact on everyday life, it did not always deter the children from doing what they wanted to do as Phoebe [F, 10/1st interview] described: "No, I don't think it does stop me from doing that (…) hmm not really, not rally much. I can still do the things I want."

Similarly, Imiayah also confirmed that her weight had no effect on her everyday activities. However, she also stated that some activities included a weight restriction, and this made her to worry about her weight in the future:

> What I do. No not really. But there is things that I'd like to do when I'm older that my weight could affect if I don't change it like, I don't know. Like there's certain weight limits for trampoline parks and like inflatable places [Inflatable theme park; entertainment park] and it makes me think, I wish I was skinnier

> so I could do that. But at the minute, nothing that I do is affected by my weight like, I can do everything, I normally do.
>
> Imiayah [F, 14/1st interview]

Only one participant, Megan [F, 11/1st interview], reported that her weight rose as a result of the prescription she received for her medical condition. In this case her physical activity was hampered by exhaustion, and her physical strength was limited as a result of her medical condition and weight. However, she did still try to make sure she took exercise:

> Yeah. I've got used to that [having health condition and excessive weight], and I know what my limits are and what I can do is when I start doing too much, I have to stop and have a little break, but I'm fine with that. I'm getting used to it
>
> Megan [F, 11/1st interview]

Although children described trying not to let their weight prohibit them from participating in certain activities, as mentioned above; some fast-paced activities, like running or basketball, increased their self-consciousness, making them more focused on their bodies. They felt that people were looking at her bodies:

> Running, because I can just feel it, just like flopping about [showing her breast and body with hand gesture]. I just feel like when I run everyone can just see wobbling and I'm just like 'don't look at me', it just makes you feel really self-conscious like don't make it as low as it. "[Q: So does it stop you from doing anything?] Not really no. Because it doesn't really bother me. I just know it's there. But it doesn't stop me from doing anything as such.
>
> Chloe [F, 14/1st interview]

Chloe's description resonates with the field notes taken during sports sessions. During these sessions, female participants over the age of eleven were observed frequently trying to prevent shaking of their breasts with their elbow or arms while running, playing basketball, or doing aerobics or pull their t-shirt down to prevent it goes up. They seemed uncomfortable and awkward:

> "While Chloe [F, 14] was bouncing the ball [basketball], she was trying to hold and to prevent shaking her chest." [FN27-MC-20190709]

> "While doing aerobics steps, Emily [F, 14] and Chloe [F, 14] were always keeping their breasts not to shake and frequently adjusting their t-shirt. It seems they do not feel comfortable." [FN10-MC-20190608]

Jess also described a similar sense of body shame during the PE sessions at school. She described obtaining a doctor's note to enable her to wear leggings rather than shorts. So, for Jess the PE uniform was more problematic than the activities themselves:

> It [weight] has quite a lot restrictions, like when I used to do PE, I'd like feel self-conscious because everyone else would be wearing these little shorts and it's like show skinny legs and then I'm just be there with black leggings and then I have to get a medical note for my leggings [not to attend PE session at school] and it was just awful. (…) and then especially because everyone else was getting changed in the change rooms and I have to go into the toilets and might change in the toilets. (…)
>
> Jess [F, 14/1st interview]

Similarly, children described how the clothing required for certain activities prevented them from participating and thus joining in with the activities their friends and family were taking part in. Emily described swimming and going to the trampoline park as particularly problematic:

> It [weight] stops me from being confident, it stops me from going out of my comfort zone. It stops me from doing a few activities like if my family wants to go swimming, then I'll be like 'I don't want to go swimming' because I have to wear swimming costume and people off to see me or if we want to go to a trampoline park then I after like jump my shirt might go up and everyone like look at me. [during sports sessions she used to hold her breast] just in general, everything.
>
> Emily [F, 14/1st interview]

Children described being worried about what other people were thinking about them and this had a negative effect on their social life. For example, Harry [M, 14/1st interview] was concerned that people would judge him negatively because of his physical appearance and weight, which often deterred him from socialising:

> I don't think it [weight] holds me back. I think it's sometimes me just overthinking what people think that holds me back but other than that, it is good. I know they're not saying it [directly to me] but, it's just like when you have too much time in your head like you think someone is saying something, but they are not.
>
> Harry [M, 14/1st interview]

Emily [F, 14/1st interview] also echoed Harry's thoughts: "Yes, it [weight] affects going out in general. I don't like to go out because of If I see anyone and if they make a comment or just if people give me a look when I'm walking down the street, then I'll think, 'oh my gosh, it's because of this', even though it could just be my head.". This constant worrying about what other people were thinking about them, even if, as they acknowledged, it might just 'be in their own heads' sometimes prevented them from venturing out. This feeling of being the object of people's gaze was described as particularly acute when going out to eat. The majority of children feel uneasy about eating in a cafeteria or fast-food establishment. Jess's [F, 14/1st interview] description of visiting McDonalds highlights this well:

> Yeah. Yeah. I don't; I just hate it [eating outside]. Because I feel like everyone's looking at me. If I go to McDonald's, I'll get literally the healthiest thing on the menu, like a wrap with chicken in it. And then I feel like everyone's looking at me or feel like everyone's thinking in the head, "Oh yeah, she's going to be eating healthy, she is fat.". Cos [because] that are sorts of assumptions people make, but they don't know that I did hardly go to McDonald's and that probably be my first one in months. Cos [because] I know how unhealthy it is like in Meadowhall; I just sit there and feel uncomfortable and feel like everyone's staring at me. Especially when I'm eating unhealthy things, which I don't do very often, but it feels like a McDonald's logo on it all "oh" like certain logos on it, that's like fast food brands, then you feel a lot more like conscience because you feel like everyone's thinking "Oh yeah, of course, she going there (..) [she took a deep breath then said "yeah"]. It's just in my head. I know people are probably saying it, but it's mostly just in my head. (…) I think it's more people saying it to the friends just so they can have a laugh than saying it to someone's face.
>
> Jess [F, 14/1st interview]

In summary, the data suggests that the majority of children appear to engage in everyday activities regardless of their weight, despite the fact that they often feel tired and their physical endurance is limited. As a result of their obesity, they compare their physical ability and endurance to that of their peers who are not obese or overweight. Children are acutely aware of their body shapes and this is brought to the fore when taking part in particular activities and is exacerbated by sports clothing. Children also describe constantly second-guessing what other people are thinking about them, particularly when they are taking part in sport or eating out. The findings also illustrated that the children are more concerned with existing physical constraints and challenges associated with their weight and body size in the here and now rather than their well-being in the future.

5.2.3 Relationships

Children described their friends very positively throughout the interviews. They described their friends as more interested in their personality than their appearance:

> No, my friends don't really care what I look like. So, they just care about my personality and if I'm not like a nice person then no one will be friends with me. But, then, there are people who just care about looks and not personality and I just don't want to be friends with them so just stay away from them.
>
> Jess [F, 14/1st interview]

Similarly, they added that their friends were compassionate, supportive, and understanding:

> No, it's like my friend kind of know that I do this SHINE (obesity intervention programme) stuff. They kind of support me with it, they kind of say to me like "you're not fat", I know, I'm like 'I'm not fat I've just got more fat than you.' So, they kind of just respect me with it, like they don't make fun of me or anything.
>
> Chloe [F, 14/1st interview]

However, although children described their friendships as unaffected by their obesity, they were conscious of their body size disparities, which influenced all children's urge to be physically similar to their peers in terms of body size.

> No. My friends all love the way I am because to them, I'm comfy, cuddly and I'm like a big teddy bear to them, and they love it. But they know that I wanna be like them, like the same weight as them, but they don't have a problem with my weight or anything like that.
>
> Imiayah [F, 14/1st interview]

While highlighting the support and acceptance of their friends, children also described how their obesity impacted upon their friendships. Despite being close friends, for example, children described feeling different in terms of size and clothing from their friends. They still felt the urge to hide their bodies from their friends. This was particularly the case in the changing room after PE sessions at school as Jess [F, 14/1st interview] described "especially because everyone else was getting changed in the change rooms and I have to go into the toilets and might change in the toilets". Going shopping with friends also highlighted this:

> Yeah. I guess cause [because] almost all of my friends are skinny, so I obviously can't relate to them on a lot of things, and they can't relate to me on a lot of things and if we go shopping together and then they're like 'oh like let's try on this and then I'm like 'No'. Like just dresses or crop tops, and I'm too insecure to wear them.
>
> Emily [F, 14/1st interview]

Although some stated that their weight had little or no effect on their close friendships, it did have a significant impact on their social interaction at school. Almost all children reported that their weight had been a target of bullying frequently by other peers as Phoebe [F, 10/2nd interview] highlighted; "Not, my weight doesn't affect anything I do, but it just makes people laugh at me more so not really bothered about it. I just don't care." As a result, children reported that they had limited numbers of friends at school:

> At school, it's quite difficult because I'm not friends with many people and a lot of people think it's funny to tease me and call me names [invent names]. Like, make fun of me. Like call me fat, ugly and stuff like that.
>
> Jess [F, 14/1st interview]

Despite the fact that they described themselves as "friendly" in the previous section, they also highlighted how being bullied had made it difficult for them to make friends and to be open with their peers:

> I am and I am not [a social person]. Because I do get into a lot of social things but I'm not a very big socialised person. (…) if we work in groups and I put myself out of it. (..) like if you can get into friendship groups, can't you. I'm one of those people who do you know when you talk to people where and then and then you make friends like that. I struggle talking to people and making friends like that.
>
> Andre's [M, 11/1st interview]

While being obese has an impact on friendship and social interaction, it also affects family relations. Emily, for example, described not feeling connected to her family and not being understood by her "skinny" family members since she thought that her family had no idea what it is like to be an obese child. In this way, she perceived her weight as a barrier to positive family relationships:

> Because if I'm eating or something then I feel guilty for eating, or I'll like to eat too much, and then I'll be angry with everyone around me even though it's not their fault, and obviously I have a slim family. So, they don't understand the issues that I'm going through, and they don't understand why I don't want to go out of the house or stuff like that.
>
> Emily [F, 14/1st interview]

Phoebe [F,10] and Isla [F,10] also described complicated relationships with their family members. Both participants expressed that they were overwhelmed by their family's approach. For example, Phoebe stated that her eating behaviours were strictly controlled by her mother, such as giving less amount of food than she was supposed to have daily. Similarly, Isla described how her family would say "don't eat this, don't eat that". She also said that she had been subjected to several negative remarks about her weight and body appearance, like "you're supposed to be skinny" by her family.

To summarise, according to the data obtained from the children's stories, weight overshadowed every relationship of the children in their social environment. This is primarily related to how other people treat children who are obese such as being exposed to bullying, meeting their family's expectation. As a result of previous negative past encounters related to their weight, the sensation that children are not understood by their friends, and the increase in physical dissatisfaction, they are unable to make new connections.

5.2.4 Bullying

As referred to above, many children referred to being bullied. Indeed, all but two children described instances of being bullied. Almost all children described being marginalised or stigmatised on the basis of their body size, shape or appearance, particularly by their peers. Andre's [M, 11/1st interview] narrative echoed the situation amongst all children:

> I've been bullied through years of school, about being fat, about being ginger and freckles. I have freckles. Ginger, (…) I think freckles because I used to be called. I can't remember. But (..) Thick. I got swear words in it. Bad words, fat with something in front of it, 'fat, bad word', 'ginger, bad word.
>
> Andre's [M, 11/1st interview]

When children were asked to describe a typical school day, almost all participants mentioned being bullied. Even during observations at SHINE, bullying at school was highlighted. During one observation, for example, Emily (F,14) was welcoming Jess (F,14) as being a participant of the intervention programme. During their conversation Emily (F,14) exclaimed, "I really really hate school". Jess (F,14) agreed with Emily and nodding; "me too, I hate school.".

> ermm like it was like more, it was like at school, it was like 'oww like she's fat and I know that like oh she is she needs to lose weight; she sits on me I'll die and like stop breathing'. I was like 'alright, ok, whatever, don't bother me'
>
> Jess [F, 14/1st interview],

Children described both verbal and physical bullying. The majority of children said they were often called "fat" and "thick" or 'fat idiot'. In this way, comments referred to both their physical appearance but also their perceived (lack of) intelligence. Children described feeling humiliated when they were perceived to be unintelligent due to their associated excessive weight. Emma [F, 10/1st interview], for example, talked about feeling particularly hurt when someone called her "dummy fat". Mohammed [M, 11/1st interview], also highlighted how peers would emphasise his lack of competence physically with derogatory comments like; "ey you're fat or I'm faster than you".

During the residential week, the children were also asked to report on a piece of paper anonymously about the derogatory remarks they received. A number of terms appeared frequently in the notes: "fat" (11), "ugly" (8), "smelly', 'stupid' and 'untalented" (all 5), "greedy" (4), "greasy', 'useless', 'unattacheds" (all 3) and "idiot" (2). There were some brutal

comments as well like “You mum should not have had you”, “more rolls then greggs” “rubbish at football” and a rhyme “rolly-polly, humpty dumpty”.

While peers were described as the perpetrators of bullying in nearly all instances, one child, Isla, described being bullied by her teacher. This had actually led her to join the intervention programme. She [F, 10/1st interview] stated that “Ermm because my mom wanted me to enter that [SHINE]. Cos, my teacher at school called me a really nasty name and then, she called me ‘fat’”.

While most children talked about their experiences of verbal bullying, some also talked about being bullied physically, for example getting “punched”, “kicked”, “spat on” or “smashed into a door or wall”. Phoebe [F, 10/1st interview], for instance, said: “She [bully] was telling the teacher for me for nothing. They were kicking me, punching me, they've done stuff to me. She was swearing at me.”

Despite many commonalities in their definitions of bullying, children were sometimes reluctant to label particular behaviours as bullying. For instance, Andre [M, 11/1st interview] who experienced bullying at school for a long time, despite having previously acknowledged that being referred to as “fat”, “red hair[ed]” or as “having freckles" was bullying type, however, he did not consider being called such names to be bullying. Since children were generally familiar with name-calling amongst their peer groups, Andre found it difficult to understand if it was ‘bullying’ and whether it had anything to do with his excess weight. He normalised 'invented names' as a usual part of school life rather than defining it as bullying. Such as;

> I think everyone keeps saying that they were calling me, they were like not bullying me but like calling me names and (…) at this new school and it's just only one person [called me names], but I don't know who he is.
>
> Andre (M, 11/1st interview)

Likewise, Phoebe [F, 10/1st interview], when asked what she did not like about herself, talked about having disliked herself ever since she was called ‘ugly’ by another child while playing on the street. In other words, she defined her appearance as being different since that day. Phoebe described being subjected to both verbal and physical bullying. In particular, she talked about hating being called fat. However, she did not mind people describing her as a ‘big girl’:

> Other people say, just need to be a bit more [squeezing her cheek] instead of puff [making her cheek big]. Like [squeezing her cheek]. They don't really

> hurt me. I just take their advice and try to help myself. I'm not fighting it away. Like someone tells me that 'I'm not attractive', I'm just like OK I'm not really bothered well fair enough. [Not] Attractive, it means like where some people don't like it, because of how I look. Coz [because] I'm a bit piyuuu [sound] [showing her cheeks big]. I don't get offended. They just said 'no offence but you're a bit', they didn't say 'fat'. They just said 'a bit bigger than me' and I'm like okay
>
> Phoebe [F, 10/1st interview]

Only two children, the two oldest male children, specifically said that they had never been subjected to bullying. Max [M, 15/1st interview] and Harry [M, 14/1st interview], acknowledged that they did not experience bullying at all, however, they knew someone who had: "I've experienced it [bullying] happen to other people, but never to me". Only one participant, Megan [F, 11/1st interview], never mentioned bullying during the interview. She acknowledged that she could not perform long term activities due to her health condition and was of the opinion that she was fortunate to have everyone at school understand her condition and respect this by saying at the first interview;

> Yeah. I've got used to that and I know what my limits are and what I can do is when I start doing too much, I have to stop and have a little break and yeah but I'm fine with that I'm getting used to it and everybody at school understands it. So I'm quite fortunate that everybody is alright with this all.
>
> Megan [F, 11/1st interview]

However, prior to the second interview during one of the fieldwork observations, she was late for the sports session and, unlike the other children, she did not want to get involved in the sports session. Once I invited her to the group exercise workout, then the SHINE facilitator did. However, she turned down both invitations and kept her distance and did her exercise away from the group. During the second interview, when asked why she did not join the sports session, she responded:

> I'm alright with interacting within them but, well the kids, I don't really like to. Other kids I don't really like to interact with adults or a kid but I don't really like to do with kids. To interact with adults like, I know that they can't judge. Yeah, I know but I don't like those kids, don't really mind (…), it's just because

> I'm shy and I don't really, I like just staying with my, on my own, and just like staying with my own friends.
>
> Megan [F, 11/1st interview],

Megan was thus intimately aware of the unpleasant behaviour that occurs among children and believed that children can be cruel.

5.2.4.1 The Assumed Motivation of Peers' Bullying

Most children thought that peers engaged in bullying just to 'annoy them'. Only three chilren referred to different reasons for being bullied. One of them, Emily [F, 14/1st interview], who experienced severe verbal and physical bullying, related how at the time she could not make sense of her peers' negative attitudes towards herself. However, in retrospect, she now understands that she was perceived as different to her peers:

> In my old school, [I was] very confused because now I can look back and think oh there were just children and I understand why they were doing it because they didn't see me as one of them. But at the time I was very confused and just hurt why I was randomly being picked on because it was unprovoked.
>
> Emily [F, 14/1st interview]

The interview prompted her to reflect on and think through why she was bullied. During the interview, she made sense of the various words she was addressed with and how she stood differently than her peers, for instance, she described herself as "vulnerable", "overweight" and "ugly":

> I think I was just an easy target because I was vulnerable. Because I didn't really fit in like; my appearance. What I was going through what I've been through. Just like stuff like that. I guess in school people pick apart your appearance and I guess I wasn't what they thought was good like looking yeah. So, I was obviously overweight, ugly.
>
> Emily [F, 14/1st interview]

In a similar way, Andre [M, 11/1st interview] was of the opinion that he was behind his peers when it came to his social abilities and saw this as the reason for being subjected to bullying. He went like, "Because I'm not very good talented. I'm not talented, I know I'm talented, but I

like my writing, like English, my writing, my maths, my science and etcetera more and more.". Although he thought he had good academic abilities, he talked about his inability to keep up with his peers in other respects. This was reflected in his interview, where he stressed the words, "I can't run very fast". Throughout the interview, his repetitive use of "I'm not talented" seemed to emphasize his negative self-perception toward himself.

In contrast, Emma [F, 10/1st interview] had a very neutral way of looking at things being unable to define any specific problem with her or bullies. In other words, from her point of view, there were no differences between her and her peers, and if she was subjected to any bullying, it was only due to the fact that the bully (her peer) had anger issues. During the interview she did not mention why her peer had an anger issue but was accepting of the situation: "No, I think it's just because [because] sometimes she gets angry. Because she has anger issues so maybe it's just because of that. She didn't do it for any reason."

In conclusion, the children were unable to comprehend the bullies' motivation and purpose. They emphasised that the problem was primarily in the perspectives of bullies, stating that they were attempting to bother children who are obese or having anger issues. Only two participants emphasized that bullies' behaviour is related to their own weight and abilities.

5.2.4.2 Emotional Wellbeing and the social Impact of bullying

Children reported consequences of bullying as it impacted their emotional wellbeing and social life. For instance, Imiayah [F, 14/1st interview] tried to express her own feelings by empathising with the experiences of her own and others who are bullied. She appeared to struggle to find words that could express how bullying had affected her:

> I think from being on the bigger side for most of my life it's shown me how nasty people can be and how it makes you feel [pause] and that's like why it's happening to you. So I would never do that to anyone else and if someone were to explain it to me, I'd understand and I'd be able to help her like whatever, it is because I never put anyone in the same place like bullies put me when I was younger. So I think I'm very understanding, unlike some people.
>
> Imiayah [F, 14/1st interview]

Other children also reported that their experiences of being bullied had led to feelings of sadness, anger, and low mood, resulting in substantial negative impacts on other aspects of life including the motivation to manage their social life. For example, some children, Phoebe, Emma-Mae, Emma, Jess, Imiayah and Megan had trust issues with their friends; they were afraid of being judged or, when playing together, they worried that the game would end up with bullying. The indirect result of this fear was the limitations that they put on their friendship and, eventually, self-isolation.

Emma-Mae [F, 14/2nd interview] described her experience of the above by indicating that her resulting anger from being bullied restricted her going outdoors, along with the fear of being left out:

> Sometimes, they always say 'Do you want to play with me'[then they do not] or some mean things or the opposite things like 'you cannot play with me or stay with me'. All of them run out and leave me.
>
> Emma-Mae [F, 14/2nd interview]

Similarly, Emily [F, 14/1st interview] was severely emotionally affected by her experience of being bullied within the school environment, to the extent that she wanted to be home-schooled:

> I didn't [she means she could not manage the situation] [she laughed], I used to not go to school, and that's reflected in my new school because even though it's [new school] better, I have still attached to the word school to them experiences that I had in my old school. So now I don't want to go to that school. I don't want to go to [any] school. So my attendance was low, I didn't go. I coped by just crying a lot and that's it. Every day after school to my mom just wherever and whenever.
>
> Emily [F, 14/1st interview]

Indeed, Emily was the only participant who shared that her cumulative experience of bullying had led her to self-harm, hurting herself by cutting her body and punching things around her in response to her deep emotional distress:

> Like when I was going through it. But I am fine now [laughs] I never really did it continuously but obviously, like as a teenager you hear about stuff. So I cut myself or punched stuff (…). Emily [F, 14/1st interview]

However, she blamed herself for being overweight by saying: “It can't be changed (she means ‘being overweight’) and it was nobody's fault but mine. Cause [because] I choose to be like this like it is nobody else that's making me overweight.”

These children who were exposed to such severe bullying, such as Emily, Phoebe, and Jess, also talked about ‘struggling to breathe” or “panic attack” when social anxiety overwhelmed them. These episodes were also triggered by some stressful situation such as during “going out” or “exam” time, and interfered with their everyday lives as Emily [F, 14/1st interview] said “I get like a panic attack straight away”. Emily [F, 14/1st interview] also emphasized how the comments from friends or peers could be deliberately malicious and hurtful and how, is in such situations it was difficult to stay calm and receive personal criticism without developing resentment towards that person. Her description of her feelings mirrored those of other children when she said:

> I'm not sure. I guess because there's been more negative comments and I don’t know because not all the negative comments were coming from friends or people [at] my age. So I don't know why I think in general, people like if you're walking down the street and someone says it's all – ‘Like your hair’, but then earlier that day someone said ‘your hair is disgusting’ you're obviously gonna stick with the disgusting one but nobody knows why.
>
> Emily [F, 14/1st interview]

While Emily described how the negative feelings were reinforced by the constant bullying, Jess [F, 14/1st interview], was the only one to say that bullying, even though it was an upsetting situation, had actually helped to build her internal strength and improve her inner resilience. Due to being bullied her whole life, she articulated feeling stronger and less affected by negative remarks:

> It makes me upset but I get it a lot, so it sort of makes me stronger. Because without them saying what they are saying, it wouldn't allow me to feel like, I wouldn't be able to say things back to them, if they had not said it all my life because I've had it like all my life.
>
> Jess [F, 14/1st interview]

Similarly, Isla [F, 10/1st interview] described the difference between her own and her friends’ reaction to people bullying her:

> Noo I've had it before [called fat] but I don't really care. Because she's being mean to me and I don't need to pay attention to people like that. Cos [because] my friend got really angry when a boy called me fat and she thought it was really mean. She [her close friend] got really angry with me because I didn't do anything back to him but I said 'I didn't want to because I don't really care' or I would only care if my friends and family called it me". I don't know those people.
>
> Isla [F, 10/1st interview]

5.2.4.3 Children's coping strategies for dealing with bullying

Children described a range of coping strategies that they employed to manage bullying situations and help them to prevent further incidents. While discussing the idea of how children managed their situation at the time of bullying, children indicated how they could 'stand tall' and manage the bullying situation if they were supported. It seemed that most children [Emily, Emma, Emma-Mae, Muhammed, Chloe, Jess] asked for help from school staff members such as a teacher at the time of bullying. Some schoolteachers helped to manage the situation like Chloe's [F, 14/1st interview]:

> I told the teachers about it. They had a word with them and just told them like calm me down a bit. It's not right. Yeah. They liked carrying on a few more times after that but gradually they stopped because they kind of knew that I wasn't really bothered. He's like, just don't show that you bothered about it, because then they weren't saying anything.

One participant, Emma [F, 10/1st interview], also described how her primary school teacher had developed a strategy which Emma could use to articulate her feelings by expressing herself on a daily basis through a smiley behaviour chart. This chart consisted of different face shapes, including smiley, happy, unhappy and so on which helped Emma to process the different emotions she experienced on a daily basis. Her teacher could thus keep a track of Emma's feelings through the chart reflecting if she was bullied or not, and take appropriate necessary actions.

> Some of my friends in my class one of them's called [name removed]. She used to have one but then we're both offline now. We don't need anymore, she doesn't get bullied anymore. And then my other friend I think it was [name

> removed] I don't remember. and then some people in my class and they were like an annoying chart. Then the teacher has been annoyed about when they put it like a sad face, a happy face or cross face. [it was like two girls in the class were bullied.]. Cause some, most people in that class like most of the boys and one girl [name removed]. She is the one that annoys kids in class. She started to get good now, but she starts to have a chart just in case she does get bullied.
>
> Emma [F, 10/1st interview]

Emma also mentioned that her teacher had her mother's phone number and whenever she was exposed to bullying, she would request her teacher to call her mother.

In contrast, some children felt that they were not sufficiently supported. Jess [F, 14/1st interview], for example, highlighted that her teachers did not intervene appropriately, so she had stopped seeking support from them:

> Yeah, I talk to my teachers all the time. They're really good about it but they don't really sort things out like it's bad at schools because as soon as I wear like one thing that's incorrect to the uniform, they will get down on me straight away. But as soon as someone's getting bullied, they don't do anything about it. It's just...[pause].
>
> Jess [F, 14/1st interview]

Other children described how they had developed their own coping strategies by distracting themselves from their unpleasant experience, for example, by playing with their pets, walking outside or meeting their close friends:

> "It's okay but sometimes I just go home and upstairs and go to my bedroom or go living room or stay outside and playing with my friends."
>
> Emma (F, 10/1st interview)

> "Ermm I just go out a lot more with my friends and forget about it. Ermm listen to music that helps a lot, like watch movies, take my mind off it."
>
> [Jess (F, 14/1st interview)]

However, one exception was Imiayah [F, 14/1st interview] who never shared her bullying experience with anyone either at the time or later on. She described how her strategy of ignoring her bullies led them to lose interest and stop bullying her:

> Ermm teasing when I was younger because it used to be the older people and I never told anyone about it. I never stuck up for myself I just carried on going for only like a week or two and then after that I ignored them and they got bored so they stopped doing it but now I don't really, I don't get bullied, I don't get teased or nothing.
>
> Imiayah (F, 14/1st interview)

Indeed, all children who shared that they were exposed to bullying described ignoring the bullies as a part of their strategy to deal with bullying. Chloe [F, 14/1st interview] explained the strategy clearly: "You pretend that you don't know that it's happening like you just block out yeah, there is no point carried on. She's not reacting." Additionally, the children who also experienced physical bullying gave further reasons as to why they ignored the bullies and pretended that nothing had happened. Emma [F, 10/1st interview], for example, talked about a fear of exacerbating the situation:

> Yeah, she sometimes annoys me all the time. Well, I don't do anything back to her. Because then she will just hit me again. So I don't hit anyone back. I guess they do hurt me again
>
> Emma [F, 10/1st interview]

In contrast, Emily [F, 14/1st interview] explained that she ignored the bullies for fear of having an emotional crisis with panic attacks or anxiety. She acknowledged the fact that she could not respond to bullies even if she wanted to because of her panic attacks, therefore she had to choose to ignore them intentionally. This was another way of protecting herself from further emotional distress:

> Yeah I get to like, I go like with any confrontation, even if it's just an argument, I get like a panic attack straight away. So I couldn't respond and even if I wanted to, I just had to stand and walk away and breathe.
>
> Emily [F, 14/1st interview]

Changing the environment in response to bullying was also described as another coping by Emily:

> "Alright. Um, I go to college and it's OK. Do you want me to describe the school just how I feel about that? In my old school, I used to get bullied so I had to move. And this school's a lot better."
>
> Emily [F, 14/1st interview]

Similarly, Phoebe [F, 10/1st interview] changed her uncomfortable environment to protect herself. She put distance between herself and her bullies and ignored them by using her headphones.

> "It's [bullying] not happened recently, it's just because I stay away from them more. Yeah, I just don't like being around people much. I prefer to be on my own with my own devices [headphones]."
>
> Phoebe [F, 10/1st interview]

Moreover, some children explicitly described how eating made them feel better, particularly when they feel "sad" or moody. For instance, Isla [F, 10/1st interview] articulated that there was a strong correlation between the tendency to eat more when she was sad. Despite being conscious that suppressing her emotions with food 'was not healthy' for her, she highlighted how much she enjoyed eating because it made her "feel so good":

> "Erm, I don't want to do anything. I feel like, when you get sad you kinda eat sometimes I kind of do that which is not good, but food just feels so good, so yeah. I mean who doesn't like food."
>
> Isla [F, 10/1st interview]

Only one participant, Emma-Mae [F, 14/2nd interview], stated that losing weight helped her to manage the bullying situation as a long-term solution:

> "Like I lost weight and when I was in school, they've liked, "oow my God, she has lost weight. She's amazing. She's gorgeous" and give me nice comments."
>
> Emma-Mae [F, 14/2nd interview]

Chapter Summary

This chapter has highlighted that children's descriptions of themselves were very much connected to their obesity. While children tended to describe themselves as "a bit overweight" they also highlighted their dissatisfaction with their bodies. Their descriptions of their personalities linked in with their body image. Children described how they would compare themselves with their peers and how this would reduce their self-confidence further. They also described how their hobbies could be a diversion from obesity-related worries.

Children's narratives also highlighted the significant impacts of obesity on their daily lives. The most significant impact of their weight was their clothing choices. They felt the need to hide their bodies with their clothes and their outfit choices therefore restricted. For this reason, they are reluctant to do some activities that require wearing clothing that reveal their body shapes. Female participants, in particular, talked about wanting the freedom to wear what they wanted like their peers.

Another area of their lives that was affected by their weight was daily activities. Some activities were particularly problematic, like running and basketball, which increased their body-consciousness. Discussions also highlighted how their weight affected their social lives. Almost all children were unwilling to go to public places, particularly restaurants, or even leave their houses because they sensed other people stare at them. While they generally talked about their families as being close and supportive, they also highlighted that they could not always understand what they had to go through as a child with obesity.

Children described many instances of being bullied at school. They talked about being humiliated for their weight but also being stigmatised as unintelligent and socially incompetent.

Additionally, this chapter also reflected that children's understanding of their peers' negative attitudes towards them was that they did not fit their peers' norm physically and emotionally. In this sense, they were convinced that the problem was mostly related to them. Nonetheless, the data showed that all these overwhelming experiences caused significant emotional distress including self-isolation, sadness, crying and self-harming. Participants referred to a number of coping strategies which helped, to some extent, to navigate these challenges.

In the next chapter, children's experience of engaging in an obesity intervention programme will be explored.

CHAPTER SIX: FINDINGS TWO

Findings of children's perspectives of the SHINE intervention programme

Introduction

This chapter will consider children's perspectives of the SHINE obesity intervention programme. The chapter is divided into three sections. The first section considers children's hopes for, and expectations of, the programme. Although the primary expectation was to lose weight, there were additional benefits they hoped for such as changing their appearance, being able to wear certain clothes, physical capabilities and socialising. It also explores children's perspectives about the programme enables them to lose weight such as receiving nutritional information, helping them to develop strategies with dealing with their emotions or everyday challenges.

The second section focuses on children's lived experiences of the SHINE intervention programme. This includes considering children's perspectives of the programme's approach and how they engaged with programme. It then goes on to present children's accounts of what sort of knowledge they gained, such as portion size, nutritional information, understanding emotional eating, food and exercise balance and improving life skills and how they applied this information in their everyday lives. Following this, it also presents children's perspectives of the intervention environment.

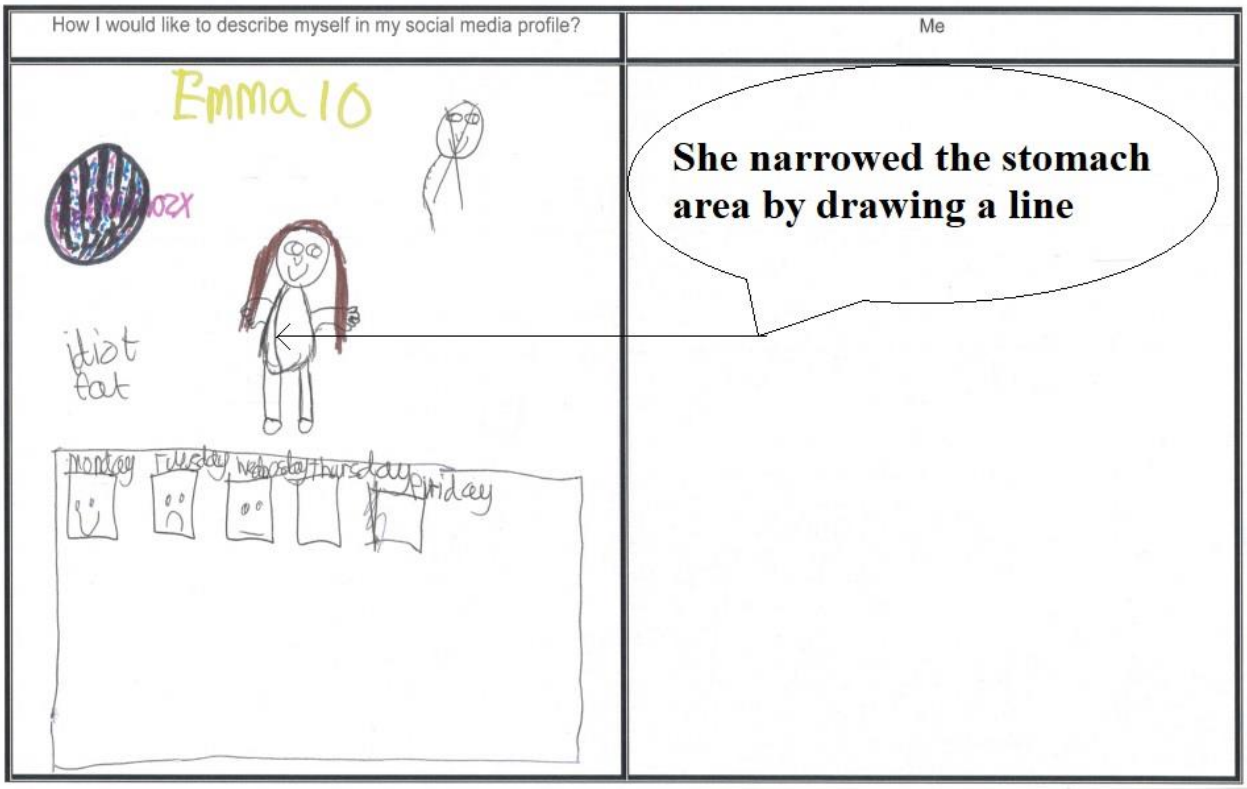
The final section considers how children described the programme's effect. In this segment, the children discussed the changes they noticed in themselves as a result of their participation. These predominantly involved physical and associated changes, such as being able to fit into clothes, exercising, gaining confidence, self-worth and being social. It also discusses how children perceive psychological processes such as acquiring a sense of control, establishing resilience, and increasing social engagement. It then explores children's descriptions of changes to their daily routine. Finally, it describes the children's perceptions of emotional discomfort following participation in the intervention programme.

6.1Hopes for and expectations of the programme

During this study children described their expectations and hopes for the obesity intervention programme. Without exception, one of their most important expectations from the SHINE intervention programme was to lose weight as Phoebe [F, 10/1st interview] typically described: "Not much actually, just to lose weight. I don't know really, just a bit wobbly". Children's narratives also underlined that they had additional expectations they hoped would come through achieving weight loss. Almost all children reported that they had concerns about or disliked their appearance, so they wanted to lose weight as they felt this could help them achieve the ideal appearance they desired. For example, during the talk and draw session, Emma [F, 10/1st interview] indicated that she hoped to lose weight and no longer be a heavy person after the programme, so she depicted her goal in her drawing by downsizing her figure, particularly her stomach area which was significant to almost all children:

> Emma: To lose weight. I just want to [lose weight].
>
> Interviewer: Can you draw yourself after this programme? How are you going to be?
>
> Emma: I might not be fat too [after programme]. I just added that one [she made a correction on her belly side of her belly in the picture she drew].
>
> Emma [F, 10/1st interview]

Figure 16 Emma's drawing aged 10 from the first interview



Emma [F, 10/1st interview]

Most children recounted being bullied which caused them to want to improve their appearance by losing weight with the hope that the bullying would stop:

> Happy. If I lose weight, I will be happy. I might not be fat; I mean I would feel better about this now and then I would be happy that probably no one would bully me anymore. Because I would not be fat anymore. Well, I'm not that fat. Sometimes they were calling me 'Emma is dummy fat and lose weight' and then they would not call me anymore.
>
> Emma [F, 10/1st interview]

Only one child, Isla [F,10] enrolled in the programme to meet her family's expectations after learning that their child had been bullied at school. Her family hoped that if she lost weight, the bullying would end even though she currently felt "normal" and was at peace with herself.

> Interviewer: So, why did you start Shine Academy?
>
> Isla: Because my mom wanted me entering that. Cos, my teacher at school called me really nasty name and then

Interviewer: Very nasty name? What does it mean?

Isla: She called me "fat"

Isla [F, 10/1st interview]

Additionally, as mentioned in the previous chapter, most children did not feel they fitted into their peers' social norms due to their excessive weight. For instance, Phoebe [F, 10/1st interview] said that she hoped one of the benefits of losing weight would be feeling socially accepted:

> "It made me feel more happy and it'll make me feel more included and not left out of it. So, like some people just leave me out to play with other people, so then I get scared a bit like 'ow okay', I walk away. So, I just said out of I am not really that sort of person."

Phoebe [F, 10/1st interview]

Much like Phoebe, many young people talked about improving their self-esteem as a result of weight loss. Emily [F, 14/1st interview] summed up briefly; "To get more confident and healthier.". Also, the majority of children described how they would like to feel more confident during social interactions as the positive pay-off after losing weight. Max [M, 15/1st interview] highlighted:

> "Just to help me lose some weight and be more healthy and to get involved in some other social groups. Because I've already got my group of friends that I mess around with outside the school, and they just introduce me to more people around my age that I can talk to and mess about with them as well."

Max [M, 15/1st interview]

The challenges and unpleasant experiences connected to having a big body has caused some of the children to develop social anxiety as well as body dissatisfaction. Children's accounts revealed that one of the most frequent worries was a fear of not fitting in. For instance, most explained that they were scared to meet new people or try new things publicly because of their fear of being judged as Imiayah described: "The same really, I never liked to do new things like, I don't like meeting new people because I'm scared of what they'll think about me. So, it was like that social anxiety again.". Similarly, Jess [F, 14/1st interview] typically highlighted to reduce her social anxiety by losing weight: "I was hoping to feel a lot happier, hopefully stop being so anxious and to lose weight […]". Therefore, the children hoped that their weight-

loss would reduce their body dissatisfaction and experience of bullying, and subsequently reduce their social anxieties.

As discussed in the previous chapter, children also struggled with self-esteem issues as a result of their body shame and dissatisfaction. Thus, according to children, by losing weight they hoped to be able to wear the clothes they wanted without feeling self-conscious and shame about their appearance, instead of hiding their undesired bodies by wearing baggy clothes:

> "I hope to lose quite a lot of weight, so I'd like be able to wear what I want and get to a decent size, but I didn't really have other hopes. […] Oh, I do like, I want to be able to fit into the clothes. It's just the size that kind of makes it a bit difficult, do you know what I mean."
>
> Chloe [F, 14/1st interview]

Similarly, clothing was particularly important for almost all female participants as mentioned in the previous chapter: To lose weight and go down a few dress sizes before I go on holiday. […] Yeah cos [because] at the minute, I won't wear a full bikini, I am wearing shorts. […] (Emma-Mae [F, 14/1st interview])

Children also described how weight loss would enhance their physical capabilities and flexibility and reduce joint pain. Megan [F, 11/1st interview] describes:

> "To lose more […]. But I think that's it to be honest just to lose weight, but I think I'm doing pretty well anyway. […] When I lose weight, so I feel healthier, I feel able to do more stuff like be skinnier. I don't know how to explain it, like just to be healthy. I think thinner means another word for being healthier, like just to be able to do more stuff that I'm not [currently able to do] it. […] Because if you do stuff all is going to hurt the day after. Well my mom usually brings the car when I'm in pain, when I'm hurting, […]"
>
> Megan [F, 11/1st interview]

Furthermore, some desired to lose weight in order to avoid weight-related health issues in the future. For instance, Jess [F, 14/1st interview] stated; […] It's not really about losing weight, it's more about being healthy because I don't wanna have a lot of health problems like now and when I'm older, so it's just more about health."

Whilst most participants were inspired by their own sense of well-being, only one participant talked about wanting to lose weight was to please others such as their families. Phoebe [F, 10/1st interview] mentioned that her mother wanted her to lose weight so that she would not suffer from long term illnesses associated with being overweight: “My mom said it's because she doesn’t want me to have diabetes and get a heart attack.”.

Furthermore, almost all children expressed a desire to learn nutritional information that would assist them in losing weight and how to improve their health as Harry [M, 14/2nd interview] typically described: “To lose weight and just be better educated. Like learning about why I don't need to eat as much, rather than just eating too much and with health risks”. The majority of children highlighted that successful weight loss was associated with adopting healthy habits such as “eating healthier” and “doing sports”, and they hoped to embrace healthy eating habits and extend their healthy food options by gaining nutritional knowledge. Emma-Mae, for example, said: “To lose weight and try new foods. We've got to try a different food, because mostly there are a lot of fattening foods. So, we've got to try and eat healthy.”

Additionally, children talked about gaining a more positive attitude towards healthy behaviours as Max [M, 15/2nd interview] typically summarised; “I just expected, it's a bit like I don't know the words for it, just positive attitudes towards stuff and advising me on how to get better.”

An interesting hope the children had for the programme was the ability to better manage their emotions. Many children described, particularly in the previous chapter, that their emotional state fluctuations resulted in an emotional eating problem. Therefore, those children were hoping to learn how to regulate one’s emotions and not turn to comfort eating as well as develop specific strategies to feel better within oneself. Imiayah [F, 14/1st interview] highlighted this:

> “To deal with my emotions and how to deal with my emotions and by doing that help me lose weight and make me feel better about myself. […] To help me cope with my emotions more and like my comfort eating or when I eat when I'm bored to help me stop doing them things [comfort eating] and go and do something that will make me better as a person and open up to people because I like to keep things to myself and yeah.”
>
> Imiayah [F, 14/1st interview]

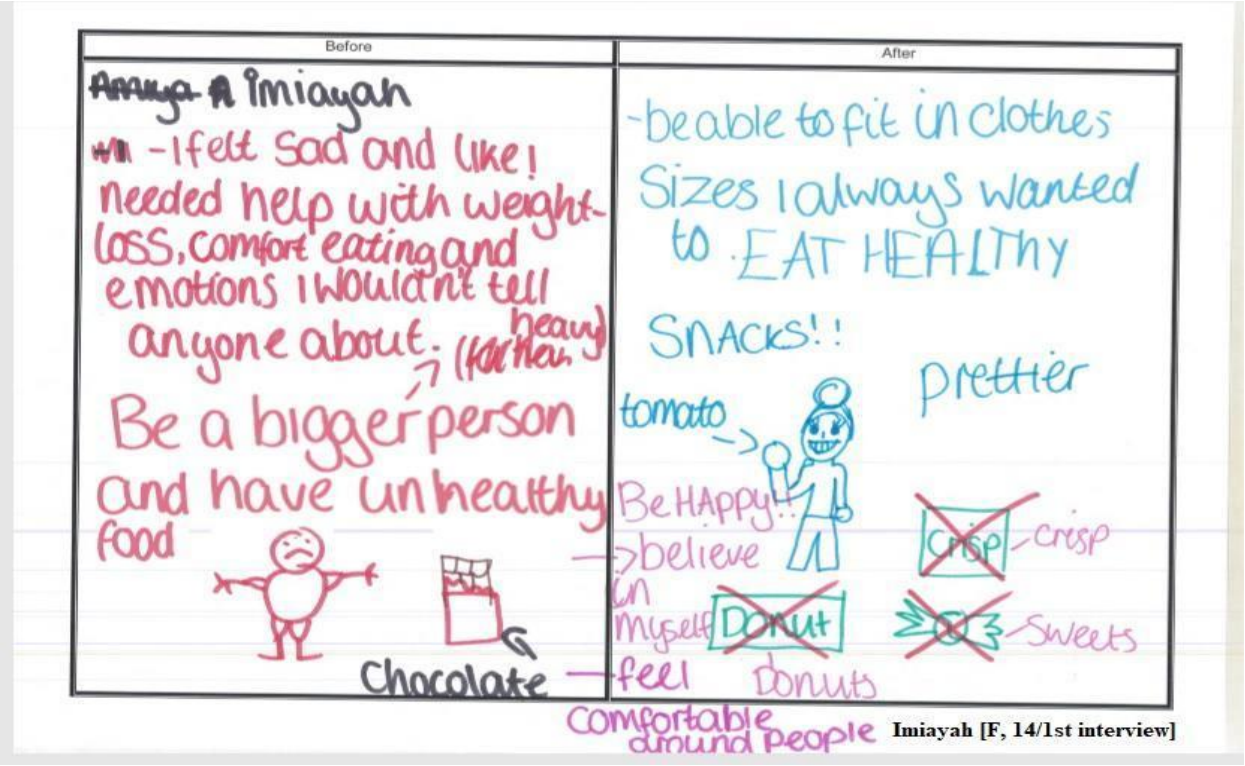
Likewise, Andre [M, 11/1st interview] had previously described that he felt angry when he was heavier and weight-loss on his own was a demanding process that compounds his stress level. His previous SHINE intervention programme experience of losing weight reduced his feeling of anger towards himself. Therefore, he decided to participate in the intervention programme with the same expectation of reducing this emotional burden:

> "It's gonna cos when I did it [the SHINE] two years ago, I lost a lot of my anger. It took anger away from me and stress about losing weight. And then that's what I want to happen now. So, if I put weight on, it just puts more stress and more stress and more stress and anger more angry. You know what I mean though yeah. And then if I lose weight, I like it takes the stress off me and anger."
>
> Andre [M, 11/1st interview]

Many of the reasons described above are expectations related to feeling better about oneself. These expectations could be met through changes in behaviour and perspective based on the information and support obtained from the programme. By doing this, children's accounts demonstrated that they wanted to believe in themselves and be confident in their abilities. For example, Imiayah [F,14/1st interview] outlined the expectations and hopes of most children in great depth throughout the talk and drawing session [see figure 17]. The elaborate differences in her drawings represented general expectations and hopes of children in seeking assistance in losing weight, hoping to modify her emotional eating behaviour, believing in herself, being happy and comfortable around people. It is also striking that she demonstrated her hope to be content with herself by losing weight, based on the attention she paid to body size and face expression in drawing her own persona:

> "Before I felt sad like I needed help with weight loss, my eating habits and my emotions and I wouldn't tell anyone about it. And I was a heavier person and turned to unhealthy food when I was bored or upset. Bigger, heavy like a bigger person. And then that's me and that's chocolate and I wanna chocolate. And then after I can see myself being able to fit in clothes sizes that I wanted to, eating more healthy foods and like instead of chocolate a tomato, no crisps, no sweets, no pastries or doughnuts when I get bored, and I wanna be able to believe in myself, be happy and feel more comfortable around people."
>
> Imiayah [F, 14/1st interview]

Figure 17 Imiayah's drawing aged 14 from the first interview



The majority of children also emphasized exciting expectations of meeting with others with similar experiences and being in an environment where they felt 'normal'. Emily [F, 14] pointed out during her first interview; "I was excited and happy that there was someone and some people out there, they are going through the same thing and that I can talk to and be a part of." However, several children reported feeling "scared" (Megan, Phoebe, Jess) and "shy" (Max, Phoebe) as a result of not knowing what to expect from SHINE:

> "At the beginning, I felt quite apprehensive and like I didn't really know what to expect and I was just feeling like down all the time but then now I feel a lot happier and now I've joined SHINE and I found so many new friends I understand how I'm feeling and what I'm going through. […]"
>
> Jess [F, 14/1st interview]

These sentiments were commonly associated with meeting others who did not have the same challenges as them, and the fear of not being able to relate to them:

> "I was scared and worried that people were not in the same situation, and I was scared because I never met them but now, I'm not scared, I'm just fine and

> I know who all are in the same situation and everybody who works here so. I always used to think it was just me who had a bit more weight […]"
>
> Megan [F, 11/1st interview]

Additionally, children's narratives highlighted that one of children's fears, without any exceptions, was related to being unaccustomed to the environment. The majority of children described their initial feelings that being in an unfamiliar place with unfamiliar individuals, on the other hand, was terrifying for them and increased their emotions of shyness:

> "I felt a bit out of place because I didn't know as many people as I do now and it just, I felt very shy, I felt a bit shy and out of place because I've never really been to something like this before, but now I've got to know more people I feel more comfortable."
>
> Max [M, 15/1st interview]

Children's narratives revealed that previous negative encounters had profoundly influenced the development of such fears. As noted, almost all participants had prior unpleasant experiences and had felt marginalized by their peers, negatively affecting their social lives. Therefore, these children recalled their fear of being different and alone, being the only one or being the biggest one. For instance, Phoebe [F, 10/2nd interview] retrieved the common fear of individuals who subjected her to bullying:

> "Before I felt a bit scared and timid. All I could remember, I kept my coat on all the time [she was still wearing big clothes], because I was scared, people laughing at me [because of her weight]. Because everyone else was smaller than me at the moment, or at that moment, so I thought that I was bigger than them. Like a bit [she opened her hand and showed me how was she big (overweight)]."
>
> Phoebe [F, 10/2nd interview].

Only two participants, Isla and Jess, expected that the programme would be "really bad boring" and "strict" respectively. Isla [F, 10/1st interview] assumed the programme would be boring, meaning the passive monotonous learning was part of the programme. Jess [F, 14/1st interview] had expected that the programme would be extremely restrictive in terms of eating habits and would impose too many constraints for instance "I thought they'd be really strict like you can't eat this [she laughed], you can't eat that".

In summary, the data highlights that the common expectations or hopes of children to lose weight are to ease the unpleasant feelings and experiences associated with being obese, as described in the previous chapter. These expectations were primarily focused on losing weight and improving their appearance and overall well-being. These also included secondary expectations that individuals believed would be achieved by losing weight such as feeling better in themselves, wearing different clothing, preventing bullying, improving social life, physical capabilities and health. It also emphasised the various expectations, particularly for individuals who desired to reduce weight to satisfy their families. Additionally, children expected to learn information and strategies to enable them to lose weight and improve their quality of life by learning coping methods for their emotions. It also addressed children's concerns regarding the programme stemming from unpleasant past encounters.

6.2 Experiences of the Intervention Programme

This section presents various perspectives and descriptions of children's involvement in the SHINE intervention programme. It offers children's perspectives on intervention programme's approach, what they learnt in the programme and how they applied this knowledge to their everyday lives.

6.2.1 Children's perspectives on what they learned as a result of the intervention programme

6.2.1.1 Children perspectives of SHINE's approach

Children's narratives emphasised that SHINE's holistic approach was tailored to children's specific needs. The children stated that their needs were not limited to physical activities or food control, but that their individual mental health was also considered, which is why they found SHINE to be successful:

> "Here [the SHINE], they give you sports activities and mental activities to help with your mental health, like if you have depression, do you know what that is, or anxiety, they can help you with that. I'd stick to this [SHINE] because it's helped me, and I want to carry on with this one."
>
> Imiayah [F, 14/1st interview]

Similarly, some children's prior intervention experiences indicated that SHINE met their individual requirements, making them feel more involved, equal, and cared for. Megan contrasted a different intervention with that of SHINE:

> "[name removed: different intervention programme name] zero out of ten. [name removed] didn't really help you. It just makes you sit there if you won't be able to do stuff, like me. Yeah, not children, people who have got a condition like me they just did back like dodgeball and that wasn't really good for me, because I can't do that. So, they just told you to sit down. So, this is for everyone, not just like people who are able to move around quickly and stuff. SHINE does it for everyone and doesn't just say, they teach you everything and they don't just leave you to sit, helps you with everything, teaches you everything you need to know, not just the parents. So, [name removed] is quite rubbish and SHINE great"
>
> Megan [F, 11/1st interview]

Megan's interview aligned with the ethnographic observations:

> Megan's lower leg was plastered during some sports sessions of the programme. As a result, she was unable to fully participate in exercise like the other participants. Megan had to sit aside while the rest of the class worked out together. However, a SHINE facilitator guided her to practice upper body workout while sitting in a chair, such as bouncing a ball against the wall. She was then encouraged to undertake upper legs exercise, progressively elevating her right and left leg. Finally, she was able to undertake some exercise with the help of the facilitator. Instead of watching others participate in sports, being guided and motivated to participate in sports helped her feel cared for. Megan appeared to be very focused on exercising and the satisfaction on her face resembles a smile.

Children stated that they were not provided with enough information to make a change in their life or were not trained on how to use the knowledge they received at other interventions. However, they indicated that the information provided by SHINE addressed their needs that there was no such uncertainty or ambiguity. They found much easier to follow certain information as Emma-Mae [F, 14/1st interview] portrayed a common description:

> I tried [name removed: different intervention programme name] when I was in year six, but that would be such running about, playing games, and then you go and eat a pizza which isn't that good. That after we went and it was like a meal, weren't healthy, […] SHINE is a lot more like, it teaches like how many slices of a pizza you can have, not like a full one to yourself, and it teaches

> you what to have when you're eating or different ways to cook it. So, it's like healthy eating. So, I am a lot more interested in it than the last program. Because this one helped me more like it got into my head like I need to follow certain rules to help more weight get off me […] so like I will go into em it helps me.
>
> Emma-Mae [F, 14/1st interview]

Almost all children perceived the SHINE's curriculum as more adaptive and flexible, which aided them in digesting the knowledge provided:

> When I was at SHINE, we talked more in-depth and learned a bit more and then we did activities on different days so it's not all squashed into one and you get more time."
>
> Emily [F, 14/2nd interview]

Additionally, children agreed that the intervention programme offered ongoing and innovative information, which helped to maintain their interest: "I found it quite interesting because it's never the same thing, it's always something different that was coming." [Max, M, 15/2nd interview]. Likewise, Chloe [F, 14/1st interview] noted that the programme offered current information as well as a credible source of knowledge based on scientific research:

> Chloe: Yeah, but they still had more information about it like, it's like new research and then because when I first came [years ago] it was like two fruit or three four five like five a day. But then we also got told it is not seven a day. So, it's still kind of (…)."
>
> Interviewer: Okay. More [she interrupted the conversation]
>
> Chloe: Up-dated, yeah
>
> Chloe [F, 14/1st interview]

Moreover, compared to other weight management programmes, children's accounts emphasised that SHINE held children themselves accountable for their diets rather than their families, which provided them authority to make their own dietary choices and to develop a sense of responsibility and agency for their life.

> Megan: [she nodded] Yeah you just play sports, but my mom managed if I could go into the portion thing, but we just didn't like it because, we like this one [shine] more a lot better.
>
> Interviewer: OK. So, when you didn't know the fact about the portion size, was it causing kind of disagreement?
>
> Megan: Yeah. Well, no it was just not fair that children don't get explain but my mom knew all this stuff now, because she was like she knew it all. She studied it but now there is some stuff you watch; you don't really know. So that is why she likes it cause they're all having it.
>
> Megan [F, 11/2nd interview]

In summary, the data revealed that children appreciated SHINE's approach. They regarded it to be customised and comprehensive, addressing their needs and making them feel cared for. It also emphasised responding to individual needs. Additionally, children considered the education provided to be engaging. They liked receiving one-to-one sessions on topics of interest to them, helping them to develop a sense of responsibility, including portion size, nutritional information, comfort eating, and managing balanced diet.

6.2.1.2 Understandings of portion size

All participants expressed that they now understood the importance of portion sizes. Chloe [F, 14/1st interview] elaborated more specifically on what she first learned about the "portion size":

> "We basically, you first learn about portion sizes and how much you should eat, what you can't eat these types of foods and what, how you eat them [food] like how many portions you eat them. And it's just basically what, like basic food, knowledge, like what you, (…), like how much of it you can eat."
>
> Chloe [F, 14/1st interview]

She added that when she learnt about portion size, it made her realise how much she used to consume before and this helped her to establish a cause-and-effect relationship between daily food consumption and weight gain:

> "I think when you restart it [SHINE] like everything, it just tells you when you first start, they tell you the same stuff or more in-depth about like, they just

> make it more clearer and how important it is [portion size], until I realize how much you are eating."
>
> Chloe [F, 14/1st interview]

Therefore, all participants suggested that they learnt how to manage as well as cut down their daily consumption as Muhammed [M, 11/1st interview] stated: "[…] Before I started SHINE, I used to eat quite a lot but [a SHINE facilitator] taught me how I could cut down on eating properly.". Also, these portion size measurement cups were also given each participant after the session so children could control their own portion at home as Phoebe [F, 10/2nd interview] typically described during her first and second interview:

> "I learned my portion for a child. I learned how to control things like my weight and then I learned many other things too […] My portions, I used them [portion size measurement cup] at home and (…) I know there's another one [pedometer] but I just can't get the words I like. Stuck!."
>
> Phoebe [F, 10/2nd and 1st interview]

In summary, it appears that the children learnt to regulate their portions based on what they learned during the intervention programme's portion size session. It was observed that learning through visual demonstrations helps children to embed knowledge. According to children's reports, using resources offered in the programme, such as portion size measurement cup allows children to effortlessly integrate what they have learned in the programme.

6.2.1.3 Understanding nutritional values and putting into practice

All participants suggested that after learning portion size, they learned nutritional values as part of food quality, which is the assessment of a balanced ratio of the basic nutrition; carbohydrates, fat, protein, minerals, and vitamins concerning the nutrient requirements of their diet. While one participant, Jess [F,14] emphasised that SHINE taught this well:

> They [another weight management programme] try to get you to like, eat less when it's not really about eating the tiniest bit or eating like a rabbit, eating salads, it's more balanced in your meals out and they don't really teach how to do that. But then here [SHINE], it's teaching you how to get a balance, it's teaching you how many carbohydrates you need, how much dairy, and how much protein. But there, it's just like eat a lot of protein, it's good for you, [she

> smiles] don't eat as much carbohydrates because it's bad for you, it's just not that great.
>
> Jess [F, 14/1st interview]

Every child, without exception, expressed an understanding of the necessity of sugar limitation in the diet, and emphasized that they had discovered how much sugar is appropriate to consume on a regular basis:

> "I learned about all the different food groups and what's in the food groups and how much sugar is in like say yoghurt and how many sugar cubes are in them and how many teaspoons I'm allowed to have a day."
>
> Isla [F, 10/1st interview]

Similarly, the children's narratives indicated that they understood sugar as a natural component of all foods, particularly fruits. As a result, it was important not to ignore fruits that may considerably increase a person's sugar consumption:

> When I came here [SHINE], it was more like you can eat fruits and vegetables, you can eat vegetables as many as you want but fruit, you've got to be careful because they have the natural sugars in them and if you have too many then it can cause actual sugars. But people in the Slimming World where I've that and they just eat fruit all day and it's actually not that good for you.
>
> Jess [F, 14/1st interview]

Concordantly, children described how they modified their home lifestyle according to their current sugar limitation and diet. They observed a difference in their weight as a result of the sugar and portion restriction:

> "My mom usually does them [preparing food and portion control], not really a lot of sugar or anything in the fridge. We [they used to, but not anymore] have a couple, a chocolate bar table, you can't stop yourself from having chocolate cause [because] then you want it more so we only have like small chocolate bars […] Yeah. And then I'm truly saying that it looks like I lost weight."
>
> Megan [F, 11/2nd interview]

Following the ranking, the facilitator's and the children's rankings were compared by checking beverage nutritional label, and a practical demonstration of how many teaspoons of sugar are in each beverage was performed such as Coca-Cola 14.5 teaspoons sugar, monster energy drink 14 teaspoons and so on. Not everyone in the classroom could conceal their astonishment, and Jess's [F,14] typical reaction by rolling her eyes was ""Ooooooww God". However, according to children's accounts, the demonstration had increased the awareness of the children.

Children's narratives also highlighted that they learnt practical knowledge such as reading product labels in the supermarket so that they could apply what they had learned from the programme. For instance, Isla [F, 10/1st interview] demonstrated below how often and how she used this knowledge in her daily routine when she went shopping with her family or by herself:

> "Oh yeah I do it all the time in the shops. Like say one time I wanted to see and I wanted to buy to choose one, site of content [food label], the content in it says; one said 10%, and I think one said 11% so, I choose 10% but I didn't really mind."
>
> Isla [F, 10/1st interview]

Their accounts indicated that the programme offered them a variety of options when shopping. They were of the opinion that this knowledge mainly provided them the freedom to select the healthiest food alternatives from the shelves:

> "Instead of shopping for more sweets and chocolates for my snack, I had looked for healthier options and where I could buy. I looked at the box [reading label on product] and saw how many calories and carbs all of them."
>
> Max [M, 15/1st interview]

Also, they learned to identify calorie counts, calories in different food groups as well as individual daily calorie intake. Max [M, 15/2nd interview] commented that "Just the information that was being provided about how I could help myself to lose some weight, so you did different types of building how many calories a day I did.".

Therefore, what children had learnt to be the healthiest selections through comparing labels was avoiding processed meals that were considered harmful choices. For example, children's accounts demonstrated that they learned to stay away from fat, sugar-dense and high-calorie foods known as junk/fast food by reading labels. As a result, they reported that using this

knowledge as much as possible in their daily lives helped them to exclude certain foods from their diets and include foods such as vegetables or fruit, which they learned to classify as healthy food. For instance, Emma [F, 10/1st interview] reviewed the food label on her drink during the interview, and described in depth how she categorised and made her healthy food choices:

> "To not eat too much sugar. […] If we eat too much fast food and junk food, you would not be able to lose weight that well. I think if you eat salad that's healthy. If you eat fruit, that's healthy. But if you eat like fries or chicken or take away or anything you know fizzy pop. Diet coke is ok. [checked the diet coke can label] No sugar, no calories, still got a little calorie. But I don't know that means [showing cans]"
>
> Emma [F, 10/1st interview]

In general, children's narratives emphasised that they gained knowledge of the nutritional information required for a balanced diet. Additionally, their accounts also highlighted that they developed the ability to pick the healthiest food for themselves while performing their daily shopping with the aid of label reading skills they have learnt. Their interviews accounts also demonstrated a more deliberate approach to meal selection including from being careful sugar limitation to staying away from processed food.

6.2.1.4 Making sense of comfort eating

Children's accounts highlighted that they all made sense of emotional eating and its consequences, for instance, the more they feel down, unhappy, or "sad", the more they eat. All of the female participants admitted to having a comfort eating issue, relying on food to make them feel better, even though they knew it was not healthy. As Isla [F, 10/1st interview] simply said: "I feel like when you get sad you kinda eat sometimes I kind of do that which is not good, but food just feels so good, so yeah". They described how SHINE had helped them to understand their emotional eating and specific triggers. For example, Chloe [F, 14/1st interview] summarised how she used to comfort herself by eating with the following lines;

> "[…] Because it was kind of relatable. Like with emotional eating, cause [because] I used to emotionally eat a lot. […] Yeah, I like, If I want something, if I feel like or eat when I'm like upset, I just eat food because it's nice [she laughed] […]"

Chloe [F, 14/1st interview]

They also described learning about the emotional impact of different foods. Jess [F, 14/1st interview] talked about how the changes in her diet affected her mood and the challenges of maintaining her diet;

> "It's difficult because I'm used to eating a lot more than I am. But it's been beneficial to how I am feeling and like, because the lack of sugar in my diet it's really affected how I'm acting emotionally and how I am acting with other people. But because I've not been eating that much sugar for the first such a long time now. I think it's about, I don't know, it's been residential for about six-seven weeks and I've started to adapt to not having that much sugar in my diet. So, I've started like being nicer [she laughed]"

Jess [F, 14/1st interview]

Also, with the help of the intervention programme, they were of the opinion that they developed different methods of dealing with their emotions:

> "So it just kind of got me thinking like what I could do better instead of eating when I'm upset and like ways to like defeat types of problems and then or if I'm upset I just ask my mom [mother] 'do you wanna go out for a bit' like get stuff off your mind and just talk about it instead of keep it bottled up."

Chloe [F, 14/1st interview]

Children's awareness of emotional eating was raised during the programme's "stress management" session. During this session children reflected their feelings on a persona and expressed themselves how they felt under the stress such as "angry", "sad" or "anxiety attack". They then listed the physical changes such as "heartbeats faster" or "struggle to breathe" and behavioural changes, such as, "cry", "bites nails" or "eat a lot or not at all when emotional". Following this, children were taught that positive action causes positive consequences and negative attitudes cause negative consequences, for instance, if they had the habit of turning to food as a stress reliever, they might put on more weight, which could further damage their self-esteem and contribute to more negative emotions culminating in a negative cycle. As a result, children have thought that if they replaced their eating habits with activities such as walking or listening to music, they would find a long-term solution to their stress and maintain or even

lose weight. Therefore, children's narratives demonstrated that they developed alternative coping strategies based on the "stress management" session.

In summary, children described being able to understand that their eating behaviours were triggered by their negative emotional state. They highlighted that that instead of suppressing their negative feelings by eating, they had developed alternative coping mechanisms.

6.2.1.5 Food and physical activity balance

Additionally, the majority of participants pointed out the importance of balancing food and activity for healthy weight; "I learn about portion control and about exercise, how important it is […]". Jess [F, 14/1st interview]. Similarly, Max [M, 15/2nd interview] highlighted the significance of balancing food consumption and physical activity in order to lose weight:

> "I learned that my portion sizes were way over what they meant to be and what I needed to cut them down and I learned just that I needed to do more a lot more activity than I was currently doing. […] Before I didn't really think about what I was eating and why I was doing to myself, like how much calories I'd taken in. Whereas now I think about how many calories I'm taking and if ermm it takes too many calories how I'm going to work that back-off."
>
> Max [M, 15/2nd interview]

By looking at the situation from a broader perspective, Imiayah [F, 14/1st interview] stated that she also learned alternative ways of being active:

> "How I thought about things changed, like I don't have to do football if I wanna do sports, I can clean up which is better for me. So, I don't have a messy room and I am just a lot happier than I was before and when I come home."
>
> Imiayah [F, 14/1st interview]

All participants agreed that after taking part in the SHINE intervention programme, they became more active than they had been previously as Muhammed [M, 11/1st interview] outlined below:

> "[…] like a healthy get out of the house sometimes. Like I feel like I already get the house often enough but SHINE just adds to it like my time being active and more. […] I feel like I'm getting out of the house much more, like playing

> with friends, getting out, I was like going out of the house a little bit more. Like keeping active. […] I think I found out I lost a lot of weight."
>
> Muhammed [M, 11/1st interview]

6.2.1.6 Improving life skills

Children highlighted that the training they received in the programme was engaging, and that it was not just about improving their health, but also developing their life skills that would help them deal with the challenges of everyday life. All children, without exception, indicated that they enjoyed intervention sessions related to cooking as Isla [F, 10/1st interview] typically described: "I like the one in the kitchen and like to do some cooking." Similarly, the children, who joined different weight management programmes, of the opinion that SHINE helped them to combine teaching and portion sizes with practical skills:

> "[…] SHINE a lot more like, it teaches like how many slices of a pizza you can have, not like a full one to yourself, and it teaches you what to have when you're eating or different ways to cook it. So, it's like healthy eating. So, I am a lot more interested in it than the last programme. […]"
>
> Emma-Mae[F, 14/1st interview]

Imiayah [F, 14/1st interview] also highlighted that they were taught some practical suggestions on how to prepare different healthy meals by utilising food in various ways.

> I don't dislike anything about this program. Like with food, with fruit if you put a bowl of fruit in front of a child they'd be like "eugh I'm not eating that" because it [the SHINE] shows you like if you haven't got time for breakfast you can make a smoothie and take it out with you. It shows you how to do different things with different foods and how to get around situations you've been in before. So, I really like this program more than I did the last one.
>
> Imiayah [F, 14/1st interview]

6.2.2 Children's perceptions of changes in their practise

This section explores the changes that children noticed in themselves after participating in the intervention programme.

6.2.2.1 Physical change and the changes that accompany physical change

The first expectation of all children from their participation in the intervention programme was to lose weight as stated in the previous section. All children shared their progress of changing physically and emotionally over time. In this regard, each child's narratives emphasised physical improvement, beginning with weight loss. All children indicated that they lost weight while participating in the programme as typically summarised by Harry [F, 14/2nd interview]: "I've lost weight, I've got a lot taller, I'm not sure [pause], to carry on losing weight." Similarly, ten individuals who went the residential week stated that they dropped more weight than they expected throughout that week: "I realized what I had to do to lose the amount of weight I lost in that [residential] week because it's like it's unreal how much weight you can lose in one week if you put your mind to it." Imiayah [F, 14/1st interview]

However, Phoebe's [F, 10/2nd interview] description of how her body had changed during the programme was slightly different to that of the other participants. She remarked that even though she had lost some weight, she had still not achieved her ideal body shape and was still unhappy with results. She was the only one who described losing weight from a certain area of her body. However, that did not matter to her as she was most self-conscious about her legs being too big. Indeed, her self-consciousness about this area of her body was evident as she squeezed and slapped her legs during the interview. She also indicated that her height changed throughout her time in the programme and described her real frustration: "I need a smaller t-shirt, but my legs are still fat [slapping and squeezing her legs]. I'm not seeing much change in myself; I only think I've got taller."

Children's narratives indicated that one of the beneficial effects of losing weight was an improvement in physical endurance. For instance, Chloe [F, 14/1st interview], who was one of the children who were very exhausted or experienced frequent fatigue during the everyday activities due to her weight before starting the programme, reported that her physical capabilities improved as a result of losing weight and her description mirrored on behalf of almost all participants:

> I lost a lot of weight, and it because you do tend to because of the exercise you're doing. because it's all about exercise, activities. So, I felt a lot lighter [she laughed] and felt I improved, and when I lost the weight, it felt like I didn't lose it much but when you realize you get weighed you lose a load from it but that's the main change.

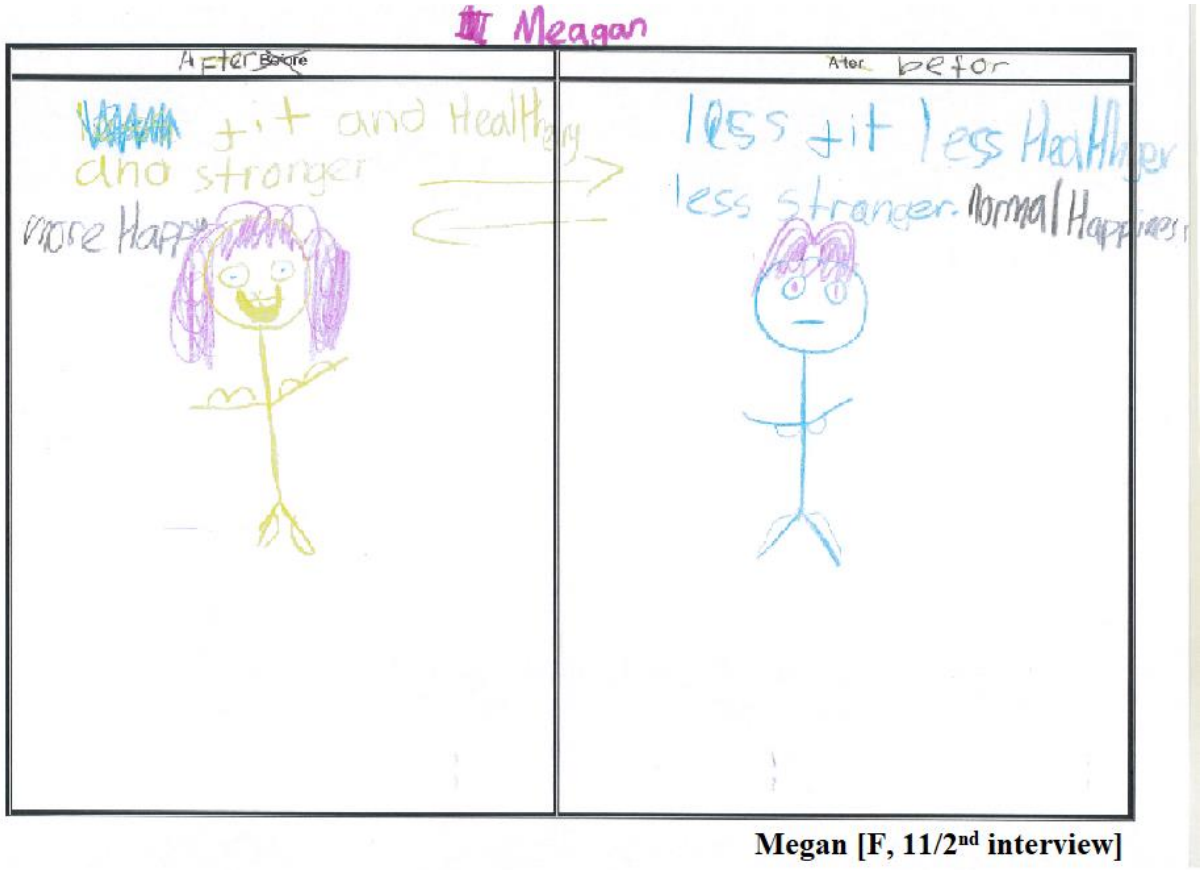
Chloe [F, 14/1st interview]

Similarly, some children stated that their physical strength had increased to the point where they were able to do physical exercises that they had previously been unable to. For example, Megan [F, 11/1st interview] previously stated that her weight made keeping up with her peers' stamina and participating in high-intensity activities difficult. However, during her second interview and 'talk and draw' session, she stated that after losing weight, she felt stronger than her prior physical condition, and she was filled with pride of being able to achieve more. Despite the fact that her drawing had no variation in body size between two images, however, she gave little attention to her face expression to reflect her happiness and to arms to convey her feeling of strength [figure 18] as she described her drawings as follows:

> Megan: Weight loss and errmm I feel happier, and I can do more stuff. So, I feel happier about them. So before [the SHINE], I felt less fit, less healthy, less strong and I just felt like I did just that. But now, I feel fit and healthy and stronger, and I feel more happier. But then I just felt normal. But now I feel a lot happier.
>
> Interviewer: It is nice. What makes you happy?
>
> Megan: That I can do more things. Yeah. I'm not just, I think, I could do a lot more than what I can do a lot more stuff.

Megan [F, 11/2nd interview]

Figure 18 Megan's drawing aged 11 from the second interview



Megan [F, 11/2nd interview]

Some of the children indicated that one of the advantages of losing weight was that they were not subjected to as much bullying. They stated that others who used to bully them noticed their physical improvements, which makes them proud of themselves:

> Emma-Mae: Like I lost weight and when I was in school, they've like, "oow my God, she has lost weight. She is amazing. She is gorgeous" and give me nice comments.
>
> Interviewer: Okay, it sounds good, So, the more you lost weight, you get less bullied?
>
> Emma-Mae: Yeah.
>
> Emma-Mae [F, 14/2nd interview]

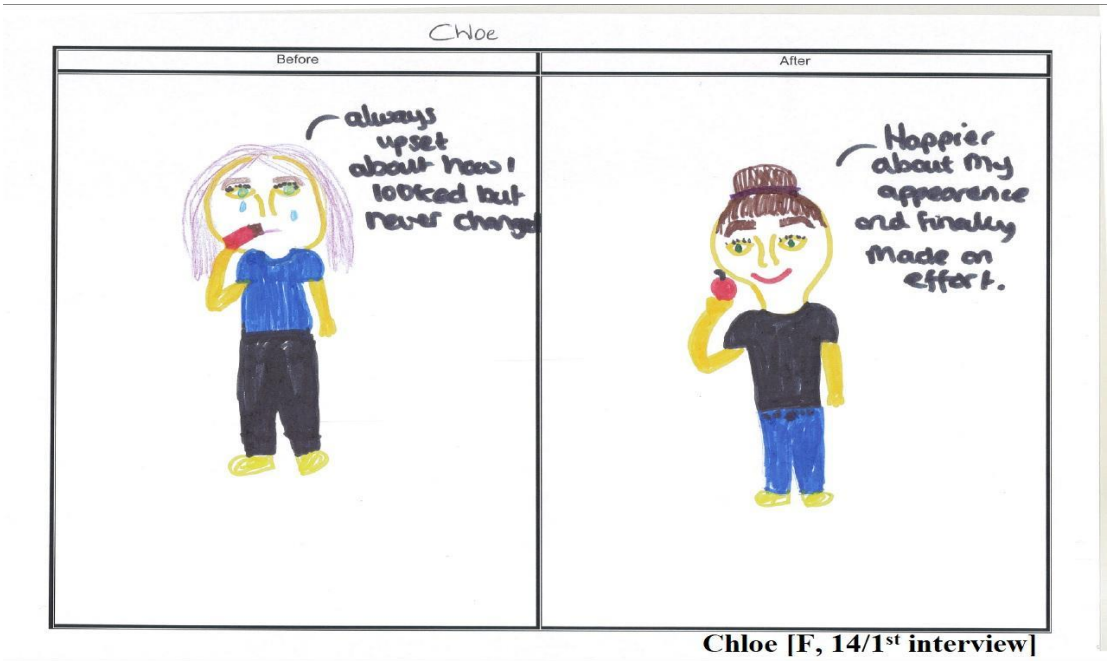
As previously indicated, the majority of children had described dissatisfied with their appearance and were self-conscious about their appearance owing to their weight as well as negative encounters like bullying. Their major motivation for desire to lose weight was to be satisfied with themselves and feel good about themselves by being content with their

appearance. Therefore, their physical change resulted in emotional changes, as Chloe [F, 14/1st interview], who was one of those lost weight and delighted about her appearance, typically described as follows:

> "I'm more happier for since […] I've came back because it's like it's making me happy about my opinions and finally made an effort, before [the SHINE] was always upset about how I looked but never changed, now, happier about my appearance and finally made an effort."
>
> Chloe [F, 14/1st interview]

Even her painting demonstrated the variations between before and after SHINE. In her drawing, the precision she adds to her hair, eyes, face impression, and body size depicted the wonderful alteration she sensed.

Figure 19 Chloe's drawing aged 14 from the first interview



On the other hand, all children used to wear bigger sized clothes compared to their current size to hide their bodies, since they did not feel comfortable and confident about their appearance. For instance, Jess [F, 14/1st interview] highlighted that her perspective positively changed, and her self-confidence grew over time thanks to the session she had. Despite the fact that her weight reduction did not create a significant impact in her look since she recently began the SHINE intervention programme, she gained enough confidence to wear anything she wanted:

> Jess: I didn't really like how I looked, and I didn't really have much confidence. Like even when I'm out with my friends I'd like to wear a massive jumper or even in summer I'd still find a way to wear a jacket or a jumper. And I just didn't really feel good about myself, I wouldn't imagine myself going out in shorts. But the other day I went out with shorts and like I've never imagined myself to go out in shorts because my legs are the one thing that I most hate about myself and my friends were like "oh yeah if you wear shorts, they will look really good on you". And I was like well "maybe they will look good on me". So, I tried them on, and I felt good about myself, so I wore them. And before I came to SHINE I wouldn't, I would never have said that and I would never have gone out because I wear belly tops now, never going out in belly tops and never going out in shorts but now I do.
>
> Interviewer: So, you think you say it's because of the SHINE?
>
> Jess: Yeah. It was like, they've helped my confidence with the sessions.
>
> Jess [F, 14/1st interview]

Clothing was also a clear indicator of almost all children progress by comparing their previous outfits as described by Muhammed [M, 11/1st interview]: “my mom told me I'd lost a lot of weight when I said to her ‘mom [mother] my school trousers kept falling down at school.’ She said, ‘I guess it is because you've lost weight.”.

Children also highlighted that being able to fit into clothes that were once too tight result in boosting to their confidence and positivity as described by Megan [F, 11/2nd interview] on behalf of almost all participants: “Clothes fit me like jeans better, so I felt happy.”. Likewise, Jess [F, 14/1st interview] discussed how being able to fit into clothes led to changes in her self-perception, such as being happy and confident as a consequence of her hard effort, reflecting almost all participants’ progress:

> …I can sort of feel myself, like being able to, I don't know how to explain it, like I can feel my clothes getting looser so that's made me feel a lot happier about myself. Like knowing that it is actually paying off and that's made me sort of like walk around with a bit more confidence
>
> Jess [F, 14/1st interview]

Despite the fact that some children did not yet achieve their target weight and, as a result, their ideal body image, they stated how losing weight had restored their self-confidence and capacity to deal with their individual challenges:

> "Yeah it's made me feel a lot more confident in myself and more positive about how I look. I just, I didn't really like how much weight I had before and how that made me look [pause], now I'm beginning to lose and I'm beginning to get more and more confident in myself."
>
> Max [M, 15/2nd interview]

Additionally, children described how they had attempted to lose weight several times or have tried to lose weight by participating in different programmes and had not been successful or obtained the desired outcome. They lost weight after many trials, giving children sense of accomplishment as Megan [F, 11/2nd interview] described: "I lost weight, like I can do more, I've achieved stuff. Like I've not achieved before, after I've achieved stuff." Similarly, Harry [M, 14/2nd interview] also was very pleased with the progress, which he did not expect to be able to complete, and proud of himself, stating; "I'm quite confident and I've quite surprised by how well I did".

Such accomplishments made them more satisfied and help them to motivate more and to discover more potential in themselves. It also changed how they felt about themselves, particularly developing a strong sense of self-worth:

> I'm much happier and I eat a lot healthier than I did. I'm good. I'm proud of myself. Yeah, because when I first started, I didn't feel a lot confident in myself and didn't like the way I look but now I do."
>
> Emma-Mae [F, 14/2nd interview]

All the above, almost all participants mentioned positive improvements about their self-perception through the end of the programme except Phoebe [F, 10/2nd interview]. She was still not totally content with herself since she could not achieve the body ideal she desired, despite losing weight in part as previously indicated, demonstrating how her sense of self was not just about weight:

> "I'm a bit of for, a person who doesn't like themself. I don't know. I'm half and half still. At the end of the program, it hasn't ended yet but I'm still growing,

> but I didn't really like myself still, because I still don't like myself much because of how I am or what I look like. from my perspective the only thing I know I am good at is being negative, that's not a good thing [laughs]"
>
> Phoebe [F, 10/2nd interview]

Her negative self-perception was reflected even in ethnographic observations as well. Despite being one of the youngest participants in the group, she was talkative, cheerful, and extremely engaging at the start of the programme. However, she was the only one who began to display progressively negative attitudes toward the end of the program such as unwillingness to undertake exercise in sports sessions and attendance in classroom interaction decreased. Even her interest in taking part in the intervention program also declined.

In summary, the children described weight loss as one of the most important impacts of the programme. This tied in with their expectations. Weight loss resulted in several favourable physical improvements and children's physical improvements to physical endurance, strength, and being able to fit into clothes. Furthermore, some children stated that they were subjected to less bullying after weight loss. The findings also emphasised that losing weight made children happier with their appearance and enhanced their self-esteem. It also gave children a sense of accomplishment, which made them more positive about the future.

6.2.2.2 Gaining a sense of control

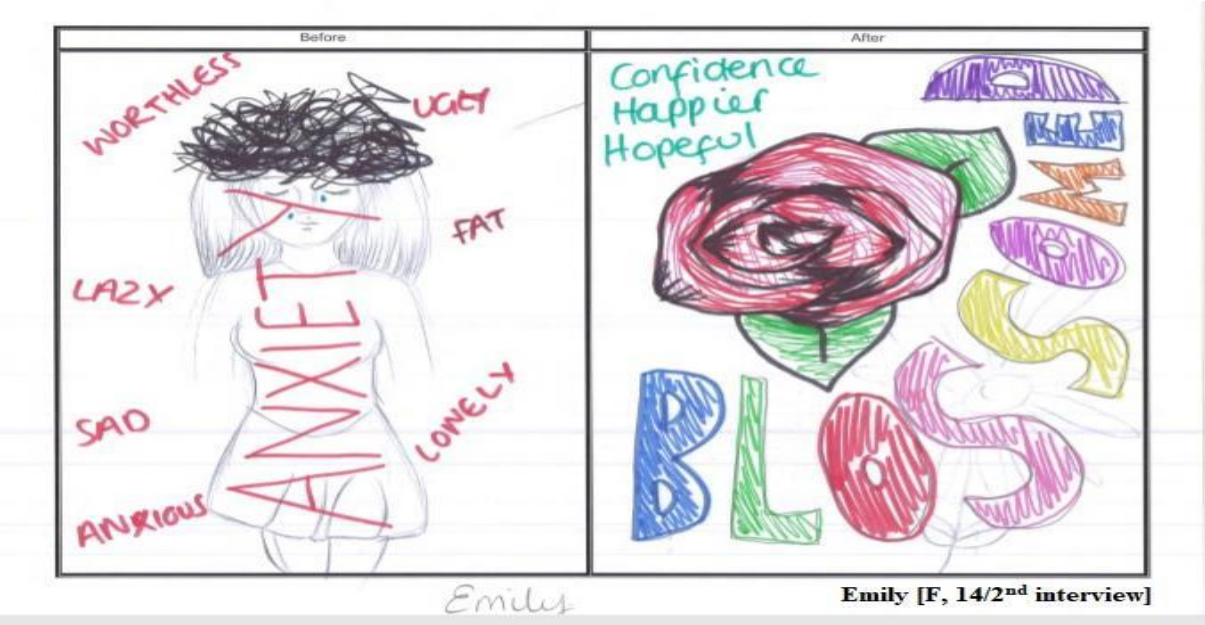
As they substituted negative perspectives for positive ones, children described how they started to gain a sense of control of their own lives instead of being captive of their negative feelings, social anxiety and low self-esteem. The children's accounts revealed that their negative thoughts about themselves did not just emerge all of sudden. They emphasised that their negative feelings were triggered by other people's negative attitudes towards them. Therefore, the source of negative emotions was mostly related to the accumulation of years of being a target of negative behaviours as mentioned in the previous chapter. For instance, Emily [F, 14], who has been severely bullied, previously stated that her intense encounters of bullying triggered social anxiety as well as self-dissatisfaction due to what other people told her. However, she emphasised that she became a more confident person, gained a sense of control over her own life and began to live a more interactive life:

> "Well before anxiety ruled me [controlled] and that was it, it defined me. So, I used to be anxious every day, all day and these are what I thought about

> myself. So, I thought I was worthless, ugly, fat, lonely, sad, lazy, anxious. That's what my head was, it was a mess [talking about scratch over her head in the drawing], [laughs]. I was upset [mentioned tears in the picture] and (…). Yeah, before I was unhappy, and I didn't know what to do to change and I didn't see any future where I'd be happy with myself. And now I'm making my way to that, that I didn't see before, so now I'm making a way to be happy with myself and making changes. And then now I've blossomed into a more confident person. […] I'm just a lot more happy. I'm a lot more social. I'm a lot more up for anything, so if my family is like 'let's do this', I'll be like 'yeah'. I'm less anxious. It [SHINE] made me happier, more confident, more social, less anxious. There's a lot. I think my health has improved as well as me being happier."
>
> Emily [F, 14/2nd interview]

Also, her drawing portrayed her personal metamorphosis throughout the programme in exquisite detail:

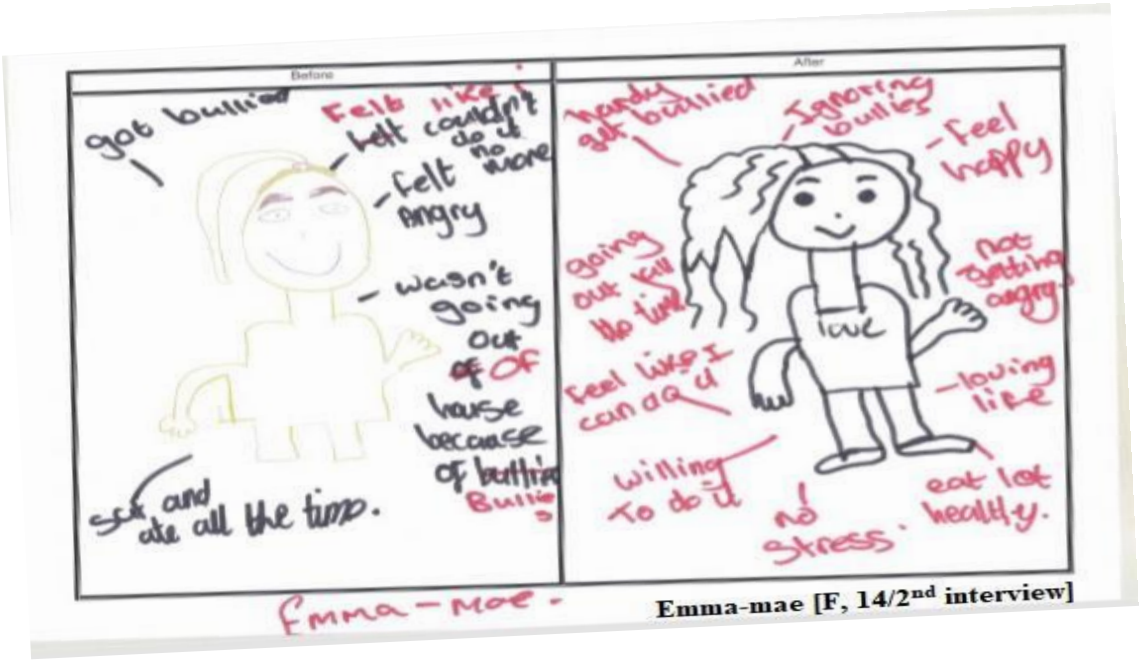
Figure 20 Emily's drawing aged 14 from the second interview



In a similar vein, according to children's reports, the intervention programme assisted them in being able to make choices and decisions, or a sense of agency. For example, Emma-Mae [F, 14/2nd interview] was one of the participants whose self-esteem declined, and her quality of life suffered as a result of her concern about the judgement of others. She stated that enrolling

in the programme increased her self-confidence and self-love, and she now managed to learn how to ignore other's negative opinion about her. During the talk and draw session, she drew her own personal transformation, which reflected the majority of the children's personal changes.

Figure 21 Emma-mae's drawing aged 14 from the second interview



While each participant underwent different personal changes, one participant, Muhammed [M, 11/1st interview], indicated that joining SHINE resulted in a favourable change in his attitude. Muhammed has a neurodevelopmental (learning disability) disorder that affects his communication skills and causes social impairment. Therefore, sometimes he had difficulty controlling his sudden outbursts and did it without realizing it. His behavioural adaptation difficulties hindered him from completing or accomplishing tasks. He remarked that by learning to regulate his behaviour during the training, he felt less tension and became a better version of himself:

> "Well, I kind of thought like, I was a better person than I was before I joined [the SHINE]. […] Well, I feel like a better person. I feel I've lost weight and I feel I'm keeping more active and that's about it. I can control my frustration. I'd say I'm experiencing less."
>
> Muhammed [M, 11/1st interview]

Also, some children reported that after participating in the SHINE, they recognised that they used to have emotional eating behaviours. These children stated to have conquered their eating addictions, and the SHINE programme instilled in a sense of responsibility, allowing them to get back on track by asserting authority over their own life:

> "I have lost a bit of weight since like over the past few weeks so, if I keep losing weight then I think I'll be able to stay on track […] and now I'm not into that much sugary foods and things like that. I've learned how to deal with everything."
>
> Imiayah [F, 14/1st interview]

Furthermore, children felt empowered as a result of the knowledge provided, since they were able to make decisions for themselves, such as how to regulate their nutrition and go shopping, which helped them to develop their agency as well as sense of responsibility.

> Instead of shopping for more sweets and chocolates for my snack, I had looked for healthier options and where I could buy. I looked at the box [reading label on product] and saw how many calories and carbs all of them.
>
> Max [M, 15/1st interview]

Similarly, Muhammed [M, 11/1st interview] also demonstrated that children quickly learnt and applied minimal knowledge to modify their behaviour, indicating their empowerment to change their conduct with information:

> Interviewer: Okay so what do you mean by eating healthy?
>
> Muhammed: Cause I'd stop at the first meal at the residential. Kath said everyone gobbled up the pasta bolognaise in about two-three minutes and she said this needed working on and then we ate much slower so our bodies could take it in properly.

In summary, according to the data gathered from the children's statements, the most significant consequence of their involvement in the intervention programme was that children who are influenced by poor self-esteem and negative emotions take charge of their own life. By pushing through their worries and concerns, they were able to experience living according to their desires rather than their feelings. They also managed to regulate their emotions, which allowed them to control their emotional eating and eat properly.

6.2.2.3 Resilience building as a result of participation in the intervention programme

According to children's narratives, it was apparent that one of the areas of intervention impact was that they learnt to adjust effectively to changes and overcome almost all obstacles well. Almost all children reported that their feelings about themselves when they started the programme changed during their participation in the programme, which made them feel happy. They represented great resilience in dealing with low self-esteem and reported feeling better as a consequence as Chloe [F, 14/1st interview] typically highlighted exemplifying her own changes on behalf of almost all children:

> "Keep your head high and just go with a smile and realize that it's not going to be all like and it's not gonna be all low self-confidence forever, it's gonna change, like you gonna go down another path and you're gonna feel bettering yourself."
>
> Chloe [F, 14/1st interview]

Children's stories emphasised that they reframed their thinking into a resilience mode, concentrating on the larger picture rather than on individual challenges. Children indicated that there was no need to be perfect in order to achieve anything; they added that the keys to success were self-belief and hope, which the programme instilled in them:

> "just have fun and do your best, you don't have to be perfect. Everybody's got something wrong with them, nobody is perfect, just do your best in everything and try. It's in the happy people who work here in [SHINE] nice and it helps you, don't give up that you're not doing straight well [takes time], So never give up on it because it will help really good. It's [SHINE] good. It helps you a lot and it gives you faith in yourself. Like hoping for yourself."
>
> Megan [F, 11/1st interview]

Similarly, Imiayah [F, 14/1st interview] also stressed the importance of self-belief and hope for the programme's greatest benefits on behalf of almost all participants:

> "you will be able to do it if you believe in yourself and follow the program. But if you have no hope then it won't get you as far as if you did like everyone's helpful, everyone's friendly, it gets you far like say if you were big when you

> first started, you will have lost weight by the time you've ended. No doubt unless you decide not to pay attention."
>
> Imiayah [F, 14/1st interview]

As children emphasised many times in the previous section that it would take time for adjustments to achieve the desired outcomes, but that the process of adapting successfully in the face of adversity was worthwhile as Jess [F, 14/1st interview] typically highlighted: "It's hard, it is hard but it does have a lot of benefits to how you feel and how you look in yourselves.". Similarly, Emma-Mae [F, 14/2nd interview], as an indication of resilience, stated that as long as the program's advice were implemented, they will attain their goals in the long term:

> "That was really helpful and in the end, I don't know exactly, you've probably lost weight if you stick to everything that they tell you. Not to mess about when they try to do the sessions and always to concentrate [she was the loud one in the session]. She gets really good information about it. […] you're not allowed to take our phones out in the programme."
>
> Emma-Mae [F, 14/2nd interview]

However, what Emma-Mae said during the interview and what was observed during the programme's session were contradictory. On the contrary, she was loudest person during the classroom-based session and played her phone time to time. Similarly, during the sports session she used to skip exercise and be distractive for other participants. For instance:

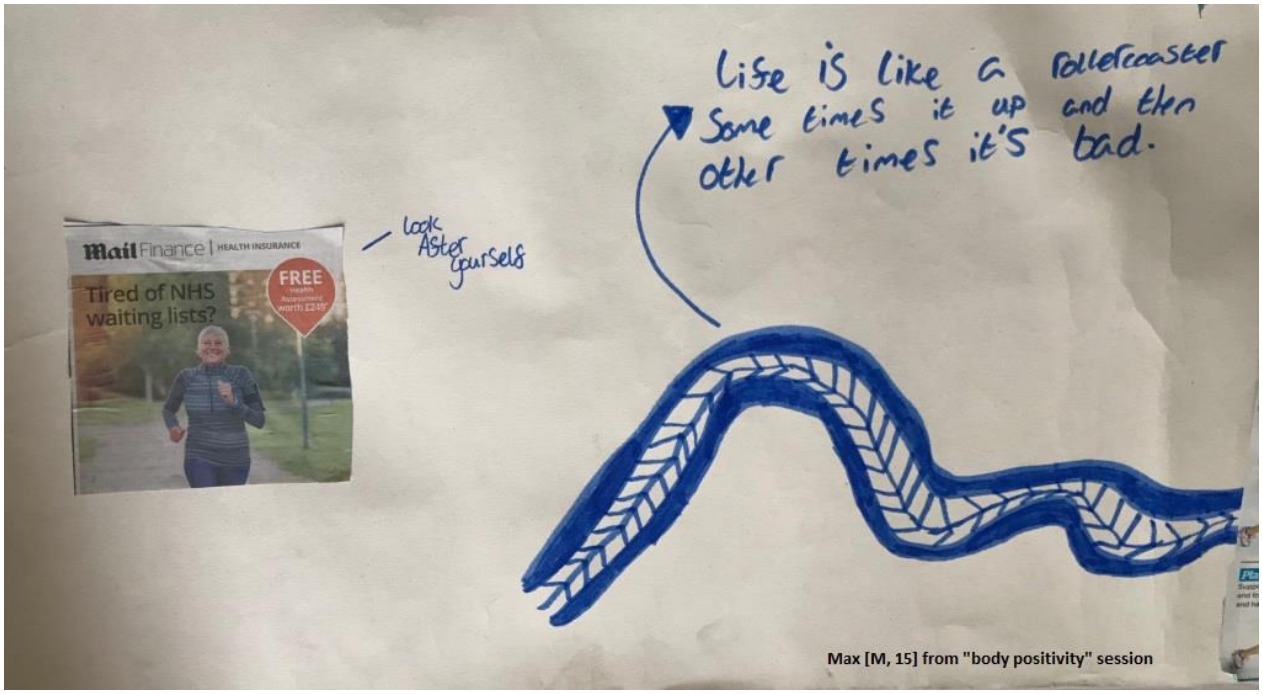
> "Emma-Mae [F, 14] cheated by skipping all exercise. She was a little distracted. She did not exercise properly in the fitness area. She was conversing with Jess [F, 14] and keeping her occupied. I am not sure if Jess bothered or not, she might be unable to say no because she was an extremely kind and nice person compared to other participants. As soon as Emma-Mae [F, 14] finished her time on the treadmill, she stopped Jess's [F, 14] treadmill. Jess [F, 14] appeared unconcerned. Then they moved on the rowing machine. Jess [F, 14] settled down on the machine properly, such as putting her feet on the pedal and tying up. Emma-Mae [F, 14], however, placed her feet on the ground and was attempting the rowing. She was simply sliding her seat and her feet were on the ground. She had fun while doing this activity and was also

distracting Jess [F, 14]. Then they moved on to cycling. As usual, Emma-Mae [F, 14] did not do it properly. After finishing cycling, Emma-Mae [F, 14] wanted to go toilet and she took Jess [F, 14] with her and both left the fitness room."

[FN17-MC-20190622, field notes]

They also acknowledged the responsibility to act on difficulties, such as the fact that participating in the intervention programme and life as a child with obesity were difficult; however, they must look after themselves in order to protect themselves from long-term obesity-related health issues, as Max [M,15] highlighted below during the body positivity session expressing himself by drawing and writing:

Figure 22 Body positivity session from Max's perspective aged 15



Also, Emma-Mae [F, 14] also stated during the 'body positivity' session that losing weight, which had previously appeared unachievable, was no longer so.

Figure 23 Body positivity session from Emma-mea's perspective aged 14

Emma-Mae [F, 14] from 'body positivity' session

As a result of findings, participating in the intervention programme enhanced psychological resilience in children who are obese. Furthermore, positive improvements in various areas of psychological resilience were also detected such as focusing on achievement despite all obstacles namely low self-esteem and intervention participation difficulties, increased individual competence to achieve the objectives, strengthened personal ambition, being more hopeful for future and so on.

6.2.2.4 Increased social interaction

As stated in the previous chapter, one key challenge amongst the children was social interaction. This was generally due to previous experiences of bullying and due to their weight and appearance. The majority even stated that they developed social anxiety. However, children narratives highlighted that as they rebuilt their self-esteem by participating the programme, they became more socially active. For example, Jess [F, 14/1st interview], who

formerly suffered from social anxiety, was one of the participants who has made considerable progress in social interaction. Her description echoes the perspective of the majority of children:

> "I was a lot more confident like I was a lot, I could go up to somebody and talk to them like I could go shopping and ask for something. Before I would've been apprehensive to even go near someone and talk to them, but I felt a lot more confident being able to go talk to people."
>
> Jess [F, 14/1st interview]

Similarly, Emily [F, 14/2nd interview] also mentioned that her social anxiety subsided and that she was happy now that her area of activity was wider.

> I'm just a lot more happy. I'm a lot more social. I'm a lot more up for anything, so if my family is like 'let's do this', I'll be like 'yeah'. I'm less anxious. It [SHINE] made me happier, more confident, more social, less anxious. There's a lot. I think my health has improved as well as me being happier.
>
> Emily [F, 14/2nd interview]

Some people even hesitated to leave their home surroundings, where they felt safe, because of being afraid of judged by others, and even their daily activities were affected such as going out with friends or families, eating outside, meeting with people in person. Harry [F, 14/2nd interview] was one of the participants who focused on self-criticism because of sensing the gaze of others and fear of being judged, thus avoiding social interaction. Unlike himself, though, he described his good progress below:

> "I think I enjoy it more, like going out rather than just staying inside. […] I think I'm more social like, I'll talk rather than just sitting there looking at the ground ermm yeah. I think I gained a lot of confidence from it. [SHINE session] I seem to like to go out more with all of my friends and actually meet in person. […] I wouldn't go out in person not much but now I go out a lot more."
>
> Harry [F, 14/2nd interview]

In a similar way, children stated that they used to stay in their comfort zone and prefer their mobile phone or computer over face-to-face communication. They are off the opinion that

participating in the intervention programme encouraged individuals to be more present and engage with others.

> "[…] then I learned how to talk to people [laughs] Because, a lot of people spend time on the phones, talk to people on the phone instead of actually talking to people face to face. So, it [SHINE] helped me to be able to like talk to people more face to face instead of just like texting them. So, it was easier for me to talk to my friends and stuff and to my parents, my family."
>
> Jess [F, 14/1st interview]

In conclusion, it appeared from children's narratives that they were more socially engaged that they were before the programme, and they were aware of this progress. In particular, they managed to overcome the anxiety and fear of judgment that would prevent them from being social. They also added that staying at home and mobile phone were called the safe zone, in order not to be social. However, they preferred in person communication over phone and going out of house.

6.2.2.5 Changes in everyday practice

The children's accounts indicated that they used what they learnt from the program in their daily life and concentrated on learning. Without exception all children highlighted that they have changed their diet since they started the programme and now pay attention to stick the knowledge they received from the programme as much as possible:

> "[…], it just being here [the SHINE] again, refreshed how much I have changed in the eating of my diet and how much from the difference I was eating before when I left to what I'm eating now. It's changed a lot, I'm eating more good ff..(..) [food] no not initially good food but less fatty foods since I was."
>
> Chloe [F, 14/1st interview]

In this regard, they identified themselves as healthy consumers, expressing satisfaction at this improvement:

> "I'm much happier and I eat a lot healthier than I did. Before I didn't like salad and then at away eating salad, I didn't like that. What ever since residential [week], I've been eating salad, not eating chocolate, not no ketchup."

Emma-Mae [F, 14/2nd interview]

Similarly, children reported that they focused on implementing consistently what they had learnt into practice, even if programme's session had ended.

> Harry: I'm gonna stick to what diet is better, to carry on losing weight.
>
> Interview: What kind of things are you doing to stick it?
>
> Harry: Eating less chocolate and sugary drinks and just eating less in general. Controlling what I ate.

Harry [F, 14/2nd interview]

However, they also stated that it was not simple for them to apply what they had learnt. Those who attended the residential week, in particular, reported that they found it difficult to maintain the same routine at home. The camp circumstances were customised to fit the specific requirements of the children while also demonstrating the importance of group cooperation in achieving success.

> "It's working well. It's hard to maintain because in residential you were all doing it together and it was all set out for you [planned for you]. And when you leave and go home you have to do it yourself, so I'm, I am doing it but there's been a few slip ups and I've not been doing as well as I wish. But yeah, I've taken away a lot more than I thought I would. Yeah and I've applied it to home so a lot of the things that we [my family] did and talk about I've now got and I'm doing at home."

Emily [F, 14/2nd interview]

Almost all of the children's narratives indicated that the changes in their everyday life had a positive influence on how they felt about themselves but also on their sleeping habits:

> Muhammed: I thought I was like not eating properly, not getting enough sleep and sort of bad stuff like that. But now I've joined shine, Shine made me feel better about myself and I wanted to keep going, I get enough sleep, eat more healthy and Kath taught me about portions and things like that.

Muhammed [M, 11/1st interview]

One of the things they noticed was that they were more active than they were before attending SHINE:

> "[…] like a healthy get out of the house sometimes. Like I feel like I already get the house often enough because I play football but SHINE just adds to it like my time being active, keeping active and more. […] I feel like I'm getting out of the house much more, like playing with friends, getting out, I was like going out of the house a little bit more. Like keeping active […] I think I found out I lost a lot of weight."
>
> Muhammed [M, 11/1st interview]

Similarly, Max [M, 15/2nd interview] also stated that SHINE changed his lifestyle by offering different alternatives to be active physically. As a result, he signalled that they were transitioning from a sedentary to a more active lifestyle: "Ermm with different sports that we did, just go into different places, […] provide more activities for you to do rather than just sitting in your own house and playing computer games."

In summary, the findings showed that children observed that they underwent changes in their everyday life patterns as a result of applying what they had learnt via the programme, such as changes in eating habits, sleeping habits, and physical activity. Most significantly, they noticed that these adjustments had a good impact on their mental health.

6.2.2.6 A supportive Environment within SHINE

As discussed in the previous chapter, children tended to avoid situations that they found difficult, preferring to stay in places where they felt secure and comfortable, particularly at home. Although children's accounts detailed that the intervention participation was stressful and challenging with its ups and downs, they reported that the programme facilitators made things easier by being helpful and supportive creating a safe environment where they were able to feel more comfortable:

> "It's hard, it is hard, but it does have a lot of benefits to how you feel and how you look in yourselves. And it's not all about losing weight. It is about how you feel in yourselves and it's not as bad as you think, because it's not strict and it's not you've got to do this. It's more like, if you've had a bad day that's fine, think about how we can deal with that. It can be hard when you're feeling

> low, when you're having a bad day. But when you come here and you're around people that like you feel comfortable around and know how you feel and it sort of like a comfort blanket like you feel a lot safer, not happier. If I didn't come here, then I don't know how I would be able to cope."
>
> Jess [F, 14/1st interview]

In a similar way, as previously indicated, one of the most common anxieties of children, in particular, was being judged by others. As a result, these children had difficulty making friends, however, they stated that they built solid relationships with the facilitators who were described as friendly, helpful and who offered an environment in which they could freely express themselves as Emily [F, 14/2nd interview] typically highlighted: "[…] you can always talk to any of the people who run it. They're always very open to talk". Developing trusting relationships with the children helped them to feel safe, which improved the children's engagement with the programme.

SHINE facilitators were also described by children as informative and helpful when trying to achieve their objectives as Imiayah [F, 14/1st interview] outlined on behalf of almost all participants:

> "It's extremely helpful. You've got nice people working here, that will always have an answer to your problem, […] everyone's helpful, everyone's friendly, it gets you far like to say if you were big when you first started, you will have lost weight by the time you've ended. No doubt unless you decide not to pay attention."
>
> Imiayah [F, 14/1st interview]

Children indicated that they felt more involved and cared for after developing trust in the facilitators. Children also stated that they developed a sense of belonging to intervention programme:

> "I was nervous to come and then I visited [name removed] without any other kids. And she made me real. She made me think that this was somewhere that I actually cared. You could tell that they actually wanted to help and it wasn't just something that was run. It was something that they care about. […] I like how it made 'us' the focus instead of being like, this is this and this is that. It's

> ‘this is about you and we're here to help you’ so I liked that, and I don't know what I disliked, I didn't dislike anything.”
>
> Emily [F, 14/2nd interview]

Additionally, almost all participants highlighted that they valued the ongoing counselling service they received during the intervention programme. Children stated that this service was provided according to individual needs as Max [M, 15/2nd interview] typically highlighted: “It also provides support, counselling sessions if you need them.”. Children also highlighted that the programme’s consultant had a beneficial effect on them in terms of emotional support and addressing psychosocial needs. For instance, Emily [F, 14/2nd interview] noted that comprehensive emotional support was given to them during their involvement:

> “This one [SHINE] targets emotional stuff as well. […]Ermm when I first started the programme, I saw the counsellor [name removed] […] they target about what you've been called, what you've been through, what's wrong with emotional eating and stuff like that.”
>
> Emily [F, 14/2nd interview]

Similarly, as described in the previous section, Andre [M, 11/1st interview] felt overwhelmed due to his excess weight, however, he clarified how he alleviated his stress with the help of the counselling service that the intervention programme provided during this period;

> “This counselling is what goes off here, isn't it? […] and that woman with [description removed], she does counselling. I know [name removed] or whatever her name is, something like that. She did counsel with me. I did the counselling with her. And that it did put me some stress, give me some stress but it would take me off gradually.”
>
> Andre [M, 11/1st interview]

Children’s narratives also revealed that they were more motivated to undertake activity as a group throughout their participation. For example, Imiayah F, 14/1st interview] noted that she had more fun when she performed any activity with a group, however, she had a little difficulty keeping up the same pace at home since she came back home since there was not enough motivation at home to continue the activity, resulting in relapse. Therefore, she highlighted the importance of a supportive environment that she received from the SHINE:

> "When I got out, like when I got home from the residence. No, when I'd finished sports, I'd feel happy about myself. Whereas if I were to do it at home, I'd be bored and give up with it. So, my mood changed."
>
> Imiayah F, 14/1st interview]

As children came together with individuals they perceived to be similar to themselves, they developed a sense of belonging to that group which made them feel "included" and "happy" as outlined by Emily [F, 14/2nd interview]: "So everyone was here for the same reason, so we were all talking, relating. When you see people with the same target you feel more included." Developing a peer bond that could be associated with a high degree of commonality allowed them to foster a shared sense of identity. Most children found it motivating to relate positively to the experiences of other peers. This had a positive impact on their intervention experience as follows:

> "It's been a lot easier because the friends that I have, you don't really know what it's like to be bigger and have quite a lot of mental health issues. But when you meet people who have like who's going through the same as you, it gives you sort of like a relief that you're not alone. And then it made me quite a happy person. […] and then it was sort of like a weight has been lifted off my shoulders [she laughed]"
>
> Jess [F, 14/1st interview]

She added that the presence of other participants in the program increased their adaptation to the program and reduced the level of stress and difficulty.

> Emm that it does get better when you do actually do the program then you will make friends. But it's hard at the beginning because you don't know anybody. But if you like pluck up a bit of confidence and pluck up a bit courage then and talk just and talk somebody, someone probably come and talk to you anyway like they did for me.[she laughed] Um yeah. And it's beneficial for me doing it [SHINE].
>
> Jess [F, 14/1st interview]

Children also stated that they preferred to receive education amongst peers their own age so that they could readily relate and build connections with others. For example, two participants, Emily and Jess, highlighted that their previous programmes were intended to support younger

children and were not appropriate for their age group, making it difficult for them to relate with other participation as well as the intervention programme.

> "We, I'd been on a program before and it [different intervention programme] was all about health and fitness, but it wasn't targeted with my age group. [...]So, we were looking for alternatives and my mom found SHINE and it's perfect."
>
> Emily [F, 14/2nd interview]

However, not all participants felt that they related well to the other participants. One participant, Isla [F, 10/1st interview], felt different from others in terms of both age and ethnicity. She described the difficulty in relating to other participants within a deepening sense of isolation resulting in emotional distress, such as crying and an unwillingness to take part in the programme:

> Isla: At first time I came to class I started crying cause I really didn't wanna come, cause [because] there were a lot of kids who were older than me. Like my friend [name removed] and she doesn't go anymore I don't think, and I thought she was there, and she looks a lot like me. But now it's like some younger kids but she looks a lot like me, looks similar to me and skin colour and hair, stuff like that.
>
> Interviewer: Okay. So, you feel closer to her?
>
> Isla: Yeah
>
> Isla [F, 10/1st interview]

These findings suggest that in order for children to continue with the program, they need an environment where they feel supported, cared for and felt safe. The facilitators' friendly approach played a major role in this regard. Even though other children's characteristics, such as having similar experiences, objectives, age as well as ethnicity, not only help to develop a sense of shared identity but also a sense of belonging, which helps children feel more secure and comfortable in an environment where their body shape or ethnicity was not uncommon. This helped to improve children's motivation to engage in the programme.

6.2.2.7 Emotional distress and SHINE

In contrast to the many positive accounts of participating in the SHINE programme, there were some associated difficulties. For example, some children's narratives revealed that participating in the intervention programme resulted in emotional distress, such as disappointment, pressure, guilt or anger. For instance, Emily [F, 14/1st interview] was an exceptional case who stated that obesity, contrary to popular belief, was not a matter of eating less and moving more, but rather of an emotional internal battle. Recognizing that her obesity was a product of her own behaviour resulted in feelings of anger and guilt towards herself. She also highlighted that it is her responsibility to bridge the emotional-obesity gap:

> I'm trying to understand that it [weight], it's been done. It [weight] can't be changed and it was nobody's fault but mine. Cause I choose to be like this, like it is nobody else that's making me overweight. People are trying to like, help me but it's not as easy as people think just to eat less, move more and stop being lazy, like a lot of overweight people aren't lazy. It's just an emotional thing. And that's something that personally you have to take on yourself instead of trying to find excuses because when you find excuses, you just show it's one side but you need to address it as a problem which takes responsibility.
>
> Emily [F, 14/1st interview]

In a similar instance, Imiayah [F, 14/1st interview] also developed a sense of responsibility to herself and to those who work in the programme. Weight gain was described by Imiayah as a sense of failure and self-shame as well as and disappointing the facilitators:

> Since the start, like all the time I've come to SHINE, I've lost quite a lot of weight and I was losing weight quickly. And then, there was a time where I got sad in myself and I put weight back on and like I didn't wanna go out and then I refused to come here because I felt like I'd disappoint people. But now I've come back.
>
> Imiayah [F, 14/1st interview]

According to the narratives of some children who struggled with obesity since the early childhood: Participating in an intervention programme enhanced their body and weight awareness, which increased their weight concerns and lowered their self-confidence, causing self-disappointment,

> I worked most my time being at Shine, like before joining in I was sad and then I'd do the program, feel happy and then I'd feel sad again and then I'd come back. So, every time, before I'd come back, every single time I'd feel bad, or sad about myself.
>
> Imiayah [F, 14/1st interview]

Additionally, one participant, Isla [F, 10/1st interview] expressed that the programme made her feel stressed and pressured regarding two issues. She disliked being weighed during the programme which increased her self-consciousness: "I hate when I get in weighted stuff like that.". Secondly, it was annoying for her to be compelled to do something and to observe her activities, particularly her eating habits:

> "Well at the beginning of the program, I felt kind of like I could eat what I wanted. I felt really normal. I still feel normal now but it's a little bit harder cos [because] I have to watch what I'm eating and it's really annoying. And my mom and I've a food diary and I forgot to put it in the last few days. But I have to write down what I eat each day okay. It's really annoying"
>
> Isla [F, 10/1st interview]

She also added that although losing weight made her happy, however, adapting healthy eating and dietary restriction, in particular, was limiting her flexibility and restricting her freedom in terms of what she could eat, causing her to feel unhappy and overwhelmed:

> "It's like when I eat food and when I didn't have to worry about everything like what I eat, I had a little bit more freedom of what I could eat. But now I don't really have that freedom anymore about what I can eat, I can still eat things but like now not as much and I have to think about why I eat and then I don't want to think about it."
>
> Isla [F, 10/1st interview]

Also, her drawing featured a strong emphasis on face expression before ("so happy" on left side of the figure 24) and after the programme ("happy" on right side) rather than the rest of her physical appearance, which was the same in shape and size. Indeed, she stated that she was very happy before the intervention programme, which she illustrated with a grin expression and a heart drawing, both of which are regarded indicators of happiness and self-love respectively.

Figure 24 Isla's drawing aged 10 from the first interview

Isla [F, 10/1st interview]

Additionally, Phoebe also found portion size control tough to practise at home due to her mother. Although families and children received the same classroom-based education programme, Phoebe was the only one who stated that her mother was not following the appropriate amount of portion size due to her mother's excessive concerns about her weight and health as mentioned in the 'hopes and expectations of the programme' section. As a result of her family misappropriating the program's instruction, Phoebe experienced additional stress, which resulted in unhappiness:

> Phoebe: She [my mother] controls my portions but she would give me a little bit less than I should have.
>
> Interviewer: Are you happy with that?
>
> Phoebe: No [she smiles] She should be giving me the right amount, not the wrong amount. She did bad! [she smiles]"
>
> Phoebe [F, 10/1st interview]

In summary, the data revealed that as children gained awareness of the programme, they disclosed three significant discoveries as a result of increased responsibilities —developing a tendency to blame themselves, a fear of disappointing others as well as a sense of limitation of freedom. However, one child also described her frustration and stress as her mum did not follow the guidance from SHINE regarding portion size.

Chapter summary

This chapter has emphasized that children's expectations of the programme were not limited to losing weight. Their expectations were strongly linked to their experience of being a child with obesity, in which they predominantly wanted to improve their appearance by reducing weight, which would boost their self-confidence. By doing so, they expected that they would not be bullied after weight-loss and that the negative impacts of bullying, such as social exclusion, feeling out of place, social anxiety, low self-esteem, body dissatisfaction and shame, would be minimised or even overcome. They thought they would feel like they 'fitted in' after the programme.

Also, children predominantly wanted to improve physical capabilities by losing weight which would reduce joint pain, increase their flexibility, enhance their physical health. Only one child wished to lose weight in order to please her family due to her families' pressure.

Clothing was of particular importance to children, particularly for female participants, and children hoped to fit into clothes that were used to be tight on them without feeling body shame and dissatisfaction.

Moreover, this chapter revealed that children's expectations of the programme included gaining the knowledge to achieve their goal of overcoming obesity, including gaining nutritional information to lose weight; learning about obesity-related health risks; obtaining information related to improve their self-esteem; learning strategies to cope with emotional eating and emotions; building a more positive perspective, and feeling better in themselves.

Furthermore, children's narratives highlighted that they hoped to meet with individuals who are similar to them in terms of body size and appearance as well as who had similar experiences. It also presented children's worries of being different from other participants and being unable to relate to others.

Additionally, this chapter also presented the perspectives and experiences of children during their participation in the intervention programme. Children described how they enjoyed participating in and appreciated the intervention programme's approach, which they regarded as comprehensive, tailored, flexible and addressing individual needs, caring, informative and innovative, which helped children to engage in the programme. Another aspect of the intervention programme that children valued was that it held them accountable for their actions and educated them one-on-one and in a family-oriented setting.

It also offered children's accounts on what they learnt in the programme, how they engaged with the information provided, and how they applied this knowledge to their everyday lives, including age-appropriate portion size, food label, nutritional value (sugar, carbohydrates, fat, protein and minerals). They highlighted that they gain the abilities they needed to live independently such as cooking, shopping as well as maintain their own balance dietary namely energy intake and burn.

This chapter also revealed children's perspectives of how children's behavioural adjustments impacted on their life. The physical changes that occur with weight loss and the self-perceptions that vary as a result of weight-loss, such as physical endurance, stopping bullying, being sociable and satisfied with one's appearance, socially fitting in, self-confidence, self-worth, clothing, developing a sense of achievement, being happy, and gaining hope for the future, were at the forefront of these changes. Only one child still did not like her appearance and not content with herself, even though she lost weight, since she did not achieve the body image she wanted. However, the remaining children stated that they regained their self-confidence on a significant level which made them happy and feeling confident about themselves.

In addition to physical improvements, children indicated that children gained autonomy in their life and learnt to act on their desires rather than their negative feelings and anxieties. From their perspective, the biggest social improvement was overcoming their social anxiety and fear of judgement, which hinder them from being sociable. They also highlighted that they learnt to manage their anxiety emotional issues including emotional eating. As a result, children stated that they learnt to make more conscious and healthy decisions in order to maintain their health, rather than reacting to their emotions.

Children's narratives were also highlighted that despite all the obstacles such as low self-confidence, hopeless, the children developed psychological resilience as a result of their participation in the intervention programme. Children's accounts revealed that they have become more optimistic about the future by altering their points of view in analysing events, focusing on their goals, and increasing their individual talents to push the circumstances for success and strengthened personal ambition, and competence.

Children also emphasised the importance of the SHINE's supported environment, which they felt supported, safe, and cared for throughout their involvement. Children also described facilitators as friendly, informative, and helpful in this regard. Children also highlighted that educated with peers their own age as well as ethnicity was important to them, which made them feel belonging and developed a sense of shared identity. Taking everything into consideration, these are all aspects that will make it easier for children to adjust to the programme.

Aside from the beneficial impacts of engaging in the intervention programme, it had also been noted that it caused some emotional stress in the children. The source of some emotional stress was increased by the children's knowledge about obesity. Some narratives showed that they blamed themselves by being an obese child. Some of their feelings as follow: weight gain was described as disappointing and failing, being weighted and participating in the programme was described as stressful, as was becoming more body and weight conscious, watching their eating habits was described as stressful, and limitation of their freedom.

CHAPTER SEVEN: DISCUSSION

Introduction

This chapter develops a discussion of the key findings presented in chapters five and six. These findings are explored to present arguments that can contribute to current knowledge and policies concerning childhood obesity. A primary goal of this chapter is to consider how the findings address the research questions identified in chapter two.

The key findings discussed are presented under the following headings:

1. Perceptions of being a child with obesity
    a) Obesity perception by gender
    b) How children describe and present themselves
    c) Emotional and social aspects of obesity
2. Experiences of the intervention programme
    a. Expectations concerning the intervention programme
    b. Motivational factors that have a favourable impact on children's experience of the intervention programme
    c. The effects of the intervention programme

The first part of the chapter considers *how* obese children described themselves and their experiences of obesity. The second part addresses the children's experiences of the intervention programme.

7.1 Perceptions of Being a Child with Obesity

7.1.1 Obesity perception by gender

Almost all of the children acknowledged that they did not feel comfortable with their body image, which had a negative impact on their self-esteem. One of the striking findings from the children's interviews and drawings is that their perception of being obese varied according to gender. For instance, female participants tended to link having excessive weight with beauty standards such as being ugly, while male participants generally associated it with physical power, an aspect of masculinity. Overall, these findings suggest that body image perception and, as a result, their self-identity were highly gendered. This finding is a step toward a more profound understanding of what it means to be a child with obesity, which is not fully addressed in the current literature (Haga et al., 2019).

The findings from some children's accounts illustrate that their experiences of being obese were associated with their discomfort in the appearance of particular parts of their bodies. Both genders were of the opinion that the stomach area was a major cause of negative body image, providing an indication of having excessive weight. However, male participants also indicated that having big shoulders or a big body is an indicator of strength. In contrast for female participants these were a signifier of ugliness and obesity. It is worth noting at this point that previous studies by Snethen and Broome (2007) and Wills et al. (2006) explored children's judgements of being obese based on body parts, rather than simply highlighting the differences between how children of different genders assessed their appearance. The current study concurs with this view, demonstrating that although both genders were concerned about the appearance of their bodies, dissatisfaction with parts of their bodies differed according to gender.

Children's narratives also emphasised various parameters that contributed to the idea of having excessive weight, one of which was clothing. Clothing was recognised as an indicator of obesity as well as a cause of body dissatisfaction. While this was only discussed in the studies of Snethen and Broome (2007) and Wills et al. (2006), the findings from this current study suggest body dissatisfaction related to clothing was predominantly detected within female participants. While both genders cited clothing as a source of greater body consciousness, only female participants discussed how their wardrobe choices were affected, since they preferred clothing that covered their bodies more fully. This observation suggests that female children often try to disguise their weight and body dissatisfaction using clothes that would not be their

first choice; an interesting finding during my study that provides an addition to previous research. However, it should also be kept in mind that while the male participants did not discuss this aspect of using clothing to hide body size or shape, this could be because gender stereotypes make such discussion difficult for boys.

This variation in clothing preference may also be attributed to the females being more body conscious, more often evaluating themselves based on notions of beauty, than their male peers (Shriver et al., 2013). From the findings presented in chapter five, only one male participant indicated that he disliked swimming since it required him to expose his body, but he did not specify whether or not his weight influenced his clothing preference. This contrasts with the female participants who all stated that their weight prevented them from purchasing or wearing the clothing they desired due to an increased body consciousness associated with clothes such as shorts, crop tops, and bikinis. As a result, female children prefer more often to wear modest or large-sized clothing, such as large hoodies, leggings, or jeans, to conceal the parts of their bodies that concern them. This finding may be explained by how body image perception impacts on self-esteem. This has as in Gatti et al.'s (2014) mixed method cross-sectional study with 242 Italian adolescents (120 male and 122 female individuals) aged 11 to 17 years. They found that there was a strong correlation between BMI and clothing details (top, t-shirt, pants, skirt, accessories, and hat) in the drawings of overweight females compared to males. The details of their clothing reinforced the notion that these girls tried to conceal areas of their bodies that they believed were disproportionate. However, males seemed more content with their bodies and drew fewer clothing details. Overall, it can be said that clothing was an important influence, particularly in the female children's presentation of the body and body satisfaction. This was strongly linked to their weight and perception of beauty and has only been discussed briefly in previous literature with the exception of Gatti et al. (2014).

Furthermore, the findings from children's narratives suggest that gender disparity play a major influence in their involvement in sports; thus, understanding the roles of gender was expanded within this study. The children generally discussed the satisfaction they gained from participating in sports activities. However, males and females both identified some skill-based difficulties, such as reporting that weighing more slowed them down or stating that they could not perform activities as well as their non-overweight peers respectively. Female participants also emphasised that certain activities that required more dynamic movements, such as running, basketball, or dodgeball, were associated with greater body consciousness and a sense of being at the centre of attention such as being exposed to staring or gazing by peers, which made them

reluctant to participate in an activity, particularly in PE. This key finding was also reflected in the observation field-notes where it was noted that the female participants ‘were attempting to keep their breasts from trembling while running and frequently pull down their t-shirt’. These observations may be due to either differences in biological development across different genders (Brown, Patel, & Darmawan, 2017) or enhanced bodily self-consciousness (Vani et al., 2021). However, Vani et al.'s (2021) and Curtis's (2008) studies highlighted additional reasons for adolescents unwillingness to participate in sports. Vani et al.'s (2021) qualitative research with eleven adolescent girls with a mean age 14.5 years found that the fundamental reason for their withdrawal from sports, according to their perspective, is that their body shape must be acceptable for that sport in order for them to participate, implying stigmatisation, such as dancers needing skinny leg or to people needing to be tall to play basketball. From Curtis's (2008) qualitative research with 18 children aged 10 to 17 living with obesity, she found that participants predominantly avoided strenuous exercise because of the fear of being teased by peers. However, the author made little comment about gender differences and no mention of enhanced body consciousness as a result of intense activity and my findings suggest that this might not be the complete picture. While children with obesity have a high level of body consciousness, their peers’ approach towards them, social stigma or norms, as well as gender development disparities make the situation more challenging.

One of the reasons why female children do not want to do strenuous exercises may be related to the early adolescent period, as indicated above by the observation note. Adolescence is a key area in which children go through many changes (biological, physical, intellectual, personality and social development), with most of their attention concentrated on physical bodily changes. For example, physical activity has been shown in the body of literature to decline by 7% per cent each year (Dumith et al., 2011) as children enter puberty (Cowley et al., 2021; Kumar, Robinson, & Till, 2016; Corder et al., 2015; DoH, 2011), with adolescent girls less active than boys (Cowley et al., 2021; Kumar, Robinson, & Till, 2016; DoH, 2011). According to results, increased self-consciousness and peer pressure (Kumar, Robinson, & Till, 2016), fear of judgement throughout adolescence, the delivery of PE (Cowley et al., 2021) and puberty may be factors in declining PA engagement (Kumar, Robinson, & Till, 2016). It appears that the adolescent period is already a key phase of development in which children's self-consciousness increases. Obesity is another issue that puts extra stress on adolescents who have a fear of being teased and greater self-consciousness, resulting in less physical activity, particularly among female children as demonstrated by these thesis findings. Furthermore, the intervention

programme's expectations and needs of children who have progressed from childhood to adolescence may change. Participation in activities could be encouraged by developing body positivity in these children.

Findings of this study in regard to reduced physical activity engagement among female participants is that the required PE sports uniform worn at school, such as shorts, is described as a worry for girls who want to participate in sports. This links to the earlier discussion on clothing and supports the existing literature. PE classes generally require children to wear specific sports uniform decided by school. This uniform, which often causes body exposure, had a negative impact on girls' body consciousness, resulting in a lack of motivation or desire to engage in PE or physical activity. According to the girls' narratives, some received a medical reports or permission from the school administration not to wear a specific PE sports gear – but even this then marks them out as 'different'. Swimming was another specific physical activity that caused body consciousness for both genders owing to the athletic wear required for sport. Again this is consistent with Curtis's (2008) study with obese children regarding PE classes and clothing, which discovered a significant level of dissatisfaction with PE sports clothing that is tight or short. However, based upon the literature review presented in chapter two, research into the relationship between sports clothing and physical activity in children and adolescent with obesity along with gender differences is limited; therefore, this study also used data from overweight children to support this study. For instance, these findings support Reddy-Best and Harmon's (2015) qualitative study with 35 overweight children (21 girls and 14 boys) ages 9-14, which found that both genders were concerned about displaying their bodies' parts, which resulted in a desire to quit because of the required sports clothes. Clothing therefore appears to have an important influence in children's participation in sports or physical activities. Furthermore, the children in this study also expressed that due to their body-consciousness, they disliked changing their clothing in front of their peers in the changing room. This finding backs up O'Dea's (2003) findings from a study with 213 children (51% female) in school grade 2 through 11 who identified that female adolescents indicated that self-consciousness and a lack of privacy in the changing room are major obstacles to engage in PE. Given all of these current obstacles for children with obesity, such as body consciousness, the revealing PE uniform (Reddy-Best & Harmon, 2015; Curtis, 2008) and lack of privacy in changing room (O'Dea, 2003), the school administration and PE teachers must be attentive to, and address the challenges in order to ensure that children engage in PE in school as Cale and Harris (2013) pointed out.

Given the limited breadth of research investigating children's gendered perceptions of being obese, it was difficult to compare more examples of gender roles on obesity. However, previous research with adults who are obese and overweight demonstrated that men were more prone than women to underestimate their excessive weight, as men regarded a bigger body size to be more 'normal' or 'natural' than women (Oldham & Robinson, 2018). Since women's bodies are arguably more exposed to criticism (Puhl & Heuer, 2009), they may judge themselves according to others' norms or beauty standards, and the female body may therefore be visually overstated, affecting their emotional condition. The findings also suggested that male participants may tended to underestimate their weight status (Oldham & Robinson, 2018; Robinson & Hogenkamp, 2015), which could influence their need for assistance. This might one of the possible explanations for why the prevalence of obesity is higher in boys than in girls in the 2018/19 school year NMCP childhood obesity prevalence in the UK, as indicated in the introduction chapter. Although most participants were dissatisfied with their appearance in general, girls expressed more body concerns and expressed a stronger body dissatisfaction in relation to beauty standards. These findings can be considered to be a step forward in bridging the research gap identified by Shah et al. (2020), which is a more profound understanding of the gender difference in childhood obesity prevalence, which can enhance prevention and intervention. Therefore, obesity weight management programmes may find it beneficial to integrate weight-concern associated gender when discussing weight management with children. Children's weight management programme expectations may differ depending on gender, which may affect their adherence to the programme. As a result, these programmes can favourably impact on the attendance of participants in the programme if they consider gender-based difficulties and perceptions in order to meet the expectations of all children with obesity.

7.1.2 Emotional and psycho-social aspects of obesity

Children's accounts highlighted that their psycho-social and emotional issues outweighted their physical health concerns caused by obesity. The outcomes of this study support the notion that obesity generates important psychological and social challenges for children, beyond those related to the physical and health issues associated with obesity. Sagar and Gupta (2018) also highlighted that increased psycho-social and emotional discomfort can contribute to the persistence of obesity, lowering obesity treatment success rates. The psychological influence

of being obese can shape how children perceive themselves, emotionally and physically as well as how children with obesity socialise.

Throughout the children's narratives, it was apparent that they were aware of their weight, and this contributed to how they viewed themselves to be different, which affected their emotional status. Some appeared to minimise their weight status by saying they were "a bit overweight", while some described their appearance as "a bit big" or "a bit wobbly". This reflects some of the existing literature which discusses how children's description of being obese or overweight is based on how they perceive their body and appearance as described in Chapter Two in this thesis, such as 'flabby body' or 'sagging skin' (Lachal et al., 2013), being 'fat' (Ashcraft, 2013; Wills et al., 2006), 'chubby' (Holland, Dallos, & Olver, 2012; Wills et al., 2006) or 'heavy' (Wills et al., 2006). This also implies that the children in this thesis did know they had excessive weight, and that this was problematic, and yet they may not have wanted to associate themselves with the word 'obese'. Nonetheless, emphasising the fact that the children were obese may have caused more harm than good since they were already more likely to internalise such messages, resulting in emotional distress that was unlikely to be a useful starting point for weight loss attempts. Overall, obesity may be regarded a sensitive subject among children; therefore, findings suggest that, while weight-related conversation with children may be distressing, researchers and practitioners must play an important role in communicating with children when addressing obesity treatments or prevention methods in children, and they must also consider how the children perceive themselves.

The findings from the children's narratives and drawings illustrated that weight had a strong influence on the children's understanding and self-identification, which is always under (re)construction. The impact of weight on the way children described themselves was investigated through comparing the children's social media drawings to their 'real life' description. It was interesting to observe that their actual personal traits and body size were often the exact opposite of their social media profiles, such as portraying being "shy" with a big body in their 'real life' description, versus being "social" with a slim body size and appearance with a smiley face in their social media drawings (see Figure 15 Phoebe's drawing aged 10 from the first interview, in Chapter Six, page 130). In general, their description of personality traits shifted in response to their desired and preferred body size. This is why the children who were socially "shy" were associated with not being confident in their perceived body weight and image. To our knowledge this was a novel methodological approach to studying children's self-perception. Although almost all of the children described themselves

and built their identities mostly on positive traits, such as being friendly, or kind, however, being obese was associated with the development of negative characteristics such as being antisocial, socially shy, and result in having low self-esteem.

The findings highlighted that one of the factors contributing to the development of negative personal traits was the shame they felt because of their bodies. This mirrors findings of Gam et al.'s (2020) study with 200 adolescents aged 10 to 19, which found those with high BMI are at higher risk of experiencing body shame. Also, a number of studies have also found that children who are overweight and obese are dissatisfied with their bodies or harbour a negative body image (Ismail, Ag. Daud, & Ligadu, 2021; Chu et al., 2019; Oldham & Robinson, 2018; Gibson et al., 2017). Body shame then reduces their self-confidence and subsequently reinforces their fear of being judged by others. Children's narratives also highlighted how the dissatisfaction and insecurity they felt towards their bodies, and the fear of being judged hindered their ability to make decisions to leave their comfort zone, which eventually led to them becoming more introvert individuals. Given the very limited body of research exploring the relationship between children's self-identification as a child with obesity and the development of their personality traits, it is difficult to find additional instances of children's personality development in relation to obesity and its effects on daily life or activities. However, these findings were consistent with the findings of Asghar et al.'s (2020) recent study with 130 adults (n=70 obese, n=34 overweight, and n=26 normal weight with a mean age of 34.58 ±12.71) who discovered that obesity, in particular participants embarrassment about their bodies had a negative impact on the development of their personality along with their daily activities. Therefore, low body- and self-perception in children has taken over their social trait and their social lives have decreased more.

One of the variables influencing the socialisation of children with obesity is how the children compare themselves to their peers, and how they viewed themselves to be different from others. The findings highlighted how children instinctively assess similarity and familiarity to oneself, and suggested that they look for individuals with whom they share similar characteristics, regardless of the social context and environment. According to James (1993), the height, shape, appearance, gender, and physical performance of the body are significant characteristics children will assess. This is comfirmed in the findings of my study which revealed how children who are obese compared their appearance with their peers terms of in body size, appearance, physical performance and clothing choices. These findings also align with other previously published results (Oen et al., 2018; Holland, Dallos, & Olver, 2012; Meaney, Hart, & Griffin,

2011; Griffiths & Page, 2008; Snethen & Broome, 2007; Wills et al., 2006; Fonseca & De Matos, 2005). This comparison strengthens the notion that children rate themselves in accordance with social norms and perhaps self-identify as 'deviant' (in the social sense; Becker 1966) when they consider themselves relative to their peers, causing children with obesity to feel socially unaccepted.

Children's narratives also revealed that they are also perceived to be different by their peers, both physically and emotionally. Subsequently, the children in this study, hence, often experienced social relationship tensions, which lead to peer pressure, bullying , teasing and social exclusion by their peers. In line with the findings of Thompson et al.'s (2020) review of emprical research from 2006-2016, which they found that children with obesity are at higher risk of being bullied than their normal-weight peers owing (mostly) to their physical apperiance, which occurs often in the school environment. Also, according to Blanco et al.'s (2020) discovered that due to body size and appearance, children with obesity are subject to severe teasing compared to children of normal weight in a case-control study with 100 children (n=50 children with obesity, n=50 children without obesity) aged 8-12. In addition to bullying experiences of children with obesity due to their body size and appearance (Blanco et al., 2020; Thompson et al., 2020), this study elicited some additional assumed bully's motivations from the perspectives of children with obesity which had not been previously presented in the literature according to my knowledge. For instance the children thought that their peers (non-obese peers) perceive them as "vulnerable", "overweight", "ugly", "disgusting", and "fat", and also added that their peers did not see them "as one of them". These notions strongly suggests that children with obesity are conscious of a socially constructed norm imposed by 'non-obese world'.

This research once again emphasised the significance of children's quality of interactions with their peers on their mental health. From the children in this study's accounts, their peers have a significant impact on how they view themselves and increase their body dissatisfaction. While the mental health of children with obesity is highly dependant on their level of contentment with their apperiance and body weight (Sagar & Gupta, 2018), in line with the existing literature, this study also highlighted that negative interactions of obese children with their peers triggered emotional distress, low self-love, self-conficence, body satisfaction, panic attacks, anxiety, sadness, anger, crying and self harm. For example, the thesis findings mirrored the findings of Kenny et al.'s (2017) study, which found that peers had a major negative influence on body image and, as a result, cause mental health concerns, such as anxiety, low

self esteem, and depression among 111 youth aged 13-15 years. These findings are also consistent with Blanco et al.'s (2020) cross-sectional study, which found that weight-related teasing has a detrimental effect on the psycho-social well-being of children with obesity and their peer relationships. This thesis further demostrated that children express that they initially expperienced body dissatisfaction and decreseased self-love when they were first called “fat” or “ugly”. It appears to be the first study to show emprically from children’s perspective that their body dissatiscation began with negative interaction with peers, which then effects how they view themselves and, eventually, their mental health. It is, therefore, important to raise awareness and understanding of peer culture, as well as how negative interactions with their peers can undermine body-and-self-dissatisfaction. Therefore, intervention programmes and school administrations might want to consider the involvement the possible involvement of peers in reducing children’s body-related negative views about children with obesity.

The data suggests that negative experiences may have caused emotional vulnerability in children, which may have resulted in the children affecting their eating patterns, namely emotional eating. Similar findings have been extensively reported in other literature, indicating that children utilised eating to soothe their emotions (Oen et al., 2018; Andersson, Shadloo, & Rudolfsson, 2016; Howie et al., 2016; Reece, Bissell, & Copeland, 2016; Randall-Arell & Utley, 2014; Lachal et al., 2013; Holland, Dallos, & Olver, 2012; Hester, McKenna, & Gately, 2010; Wills et al., 2006). According to the children’s accounts, upsetting events, particularly, negative attuites of their peers towards them (bullying, teasing, peer rejection etc.) cause them to engage in an eating pattern to alleviate their emotions, which they refer to as emotional eating. This finding was consistent with the findings of Webb, Kerin, and Zimmer-Gembeck's (2021) longitudinal study with 379 children aged 10-13, which revealed that peer victimization had a significant influence on the development of emotional eating, and that emotional eating increased a year later. In addition to this, children’s narratives in this thesis highlighted that children were aware that increased emotional eating relates to weight gain. This notion is supported by the findings of Shriver et al.'s (2019) longitudinal investigation with children when they were at 15, 16, and 19, which discovered a substantial relationship between emotional eating with increased adiposity. According to Jalo et al. (2019), emotional eating frequently leads to unhealthy eating behaviours, such as consuming sugary or high fat density food, which increases the risk of weight gain, as illustrated by the children’s narratives in this thesis. These findings indicate that the risk of obesity increases considerably in the presence of emotional eating, which is heavily influenced by negative peer relationships. As a result,

emotional eating in relation to peer relationships should be taken into account in the progression of the effect of obesity and WM in young children.

In conclusion, children's relationships with their peers has a significant impact on their emotional and socialisation states. It appears that children's lives are influenced by the behaviours and attitudes of their peers. Smart (2007, p.46-49) discussed 'relationality' suggesting that individual identities are often formed by their (immediate) family relationships. She emphasised, however, that the notion of relationality goes beyond kinship, and that a connection can be created with anybody, not just relatives. In the line with this concept, as previously stated, children's identity development is ongoing, and one aspect contributing to this development is friendship relations, which are heavily influenced by physical appearance and its emotional consequence as well as by the social intercations.

7.2 Experiences of the intervention programme

7.2.1 Expectations concerning intervention programme

Not surprisingly, children's experiences of obesity intervention programmes can depend upon the expectations they have in terms of what they wish to achieve but also what the intervention environment will be like. Yet these expectations have only been given limited attention in previous research.

At its most basic, the change expected by the children from the intervention programme was to lose weight. The findings in relation to children's expectations also concur those of previous studies, including Andersson, Shadloo, and Rudolfsson (2016), Pearson, Irwin, and Burke (2012), and Hester, McKenna, and Gately, (2010). In line with this finding, children's accounts further indicated that they had expectations that losing weight would offer body appearance equality, allowing them to feel more accepted by their peers and to feel socially fit in (Reece, Bissell, & Copeland, 2016), and eventually reduce episodes of bullying (Schalkwijk et al., 2015). As noted in the previous section of this chapter, such negative experiences developed a fear of being judged, stigmatised, making them socially apprehensive which negatively affected their social interaction. They, therefore expected that weight loss would help them to be a more confident individual who is not afraid of social interactions. It can be concluded that children's expectations from the program are not just about reducing body mass but are very

much about wanting to be accepted by others, and about developing their social interactions by being supported by the intervention programme.

Without exception, all children included in this thesis expressed a primary desire to improve physically such as weight loss. However, they also expected to improve their psychological well-being through this weight loss. In line with this study, psychological well-being was important to the children as highlighted in chapter two where children across several studies expressed psychological difficulties as a result of being obese, such as body dissatisfaction, low self-confidence, self-consciousness, body shame, emotional distress and social anxiety and fear. A similar conclusion is highlighted by Andersson, Shadloo, and Rudolfsson (2016) in their study with five female adolescents with obesity (age 12-18 years) in which they experienced themselves, their bodies, and their perspectives as a consequence of their involvement in a weight loss programme. Hence, it is important to highlight once more that children hoped and expected to improve psychologically and eventually feel better about themselves.

Also, a further salient finding from the children's accounts is that they expected to gain certain essential information, such as nutritional information, sports participation, a balanced diet, and how to better manage their emotion and feeling better in order to lose weight and to improve their overall health. An important aspect of this finding, not given much attention in previous research, is that the children are eager to take charge of their weight loss journey. Similarly Wehling et al.'s (2020) most current evidence-based behavioural change guideline also strongly advised that children must be actively accepted as the major agent of obesity-related behaviour changes. This finding has evidence-based implications when designing intervention programmes, as they should consider the part that the children can play as individual social actors who should be given responsibility for co-creating a suitable programme to meet their needs.

In a similar vein, findings from children's narratives revealed that some children expected to please others, particularly their families. This supports the idea that some children may not be personally motivated to join intervention programme, rather; they do so to make their families happy, which limitedly paid attention in the literature. Schalkwijk et al. (2015) also investigated the expectation of children who are obese and overweight (n=18) and at least one of their parents (n=24). They found that families hoped their children to lose weight, and they wanted

to see their children slimmer. Children's expectations and those of their families (and indeed the intervention organisers) may not always align. Parental expectations may undermine children's desires or motivations and, as a result, the children can become more concerned with what other people want for them than with what they want for themselves. These, findings imply that intervention programmes should first examine what a child expects from the programme in order to most appropriately motivate them.

Finally, children's accounts also revealed that other children in the programme were seen as an important element of the social environment increasing the sense of intervention belonging. In line with previous research, children expressed concern about being the biggest participant in size, and hence their expectations of not being accepted by others, followed by the fear of being judged (Meaney, Hart, & Griffin, 2011). Through the children's narratives, their relationship with other participants with a body weight problem was recognised as a vital social bond that reinforces the sense of intervention belonging. Sense of intervention belonging in this study is defined as children's sense of being accepted, included and encouraged within the social environment.

7.2.2 Motivational variables that have a favourable impact on children's experiences in intervention programmes

Understanding children's motives to participate in and continue attending intervention programmes is critical for increasing initial engagement and improving retention. Children's narratives revealed that the intervention programme's facilitators, design and climate for children was as an important factor in improving intervention engagement, attrition and its effects.

The findings illustrated that intervention facilitators' approaches have a substantial impact on the children's engagement in the programme as well as their motivation to continue. This aligns with previous research (e.g., Andersson, Shadloo, & Rudolfsson, 2016; Reece, Bissell, & Copeland, 2016; Pearson, Irwin, & Burke, 2012; Meaney, Hart, & Griffin, 2011; Morinder et al., 2011) which demonstrated how children appreciated the facilitators' approach as supportive, encouraging, understanding, and responding to their particular needs. Howie et al. (2016), also highlighted how a good relationship with intervention facilitators had a long-term positive impact on the children while researching the impact of the intervention programme on establishing healthy behaviours in thirty-seven children who were obese or overweight aged

12-16 and their families. Additionally, in agreement with the findings of this study, Schalkwijk et al. (2015) also found that children valued facilitators' non-judgemental and non-offensive approach when they investigated the expectations and barriers to making lifestyle changes among eighteen children aged 8-15 who were obese or overweight and twenty-four parents. It appears that children care considerably about the quality of their everyday interactions with intervention facilitators. In addition to approaches described by children in the existing literature, this study elicited some further perspectives which had not been previously described in detail. For example, the children described how the facilitator's friendly approach provided them with a safe environment where they do not feel judged. This enabled them to express themselves freely, as well as creating a trustworthy relationship that helped them to foster a sense of belonging and feeling cared for. The children also emphasised how they found facilitators informative, and this helped them to achieve their goals. It is clearly important that the children felt cared about and the attitudes of intervention facilitators may therefore be a major element in children's successful engagement with intervention programmes.

Children's narratives also reveal another variable that effects children's engagement in the intervention programme constructively is that counselling services. They found counselling services beneficial in a variety of ways, most notably in terms of supporting their autonomy and aiding their competence. This thesis also concur the findings obtained in previous studies on the views of children (Andersson, Shadloo, & Rudolfsson, 2016; Pearson, Irwin, & Burke, 2012). For example, they reflect a finding by Andersson, Shadloo, and Rudolfsson (2016) that females who are obese adolescents (aged 12-18) find counselling service useful in terms of both exercise and diet. However, an additional finding from the children's perspectives in my study showed that the children recognise how the counselling services teach them to manage their own unpleasant emotions, such as self-anger, weight loss stress, negative emotions that often occur as a result of bullying as well as helping them deal with emotionally motivated eating. Clearly, children experience weight-related difficulties as widely highlighted in the findings in chapter five. It appears that the children regarded the counselling service as the most appropriate place to seek emotional support. This supports the notion that psychological interventions, such as behavioural therapy and cognitive behavioural therapy, should be given equal weight to traditional techniques such as diet and exercise, which Chu et al. (2019) showed to have long-term benefits. This finding suggests that intervention programmes could address children's psychological needs and focus on the growth of their counselling services, as children who are obese often require constant and long-term emotional support.

Children in this thesis expressed satisfaction with the intervention programme's comprehensive approach, which also addressed mental wellness rather than just focusing on weight loss. Even though the children are participating in the intervention programme to lose weight, children's accounts appear to suggest that they also desire to find a solution to their weight-related emotional difficulties rather than simply being reminded of their weight issues throughout their involvement. This notion is supported by the findings of Morinder et al.'s (2011) study of 14-16-year-old children's perspectives on hospital-based obesity treatment, which provides a multidisciplinary approach. They found that the majority of children complained that the programme focuses exclusively on weight loss rather than providing emotional support. However, there is a limited evidence in the literature that children who participated in neither a community-based nor a hospital-based intervention programme were sufficiently emotionally supported by the programmes. Besides, since the hospital environment is often seen as an unfamiliar, scary, and unpleasant setting, it may cause considerable psychological discomfort in children (Rokach, 2016). Thus, it may be useful for any future studies to understand how children view their obesity treatment visits at hospital and whether the hospital-based intervention provides appropriate emotional support. The evidence in both settings suggests that children require long term emotional support during their treatment.

In addition to their mental well-being being handled, the children's narratives revealed that they were satisfied with how their individual needs were addressed. Specifically, this included obtaining information to help them live a healthier life, exercise, and nutrition advice, all of which were consistent with previous studies (Andersson, Shadloo, & Rudolfsson, 2016; Reece, Bissell, & Copeland, 2016; Pearson, Irwin, & Burke, 2012; Meaney, Hart, & Griffin, 2011; Morinder et al., 2011). Again, this is consistent with Wehling et al.'s (2020) future research recommendations that, for a successful intervention programme, their behavioural modification approaches should target children's needs and be highly customised. This thesis' findings are evidence-based confirmation that children are aware of the services they got from the intervention programme and appreciate having their needs met by the programme.

Another factor influencing children's engagement and motivation in the programme is the presence of other participants in the programme. As previously stated, children commonly compare their appearance, such as size or weight, to that of other participants in the programme to form a connection and foster better relations within the environment, which helps make them feel more included in the community. The children also reported that meeting with individuals with similar challenges makes it easier to connect with others and to participate /engage in the

intervention programme (Reece, Bissell, & Copeland, 2016; Schalkwijk et al., 2015; Pearson, Irwin, & Burke, 2012; Morinder et al., 2011). These accounts support work from previous researchers who report that children feel more equal to others and less alone when they have similar concerns (Watson, Baker, & Chadwick, 2016; Schalkwijk et al., 2015). Moreover, previous study indicated that getting education with peers of similar age provides a more familiar setting for children (Reece, Bissell, & Copeland, 2016). These accounts are similar to the experiences recounted by the children in this thesis, who reported feeling more comfortable when they share characteristics such as similar age, body size. This thesis further demonstrated that similar ethnicity promotes a sense of belonging to peers in the intervention programme. These characteristics, age, body size and ethnicity, creates a shared identity, which helps them to relate with other participants, allowing them to readily engage with the programme. Also, commonality, shared experiences and goals, can therefore help generate an equitable environment in which children are not afraid of being judged (Howie et al., 2016; Watson, Baker, & Chadwick, 2016; Pearson, Irwin, & Burke, 2012). Those suggest that the age range (if possible, ethnicity diversity) of the group to which intervention will be delivered should be close to each other so that they can relate and built a sense of belonging that can then improve intervention programme engagement for the children. This would also assist children in receiving age-appropriate education while participating in the programme.

Children discussed the importance of enjoyment during their participation in the intervention programme. This aligns with recent qualitative studies reporting factors that positively influence children's satisfaction and engagement with intervention programmes (Howie et al., 2016; Pearson, Irwin, & Burke, 2012). Watson, Baker, and Chadwick's (2016) study, places a strong emphasis on children's feelings of enjoyment throughout their time in the intervention programme. This enjoyment was created through engagement in active learning, which includes interacting with other participants, exercising as a group, exploring, and trying things that are different from typical school classes. These findings appear to imply that active learning supports connection among children, allowing them to foster a sense of belonging, feel more involved and become motivated in the programme. Similarly, findings here related to children's enjoyment of cooking and tasting different foods are consistent with the findings of Pearson, Irwin, and Burke's (2012) study. As a consequence, the more children interact with the programme, the more they engage with it, the greater the enjoyment and the children are more likely obtain better outcomes. As such, recommendation to improve children's engagement with the intervention programme for children have been suggested that

intervention programmes should design and implement their programmes in such a way that children may actively participate and have fun by mixing programme sessions with a variety of games and activities (Howie et al., 2016; Watson, Baker, & Chadwick, 2016; Pearson, Irwin, & Burke, 2012) and are further supported by the present study.

Therefore, children care about and place a high value on who they work with in the programme, communicating with them, meeting their information needs that can aid in their psycho-social and physically recovery, and having fun while participating in the programme. It can be can conclude that these factors influence children's participation in the programme and its outcomes positively.

7.2.3 The impact of participation in the intervention programme

Children's accounts highlighted that over the course of the intervention programme, all of the children lost weight, demonstrating that the intervention programme is an effective means for children to reduce weight. In line with the existing literature, there were also physical benefits to lose weight that children desired, such as increased physical strength, endurance and capability (Andersson, Shadloo, & Rudolfsson, 2016; Pearson, Irwin, & Burke, 2012) as well as being able to fit into more age appropriate clothes as discussed earlier (Andersson, Shadloo, & Rudolfsson, 2016; Pearson, Irwin, & Burke, 2012; Meaney, Hart, & Griffin, 2011). However, the findings illustrated that participation in the intervention programme is not solely linked to weight loss, since children's narratives revealed that reducing weight is typically associated with improvements in body image. As stated in the findings section, children's definition of being obese are based on their physical appearance, and they most commonly associated obesity with body regions that they worry about. The findings revealed that, regardless of overall weight reduction, children would strive to get the ideal physique that they desire. This carries an implication then that intervention programmes should incorporate coping methods to assist in improving children's negative body image perception.

The physical changes that children experience as a result of losing weight are viewed by them as reshaping their self-identity, particularly in creating a more positive self-image. In this sense, children's narratives highlighted that losing weight, which had previously appeared unattainable for children, gave them a sense of accomplishment and helped them to be satisfied with themselves, therefore increasing their self-esteem and self-worth. This finding aligns with the findings of Andersson, Shadloo, and Rudolfsson (2016), who highlighted how physical

changes following weight loss provided children with a greater sense of pride while also improving their self-value and confidence. In addition, this study noted that improving children's self-concept motivates them and offers them hope for the future in terms of retaining healthy behaviours beyond the intervention programme. It should be recognised that weight loss is connected to more than physical change; it is also related to believing in oneself. It is, therefore, critical to teach children about trusting in themselves and helping them to develop self-confidence regardless of weight reduction.

Children's accounts suggested that losing weight alleviated the weight-related issues that children confront on a regular basis, which boosted their self-esteem. In line with previous research, the children noted that losing weight has given them the flexibility to wear or fit better into the clothes they preferred, resulting in enhanced self-confidence (Andersson, Shadloo, & Rudolfsson, 2016; Pearson, Irwin, & Burke, 2012; Meaney, Hart, & Griffin, 2011). In addition to mitigating some weight-related concerns that had previously been described in the literature review in chapter five (such as clothing, physical fatigue, and flexibility), this study elicited some additional lessened weight-related concerns that had not previously been described. For example, 'having less social fear or anxiety', 'being a more social person', 'experiencing less bullying' were all highlighted and were recognised as important in improving aspects of children's social lives. It also appears that, based on comparisons of the children's perspectives on progress on pre- and post-intervention programme effect, the findings indicated that, while children express less weight-related issues after the intervention programme, their positive self-image are still developing later. Therefore, intervention programmes should also include an emphasis on improving children's positive self-perception.

According to children's narratives, it appears that weight loss is linked to considerable gains in psychosocial status. However, the majority of previous research has concentrated on weight reduction as the primary outcome throughout the intervention programme, with less attention being given to psychological benefits and outcomes such as increasing self-esteem, self-value, sense of pride, and feeling of fitness (Andersson, Shadloo, & Rudolfsson, 2016; Pearson, Irwin, & Burke, 2012; Meaney, Hart, & Griffin, 2011). This thesis demonstrated that weight reduction improves other psychosocial qualities such as self-dissatisfaction, self-love, and social anxiety. As a result, children expressed becoming more content with themselves as a result of these psychosocial improvements, as also highlighted by Reece, Bissell, and Copeland (2016). Evidence clearly suggests that low psychosocial conditions reduces quality of life and prevents children living healthy, happy lives (Dreyer & Egan, 2008). The findings are also consistent

with Li et al.'s (2020) study with 36 parents and their children with obesity aged 5-13, (randomized group n=27, control group n=21), which found that at the end of a 12-week parent-focused obesity intervention programme, randomised children had better weight loss and social-emotional functioning than the control group. The findings are also in line with Engström, Abildsnes, and Mildestvedt's (2016) study of seventeen adolescents aged 13 to 24, which indicated that participating in a obesity intervention programme lead to increased self-esteem among the adolescents, implying that they became more socially interactive outside of the intervention programme. Therefore, these findings support the notion that children who make psychological progress through interventions may be more inclined to adopt long-term healthy behavioural adjustments.

In the findings of the thesis, children's narratives demonstrate that their psychosociological progress advances irrespective of weight. According to children's responses, the intervention programme provides multiple advantages for their psychosocial health, all of which certainly contributed to their learning. In line with previous literature (Reece, Bissell, & Copeland, 2016; Pearson, Irwin, & Burke, 2012; Morinder et al., 2011), the intervention programme training enhanced children's individual empowerment, increased their capacity to make health-related decisions for themselves (including nutrition, food, portion size control), and enabled them to take more control of their own lives, resulting in increased individual self-confidence. These findings on the development of personal autonomy, enabling the children to make more decisions in their own lives and to establish feelings of individual responsibility, are consistent with prior research findings, including Campbell-Voytal et al., (2018) and Morinder et al., (2011). However, while children can grow into self-reliant individuals capable of making decisions and managing their social anxiety, Howie et al., (2016) highlighted in their study (with children who are obese and overweight aged 12-16) that these abilities cannot always be maintained under stress which promotes relapse in children. Similarly, findings highlighted that children's past negative experiences, such as bullying and being target of stereotypes, cause them to develop social anxiety and fear of being judged. As a result, they can then revert to acting in ways that are consistent with their negative emotions in order to protect themselves such as remaining at home and not going out. However, the findings of this study reveal that intervention programmes can help improve the social coping mechanisms to deal with emotional crises in positive ways. It is emphasised that children build these social and emotional skills, these coping mechanisms, through the intervention programme thereby helping them address the fears and concern that impact on psychosocial aspects of life quality.

Intervention programmes could therefore consider assessing and addressing children's needs, fears and worries in order to help them live more independently, autonomously, and to maintain healthy behaviours in order to assist children's psychosocial development.

According to the children's narratives, they enhanced their social interaction outside of the intervention programme. Participating in the intervention programme appeared to have nurtured children's sentiments of confidence and reduce their social anxieties, which had a direct impact on their social interaction behaviours both during and outside of the intervention programmes. Rather than considering the influence of the intervention on their social life outside of the programme, most of the previous research has focused on social interaction with other participants during intervention programmes (Andersson, Shadloo, & Rudolfsson, 2016; Watson, Baker, & Chadwick, 2016; Schalkwijk et al., 2015; Meaney, Hart, & Griffin, 2011; Morinder et al., 2011),. The findings are also in line with Engström, Abildsnes, and Mildestvedt's (2016) study of seventeen adolescents aged 13 to 24, which indicated that participating in a obesity intervention programme lead to increased self-esteem among the adolescents, implying that they became more socially interactive outside of the intervention programme. To comprehend intervention programmes' overall influence on children, research should therefore also focus on how the intervention programme effected children's social lives, both within and outside the programme, in order to track their psychosocial progress.

Children's stories also indicated that reframing their perception over negative events with the help of the programme improves their capacity to manage, adjust, or recover from emotional distress, namely developing resilience. It also assisted the children in developing feelings of optimism about themselves, and the world around them, as well as helping develop an active approach to life that includes techniques for constructively overcoming challenges. These findings can be considered as a step in assisting children in overcoming their weight-related psychological discomfort, changing their perspectives, and enabling them to become mentally stronger individuals, which may further aid in the reduction of obesity. This findings confirm those from Foster and Weinstein's (2019) study with 24,405 children aged 10-17 who are normal weight, overweight and obese. They examined data from National Survey of children's health to see whether family or children's resilience factors were related to weight status. They observed that resilience, particularly emotional resilience, might play a critical role in preventing childhood obesity regardless of socioeconomic level. This also implies that intervention programmes that are designed to help boost resilience may have additional potential in treating childhood obesity. However, given the lack of research investigating

resilience following children's obesity intervention participation, it was difficult to compare the function of resilience in obesity, suggesting that further research is needed.

While the children expressed positive outcomes of participating in the intervention programme, their accounts also highlighted that one of the programme's consequences was the emotional burden that it imposed on them. According to Ells et al.'s (2018) Cochrane systematic review, which investigated the participation of children with obesity and overweight (aged 2-18) in obesity intervention programme, the adverse effects of programmes such as psycho-social wellbeing, eating disorder, or injuries etc. were generally not well-reported in any of the studies, and the incidence of adverse effects in those who reported it was very low. In the limited existing literature highlighted that children's accounts highlighted that a lack of weight lost may cause a sense of disappointment, failure and shame in themselves (Staniford, Copeland, & Breckon, 2019; Morinder et al., 2011), a sense of guilt because children believe their weight loss failures would be blamed on their family (Hester, McKenna, & Gately, 2010), feeling of embarrassment of rejecting their peers' food offer (Schalkwijk et al., 2015). In line with the findings of this current study, the existing literature showed that participating in an obesity intervention programme improved body weight consciousness (Reece, Bissell, & Copeland, 2016; Morinder et al., 2011) and restricted their food choices (Staniford, Copeland, & Breckon, 2019). In addition to these, this thesis elicited some further adverse effects of the intervention programme, for example, children's accounts revealed that as their obesity awareness increased in the programme, they developed a sense of guilt and anger towards themselves, children's close connection with programme facilitators reinforced the sense of responsibility, which triggered the fear of disappointing facilitator, as well as self-shame and a fear of self-failure. Therefore, this thesis contributes to the limited literature on children experience of intervention programme adverse effect as Ells et al. (2018) highlighted previously. Therefore, these findings highlighted once more again the importance of long-term psycho-social support on children with obesity during and after the programme.

In conclusion, the children's narratives highlighted many benefits of participating in the intervention programme, including weight loss, improving their sense of achievement, reducing weight-related problems, improving their psycho-social aspects, incresing their social interactions outside of the programme and developing resilience. These procedure undeniably has caused emotional distress in children, which highlighted long-term support neccessity.

Chapter summary

This chapter discussed the findings from children who are obese, their experience as a child with obesity, and their intervention programme expectations and experiences with the existing literature by presenting how these findings contribute to existing evidence base literature and to selected theoretical framework. Therefore, this thesis achieved its aims in the Discussion chapter, and all four research questions posed in Chapter Two were addressed:

- ✓ How do obese children describe themselves and their experiences?
- ✓ What are children's expectations and hopes for the obesity intervention programme?
- ✓ What are the children's experiences of the programme?
- ✓ How do they perceive the impact of the programme?

CHAPTER EIGHT: CONCLUSION

Introduction

This chapter emphasises the key findings of the study and outlines the ways in which this thesis adds to the extant literature. The study is rare, in being an ethnographic study focused on children's obesity experiences as well as their intervention (SHINE PSI) experiences. It offers an understanding of children living with obesity and the lifestyle changes and challenges they encounter during the intervention programme, as provided through the children's own perspectives. It also adds to the wider understanding of the impact of obesity on children. As a result, these findings are useful as a guide for those interested in childhood obesity, how obesity intervention programmes work, how children perceive and experience these and the effect on them, and therefore how policy makers might improve tackling childhood obesity and obesity intervention programmes. The chapter also includes a discussion of the strengths and limitations of the research, as well as outlining some implications and recommendations for policy, practice, and future research.

8.1 The resume of the study

This study's aims were to investigate children's experiences of living with obesity and their experiences of an obesity intervention. The children with obesity who participated in this project offered thorough and coherent narratives of their experiences as a child with obesity. They shared their experience of living with obesity and how obesity impacts their entire life, physically, socially, intrapersonally (individually), emotionally, intellectually, and psychologically in terms of the impact on their wellbeing. Their accounts reveal important weight-related difficulties, the majority of which are social, psychological and intrapersonal rather than physical in nature. These findings demonstrate how they feel about and perceive themselves as a result of being a child with obesity. They further demonstrate how social pressure (from the 'non-obese world') makes them feel, and the resulting psycho-social problems that accrue.

The children also expressed their perspectives on the multidisciplinary intervention programme which incorporated educational and behavioural components to help sustain healthy life changes. These experiences explore how they modified their lifestyle throughout the programme, how they used the information they received from the programme in their lives,

and how they hoped to benefit from these programmes. The children recognised the intervention programme as a place to acquire information about weight reduction that could help them achieve their desired goals. In doing so, they demonstrated a detailed understanding of how the battle against obesity links to a healthy and balanced diet as well as psycho-social factors. Their accounts of intervention experiences indicate that they have a good understanding of what it takes to be healthy, as well as providing evidence of what they had already accomplished, and how they had developed personally, thus demonstrating some positive results.

8.2 The Contributions to knowledge

While some of the findings resonate with previous work on children's experience of being an obese child and their intervention experiences, this study made several new contributions to knowledge which are described below:

1. This study contributes to the lack of literature on understanding children living with obesity. As discussed in Chapter Two, the majority of the identified relevant childhood obesity literature is obtained from research on children that are normal weight, overweight or a combination of normal weight, overweight and obese. This study addresses this gap by recruiting and focusing *only* on children living with obesity.
2. The methodological approach used in this thesis, presents an in-depth focused ethnographic study in the field of childhood obesity. There have previously been no focused ethnographic studies that provide a comprehensive perspective into children's viewpoints of being obese as well as exploring their intervention experience of the SHINE PSI programme; one of the well-known Tier 3 childhood obesity intervention programmes in the UK.
3. In addition to the existing literature on children's experience of living with obesity, this study identified and highlighted gender-based difficulties that exacerbate the impact of obesity and negatively impact on their everyday lives. Gender-based difficulties in obesity impacted on the girls' sports engagement, going shopping with friends, and friendship harmony. In addition to these, the adolescent period became a more significant concern in girls with obesity as bodily shape changes further.
4. This study emphasises the psychosocial impact of obesity on children, and how intervention programmes may assist children in reducing the negative effect of obesity.

5. This study explored how the negative impacts of childhood obesity are predominantly socially constructed, encompassing concerns such as peer pressure, marginalisation, social rejection, and stigmatisation, across the children's narratives.
6. This study identified children's expectations of an obesity intervention programme: some of these concur with the existing literature; however, there are unique themes identified under this category. The identification of these expectations may inform the manager or facilitator of an obesity intervention programme assisting them in addressing individual requirements in order to promote children's engagement and on-going participation and completion of the programme.
7. A further contribution to knowledge was to underline that the children's narratives demonstrated that they cared about the quality of intervention facilitators' approach to them, which would be described as motivational aspects that positively influenced their intervention participation experiences.
8. Children's accounts also suggested a significant demand for counselling services in order to improve their mental well-being. As a result, this study emphasised the necessity for a holistic intervention programme for children living with obesity; an approach that incorporates physical, psychological and behavioural lifestyle elements.
9. This study identified some additional beneficial effects from participating in the intervention programme, which seem underexplored in the existing literature. The intervention programme is not only effective in terms of weight-loss, but also provides psycho-social benefits such as reducing weight-related worries, social fear, or anxiety, and improving resilience, all of which have a significant influence on the children's quality of social lives and thus their psycho-social wellbeing. It was underlined that strengthening the psyco-social aspect of life may be a powerful factor in asisting the children to sustain acquired healthy behaviours.
10. Lastly, this study also addresses some additional emotional burden that children developed while participating in the intervention programme, which is very limitedly recorded in the literature review as Ells et al. (2018) highlighted. This study addresses a knowledge gap in the literature on the negative impacts of the intervention programme on children.

8.3 Strengths of the Study

This study has several strengths. It is a comprehensive study that incorporates children's own perspectives, which have so far received limited research attention. This is important as such perspectives can demonstrate how children make sense of being a child with obesity and their obesity intervention experiences. The study design and findings highlight some of the key features of the Social Studies of Childhood (Prout & James, 2015): the use of ethnography gives children a more direct voice, where children can play a constructive role in making sense of their own lives, and the idea that childhoods are individually unique and socially constructed (further detail in Chapter One, New understanding of childhood study, page 11). By mobilising key tenets of the Social Studies of Childhood, this study highlights the merits of a child-centred approach: a study undertaken with children and focusing on their needs and perspectives by listening to them. This helps us comprehend the unique messages they send by expressing their own viewpoint of being a child with obesity and on their participation in an obesity intervention programme through the application of ethnographic research methodologies. These methodologies have been previously underutilised in child-centred study.

As discussed in chapter two, there has been limited research conducted on children's experiences with either obesity or obesity intervention experiences; except Reece, Bissell, and Copeland's (2016) and Andersson, Shadloo, and Rudolfsson's (2016) studies. This study provides a comprehensive approach that includes both the children's experiences about being an obese child and their intervention experience, which is an essential step in understanding the most suitable and effective treatment or support for their concerns while tackling childhood obesity. Furthermore, the use of an ethnographic approach provides multiple benefits since it contributes to our understanding at a methodological level in a hitherto unexplored area while also further developing our theoretical perspective on research with children. This approach includes observing children's behaviours, including what they say and how they act, as well as interviewing them with a child-centred approach, using methods such as talk and draw sessions and diary keeping, all of which help represent the reality of the research in the field.

Throughout the interviews in this study, the children's drawings provided a deeper understanding of the children's self-description and intervention experiences; this proved to be a beneficial method. Children's perspectives in drawings give an embodied view of how they see and perceive themselves as a child with obesity. For example, children clearly expressed their social media and actual traits differences by using words such as "skinny" versus

"chubby", "social" versus "antisocial" and "pretty" versus "ugly". This notion was supported by the children's drawings, in which discrepancies in body dimensions implied that negative traits were associated with the appearance of their bodies, and this may provide evidence about how body size could affect children's perception of oneself. Furthermore, children's drawings representing their body regions, changes in facial expression, and written words on drawings have added a new different perspective to the literature in making sense of pre- and post-intervention experiences. Therefore, this study also implied that by using child-friendly task-based methods, such as drawing during the interview, it allowed the children to express themselves more concretely, enhancing the comprehension of the children and their original messages.

Using a child-friendly method throughout was therefore a major strength; it is worth noting that child-friendly methods have been widely overlooked in the current literature with children who are obese. Using such creative methods allows children being interviewed to feel more comfortable with an adult researcher as they are not accustomed to, or comfortable with, having one-on-one interviews with adults (Punch, 2002b, 2002a). Also, the academic status of the adult may result in the children perceiving them as an entity of authority (Hill, 2005; Christensen, 2004; Eder & Corsaro, 1999; Morrow & Richards, 1996). In this case, this might cause imbalance in power dynamic between the researcher and the children limiting collecting of high-quality (Martin, 2019; Hill, 2005; Morrow & Richards, 1996). However, this problem could be solved, or at least ameliorated, by adopting a child-friendly approach, which can help the children to be more comfortable with the adult researcher, and thereby reducing the power-imbalance.

8.4 Limitation of the Study

Despite the many strengths of this study, this study has its limitations. The scoping review method used to highlight research gaps and develop the thesis research questions has its own limitations. According to Pham et al.'s (2014) scoping review of scoping reviews, 16% of 344 scoping reviews mentioned that a lack of quality assessment of included research as a study limitation. However, instead of looking for the best response in the literature, my goal was to uncover any current research that provides evidence about the experience of children living with obesity and their perspectives and experiences of participating in intervention programmes (O'Brien et al., 2016). For example, Njelesani, Couto, & Cameron (2011) did not conduct quality assessment of included studies in their scoping review and emphasized that their study

was concerned with a broader range of study designs and methodologies than a systematic review would cover.

O'Brien et al., (2016) highlights a further limitation of scoping reviews: the necessity for more cautious interpretation of the included studies as, without quality appraisal, the scoping review provides an overwhelming volume of data. However, careful consideration and development of the inclusion and exclusion criteria helped make the volume of evidence acquired from the databases more manageable. I have also explained the study selection process in relation to eliminating, or at least reducing, researcher bias (see inclusion/exclusion criteria of scoping reviews in Chapter Two).

This focussed ethnographic approach, like other research methods, has also its limitations. The challenges of using a focused ethnographic approach were considered in the methodology section, chapter three, where limitations of time to conduct observations were noted. Due to the intervention programme schedule, it was challenging to obtain rigorous data in such a short amount of time, particularly in trying to arrange interview dates with children and their families [see data collection section and reflection on using data collection in chapter 3]. Also, due to time constraints and children's family issues, a second interview with four children that had been planned could not be carried out. Further, three children were only interviewed once part-way through the data gathering process, which was a situation out of my control. However, these challenges did not adversely impact on data collection to a large extent. I was able to collect extensive data through the intervention programme, interview sessions with children, performing a talk-and-draw session and diary during the interview, and my own fieldwork observations notes.

Many ethnographic researchers have acknowledged participant observation as a constraint (Atkinson, 2009; Hammersley & Atkinson, 2007; Roper & Shapira, 2000; Savage, 2000). They point out that, while ethnography provides real time rich data, it is also time demanding, requires intensive field work, and is likely to be costly. Since I used a focused ethnography approach, the study was completed in a shorter time period than traditional ethnography (see Chapter three). However, I would emphasise that I worked as a volunteer for 12 weeks in the intervention programme in order to develop trust with children, which is essential for research with children (Fine & Sandstrom, 1988), and to learn the culture of intervention programme delivery before undertaking research with the children. Therefore, this more than doubled the time I spent collecting data in this study, however I believe the benefits of gaining the children's

trust outweighed this additional time expense. Lastly, observation is a reflection of real-time events of participants' actions, interactions and conversations which occurs in natural settings (Hammersley & Atkinson, 2007; Sharkey & Larsen, 2005). Therefore, a direct transfer of the findings of this research to other settings cannot be assumed – though it is likely that some findings will have resonance in other settings.

In addition to theoretical limitations, a limitation of the study might be the use of purposive sampling strategy; nevertheless, it is equally crucial to recognise that it conveniently supports the nature and objectives of the study design and is also used to identify participants who fit within the parameters of the research questions asked (Bryman, 2016). The sample comprises individuals who actively participated in the SHINE obesity PSI programme and so does not represent the perspectives of those who dropped out or were never engaged with the programme. In addition, the sample size is limited in qualitative research due to their intensive and in-depth nature. I would have preferred to include every child in the programme in this study, however, the study was based on volunteering, only children who agreed to participate in the study were included. It should be emphasized that my aim was to understand, explore, as well as provide insightful and in-depth knowledge about children's perspectives of being obese and their experience with the obesity intervention programme rather than generalising it to a wider population. However, theoretically, it is possible to argue that the results of this study, or certainly aspects of these, could be applicable to populations with similar characteristics, to the sample used in this study (Mason, 2018).

One of the final limitations may be the consideration of children's social desirability bias since most children described the SHINE programme and its facilitators favourably (see Chapter Six). Similar concerns are raised in Coe's (2012) study on 'growing up and going abroad' with children, which discusses the risk of children catching 'what they thought we wanted to hear' (p.921). Likewise, as a researcher and paediatric nurse, I also acknowledge that the likelihood of social desirability in the children's responses is a reasonable assumption; some children may have been inclined to report an answer they feel is more socially acceptable than their 'true' answer. However, I tried to maintain a power balance, portraying myself as a friend to those children rather than a SHINE facilitator or manager (see Chapter Three, section 3.6.6 and 3.9), in order to help minimise the occurrence of socially desirable responses. However, it is important to acknowledge that, despite my best efforts, social desirability was still inevitable.

8.5 Implications and recommendations for research, policy and practice

This study notes several implications for policy and practices designed to improve children's experience in obesity intervention programmes and for the intervention programme's delivery, and these are outlined below.

8.5.1 Implications and recommendation for policy

a) The study provides evidence-based data about how children living with obesity experience and perceive obesity from their ow point of view. These findings imply that existing childhood obesity policies (where doctors are the first point of contact) should incorporate the viewpoints of the target population in policy creation and decision-making processes in order to better tackle childhood obesity.
b) This study found evidence that coping with the psychological and societal challenges of obesity appears to be more challenging than the physical difficulties, and it is likely to continue during and after the intervention programme. This evidence implies that children require long term psychological and social support and suggests that psychologists and counselling should play an active role in the development of obesity treatment policies.
c) In this thesis obesity has been shown to be not only a physical condition, but also a psychological problem. Findings may inform local and national policy makers when considering what future interventions for children living with obesity should address. Also, policymakers should audit these childhood obesity intervention programmes on a regular basis to ensure psychosocial outcomes, not only weight reduction outcomes, are being met.

The evidence from children's accounts indicated that they frequently encounter obesity-related psycho-social difficulties in school settings ranging from bullying, teasing, social exclusion to PE sessions. According to the most recent HM Government Childhood Obesity: a Plan for Action in Public Health England's (2020) guideline on Childhood obesity there is a desire to support schools in relation to four core themes: healthy eating policies, stopping bullying at school, raising awareness to promote children's and young people's emotional health and wellbeing, and supporting PE teachers and schools to deliver high quality PE lessons. To help achieve these policy regulation's objectives, this thesis offers some evidence-based guidance

to school administrations and teachers; in order to prevent or reduce the detrimental impact of bullying.

8.5.2 Implications and recommendation for practice

- To support the policy recommendation indicated in article c in the previous section, findings suggest recommendations to school administration and PE educators in *promoting PE engagements* of children living with obesity in particular; (i) PE teachers could reduce the competitive atmosphere in PE classes. (ii) PE teachers could prepare a curriculum in which children who are obese can actively engage with their peers. (iii) School administrators could be more flexible and sensitive in terms of children's choices of PE clothing. ad (iv) School administrators could increase privacy in changing rooms at school. Also, they (i) could pay more attention gender related of bullying (ii) more regular check on children's well-being who have been bullied earlier on, (iii) children who are subjected to bullying and teasing should receive individual counselling and well-being support.
- In terms of the *intervention programme climate*, it is essential for children to acquire a sense of belonging and equality, and to be helped to develop good relations to the group in which they are educated. To do this, children give importance on ethnic origin, body size, comparable concerns, and the average age of the group in which they are taught. For children, being in the same age range group is especially important, as is receiving age-appropriate education. As a result, these findings may inform intervention programme providers to consider these parameters in order to ensure good inter-individual dynamics in groups while delivering programmes.
- In relation to *intervention programme delivery*, these recommendations are consistent with Wehling et al.'s (2020) recent study on improving weight-management programmes to support children and their families, which indicated that improving the implementation of intervention programmes, tailoring them as much as possible to meet the needs of children, is critical. In this thesis, children's expectations from the tailored service encompassed not just weight loss, but also the psychological difficulties they encountered as a result of being a child with obesity, such as; low self-confidence, body dissatisfaction, social isolation, and social rejection, as well as overall well-being. Children, without a doubt, require more specialised psycho-social counselling services during their participation in the intervention programme, as well as ongoing assistance

thereafter. With the help of counselling therapy, children may be enabled to develop a new and more positive self-view.

- Finally, the intervention facilitators who deliver the programme have a critical role in enhancing the quality of the intervention experience for the children by instilling a sense of trust and safety in them, which has a direct impact on the children's engagement in the programme. According to the evidence presented in this thesis, these facilitators may not need to be professionals, but they must be trained as a 'personal trainer' and their training should be regulated by appropriate bodies to ensure that engaging and communicating with children helps achieve the government's goal of tackling childhood obesity (DoH, 2020). This might be more cost effective and inclusive than educating professionals and provides a larger workforce in a shorter time.

8.6 Future research priorities and recommendations

The study's findings have identified a number of areas where more research could assist in improving our understanding of children's obesity and intervention experiences. The following are the suggested research objectives for future research:

- It would be interesting to consider in more detail the gender differences in experiencing obesity among children. For instance, some boys talked about the weight-gained strength (having a big body and shoulders as an indicator of being strong), while girls tended to focus more on clothes, body appearance and image. Future research could consider whether there are significant disparities between the genders and their weight-management experiences and what the implications are for making children's obesity intervention programmes more gender sensitive.
- Children's narratives underline the importance of considering children's expectations of the intervention programme, something previously under-researched (e.g. Schalkwijk et al., 2015). Future research could benefit from better understanding how children's expectations link to what interventions provide and how these could be best aligned.
- Long-term support is considered important in the literature (e.g. Jones et al., 2019) and from children's accounts in this study. Future research could explore whether children can continue to receive post-programme assistance as well as the outcomes and impact of longer-term support.

- According to children's accounts, they experience many changes in their daily routine (e.g. healthy eating, healthy shopping, being more active) and psycho-socially (e.g. increased self-esteem, feeling better, being more content with themselves compared to pre- and post-intervention) with the education and input they received during the intervention programme. Besides the development of skill and confidence, one of this thesis notable results is that children build resilience through adjusting their perspective on unfavourable attitudes, events and situations. Resilience has been identified as a critical component in the continuation of behavioural changes (Burchett et al., 2018; Mead et al., 2017), but this is only marginally represented in the current intervention programme experience literature. Therefore, further research is required to understand the key components of building resilience among children during obesity intervention programmes.
- Evidence here demonstrates how child-centred research methods help contribute a deep understanding of the complexity of information that can be obtained while conducting research with children.
- When dealing with children, researchers should consider the power imbalance between the children and researcher. Saracer and Senol (2020) recently highlighted in their studies how child-centred research tools assist in balancing the power dynamic between the children and the researcher. In addition, in a child-centred study conducted by Van der Ent, Dagevos, and Stam, (2020) with forty-six children (aged 8-17), they stated that such tools increase the interaction and participation of children with research and balance the power relationship between the children and the researcher. Although there is an increasing recognition of young children's role in social research (Davidson, 2017; Prout & James, 2015), there has been limited focus on child-centred creative methods when researching with children with obesity. Therefore, future researchers in this area should consider using, and further developing, child-centred methods that help to equalise the power balance to improve both the children's engagement in research and the diversity and depth of information obtained by allowing children to express themselves more freely.

8.7 Personal reflections

In the Preface section, I noted how my own experiences and interests influenced the scope of my research. I highlighted how and why my research interest lies in understanding the

perspectives of children living with obesity and their experiences of it. In this section, I reflect on some of the topics that emerged throughout the data collecting and interpretation process, as well as reflecting on my relationship with the subject. I also aim to reflect on my experiences dealing with children who have obesity and what I have learnt through the research process.

To begin with, I had never used a qualitative technique before. As mentioned in the Preface Section, I earned my master's degree in Turkey, where qualitative methods are unusual, and most dissertation or thesis subjects are investigated using quantitative methods. This was one of the main reasons I opted to study at the University of Sheffield (UK), where my supervisors have substantial expertise in qualitative research and prioritize researching *with* children rather than researching *on* children. I found that employing an ethnographic method had its challenges and obstacles as mentioned in Chapter Three. However, it also prepared me to think more holistically when undertaking a qualitative study and researching with children. I strongly believe that witnessing and hearing the children's own experiences from themselves, examining their perspectives, and approaching them by using an ethnographic method, allowed me to see my researcher identity visibly alongside my nursing identity, and I am aware of this transformation.

Listening to children talking about living with obesity was difficult at times and emotionally demanding, but also allowed me think further about what I was like at that age. I, too, was a big girl when I was at their age, attempting to conceal my body under clothes. I felt different to my friends and could not relate to them in many aspects due to self-consciousness in relation to clothing, sports, and similar concerns mentioned by the children in this study. Children's narratives highlighted that obesity not only lowers their quality of life in all areas - such as friendship, daily activity, and school life - but also has severe psychosocial consequences, such as low body satisfaction, self-confidence, and self-image. They were also subjected to a considerable degree of bullying. However, this is where my experiences diverged from those of the majority of the participants. Unlike those children, I was not subject to bullying or stigma. Curvaceous women/children were more accepted in Turkey two decades ago. At a certain age, I was slim when I was younger and I can claim that when I was skinny, I was exposed to bullying more than when I was bigger. I can confidently state that my research led me to understand that thoughts and perspectives are often culturally developed and moulded, and that culture has a significant influence on developing a society's, including children’s, perspectives.

I have found that children had diverse experiences and perspectives on what it is like to be a child living with obesity, but they were often surprisingly open to talking about it, as mentioned in Chapter Three. Given their young age, I was astounded by how adult-like they sounded while describing their emotional condition under difficult situations. As mentioned in Chapter Five, children's narratives also revealed the emotional burden of living with obesity, and many of them remarked that their surroundings, particularly their peers, had made their lives more difficult. Listening to the reality that the childhood years, which should have been the most beautiful and exciting period for children, were spoiled by others was an extremely emotionally draining process for me.

The children's narratives demonstrated that they were all aware of emotional eating, such as utilizing food to soothe their feelings. It startled me that, despite their young age, children are aware of the concept of using food as a coping mechanism. This prompted me to consider my own connection with food, whether I used food to manage my emotions. For example, I still have body consciousness (even though I am at a healthy weight range according to BMI) and occasionally regulate my energy intake and expenditure. However, I had decided not to worry about what I was eating while writing this thesis. It is because watching what I eat takes quite an effort, and I thought I would not have the additional energy to work on this. I am also a person who likes utilizing food to socialize with friends, sampling foods from various cultures, and also recognising that enjoying food is a favourite activity for me celebrating an event as a 'reward'. However, there were moments when I used food as a form of comfort, and I realised that my demand for 'unhealthy choices' (as characterized by the children) increased while my exercise routine decreased during the write-up period and Covid-19 situation; and this despite my knowing the benefits of both a healthy diet and exercise on well-being.

All children made references to the nutritional knowledge they gained as a result of their participation in the intervention programme. Their narratives revealed that using this information helped them to make modifications to their diet and lifestyle and had a positive impact on their psychosocial health. I was amazed by how much the children who took part in this research understood or knew about the benefits of eating healthy food, limiting their daily consumption, and supporting their healthy diet with exercise. As an adult, I could understand how tough it was to constantly monitor what you ate and restrict certain foods, as the children highlighted in Chapter Six. Dieting, in my experience, was (and still is) stressful, and it is easy to get into the trap of feeling guilty about eating unhealthy foods and pampering yourself as a reward.

The children's narratives also demonstrated that the intervention programme was more than a place where they could learn how to make healthy choices but was also about receiving support without being judged. I investigated plenty of articles about how to work with children while designing this study. The fundamental idea was to establish trust and safe ground to receive a better outcome. I have once again experienced how important trusting ties were to them by observing and interviewing them. Significantly, according to children's accounts, SHINE provided a place for them to feel trusted, equal, safe and supported, all of which are the catalyst for change.

Acknowledging the psychological challenges of obesity, and the difficulty of adhering to the obesity intervention programme, I believe that observing and hearing children's experiences about their daily challenges and concerns (which was emotionally demanding) helped prepare me to become even more sensitive toward children. This is especially important in Turkey, as Turkey lacks intervention programmes, such as the SHINE, from which children may benefit. I have also become more interested in learning more about children's wider childhood experiences. I am keen to understand their health-related behaviours and learn more about childhood studies in general and the context of children's rights which I believe this has significant implications for child health and social care policy and practise around the world.

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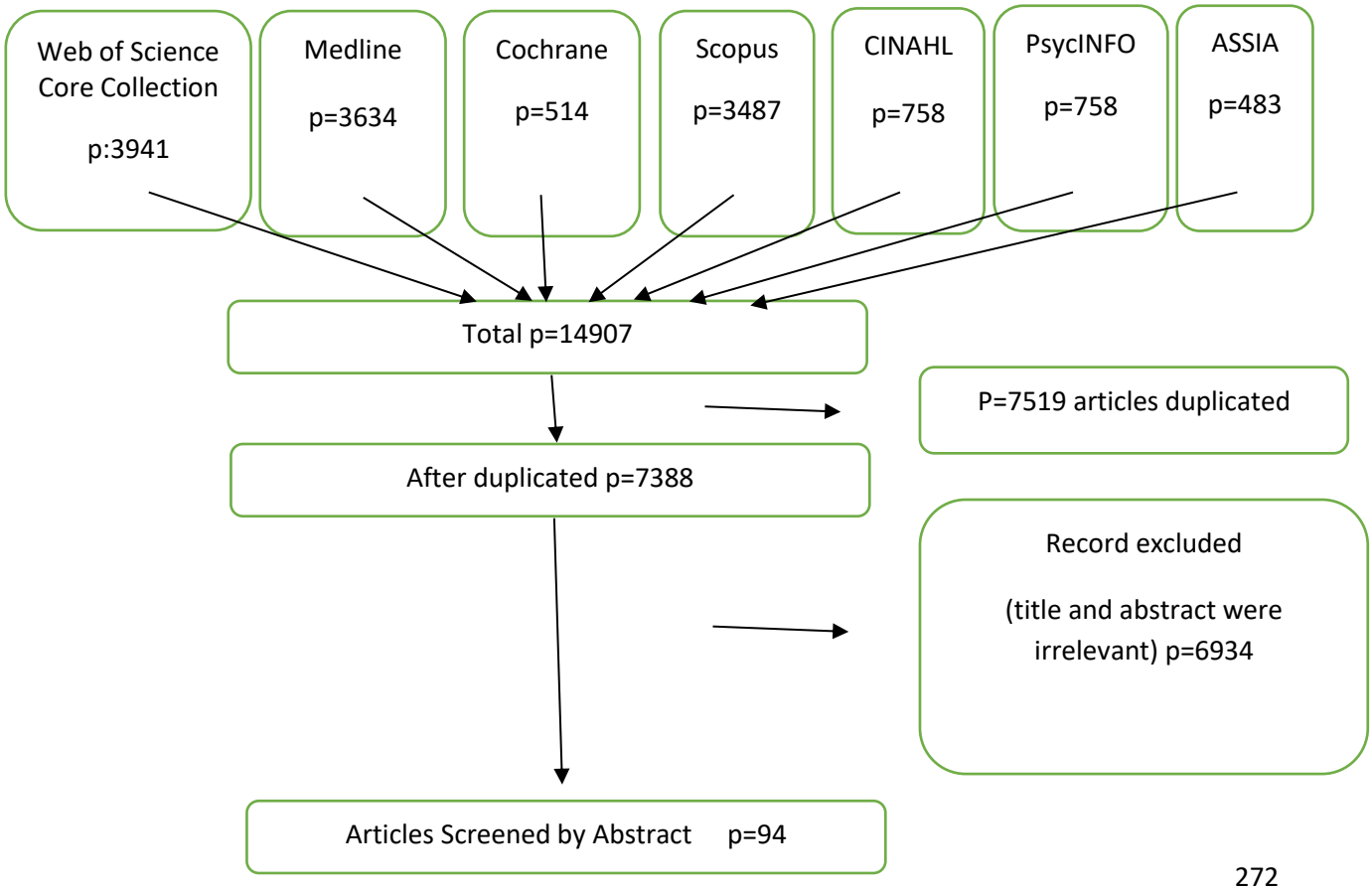
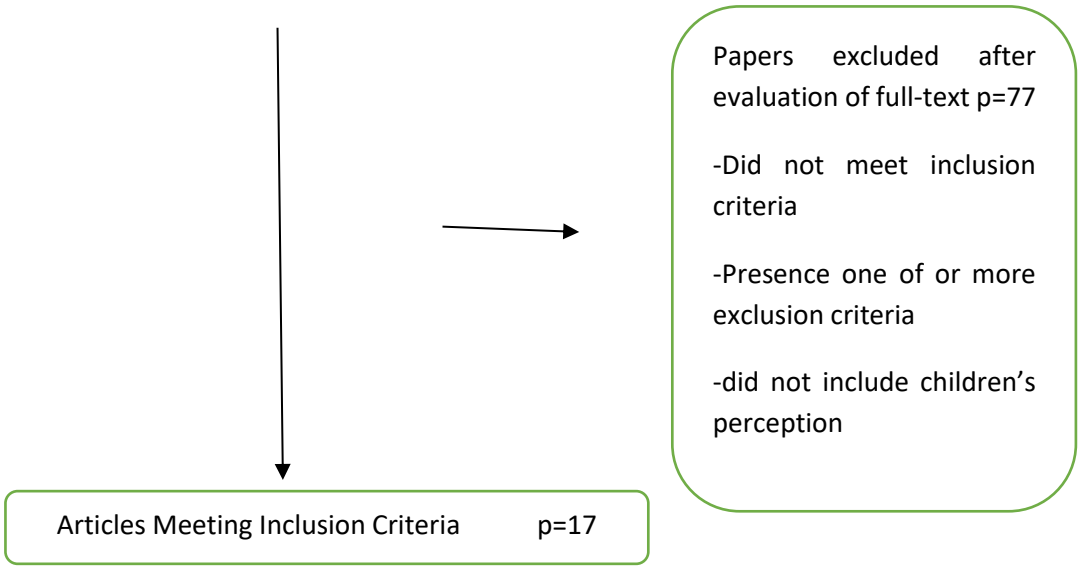
Appendices:

Appendix A- The perspective of children about being obese; Flowchart of study selection process




Papers excluded after evaluation of full-text p=77
-Did not meet inclusion criteria
-Presence one of or more exclusion criteria
-did not include children's perception
Articles Meeting Inclusion Criteria p=17

Appendix B- The perspective of children about being obese; The table of eligible literature review studies

	Study/aouther(s) name and Country	**Aim**	**Study Design**	**Key Findings (outcomes)**
1	Qualitative studies among obese children and adolescents: A systematic review of the literature (Lachal et al., 2013) **Settings: France**	To obtain a coherent view of children and adolescent obesity, focused on clinical and personal experience.	**Design:** Systematic review/the meta-synthesis of 45 qualitative studies **Sampling**: N/A **Sample:** Included studies deal directly the problem of obesity in children and adolescents from various perspectives: those of obese children and adolescents, of parents, and family supportive health practioners. **Data Collection:** Paper-based **Data analysis:** Thematic analysis	-They (from children's and adolescents', parents as well as HCPs' perspective) have a difficulty to define or perceive obesity -Children made sense of their condition external cause, social exclusion by peers -Physical activity accepted by children easily but dietary adaptation takes time. Knowledge gaps highlighted: How do children understand they are obese or overweight?
2	'I just don't want to get bullied anymore, then I can lead a normal life', Insights	To explore the adolescent experience of living with obesity and their	**Design**: Qualitative study **Sampling**: Purposive sampling **Sample**: 12 participants (age 11-16 years, 4 male 8 female)	- Children described negative and difficult emotions associated with being overweight and obese, such as self-esteem, feeling ashamed or stigmatized by peers, bullying

	into life as an obese adolescent and their views on obesity treatment (Reece, Bissell, & Copeland, 2016) **Setting**: UK	engagement with obesity treatments	**Data collection**: Semi-structured interview **Data Analysis**: Framework analysis	- Children find challenging maintaining changes -Children find supportive the facilitators and peers in the programme Knowledge gaps highlighted: After intervention programme is there any changes how they feel about themselves? Personal improvement Knowledge gaps highlighted: After intervention programme is there any changes how they feel about themselves? Personal improvement?
3	Young teenagers' perceptions of their own and others' bodies: A qualitative study of obese, overweight and 'normal' weight young people in Scotland	-To explore the embodied perceptions of obese, overweight and 'normal' weight young teenagers, within the socio-cultural contexts in which these young teenagers live their	**Design:** A Qualitative Study **Sampling:** From three school **Sample:** 36 young people aged 13-14 (18 girls, 18 boys) with 18 participants 'normal' weight and 18 overweight with BMI>25 or obese with BMI>30 **Data Collection:** A socio-demographic information -semi-structured interviews	-Conceptualisations of fatness and body size such as using words "chubby" or "heavy" -Perceived influences on body shape and size, -The consequences of being fat, (get exposed to bullying, making them physically slow, clothing) -Experiencing of losing weight (happiness, excitement, feeling motivated) -Friends, family and fatness (not supportive)

	(Wills et al., 2006) **Settings: Scotland, UK**	everyday lives, also whether, and how, weight and body size infiltrate other areas of teenagers' everyday lives; how these issues are experienced and perceived; and whether medical definitions of fatness are reflected in young peoples' discursive concerns	**Time:** Between February 2003 and January 2004 **Analysis:** Thematic analysing	
4	The experiences of young people with obesity in secondary school: Some implications for the healthy school agenda	To explore the experiences of young people with obesity within the secondary school environment in relation to areas of concern prioritised	**Design:** A Qualitative Study **Sampling:** A purposive sampling **Sample:** 18 children and young people, between the ages of 10 and 17. **Data Collection:** Focus group and individual interview	-School-based physical exercise (PE clothing, being exposed to bullying, avoiding PE, experiencing gazing) -Healthy eating (healthy eating perceived to be different from their peers)

	(Curtis, 2008) **Settings: South Yorkshire, the UK**	by the National Healthy School Programme (HSP)	**Time:** 2005 **Analysis:** Thematic Analysis	-Emotional well-being and bullying (children's emotional well-being was affected by their experience of being obese) Knowledge gap: Bullied children's help seeking behaviours in school settings?
5	Weight, exercise, and health children's perception (Snethen & Broome, 2007) **Settings: the USA**	To identify obese children's perspective of their weight, exercise, and health status	**Design:** A phenomenological approach **Sampling:** Not mentioned **Sample:** 17 children aged 8-12 years, with BMI≥95 for age and gender **Data Collection:** Semi structured interviews **Time:** Not mentioned **Analysing:** Thematic Analysis	-Intellectual disconnect: Children correctly identified healthy and unhealthy behaviours: dietary intake and physical activity. Children's knowledge about healthy dietary intake and physical activities disconnected from actual health practices. -Body Image Incongruence: Children are under perception of their actual BMI. -Social Importance: Social factors were reported by the participants to be important in relation to weight, exercise, and health. -Exercise Comprehension: Children demonstrated confusion about physical activity requirements: frequency, intensity, and duration.
6	The psychosocial burden of childhood	to investigate the course of	**Design:** Longitudinal study **Sampling:** Purposive Sampling	- Overweight and obese children reported greater psychosocial distress than healthy weight children,

	overweight and obesity: evidence for persisting difficulties in boys and girls (Gibson et al., 2017) **Setting: Germany**	psychosocial difficulties over a 2-year period for children who were overweight or obese at baseline, and a sample of children who were a healthy weight at baseline.	**Sample:** 212 healthy weight (girls; n=61, boys; n=53), overweight and overweight /obese children (girls n=48, boys n=50) aged between 6 and 13 years at baseline, together with their parent/s. **Data Collection**: Anthropometry, The Children's Depression Inventory, The Self-Perception Profile for Children, Child quality oflife (PedsQL), Bullying Questionnaire for children, Students' Life Satisfaction Scale, The Child Eating Disorder Examination (interview), The Children's Body Image Scale **Time:** Jan 2004-Aug.2008 **Analysing:** Statistical analyses	and these differences were more pronounced for girls than boys. Weight and psychosocial impairment showed stability from baseline to 2-year follow-up.
7	The adolescent female's lived	To explore the lived experience of the obese adolescent	**Design:** Qualitative an Existentialist Phenomenological Approach	-Seven themes; the internal and external messages perceived including, false assumptions, the myth of perfection, nonculpable diversity, nobody's perfect,

	experience of obesity (Randall-Arell & Utley, 2014) **Setting: Missouri, the USA**	female and understand the impact of the messages received; about obesity and body image from society, media, school, family, and peers.	**Sampling:** Network sampling via snowball sampling **Sample:** 8 adolescent girls, aged 11-18 years, BMI≥30 **Data Collection:** face-to-face and semi-structured interview **Time:** Not mentioned **Analysing:** Eidetic reduction	beauty is not skin deep, disengagement, and society's misplaced focus. **-external message**: regarding body image, appearance, and moral responsibility. **-false assumptions: (a)** they were perceived laziness, excessive and unhealthy eating habits (personality not based on weight) **(b)**being lack of intelligence from other persons' view **-myth of perfection**: from media through the portrayal of universally thin, positive characters in tv etc Internet **-Internal perception:** **Beauty is not skin deep:** The idea of beauty cannot be limited to a socially determined physical ideal **Society's misplaced focus**: Most expressed it in terms of society's focusing on a condition upon which they, themselves, did not focus. **-Internal Resolution:** nobody's perfect, nonculpable diversity **(**no fault of their own.),

				Disengagement: the messages received by depersonalizing them.
8	An exploration of young women's experiences of living with excess weight (Holland, Dallos, & Olver, 2012) **Setting: South West of England**	to explore the nature of the experiences of young women who have excess weight	**Design:** A qualitative study - The Interpretative Phenomenological Analysis (IPA) **Sampling:** Purposive sampling **Sample:** Eight young women, aged 13 to 16 years, BMI varied from 29.1 to 45.9 **Data Collection:** A semi-structured interview, the Beck Youth Depression and Anxiety Inventories (BYI), the child attachment interview (CAI) **Time:** Not mentioned **Analysis:** the IPA and the CAI analyses	-Four overarching group themes derived from the analysis; emotional regulation, focus on family relationships, lack of control and a sense of self. -**Emotional Regulation:** All participants described whether in the past or in the present, turning to food for comfort and using food to manage emotions such as boredom, loneliness, and depression. -**Focus on family relationships:** A number of participants described difficulties in family relationships, either conflict or the absence of a significant caring figure, blame. -**Lack of control:** Many of the participants described having no internal hunger control and it being a constant struggle to manage weight gain. -**Sense of self:** For many of the participants their identity had become about being overweight, due to living with excess weight for a large part of their lives and the way they felt about themselves seemed to be closely connected to their size.

9	The social and emotional lives of overweight, obese, and severely obese children (Harrist et al., 2016) **Setting: The US**	To explore both peer group dynamics and child intrapersonal characteristics (negative affectivity) in a community sample using data collected from	**Design:** A Longitudinal Study **Sampling:** 20 elementary schools in north central Oklahoma **Sample:**1164 Children were 49% male and 51% female with a mean age of 6.88 years (severely obese, n = 67; obese, n = 125; overweight, n = 204; and non-overweight, n = 768. **Data Collection:** Anthropometric assessment Loneliness and Social Dissatisfaction Questionnaire (LSDQ) Weight-related teasing subscale of the Perception of Peer Teasing Survey Pictorial Scale of Perceived Competence and Social Acceptance Sociometric nominations (for peers) Perceived peer status (for teacher)	-<u>Interpersonal social experience:</u> -There was a meaningful difference between children with obesity and children with normal weight -There were no differences between overweight and obese groups on the set of dependent variables. -normal-weight and obese groups were significantly different on the set of dependent variables while controlling for ethnicity and sex. -Normal-weight children's scores indicated more positive interpersonal experiences than severely obese children. -Severely obese children fared worse than overweight children in each of these interpersonal areas. -Severely obese children had greater perceptions of peer teasing, higher ratings of peer acceptance, and poorer ratings on every teacher measure: liking, disliking, picked on or teased, and withdrawal -<u>Sociometric Analysis:</u> children's sociometric status was not independent of weight classification. -Children with severe obesity were significantly more likely to experience rejection from their peers

			Behaviour Assessment System for Children, 2nd ed. (teacher) Modified Child Depression Inventory (Child)	compared to other weight groups and also were significantly less likely to be popular -<u>Intrapersonal Characteristics:</u> -Normal-weight children were not different on the set of dependent variables from overweight or obese children. - severely obese children had higher teacher-rated depression -The source of this effect was due to a significant difference on teacher rated somatization, with obese children having higher scores. -Both teacher-rated measures were significantly different between these groups with severely obese children having higher scores on teacher-rated somatization and teacher-rated depression
10	Perception of overweight and obesity among Portuguese adolescents: an	to: (i) examine BMI perception in a large population-based sample of adolescent girls and boys; (ii) analyse differences	**Design:** A cross-sectional Study **Sampling:** Randomly selected from the national public school **Sample:** 5697 adolescents aged 11-16 (obese; n=89, overweight; n=822, non-overweight n=4875)	-There was a significant difference in physical activity between obese and non-obese youth -Girls reported dieting more than boys, with 15.3% of overweight teens dieting versus 6% of non-overweight teens.

	overview of associated factors (Fonseca & De Matos, 2005) **Settings:** Portugal	between demographic variables such as gender and sex, and some psychosocial variables among non-overweight, overweight and obese adolescents; (iii) explore some key associations of perceived body image among these adolescents; and (iv) consider implications for both prevention and intervention.	**Data Collection:** Questionnaire and perceived body image (using a tool with a sequence of seven body silhouettes progressing **Time:** Not mentioned **Analysing:** Separate analyses of psychosocial variables were conducted by gender, using the x2-test, t-tests, ANOVA and multiple linear regression	-Those classified as overweight were significantly more likely to describe themselves as not healthy. -A significantly greater proportion of obese/overweight versus non-overweight youth reported difficulty in making friends. -BMI, age, involvement in dieting and attitude toward appearance were significantly associated with body image.
11	The impact of weight-related victimization on peer relationships: the	To examine the relationship between obesity and victimization, and	**Design:** A qualitative phenomology study **Sampling:** Purposive sampling	-Weight-related victimization experiences were common and their impact on peer relationships was complex.

	female adolescent perspective (Griffiths & Page, 2008) **Setting: The UK**	the impact this has on peer relationships.	**Sample:** 5 (young female people aged 12–18 years), with BMI≥95th percentile **Data Collection:** in multiple, semi-structured, in-depth interviews. **Time:** not mentioned **Analysing:** Interpretive phenomological analysis	-Low self-confidence, isolation, and peer anxiety was all identified as resulting from victimization and were all barriers to developing peer relationships. -Participants sought protection from victimization by seeking the "ideal" non-judgmental empathetic best friend(s) and supportive family members to shield them from negative experiences. -However, there was also evidence that, while they were guarded with their own feelings, the experience of victimization increased empathy in these obese female adolescents.
12	Participation in play activities: A single-case study focusing on a child with obesity experiences (Skär & Prellwitz, 2008) **Setting: Sweden**	To describe how a child with obesity perceived participation in play activities.	**Design:** A Qualitative Single Case Study **Sampling:** Purposive Sampling **Sample:** A 9-years-old boy with obesity, no other medical diagnosis, and having regular consultations with a dietician, His Mother and Teacher **Data Collection:** Semi-structured interview, observations, field notes	-A wish for participation in play activities; most of time he felt left out, -The importance of knowing social rules in play activities, the boy's experience came from different perceived problems such as lack of friends to play with, his inability to know how to perform in different play activities, and lack of proper support and encouragement from adults. -The meaning of support and encouragement, how he supported to participate in a play

			and self-report assessment instrument called 'kid play profile' **Time: N**ot mentioned **Analysing:** Qualitative content analysis	
13	African American adolescent males living with obesity (Ashcraft, 2013) **Setting: The US**	(1) how do obese African American male adolescents perceive themselves? (2) what does being obese mean to the African American male adolescent?	**Design:** Qualitative Study; Hermeneutic Phenomological Design **Sampling:** Not mentioned **Sample:** 13 males aged 13-17 years with BMI>95th **Data Collection**: In-depth semi-structured interviews **Time:** Feb 2009-10 **Analysing**: Inductive content analaysis	Four main themes were discovered. The main themes were as follows: (1) It Don't Mean Nuthin'; Statements such as these provide evidence to support the claim that adolescents who participated in this study have a limited understanding of their obesity (2) It's Just Me, Who I Am; When asked, "How do you think others view you?", some participants' expressed more positive comments, which indicate self-perception was based on their perceived social acceptance rather than on recognition of the reality and severity of their problem. (3) Something Bad Might Happen; When asked, "What does being OW mean to you?", rather than focusing on the immediate health risks associated with their obesity such as high cholesterol, high blood

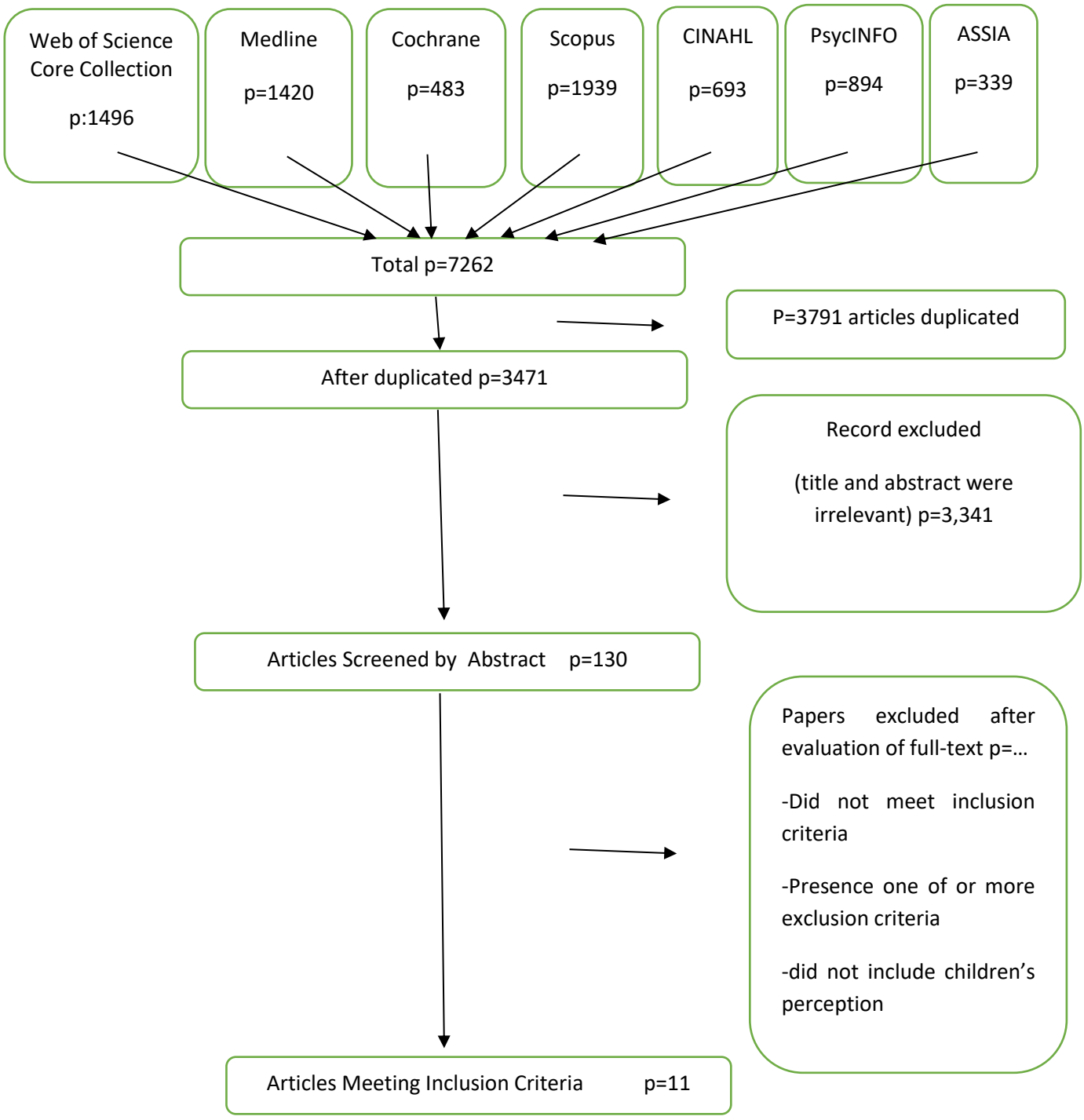
				pressure, stigmatization, and poor self-esteem (CDC, 2011b), adolescents focused on other, what they perceived as more serious, medical problems (4) I'm Confused and I Feel Bad: Again, when asked "What does being OW mean to you?", some participants expressed comments that suggested confusion or negative associations related to their obesity. -Study done with only male participants
14	A focus group study of African American obese children in Mississippi (Davis & Davis, 2008) **Setting: The USA**	To provide a framework for conducting focus group studies and to inform the experience of overweight children.	**Design:** A qualitative Study **Sampling:** Purposive network Sampling **Sample:** 17 children aged 8-11 with BMI>95 **Data Collection**: Focus group interview **Time:** not mentioned **Analysing**: The constant comparative method	-All children want to be weighted less -they have a good relationship with peers and families -Their favourite foods based on processed food -Children's favourite daily activities are described as watching TV -They aware what healthy food includes

15	Obese and overweight youths: risk for experiencing bullying victimization and internalizing symptoms (Waasdorp, Mehari, & Bradshaw, 2018) **Setting: The USA**	(1) obese and overweight youth would be more likely to be victimized compared with normal-weight youth (2) To explored whether obese and overweight youth were at an increased risk of experiencing relational, verbal, physical, or cyber victimization and also to examine whether the relation between weight status and victimization varied by gender	**Design:** Quantitative Cross-sectional study **Sampling:** Purposive sampling from the Maryland Safe and Supportive Schools (MDS3) Project **Sample:** N total 43,282; N: 21.2% of 26,494 high school youths were obese and 22.4% were overweight, among (n=) 7.5% of 16,749 middle school youths were obese and 10.4% of that were overweight, rest of population were normal or underweight. **Data Collection:** Youth demographic characteristics, Exposure to bullying, Forms of bullying, weight status, Internalizing symptoms (Youth Self-Report) School-level covariates	-Females were significantly more likely than males to experience all forms except physical victimization. -Multilevel results suggested that compared with normal weight youths, both overweight and obese youths were at an increased risk for experiencing relational, verbal, and cyber victimization, with only obese youths being at an increased risk for experiencing physical victimization. -Notably, the odds of experiencing cyber victimization were higher than the odds of experiencing other forms of victimization. -Frequently victimized obese youths, but not frequently victimized overweight youths, had significantly higher levels of internalizing symptoms compared to their frequently victimized, normal-weight peers. -These findings highlight the increased risk for psychosocial adjustment problems among frequently victimized overweight and obese youths, suggesting these youths may require preventive interventions tailored to meet their unique needs

		(3) hypothesize; the relation between victimization and internalizing symptoms would be stronger among obese and overweight youth compared to normal-weight youth.		
16	Adolescents' perspectives on everyday life with obesity: a qualitative study (Oen et al., 2018) **Setting: Norway**	To gain an in-depth understanding of the perspectives and life experiences of adolescents living with obesity	**Design:** A qualitative study **Sampling:** A purposive sampling **Sample:** Obese Adolescent (>30-isoBMI) 12-15 years old (5 girls, 1boy). **Data Collection:** Individual in-depth semi-structured interviews. After 5 to 8 weeks, a second interview was conducted to ensure the meaning of nuances	-Obesity as a multi-faceted and "difficult-to-solve condition" Adolescents' perspectives on causes of obesity Challenges in changing behaviour -Bullying and fragile social relationships The important but deceitful friends The family as the primary source of support -Obesity as a shameful and sensitive issue An urge for secrecy The ambiguity of asking for help The complex health-care encounters

			Data collection time: Nov 2013-February 2014 **Analysis:** Qualitative content analysis	
17	Growing as a human being - obese adolescents' experiences of the changing body (Andersson, Shadloo, & Rudolfsson, 2016) **Setting**: Sweden	To describe how obese adolescents experience themselves and their body, and how their views changed as a result of participation in a weight loss program	**Design**: An inductive and qualitative design **Sampling**: Purposive sampling **Sample:** 5 female adolescents (aged 12-18 years with BMI≥30) **Data collection:** Semi-structured interview **Data collection time:** not mentioned **Data Analysis:** Qualitative content analysis	-Participant did not see them different from others and they were too young to think about weight or seeing it is a problematic. -Becoming aware of the appearance of one's body: shame about the appearance; dissatisfied with their bodies, wish to be slimmer, clothing issues, being teased and bullied (shattered self-confidence), not to be accepted by peers, being ashamed of one's body, low self -confidence. -Gaining the desire to invest in weight loss; By participating in a treatment program for weight loss, they felt free and were inspired by others who had gone through the same process -Maintaining new habits in everyday life; how in their pursuit of weight loss the participants began to listen to and take advice, as well as help from family members about how to maintain new habits.

Appendix C- The perspective of children participating in an obesity intervention programme; Flowchart of selection process



Appendix D- The perspective of children participating in an obesity intervention programme; The table of eligible literature review studies

	Study/author(s) name and Country	**Aim**	**Intervention Programme Information**	**Study Design**	**Key Findings (outcomes)**
1	Obese young people's accounts of intervention impact (Hester, McKenna, & Gately, 2010) **Setting**: UK	To uncover detailed qualitative accounts of experiences of implementing healthy lifestyle changes following an intensive stay at residential weight-loss camp	Carnegie International Camp is an 8-week residential programme that helps children to understands their current situation, encourages them to engage in active session and achieve their health goals by helping them to set realistic goals Therefore, it includes dietary regulation, physical activity and behavioural	**Design**: Qualitative case study **Sampling**: Purposive **Sample**: Five obese participants (three male two female) aged 14-16 **Data collection**: Semi structured interview **Data collection time:** First interview end-of-residential week, second interview repeated after 3 months, third interview repeated after 9 months.	-Camping has been associated with positive impacts on children (weight loss, learning skill, physical activity, healthy eating, making friends), however, it is difficult to maintain what they learned at camp back home. -Camping affects continue at home life, however, sometimes they lose autonomy, competence and relatedness. -it is difficult to maintain life without thinking maintaining healthy eating

			modification and healthy lifestyle education.	**Data Analysis**: Inductive analysis	-being exposed to stigma suh as being seen as fat even they have lost weight -Mostly focused on maintenance problem after camp live. Knowledge gaps highlighted: What about psycho-social improvement?
2	The Children's Health and Activity Modification Program (C.H.A.M.P.): Participants' perspectives of a four-week lifestyle intervention for children with obesity (Pearson, Irwin, & Burke, 2012)	To explore the experiences of children who participated in the Children's Health and Activity Modification Program (C.H.A.M.P.).	C.H.A.M.P is a four-week day camp lifestyle intervention programme for obese children aged 8-14 with BMI≥95th percentile and their families. The camp included daily group-based physical activity, education sessions (nutrition, physical activity, and self-esteem).	**Design**: Qualitative Study **Sampling**: Purposive sampling **Sample**: Thirty-one different children aged 8-14 years with BMI≥95th; (cohort 1; n:12) and 2009 (cohort 2; n:24) **Data collection:** Six focus groups	-physical activity gets easier by the time and it perceived as an accomplishment, fun and distraction, -enjoyed making and preparing different meal, increased children's awareness about nutrition, -increased self-efficacy, self-esteem, self-awareness, self-autonomy/empowerment.

	Setting: Canada			**Data collection Time**: September in 2008 and in 2009. **Data Analysis:** Inductive content analysis	-counsellor had impact on providing support and encouragement. -The importance of facilitators such as easy to communicate -The importance of intervention programme is that children felt a sense of comfort and security. Knowledge gaps highlighted: What was the participants expectation from the programme at first place? How it is reflected their daily life?
3	Growing as a human being - obese adolescents' experiences of the changing body	To describe how obese adolescents experience themselves and their body, and how their views changed as a result of participation in a weight loss program	A weight loss programme guides children aged 12-18 with BMI>30 or more to achieve changes in their lifestyle, such as food, calorie intake, and	**Design**: An inductive and qualitative design **Sampling**: Purposive sampling **Sample:** 5 female adolescent aged 12-18 years with BMI≥30	-Participant did not see them different from others and they were too young to think about weight or seeing it is a problematic. -Becoming aware of the appearance of one's body: shame

	(Andersson, Shadloo, & Rudolfsson, 2016) **Setting**: Sweden		exercise and also includes motivating discussion about information and guidance. These periods include the simultaneous follow-up of team professionals, such as a nurse, a dietician, a psychologist, a physiotherapist, and the adolescents' custodian.	**Data collection:** Semi-structured interview **Data collection time:** not mentioned **Data Analysis :** Qualitative content analysis	about the appearance; dissatisfied with their bodies, wish to be slimmer, clothing issues, being teased and bullied (shattered self-confidence), not to be accepted by peers, being ashamed of one's body, low self - confidence. -Gaining the desire to invest in weight loss; By participating in a treatment program for weight loss, they felt free and were inspired by others who had gone through the same process -Maintaining new habits in everyday life; how in their pursuit of weight loss the participants began to listen to and take advice, as well as help from family members about how to maintain new habits.

4	'What's the point when you only lose a pound?' Reasons for attrition from a multi-component childhood obesity treatment intervention: a qualitative inquiry (Staniford, Copeland, & Breckon, 2019) **Setting**: UK	To explore parents and children's views towards attrition from MCTIs with a view to understanding how best to reduce the likelihood of participants dropping out of treatment using qualitative enquiry	GOALS is a family-based childhood obesity treatment intervention programme. It aims children aged 14-16 with BMI≥98th percentile and their families. It includes family fun based physical activity, weekly target setting based on practical improvements, dietary/nutritional education, psychological/motivational theme sessions.	**Design**: Qualitative study **Sampling**: Purposive sampling **Sample**: 10 children (three males and seven females) aged 7-14 with BMI SD=1.8 as classified obese and ten parents of the same children **Data collection**: Semi-structured interview **Data Analysis**: The framework analysis	-Psychological and motivational factors: Children and their parents were unable to commit to the programme and felt quilt and embarrassment not to take responsibility -Both children and families feared to change their dietary habits. -Both sides (children and family) blamed each other for being unsuccessful. -Children find healthy eating boring -Children could not bond with the other participants in the programme. -Children express that their home environment was unsupportive.

5	African American adolescent-caregiver relationships in a weight loss trial (Campbell-Voytal et al., 2018) **Setting**: US	to (1) describe the perspectives of African American adolescents and caregivers on participating in an evidence-based weight loss trial; (2) explore experiential differences of adolescents- caregivers' dyads who achieved adolescent weight loss compared to those who did not.	(FIT) for Weight Loss programme is the 6-month programme that focuses on motivational improvements and cognitive behavioural changes such as diet, physical activity and self-monitoring, personal goal setting, environmental management.	**Design**: Qualitative study **Sampling**: Purposive sampling **Sample:** 136 American adolescent aged 12-16 with BMI≥95th and their 136 caregivers **Data collection:** Semi-structured interview **Data Analysis**: Content and thematic analysis	-Adolescent and their caregiver worked together actively -Adolescents are positively affected by their caregiver such as reminding, encouraging, changing diet and physical activity -Adolescent had difficulty to adapt what they learned from the intervention programme. -Adolescent and their caregivers also experience conflict, frustration and resistance against each other.
6	'I just don't want to get bullied anymore, then I can lead a normal life', Insights into life as an obese adolescent and their views on obesity treatment	To explore the adolescent experience of living with obesity and their engagement with obesity treatments	A community-based weight management programme which recruit only children who are clinically overweight with BMI>91st percentile.	**Design**: Qualitative study **Sampling**: Purposive sampling **Sample**: 12 participants (age 11-16 years, 4 males 8 females)	-Children described negative and difficult emotions associated with being overweight and obese, such as self-esteem, feeling ashamed or stigmatized by peers, bullying.

	(Reece, Bissell, & Copeland, 2016) **Setting**: UK		The programme sessions include healthy eating advice, behavioural change, physical activity.	**Data collection**: Semi-structured interview **Data Analysis**: Framework analysis	-Children find challenging maintaining changes- -Children find supportive the facilitators and peers in the programme Knowledge gaps highlighted: After intervention programme is there any changes how they feel about themselves? Personal improvement?
7	Kids just wanna have fun: Children's experiences of a weight management programme (Watson, Baker, & Chadwick, 2016) **Setting**: UK	To explore children's accounts of their experiences of the UK 's largest childhood obesity programme, MEND (Mind, Exercise, Nutrition...Do it!)	The MEND is a multicomponent community-based family-oriented childhood obesity intervention programme. MEND targets obese and overweight children aged 7-13. It is twelve weeks programme	**Design**: Qualitative Study; Interpretative Phenomenological Analysis **Sampling**: **Sample**: 14 children (eight males, six females, aged 11-14) **Data collection**: Semi-structured interview	-Children had fun by participating programme -Children perceived their families and peers (in the programme) to be encouraging and supportive. -Children acknowledged they learned new things; nutrition, healthy eating etc. Limitations: This article did not explain the last two themes, only

			includes two sessions per week. Sessions include nutritional and physical education that centres on behavioural modification (control of stimulus, environmental restructure, management of contingency) as well as constructive parenting strategies that benefit the family	**Data Analysis**: Interpretative Phenomenological Analysis	interpreted the most striking themes: fun.
8	Perspectives of obese children and their parents on lifestyle behaviour change: a qualitative study (Schalkwijk et al., 2015)	i) to explore the expectations of obese children and their parents in relation to lifestyle interventions. ii) to identify barriers to making lifestyle changes that parents and	three different intervention programme that are youth health care, primary health centre and paediatrics. All three programmes based on family-oriented lifestyle	**Design**: Qualitative study **Sampling**: Sample nomination letter (Primary health centre N:7, youth health care N:7, paediatric N:4)	-Expectations; losing weight by being physically active and learning about healthy food and stop bullying -Families are inconsistent about rules

	Setting: Netherlands	children face within their social context (within the family, at school and amongst friends and peers) as well as the things that facilitate these changes and iii) to identify the needs of obese children and their parents in the context of a lifestyle intervention	behaviour change including dieting, physical activity. Families are also actively involved role during children's consultation or separate parent session.	**Sample**: 18 children who are obese/overweight (10 females, 8 males, aged 8-15) and 24 parents (17 mothers, 7 fathers) **Data collection**: Semi-structured interview **Data Analysis**: Thematic analysis **Data collection time:** Between January and May 2010	-Children feel more equal to other participants in the intervention programme -Children want to learn from their GP about the implications of being obese or overweight from in a nice manner. Limitation: Mostly parents were given voice
9	Adolescents' perceptions of obesity treatment – an interview study (Morinder et al., 2011) **Setting**: Sweden	To describe adolescents' perceptions of obesity treatment	A paediatric clinic that aimed to treat childhood obesity aged 3-18. It is multidisciplinary professional team consists of dieticians, health promoters, nurses, physicians,	**Design**: Qualitative Study; Phenomenographic research approach **Sampling**: Purposive sampling **Sample**: 18 obese adolescents (12 females,	-Children perceived of the intervention programme as adaptable, flexible, and adjustable to their personal needs, however some found the programme unrealistic. -Developed trust to facilitators

			physiotherapists and psychologist. The treatment includes diet, physical exercise, behavioural modification and motivational interviewing, summer camps, weight loss drugs and bariatric surgery. The **inclusion criteria** International Obesity Task Force to define childhood obesity BMI 25kg/m2 overweight BMI 30kg/m2 obese	6 males, aged 14–16 years, BMI;25–47.4 kg~m72) **Data collection**: Semi-structured interviews **Data Analysis**: Phenomenographic research approach **Data collection date:**	-obesity treatment described as safety, relief, acceptance and personal awareness -When programme focus on weight, children feel more ambivalence and uncertainty Knowledge gaps highlighted: What do children learn from the programme and how they imply their life?
10	Practical Lessons Learned from Adolescent and Parent	-To explore the shared experiences of adolescents with	CAFAP is a 8-week programme including two sessions per week.	**Design**: Qualitative mix method study	-After 8-week intervention post-programme; Children liked participating programme and

	Experiences Immediately and 12 Months Following a Family-Based Healthy Lifestyle Intervention (Howie et al., 2016) **Setting**: Australia	overweight or obesity and their parents during a community-based, healthy lifestyle intervention.	The programme focusses on self-determination and goal setting theory that includes healthy eating, physical activity, motivational behavioural changes and goal settings.	**Sampling**: Sample nomination newspaper, radio, health professionals, and distribution of flyers. **Sample:** 37 children aged 12-16 (n=34 with BMI≥95th percentile, n=3 with BMI≥85th percentile) and their parents (n=33) **Data collection**: the qualitative individual interviews and focus groups and with parents and teens and satisfaction survey. **Data Analysis**: Thematically analysed **Data collection time**: 2012	learning new skills such as portion size, cooking and reading food labels -After 12-months following post-programme; Children manage to maintain what they have learned from the programme, however it was difficult to resist junk food. Children experienced lack of support from their peers or could not do exercising on a regular basis as they used to do, sometimes they relapsed. -Families were considered as a source of support -They received main messages; being active, healthy eating (portion size, food labels) and reducing sedentary behaviours.

				-First data collection after 8-weeks intervention programme -Second collection after 12-months following completion of the programme	Satisfaction survey results: Teens' overall satisfaction was 4.2 (SD 0.8) immediately post-program and 4.0 (SD 0.5) 12 months post-program. -Parents' overall satisfaction was 4.0 (SD 0.9) immediately post-program and 4.1 (SD 0.4) 12 months post-program.
11	Do You Hear What I Hear? Overweight Children's Perceptions of Different Physical Activity Settings (Meaney, Hart, & Griffin, 2011) **Setting**: US	-To explore overweight children's perceptions of different physical activity settings. -To gain insight into the children's thoughts encompassing their participation in both the after school/summer program and their physical education classes at their	BACTIVE (pseudonym) is delivered after school and also summer programme. After school is a total of sixteen weeks programme (eight weeks in fall and eight weeks in spring) includes two session per week. Summer	**Design**: A case study research design; Social cognitive theory framework **Sampling**: Sample nomination letter **Sample:** 67 participants (female n=36, males n=31 a mean aged 10.2 with BMI≥85th percentile	-Expectations: to be fun, strict programme, heavily physical exercise based, and fears, anxiety and body size concern of joining the programme. -Children had fun joining the programme (doing different activities, doing different activities with peers, developing belonging) -Children felt more comfortable with other peers in the

		respective elementary schools	programme is three weeks. Both programmes focus on physical activity and healthy lifestyle changes such as nutrition and wellness education.	**Data collection**: Semi-structured interview **Data Analysis**: Content analysis **Data collection time**: not mentioned	programme, which motivate them more.

Appendix E-Interview Schedule 1

General questions;

- How are you today?
- Have you had a good day so far?
- Can you introduce yourself to the audio-recorder using your pretend name and tell me your age please?

Participants with diary and/or drawings;

Q.1. Tell me about what written in here?

Prompt: How did you feel on that day?

Prompt: Why did you choose this "…"entry?

Prompt: What makes you think that '…'?

Prompt: Can you tell me more about that?

Prompt: So, you are saying…?

Prompt: Why is that important to you?

Prompt: Have you always felt this way?

Q.1a. How did you feel when you did the drawing? (If they have any drawing)

Prompt: Tell me about your drawings in here.

Prompt: Can you explain your drawing what did you want to express ?

Prompt: I would like to hear from you what did you mean by drawing ….?

Participants without diary and/or drawings

Q.1. Could you describe a day at school / home?

Prompt: What do you like to do by your own?

Prompt: You said "…", I would like to hear from you what do you mean by "…"?

Prompt: What makes you think that "…"?

Prompt: Have you always felt this way?

Q.1a. How do you feel about yourself?

Prompt: Is there anything good about it?

Prompt: Is there any bad about it?

Prompt: What makes you feel in this way?

Prompt: So, are you saying?

Prompt: Have you always felt this way?

Prompt: How did you deal with this"…"?

Common Questions

Q.2. What do you enjoy doing?

Prompt: What makes you happy?

Q.3. If you were setting up a profile of yourself on social media, what would you like it to? (**Talk and Draw**)

Prompt: How would you describe yourself on social media?

Prompt: Can you draw that profile?

Prompt: Why would you describe yourself in that way?

Prompt: I would like to hear from what did you mean by drawing?

How I would like to describe myself in my social media profile?	Me

Q.4. How do you feel when you are describing yourself?

Prompt: So, are you saying?

Prompt: What do you think what makes you think "…"?

Q.5. Does your weight affect anything you do?

Prompt: Does it stop you from doing anything?

Prompt: Does it affect your friendships?

Prompt: Does it affect life at home?

Prompt: Does it affect life at school?

Prompt: Tell me about more …?

Q.6. Can you tell me about any experiences that you found stressful?

Prompt: Experiences with facilities, sports?

Prompt: Do you have any coping strategy to deal within this situation?

Prompt: Prompt: Would you like to share your coping strategy with me?

Q.7. What are you expecting/hoping from this programme?

Prompt: What kinds of hopes, emotions and feelings did you have?

Prompt: Do you find it exciting?

Thanks and questions.

Appendix F- Interview Schedule 2

General questions;

- How are you today?
- Have you had a good day so far?

Common Questions

Q.1. When did you start the Shine programme at first?

Prompt: Why did you first start with shine in the first place? / Any expectation?

Prompt: How was your feeling before the initial programme?

Prompt: What did you make of the initial programme? – What did you like/dislike about it?

Prompt: How did you feel about yourself at the end of the initial programme? /Was that different to when you started?

Q.2. What made you decide to carry on with the maintenance programme?

Prompt: How have you found the current programme? and Has it influenced how you feel about yourself?

Prompt: What did you like/dislike about it?

Prompt: How would you compare yourself from before the initial program and now/future?

Prompt: *Is there any differences? Could you draw these changes?* (***Talk and Draw)***

Before the programme	After programme

Prompt: What kind of thing you see as an improvement in yourself?

Prompt: Have you met your expectation so far?

Q.4. How would you describe this programme to someone who might be starting?

Prompt: What would you like to advise new beginner?

Q.5. Did you try any different programme like Shine Academy?

Prompt: Is there any differences between Shine and other programme?

Q.6. How did you find the Residential week? (***If s/he went on Residential week)***

Prompt: From your perspective, how did it go?

Prompt: What was your expectation? /Did you meet your expectation?

Prompt: Did it change the way you felt about yourself in any way?

Q.7. Thinking more broadly, outside of SHINE, have there need any changes since we last spoke in how you feel your weight affects anything you do?

Prompt: Does it affect your friendships?

Prompt: Does it affect life at home?

Prompt: Does it affect life at school?

Prompt: Tell me about more …?

Q.8. You said ".." . How did you manage to overcome within this situation

Participants with diary and/or drawings;

Q.9. Tell me about what written in here?

Prompt: How did you feel on that day?

Prompt: Why did you choose this "…"entry?

Prompt: What makes you think that '…'?

Prompt: Can you tell me more about that?

Prompt: Why is that important to you?

Prompt: Have you always felt this way?

Q.9a. How did you feel when you did the drawing? (If they have any drawing)

Prompt: Tell me about your drawings in here.

Prompt: Can you explain your drawing what did you want to express ?

Prompt: I would like to hear from you what did you mean by drawing ….?

Participants without diary and/or drawings

Q.9. Could you describe a day at school / home?

Prompt: What do you like to do on your own?

Prompt: You said "…", I would like to hear from you what do you mean by "…"?

Prompt: What makes you think that "…"?

Prompt: Have you always felt this way?

Q.9a. How do you feel about yourself?

Prompt: Is there anything good about it?

Prompt: Is there any bad about it?

Prompt: What makes you feel in this way?

Prompt: So, are you saying?

Prompt: Have you always felt this way?

Prompt: How did you deal with this"…"?

Thanks, and questions.

Appendix G- New Group Interview Schedules

General questions;

- How are you today?
- Have you had a good day so far?
- Can you introduce yourself to the audio-recorder using your pretend name and tell me your age please?

Participants with diary and/or drawings;

Q.1. Tell me about what written in here?

Prompt: How did you feel on that day?

Prompt: Why did you choose this "…"entry?

Prompt: What makes you think that '…'?

Prompt: Can you tell me more about that?

Prompt: So, you are saying…?

Prompt: Why is that important to you?

Prompt: Have you always felt this way?

Q.1a. How did you feel when you did the drawing? (If they have any drawing)

Prompt: Tell me about your drawings in here.

Prompt: Can you explain your drawing what did you want to express ?

Prompt: I would like to hear from you what did you mean by drawing ….?

Participants without diary and/or drawings

Q.1. Could you describe a day at school / home?

Prompt: What do you like to do on your own?

Prompt: You said "…", I would like to hear from you what do you mean by "…"?

Prompt: What makes you think that "…"?

Prompt: Have you always felt this way?

Q.1a. How do you feel about yourself?

Prompt: Is there anything good about it?

Prompt: Is there any bad about it?

Prompt: What makes you feel in this way?

Prompt: So, are you saying?

Prompt: Have you always felt this way?

Prompt: How did you deal with this"…"?

Common Questions

Q.2. What sorts of things do you enjoy doing?

Prompt: What makes you happy?

Q.3. How did you decide to join this programme in the first place?/Any expectation?

Prompt: How did you feel about yourself before attending this programme?-Now?

Prompt: What are you expecting/hoping from this programme?/ What kinds of hopes, emotions and feelings did you have?

Q.4. Could you explain me your experience of the current programme?

Prompt: How did you find it?- What did you liked/disliked about it?

Prompt: Has the programme met your expectation so far?

Prompt: Do you see any changes in yourself so far?

Prompt: How would you picture yourself at the beginning of this program and at the end of this programme? Do you want to see any differences?

Prompt: *Could you draw these changes?* (***Talk and Draw)***

Before the programme	After programme

Prompt: Have you met your expectation so far?

Q.5. How would you describe this programme to someone who might be starting?

Prompt: What would you like to advise new beginner?

Q.6. Did you try any different programme like Shine Academy?

Prompt: Is there any differences between Shine and other programme?

Q.7. How did you find Residential week? (***If s/he went on Residential week)***

Prompt: Could you tell me a lit bit more?

Prompt: From your perspective, how did it go?

Prompt: What was your expectation? /Did you meet your expectation?

Prompt: Do you feel any changes in yourself as a result of going on the residential week?

Q.8. If you were setting up a profile of yourself on social media, what would you like it to? (***Talk and Draw)***

Prompt: How would you describe yourself on social media?

Prompt: Can you draw that profile?

Prompt: Why would you describe yourself in that way?

How I would like to describe myself in my social media profile?	Me

Q.9. How do you feel when you are describing yourself?

Prompt: So, are you saying?

Prompt: What do you think what makes you think "…"?

Q.10. Do you feel that your weight affects anything you do?

Prompt: Does it stop you from doing anything?

Prompt: Does it affect your friendships?

Prompt: Does it affect life at home?

Prompt: Does it affect life at school?

Prompt: Tell me about more …?

Q.11. You said "……". How did you manage to overcome within this situation?

Prompt: Did you develop any coping strategy?

Q.12. In general, can you tell me about any experiences that you found stressful?

Prompt: Experiences with facilities, sports?

Prompt: Do you have any coping strategy to deal within this situation?

(**Thanks, and questions**)

Appendix H- Talk and Draw Session 1

How I would like to describe myself in my social media profile?	Me

Appendix I- Talk and Draw Session 2

Before	After

Appendix J- Disclosure Barring Service

Enhanced Certificate

Page 1 of 2

Disclosure & Barring Service

DBS Fee Charged

Certificate Number 001615770383

Date of Issue: 18 MAY 2018

Applicant Personal Details

Surname: CATALBAS

Forename(s): MELTEM

Other Names: NONE DECLARED

Date of Birth: 29 OCTOBER 1986

Place of Birth: KARASU TURKEY

Gender: FEMALE

Employment Details

Position applied for:
CHILD AND ADULT WORKFORCE HEALTHCARE STUDENT

Name of Employer:
UNIVERSITY OF SHEFFIELD - SCHOOL OF NURSING & MIDWIFERY

Countersignatory Details

Registered Person/Body:
GB GROUP PLC

Countersignatory:
JESSICA LEE

Police Records of Convictions, Cautions, Reprimands and Warnings

NONE RECORDED

Information from the list held under Section 142 of the Education Act 2002

NONE RECORDED

DBS Children's Barred List information

NONE RECORDED

DBS Adults' Barred List information

NONE RECORDED

Other relevant information disclosed at the Chief Police Officer(s) discretion

NONE RECORDED

Enhanced Certificate

This document is an Enhanced Criminal Record Certificate within the meaning of sections 113B and 116 of the Police Act 1997.

THIS CERTIFICATE IS NOT EVIDENCE OF IDENTITY

Continued on page 2

Appendix K- Ethical Approval

The University Of Sheffield.

Downloaded: 09/05/2019
Approved: 29/04/2019

Meltem Catalbas
Registration number: 170147255
School of Nursing and Midwifery
Programme: PhD

Dear Meltem

PROJECT TITLE: Being Obese: A Focused Ethnographic Study of Children Attending an Obesity Intervention Programme, and Their Experiences and Perspectives of Obesity
APPLICATION: Reference Number 024462

On behalf of the University ethics reviewers who reviewed your project, I am pleased to inform you that on 29/04/2019 the above-named project was **approved** on ethics grounds, on the basis that you will adhere to the following documentation that you submitted for ethics review:

- University research ethics application form 024462 (dated 18/04/2019).
- Participant information sheet 1057919 version 1 (13/03/2019).
- Participant information sheet 1057508 version 1 (06/03/2019).
- Participant information sheet 1057509 version 2 (18/04/2019).
- Participant information sheet 1057553 version 2 (18/04/2019).
- Participant information sheet 1057507 version 2 (18/04/2019).
- Participant consent form 1057536 version 2 (18/04/2019).
- Participant consent form 1057510 version 2 (18/04/2019).

If during the course of the project you need to deviate significantly from the above-approved documentation please inform me since written approval will be required.

Yours sincerely

Jane McKeown
Ethics Administrator
School of Nursing and Midwifery

Appendix L- Parent-Guardian (About My Child)

The University Of Sheffield.

About My Child (Parent/Guardian)

My child's name is: _____

I would describe my child's ethnicity as: _____

In order for you be able to contact me to arrange to talk to my child, my phone number is: _____

My first name (so that Meltem call me) is: _____

First part of my postcode (such as S11 or DN1):_____

Note: This form and the Parent/Guardian consent form should be returned to Meltem in the envelope provided.

Appendix M- Child Consent Sheet

The University Of Sheffield.

Child Consent Sheet

'What does it feel like to be you?'

Name of Researcher: Meltem Catalbas

Please <u>tick</u> each box to show that you understand

I understand that I will be recorded while I am talking to Meltem, but I will be told when this is happening. ☐

agree to things being written down about me and for Meltem Catalbas o study them and use them in her research. ☐

nderstand that my real name will not be used, and instead I can chose retend name so that nobody will know what I have said. ☐

understand what the project is about and have had chance to ask uestions about it. ☐

now that during the research, I am free to stop at any time, for any reason. ☐

gree to take part in the research. ☐

_____ _____

Your Name Date

_____ _____

Researcher's name Date

To be signed and dated in presence of the participant Copy to be given to child

Appendix N- Child Information Sheet

Child Information Sheet

'*What does it feel like to be you?*'

Thank you for looking at this information letter. In this letter, I will tell you who I am and what the project is about.

About me: My name is Meltem Catalbas and I am from Turkey. I am doing a research project at The University of Sheffield. This project is a part of my university course. I hope that I will learn things that will help me to support children when I go back to Turkey. I would be very grateful if you would agree to take part in my research.

Here are some questions you might have…

What is the project about?

I want to understand what it is like to be a child, like you, taking part in the SHINE programme. I am hoping to work with children aged between 8 and 15. I'm interested in your everyday lives, your feelings, what you like doing (e.g. different sports and activities) and who you like spending your time with. To do this, I want to talk with you and see the sorts of things you do at the SHINE Academy.

How can I help?

I would like to observe the activities that you take part in at SHINE and talk to you about them.

I also have some fun activities for you to do. I will give you a notebook where you can write things related to your feelings such as '*what has been the best thing that happened to you today at school/home/weekend day?*' and '*what has been the worst thing that happened to you today at school/home/weekend day?*', like a diary. You can keep a diary or write some words that describe how you feel (such as happy, excited, tired, sad, or unhappy) or you can do drawings in it. When we meet we will talk about your diary. If you are new to SHINE, we can talk individually or in a group of 2 or 3 children. You can choose who is in your group.

If you decide not to put anything in your diary, do not worry we can still have a conversation.

Why have I been chosen?

You have been asked to take part because you are aged between 8 and 15 years old and are attending the SHINE Academy.

Do I have to take part?

No, you do not have to take part in the project if you do not want to. That is ok. You will still be able to come along to the SHINE Academy. However, if you do take part, I would be very grateful and you would be able to teach me a lot. I hope you will find the project interesting and fun.

If you decide to take part, you can change your mind at any time without giving a reason and you can also choose not to do any parts you don't like. I do not mind this at all.

What will you do with what I say?

Your ideas are really important so what we talk about will be recorded but I will always tell you when I am doing this. I will make sure I delete the recordings after I have written them up. I will write about what you say for my project. I will not use your real name when I do this. When I talk to anyone about the project, I will use your pretend name so nobody will know you took part in the project.

What will happen when the project is finished?

Once the project is finished, I will write a report about it. This report will be about how you and other children feel about their weight and about taking part in SHINE. It will have things that you have said in it. It will also be published in a magazine called a journal or presented in a conference. However, your name will not appear in this report or anything else, so no one else will know you took part.

What do I do if I would like to take part?

If you decide to take part in the project, tell your parent or the person who looks after you. Both of you will have to fill in consent forms. Then I will meet with you at SHINE. I will ask you questions and encourage you to talk about how you feel about yourself. There are no right and wrong answers. I just want to find out how you feel and what your experiences have been. We will talk for about 45-60 minutes but we can stop whenever you want.

You can also ask me to stop the interview for a break anytime. You do not have to restart the interview after this break if you don't want to.

Things You Need to Know

The things we talk about will be recorded.

(I will ask your permission each time I am recording)

I will write down the things that we talk about and that I observe during the activ you do in the SHINE buildings and in the sports centres.

You are free to choose your pretend name so no one will know what you have said.

If you tell me anything that suggests you are at risk of harm,
I will have to talk to someone about it but I will always tell you before I do that.

You can always ask me quest

You can always stop at any point for any reason.

If you want to take part, you need to fill out the consent form, and ask a parent or guardian to fill out their consent form so that I have their permission too.

Please return both forms to me and KEEP THIS LETTER

Phone: 07474950048 (please leave a message If I cannot answer your call)

Email: mcatalbas1@sheffield.ac.uk

Post: Meltem Catalbas

The School of Nursing and Midwifery

The University of Sheffield

Barber House, Sheffield, SL10 2HQ

Appendix O-Parent/Guardians Consent Sheet

The University Of Sheffield.

Parent/Guardian Consent Form

Title of Research Project: Asking Children: What does it feel like to be you?

Name of Researcher: Meltem Catalbas

Please initial each box to show that you understand

1. I confirm that I have read and understand the information sheet explaining the above research project and I have discussed the research with my child and had the opportunity to ask questions about the project. ☐

2. I understand that my child's participation is voluntary and that they are free to withdraw at any time without giving a reason and without there being any negative consequences. In addition, should my child not wish to answer any particular question/s, they are free to decline. ☐

3. I understand that I can withdraw my consent for my child to participate at any time, without their being any negative consequences. ☐

4. I understand my personal phone number will not be revealed to people outside the project, and that Meltem will delete any records of this once we have arranged interview dates/times. ☐

5. I understand that my child will not be identifiable in any report arising from the project. ☐

6. I understand that the conversation between my child and Meltem will be recorded. ☐

7. I agree for the data collected from my child to be used in this research ☐

8. _____

Name of Child (participant)

_____ _____ _____

Name of Parent/Guardian **Date** **Signature giving consent**

_____ _____ _____

Lead Researcher Date Signature

To be signed and dated in presence of the participant
Copy to be given to parent/guardian.

Appendix P-Parents/Guardian Information Sheet

The University Of Sheffield.

Information Sheet For Parents/Guardians

Research Title: Asking Children: What does it feel like to be you?

Dear Parent/Guardian

I would like to invite your son/daughter to take part in my research study. Before you decide on whether to consent to your child's participation, it is important for you to understand the research being done and what it would involve for your child. Please read the information in this letter carefully, and discuss it with your child. Take time to make your decision, and feel free to contact me with any questions you may have. If you are then happy for your child to take part in this research project, you will need to sign and return the consent form that is attached to this letter.

What is the purpose of the research?

The aim of this study is to explore children's experiences of participating in an obesity intervention programme as well as to understand what it is like for them being overweight.

Why has my child been chosen?

The SHINE Academy manager, Kath Sharman has agreed to support this project. Your child has been asked to take part in the study because s/he is aged between 8 and 15 years old and is attending the SHINE Academy. Your child has also expressed an interest in taking part. If you agree, I will explain the research in detail to your child and seek their consent to participate.

What does the research involve?

I would like to observe your child taking part in SHINE activities both in the SHINE building and in the sports centres. I will also give your child a notebook; they are free to keep a diary or draw in this notebook. In the notebook, there will be some basic questions to encourage your child to think about their feelings and experiences, for example, '*what has been the best thing that happened to you today at school/home/weekend day?*' and '*what has been the worst*

thing that happened to you today at school/home/weekend day?'. Then your child and I will talk about their diary entries.

If your child does not want to keep a diary and does not want to write or draw anything in their notebooks, they do not have to. We can still have a discussion. This discussion will last about 45-60mins and I will ensure that children know that it is not a test, and there are no right and wrong answers; I just want to know how they feel and what they think. This discussion will be recorded by Dictaphone. Your child is free to use a pretend name, so no one else will be able to tell what your child has said or identify them in any way in the work that I write up.

When and where will the research take place?

The research project takes place during the SHINE programme. The interviews will take place in the SHINE building. The date and time of the interview will be set by calling you as a parent or carer on the phone. So that I can do this, I will ask you for a contact phone number.

The observation will take place in every activity that SHINE Academy plans such as in the SHINE building and in the sports centres.

Does my child have to take part?

They do not have to take part. Participation is completely voluntary. Your child will still be able to come along to the SHINE Academy whether they participate or not.

Are there any risks involved in taking part?

It is possible that children may find the weight-related conversation distressing. If your child becomes upset in the interview they will be asked if they want to stop the conversation, to take a break or to do the interview at another time.

If we decide to take part, what will my child and I have to do?

If your child decides to participate in the project and you are happy for them to do this, I will ask you both to fill out a *consent form*. Your son/daughter will then undertake an interview with me.

Your child will be interviewed on her/his own or in a group of 2 or 3 children. They can choose who is in their group.

What if my child changes his/her mind about taking part?

Your child is free to change their mind about taking part in the study at any point. They do not need to give any reason. If they change their mind they can still continue to take part in SHINE activities

You can also change your mind about your child participation at any point. If you do change your mind, please contact me. My contact details are at the end of this information leaflet or you can speak to me at SHINE.

Will my child's taking part in this project be kept confidential?

Confidentiality is taken very seriously in this research. Your child is free to choose their own pretend name, so the interview recordings and observation notes will remain anonymous in all analysis and reporting of the research. No identifying details will be revealed to anyone.

The only exception would be if your child discloses any information that suggests they are at risk of harm, I would then need to share this with the SHINE manager. However, I will always tell your child before doing so.

What is the legal basis for processing my personal data?

According to data protection legislation, I, as a researcher, am required to inform you why I am asking for your contact details and for the information in the "*About my child*" form. Such information is considered sensitive, therefore I have to explain to you what I will do with it. As parents or guardians of children, you are asked for your *phone number* to arrange an interview date with your child and for the part of your post code to see where children who take part in SHINE come from. Therefore, I am collecting this information to carry out my research. I think this research will be of interest to the public.

If you are not sure what this means or if you have any further questions, please do not hesitate to get in touch with me. I will explain it again and discuss it before you sign the consent form.

What will happen to the results of this research?

The results of this study will be written up in my Ph.D. thesis and in academic journals. The findings may be presented at conferences. I may include direct quotes from your child's interview or from my observation notes, however, they will not be identifiable and I will refer to what they have said by using a pretend name.

This study has also been subject to ethical review and approved by the University of Sheffield's ethics review panel, through The School of Nursing and Midwifery.

Who will have access to data and where will it be held?

All data will be under my control and kept confidential at the Sheffield University. I will delete all audio recordings as soon as they have been written up. All data will be used only for the purpose of this research and not passed onto anyone else.

Who should I contact for further information?

If you have any questions about the study or require any further information, please do not hesitate to contact me. If you want to speak to someone other than me, you can also contact my supervisor Professor Penny Curtis or Professor Tony Ryan by phone/email/post:

My Details	My Supervisor's Details	Director of Researh
Phone: 07474950048 Email: mcatalbas1@sheffield.ac.uk Post: **Meltem Catalbas** The School of Nursing and Midwifery The University of Sheffield Barber House, Sheffield, SL10 2HQ	Phone: 114 222 2040 Email: p.a.curtis@sheffield.ac.uk Post: **Prof. Penny Curtis** The School of Nursing and Midwifery The University of Sheffield Barber House, Sheffield, SL10 2HQ	Phone: +44 (0)114 222 2062 Email: t.ryan@sheffield.ac.uk Post: **Prof. Tony Ryan** The School of Nursing and Midwifery The University of Sheffield Barber House, Sheffield, SL10 2HQ

THANK YOU FOR TAKING THE TIME TO CONSIDER THIS RESEARCH

Appendix R- TIDieR Checklist

TIDieR
Template for Intervention Description and Replication

The TIDieR[9] (Template for Intervention Description and Replication) Checklist*

Information to include when describing an intervention and the location of the information

Item no	Item Description	Where Located Primary paper (page or appendix number)	Other † (details)
1	**BRIEF NAME:**Provide the name or a phrase that describes the intervention.	Page i ,	Abstract
2	**WHY:** Describe any rationale, theory, or goal of the elements essential to the intervention.	Page 75-77	The research setting The SHINE Academy (Methodology Chapter Three)
3	**WHAT:** Materials: Describe any physical or informational materials used in the intervention, including those provided to participants or used in intervention delivery or in training of intervention providers. Provide information on where the materials can be accessed (e.g. online appendix, URL).	Page 115-121	The PSI programme content in Chapter Four
4	**WHAT:** Procedures: Describe each of the procedures, activities, and/or processes used in the intervention, including any enabling or support activities.	Page 77-80	The SHINE Care Pathway Programmes (Methodology Chapter Three)
5	**WHO PROVIDED:** For each category of intervention provider (e.g. psychologist, nursing assistant), describe their expertise, background and any specific training given.	Page 77	The SHINE Academy (Methodological Chapter Three)
6	**HOW:** Describe the modes of delivery (e.g. face-to-face or by some other mechanism, such as internet or telephone) of the intervention and whether it was provided individually or in a group.	Page 115	The Delivery of the programme (Chapter Four: The description of the PSI programme)

[9] TIDieR checklist adopted from: Better reporting of interventions: template for intervention description and replication (TIDieR) checklist and guide | The EQUATOR Network (equator-network.org)

7	**WHERE:** Describe the type(s) of location(s) where the intervention occurred, including any necessary infrastructure or relevant features.	Page 124-127	The Physical description of the Study Setting in Chapter Four
8	**WHEN and HOW MUCH:** Describe the number of times the intervention was delivered and over what period of time including the number of sessions, their schedule, and their duration, intensity or dose.	Page 115 Page 80	The PSI programme content in Chapter Four The PSI programme participants in Chapter Three.
9	**TAILORING:** If the intervention was planned to be personalised, titrated or adapted, then describe what, why, when, and how.	Page 122-123	Tailored PSI programme in Chapter Four
10.ǂ	**MODIFICATIONS:** If the intervention was modified during the course of the study, describe the changes (what, why, when, and how).	Page 80	The PSI programme participants in Chapter Three.
11	**HOW WELL:** Planned: If intervention adherence or fidelity was assessed, describe how and by whom, and if any strategies were used to maintain or improve fidelity, describe them.	Page 122	Tailored PSI programme in Chapter Four
12.ǂ	**HOW WELL:** Actual: If intervention adherence or fidelity was assessed, describe the extent to which the intervention was delivered as planned.	Page 115-121	The PSI programme content in Chapter Four

** **Authors** - use N/A if an item is not applicable for the intervention being described. **Reviewers** – use '?' if information about the element is not reported/not sufficiently reported.

† If the information is not provided in the primary paper, give details of where this information is available. This may include locations such as a published protocol or other published papers (provide citation details) or a website (provide the URL).

ǂ If completing the TIDieR checklist for a protocol, these items are not relevant to the protocol and cannot be described until the study is complete.

* We strongly recommend using this checklist in conjunction with the TIDieR guide (see *BMJ* 2014;348:g1687) which contains an explanation and elaboration for each item.

* The focus of TIDieR is on reporting details of the intervention elements (and where relevant, comparison elements) of a study. Other elements and methodological features of studies are covered by other reporting statements and checklists and have not been duplicated as part of the TIDieR checklist. When a randomised trial is being reported, the TIDieR checklist should be used in conjunction with the CONSORT statement (see www.consort-statement.org) as an extension of Item 5 of the CONSORT 2010 Statement. When a clinical trial protocol is being reported, the TIDieR checklist should be used in conjunction with the SPIRIT statement as an extension of Item 11 of the SPIRIT 2013 Statement (see www.spirit-statement.org). For alternate study designs, TIDieR can be used in conjunction with the appropriate checklist

Appendix S- **Consolidated criteria for reporting qualitative studies (COREQ): 32-item checklist**

Developed from:
Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*. 2007. Volume 19, Number 6: pp. 349 – 357

No. Item	Guide questions/description	Reported on Page #
Domain 1: Research team and reflexivity		
Personal Characteristics		
1. Inter viewer/facilitator	Which author/s conducted the interview or focus group?	88, 96
2. Credentials	What were the researcher's credentials? E.g. PhD, MD	X,xi
3. Occupation	What was their occupation at the time of the study?	i , 67, 76,
4. Gender	Was the researcher male or female?	Female
5. Experience and training	What experience or training did the researcher have?	X,xi
Relationship with participants		
6. Relationship established	Was a relationship established prior to study commencement?	70-71
7. Participant knowledge of the interviewer	What did the participants know about the researcher? e.g. personal goals, reasons for doing the research	86,99-100
8. Interviewer characteristics	What characteristics were reported about the interviewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic	X-xi, 16, 58-59, 106,

Domain 2: study design		
Theoretical framework		
9. Methodological orientation and Theory	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis,	60-67

	ethnography, phenomenology, content analysis	
Participant selection		
10. Sampling	How were participants selected? e.g. purposive, convenience, consecutive, snowball	81
11. Method of approach	How were participants approached? e.g. face-to-face, telephone, mail, email	85-86
12. Sample size	How many participants were in the study?	90
13. Non-participation	How many people refused to participate or dropped out? Reasons?	88,90
Setting		
14. Setting of data collection	Where was the data collected? e.g. home, clinic, workplace	I, 67, 76
15. Presence of non-participants	Was anyone else present besides the participants and researchers?	No
16. Description of sample	What are the important characteristics of the sample? e.g. demographic data, date	83
Data collection		
17. Interview guide	Were questions, prompts, guides provided by the authors? Was it pilot tested?	Appendix E-Interview Schedule 1 page 304 and Appendix F-Interview Schedule 2 306 respectively Piloting interview page 75
18. Repeat interviews	Were repeat inter views carried out? If yes, how many?	No, this was not seen as a necessary part of the research design
19. Audio/visual recording	Did the research use audio or visual recording to collect the data?	88
20. Field notes	Were field notes made during and/or after the inter view or focus group?	91-95
21. Duration	What was the duration of the inter views or focus group?	88
22. Data saturation	Was data saturation discussed?	84
23. Transcripts returned	Were transcripts returned to participants for comment and/or correction?	No, the time available to complete the study did not permit this
Domain 3: analysis and		

findings		
Data analysis		
24. Number of data coders	How many data coders coded the data?	105
25. Description of the coding tree	Did authors provide a description of the coding tree?	105
26. Derivation of themes	Were themes identified in advance or derived from the data?	64, 105-106
27. Software	What software, if applicable, was used to manage the data?	105
28. Participant checking	Did participants provide feedback on the findings?	No, the time available to complete the study did not permit this
Reporting		
29. Quotations presented	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant number	134-213
30. Data and findings consistent	Was there consistency between the data presented and the findings?	Yes
31. Clarity of major themes	Were major themes clearly presented in the findings?	134,144,167,175,185,
32. Clarity of minor themes	Is there a description of diverse cases or discussion of minor themes?	134-213