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An investigation into the “Kitchen
Social” holiday programme in terms of the
operation and impacts on the
wellbeing, diet and activity of service
users.

E.Crilley

PhD

2021

An investigation into the “Kitchen Social” holiday programme in terms of the operation and impacts on the wellbeing, diet and activity of service users.

Eilish Crilley

The thesis is submitted in partial fulfilment of the requirements for the award of Doctor of Philosophy of the University of Northumbria at Newcastle.

The faculty of Health and Life Sciences

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ABSTRACT

The aim of the current thesis was to investigate the views of senior stakeholders, staff, parents and children on the operation of the Kitchen Social holiday programme and the potential impacts on parents and children's wellbeing. This thesis also aimed to examine the impacts of the Kitchen Social holiday programme on children's nutritional intake and children's physical and sedentary activity levels. This thesis is important as it provides a novel insight into a holiday programme which supports low-income families who may be experiencing holiday food insecurity. A mixed methods research design was utilised in this thesis for an initial qualitative research study which informed the following two quantitative studies.

Study 1 involved a qualitative research design to explore the views of senior and key stakeholders on the operation of Kitchen Social and the potential impacts that this has on the wellbeing of children and parents. The findings of Study 1 show that hubs involved in the Kitchen Social programme differ in the delivery and organisation, yet all hubs are required to adhere to the Kitchen Social guidelines. Study 1 also demonstrates that the holiday hubs have a positive impact on the wellbeing of parents and children due to the increased opportunities to socialise, learn, take part in enriching, creative and physical activities, receive childcare in a safe environment, and access nutritious food. However, the benefits service users gain from attending the hubs may differ depending on the hub they attend. Study 1 considered the need for holiday hubs to receive government funding for hubs to be sustainable and expand to support more families who may benefit from attending a holiday hub.

Study 2 investigated the number of, and amount of time children spend in physical and sedentary activity levels during the school summer holidays when children attend a holiday hub compared to the school term. Study 2 also investigated children's adherence to Physical Activity Guidelines and the amount of energy children expend during the school summer holidays when children attend a holiday hub compared to the school term. Children (N=37) aged 10-14 years old completed the amended Youth Physical Activity Questionnaire (YPAQ) on two separate occasions: once during the school summer holidays and once during the school term. The Y-PAQ collected data on the type and time spent in physical and sedentary activities across 3 consecutive days, prior to the day of completion. The Youth Compendium of Physical Activities allowed the researcher to estimate the amount of energy expended from activities. The findings demonstrated that children participated in a higher number of physical activities for a longer amount of time, and sedentary activities for a shorter amount of time during the school summer holidays compared to the school term. Yet, there was no difference in the number of children adhering to PA guidelines, and the amount of energy children expended during the holiday hub versus school term time.

Study 3 viewed the impact of holiday hub attendance on children's diet quality and adherence to the School Food Standards (SFS) using a quantitative research design. Data on the food and drink intake of children (N=56) aged 7-16 years old was gathered from children using a 24-hour recall method. Children recalled the food and drink they consumed the prior day from waking up to falling asleep that evening on two separate occasions; once based on an attending hub day and once based on a non-attending hub day. The Young Persons Food Atlas was used to ensure data on portion sizes, cooking methods and brands were collected. The results of Study 3 showed that children's diet quality improved and children more closely adhered to the SFS on an attending hub day versus a non-attending hub day.

The studies in this thesis offer insight into the operation and potential benefits of a holiday programme to inform stakeholders involved in organising, implementing and delivering a holiday programme across the UK. These study findings are well-timed as the government has recently announced funding for the Holiday Food and Activity programme across England. This thesis also highlights future studies to provide further knowledge on the best practice of operating and delivering a holiday programme.

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LIST OF ABBREVIATIONS

DBS: Disclosure and Barring Service

CPAG: Child Poverty Action Group

DfE: Department for Education

DWP: Department for Work and Pensions

FRS: Family Resources Survey

JRF: Joseph Rowntree Foundation

LDNS: Low Income Diet and Nutrition Survey

NDNS: National Diet and Nutrition Survey

USDA: United States Department of Agriculture

HFSSM: Household Food Security Survey Module

MET: Metabolic Equivalent of Task

BMR: Basal Metabolic Rate

EE: Energy Expenditure

PA: Physical Activity

SA: Sedentary Activity

MVPA: Moderate to Vigorous Physical Activity

YPFA: Young Persons Food Atlas

Y-PAQ: Youth Physical Activity Questionnaire.

CRF: Cardiorespiratory Fitness

BMI: Body Mass Index

SFS: School Food Standards

SEM: Socio-ecological model

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AUTHOR'S DECLARATION

I declare that the work in this Thesis has not been submitted for any other award and that is all my own work. I also confirm that this work fully acknowledges opinions, ideas and contributions from the work of others.

Ethical clearance for the research included in this Thesis has been approved. Approval has been sought and granted by Northumbria University Faculty of Health and Life Sciences Ethics Committee.

I declare that the word count of this Thesis is 84,393 words.

Name: Eilish Crilley.

Signature:

Date: 29/06/2021.

CHAPTER 1: Introduction

1.1 Overview to this Thesis

This thesis will investigate the operation and impacts of the “Kitchen Social” holiday programme on service users across London. This thesis will also be underpinned by a socioecological perspective of health. This is discussed further on page 61 and will involve the identification of individual, social, environmental and policy factors which are associated with the Kitchen Social holiday programme. A unique contribution to knowledge will be provided in this thesis by investigating an area which possesses only a small body of published research in the UK. Firstly, an exploration of the operation and impacts of hubs will establish good practice, areas for improvement and the wellbeing of service users. The operational characteristics of a holiday programme refer to the types of activities and food, and the length and number of hours the programme offers (Shinwell, et al., 2021). Secondly, this programme of work will investigate children’s physical and sedentary activity levels during the summer holidays for service users attending the Kitchen Social holiday hubs compared to the school term, as no studies to date have carried out this comparison. Finally, this PhD will also consider the impact of the Kitchen Social holiday hubs on children’s diet quality to allow for comparisons across an entire day, as well as a specific focus on the lunch time meal which is provided to children on an attending hub day. The findings of this research will be distinct and relevant to other academics interested in this area, and community centres, schools, religious organisations and local authorities interested in running a holiday hub. Prior to exploring the operation and impact of the Kitchen Social holiday programme, the current chapter will discuss the following topics, all of which are related to holiday provision: poverty and food insecurity, impact of low-income on nutritional intake and physical/sedentary activities, challenges that parents experience during the school holidays including unaffordable childcare facilities, poor mental wellbeing and holiday hunger. This chapter will then focus on the evidence of holiday provision in response to the challenges that low-income families experience during the school holidays. Chapter 1 will conclude by summarising the current literature review.

1.2 Background and Context to this Thesis

In the UK, a high number of children are living in poverty (Joseph Rowntree Foundation, 2018) and many experience food insecurity (Loopstra et al., 2019). Data published by Leeser (2019) from the DWP Family Resources Survey demonstrated that in 2017-18, poverty levels in London remained higher than the UK average with 28% of people in London living in poverty. London is an area with some of the highest rates of child poverty in the country and child poverty rates are higher than adult poverty rates, with 37% of children living in poverty in London during 2017-18. This has been mirrored in more recent reports which show that child

poverty rates in London are the one of the highest in the UK and four in ten children in London live in poverty (Hirsch & Stone, 2021).

London's Poverty Profile, 2020). This is concerning as children living in poverty are more likely to display risky health behaviours such as consuming a poor diet and spending more time physically inactive (James et al., 1997), with poor mental health and educational outcomes (Deighton et al., 2019; Kiernan & Mensah, 2011). With 20% of workers in London earning less than the London Living Wage (Sharpe et al., 2017), it is unsurprising that the majority of children living in poverty are in a household where at least one parent works (Child Poverty Action Group, 2020), and 17% (approximately 400,000) of children living in London reside in households of low or very low food security (Greater London Authority, 2019). London also has the highest rates of knife crime in the UK (Allen & Kirk-Wade, 2020), which is particularly concerning due to the lack of safe places for children to play (Hastings et al., 2015; Smith & Barker, 2001).

During the school term, the School Food Standards (2015) are in place to support children's nutritional intake through school meals and free school meal provision which aims to ensure that school meals are provided free of charge to low-income children (Department for Work and Pension, 2013; Department for Education, 2015). In terms of physical activity, children's activity levels are supported during the school term through Sports Premium. This involves £320 million of government funding to ensure primary schools can improve the physical activity they offer, compulsory Physical Education classes and initiatives such as the Daily Mile (Childhood Obesity Plan, 2016; Childhood Obesity Plan, 2018; Department for Education, 2020, b). However, during the school holidays, families do not have access to this support. The London Food Poverty Profile, in 2015, projected that over half a million children in London will experience some level of food insecurity during the school holidays. This has been referred to as "Holiday Hunger" which is defined by Graham et al. (2016) as the inability for children to access an adequate supply of nutritious food during the school holidays. A number of reports have provided evidence that many families may be unable to afford the costs of providing food, childcare and enriching activities during the school holidays, which may exacerbate risky health behaviours in children (Brazendale et al., 2017; Campbell et al., 2015; Gill and Sharma, 2004).

Holiday programmes, many of which are located in areas of high deprivation across the UK, work to address holiday hunger (Mann et al., 2017; Mann et al., 2018; Long et al., 2018). More recently, during the summer of 2018 and 2019, the Department for Education recognised the need for holiday provision and funded a number of pilot projects. This involved local authorities recruiting community organisations to deliver free, healthy food and activities for

children during the school summer holidays. Although these pilot projects adhered to healthy eating and physical activity guidelines, there are still no statutory regulations relating to holiday provision during the school holidays. Yet, a report by Forsey (2017) suggests holiday programmes across the UK have similar objectives in terms of increasing physical activity, improving nutritional intake, reducing social isolation and providing learning opportunities for low-income children. However, the literature review presented in this current chapter demonstrates that there is still little-known regarding holiday provision.

1.2.1 Poverty Definition, Measurement and Policy

Put simply, poverty is defined as when a person's resources are well below their minimum needs, including the need to take part in society (Joseph Rowntree Foundation, 2017). However, despite this relatively straightforward definition, measuring poverty is complex and the UK has adopted a range of measures. Early measurements of poverty include Townsend's relative deprivation approach (1979) which involved a survey to measure household resources (including individuals' incomes) and standards of living. Relative deprivation differs from definitions of poverty as it relates to how people live and is the consequence of a lack of income and other resources. The survey, developed by Townsend (1979), included sixty items to assess poverty based on perceptions of acceptable living standards at the time (examples of these items include sufficient diet, clothing, housing, education and health). The sixty indicators created a deprivation score for households and an individual was classified as 'deprived' if they lacked three or more deprivation indicators. Therefore, Townsend's approach examines the indicators of deprivation, which are then related to household income levels to establish whether an individual is experiencing poverty.

By contrast, Mack and Lansley (1985) argued that the methodology used in Townsend's approach was not appropriate, as it did not allow for the consideration of differences and choice in how people live. To illustrate, the deprivation indicators used by Townsend (1979) did not allow for the identification of personal choice (those who did not want an item) from those of constraint (those who could not afford an item). In order to address this limitation of the deprivation approach, Mack and Lansley (1985) purported the use of a consensual method that distinguished between those who lack necessities from choice and those who cannot afford them. Data were gathered, using the consensual method, in the Breadline Britain Survey (1983) which listed thirty-five standard of living items and asked respondents whether they possessed these items. An example of the items included in the survey, is asking adults whether "They are able to afford fresh fruit and vegetables daily"? Respondents were then asked whether this was by choice or because they could not afford it. An income measure was also used to find out whether individuals reporting they could not afford an item had a low income. This measure excluded housing costs and adjusted household income to take account for household size.

Likewise, as living standards change, and hence the criteria for relative poverty changes, Gordon et al (2000) updated the list of necessity items from the Breadline Britain Survey (1983). For example, necessity items which were added to the Breadline Britain Survey (1983) included asking respondents about their participation in common social activities such as whether “They are able to afford celebrations on special occasions such as Christmas”?

Approximately 10 years ago, a measurement of low income and deprivation was one of the methods proposed to measure child poverty in the UK by the Child Poverty Act (2010). This act imposed a legal duty on the government to produce a child poverty strategy and to end child poverty by 2020. The act was implemented in England, Scotland and Northern Ireland and comprised of four specific targets. These include (1) for less than 5% of children to live in material deprivation; described as the inability to afford necessities, and be living in a low-income family, (2) for less than 5% of children to live in absolute low-income families, (3) for less than 10% of children to live in relative poverty and (4) for fewer children to live in relative poverty for long periods of time (three years or more) which has been termed as living in persistent poverty.

Low income was classified in the first target of the act by viewing which households have an income of less than 70% of median household income and families’ material deprivation score was calculated using a series of 21 questions included in the Family Resources Survey (FRS). The FRS is an annual report by the Department for Work and Pensions (DWP) (2012) that provides figures on the incomes and living circumstances of households and families in the UK, to inform social welfare policy. Each question in the survey asks whether the family can afford an item and a family is allocated a score for each item which they lack because they are unable to afford it. Prevalence weighting is used to provide a score for each item; the more people who say they can afford an item, the more weight that item is given. Scores are then summed to produce an overall material deprivation score. Therefore, children were viewed as living in material deprivation and a low-income family if they lived in a household with income less than 70% of current median income and if their material deprivation score exceeds a certain threshold. However, the problem with using this approach to measure poverty is that the survey needs to be updated at regular intervals to reflect the items and activities that people in the UK believe to be necessary to establish material deprivation.

Absolute poverty was classified in the second target of the act through using a fixed threshold that only rises with inflation (Wickham et al., 2016). This method is problematic as unlike the relative measurement of poverty (rather than absolute), this method does not recognise that standards of living change over time (Wickham et al., 2016).

Therefore, the most frequently used measurement of poverty in the UK and internationally which was used in third and fourth target of the act, is relative poverty. This is classified as someone living in a household whose income is less than 60% of their median income, adjusted for their household size and type (Joseph Rowntree Foundation, 2017). In 2016, the Child Poverty Act (2010) was eradicated by the Welfare Reform and Work Act, including the targets to reduce and measure poverty in the UK. However, after campaigns following the eradication of the act, the government agreed to commit, in law, to collect and publish data annually on child poverty figures (Child Poverty Action Group, 2021).

More recently, the Social Metric Commission (SMC) (2019) criticised the widely used relative measure of poverty. The SMC state the measure only takes into account people's income and does not account for inescapable costs such as the impact of disability or childcare costs. Hence, they have proposed a new measure of poverty in the UK, that is based on the extent to which someone's resources meet their needs. This measure considers the available assets that families have which includes income and liquid savings. The measure also includes the inescapable extra costs that families' face which may make them more likely to experience poverty such as costs of disability, childcare, and housing (rent or mortgage). This new measure of poverty focuses on the extent to which the material resources available to an individual meet the material needs the individual currently has. Therefore, it takes into account not just how much income an individual has but also how much necessities cost. Although this measure has been used by the Select Committee on Food, Poverty, Health and the Environment (2020) to report recent poverty figures, this measure has not yet been used in any peer reviewed papers in the UK.

As detailed above, when considering figures on poverty, it is important to consider the measurement of poverty used. Thus, for the purpose of clarity, when referring to poverty figures throughout this thesis, the way in which poverty is measured will be clearly stated. The relative poverty measurement is the most common method and has often been used in reports by the Joseph Rowntree Foundation (2018, 2020). These reports show that, in the UK, child poverty rates have risen by 15% since 2011/2012. Approximately 14 million people in the UK are living in poverty (more than one in five, or 22% of the population) made up of 8 million working-age adults, 4 million children and 2 million pensioners. While individuals can progress in and out of poverty for various reasons such as a change in employment; approximately 4.6 million people (7% of people) in the UK are living in persistent poverty (as described on page 20), with the highest rates among lone parent families (24%).

1.2.2 Context of Poverty

Since one of the biggest costs for households are rent and mortgage payments (Williams, 2019), it is unsurprising that when the impact of housing costs on income was considered in the measurement of poverty, then 5%, or 3.1 million more people were classified as experiencing poverty (Joseph Rowntree Foundation, 2013). This suggests that not taking housing costs into account may significantly underestimate the risk of poverty and housing may be difficult to sustain for many families on a low income. The impacts of housing costs on individuals have been demonstrated in the homelessness monitor by Fitzpatrick et al. (2019), which identifies a 165% increase from 2010 to 2018 in the total number of individuals experiencing homelessness due to the inability to afford housing costs in the UK. A survey (n=334) involving local authorities revealed that they anticipated an increase in homelessness as a result of the full roll-out of Universal Credit. Universal Credit is a welfare reform to the working-age benefits system that brings six separate benefits into one integrated payment (Joseph Rowntree Foundation, 2019).

When an individual does not have access to basic essential items including a home, food, heating, lighting, clothing, shoes and basic toiletries, they are classed as living in destitution (Joseph Rowntree Foundation, 2018, 2020). Destitution is defined as when people lack two or more essentials over the past month due to unaffordability and/or a very low income. The Joseph Rowntree Foundation reports (2018, 2020) calculated low income using actual spends on essential items for the poorest 10% of the population, 80% of the JRF 'Minimum Income Standard' costs for equivalent items, and the amount the general public thought was required for a relevant sized household to avoid destitution. To establish whether an individual is destitute, individuals are asked whether the reasons for going without essential items was because they could not afford them. Individuals are also asked their income to find out if this is below the standard relative poverty line and savings to find out if individuals are able to supplement their insufficient income.

In 2017, the authors of the Joseph Rowntree Foundation (2018) report gathered interviews with (n=50) key experts and a survey with (n=2000) public members. Findings from interviews and the survey demonstrated that approximately 1.5 million people, including 365,000 children, were destitute, in 2017, in the UK. One of the main reasons for destitution included benefit delays and the five-week wait between making a Universal Credit claim and receiving a payment. In 2019, the authors of the Joseph Rowntree Foundation (2020) report gathered surveys from (n=3914) individuals and found that 2.4 million people, including 550,000 children were destitute, in 2019, in the UK. Therefore, the number of people experiencing destitution increased by 54% and the number of children experiencing destitution had increased by 52% from 2017 to 2019. However, despite the Joseph Rowntree Foundation (2018, 2020)

reports using a large-scale household survey to establish the number of individuals living in destitution, those experiencing the most severe hardship may not reliably respond.

The Early Warning System by the Child Poverty Action Group monitors the changes and impacts of the Universal Credit system. For example, the Child Poverty Action Group (2018) identified that penalties can be imposed on benefit payments if claimants do not meet certain conditions such as participating in job searching. Penalties result in a reduction in universal credit payment from the point of failure to comply to certain conditions until the claimant fulfils all of the conditions attached to their benefit. The Universal Credit system have reduced the support to many low-income families. For example, prior to March 2020, benefits were capped meaning they were not rising with inflation and were not reflecting the rising costs of living because they had not increased since 2015 (Joseph Rowntree Foundation 2021).

Despite the benefit freeze ending in April 2020 and payments increasing by 1.7% (McInnes, 2020), benefit claimants are still subject to low payments. For instance, the Joseph Rowntree Foundation (2020) identifies that households are subject to the Bedroom Tax, which reduces housing benefits through an under-occupation penalty if households have one or more spare bedrooms. Combined with increasing housing costs, this could be causing more households to experience poverty. In addition to this, families are also subject to the Two-Child Limit in child tax credit which was implemented in 2017. This means that families having a third or subsequent child were no longer entitled to additional support through child tax credit and universal credit, worth more than £50 a week per child. From a survey of nearly 1,000 families affected by the policy, the Child Poverty Action Group (2020) estimate that 230,000 families have been negatively affected by the two-child limit from 2017 (when the policy was implemented) to 2020. Affected families were having to cut back on basic items, including adequate or healthy food, clothes, haircuts and baby equipment. In addition to this, benefit claimants are also at an increased risk of being in debt. This is illustrated in a report authored by Drake for Citizens Advice (2017); an organisation that helps individuals needing support with their benefits. The report demonstrated that individuals are more likely to have debt problems when they are in receipt of benefits through universal credit (26%) compared to the previous system of legacy benefits (19%). However, this report focused on England and Wales and did not include the entire UK.

It is not just individuals who are out of work, and are claiming benefits, who are at risk of poverty. The rise of in work-poverty demonstrates that employment does not provide a guaranteed route out of poverty in the UK (Andreadi et al., 2019). Over the last 20 years, the Joseph Rowntree Foundation (2019) has identified an increase in the number of adults in-work poverty from 39% to 56%. This includes seven in ten children now living in a household where

at least one adult is working. Likewise, the Marmot review (2020) attributed the increase of adult in-work poverty and child poverty rates to low-wages and an increase in the use of insecure zero-hours and part time contracts. This may have negative impacts on health and increase the widening health inequalities. Sir Michael Marmot acknowledges that in-work poverty would be reduced by addressing the structural causes of poverty, such as increasing the National Living Wage to ensure individuals in work achieve a minimum income which reflects the 'Real' Living Wage. The Government's National Living Wage is calculated based on a target to reach 60% of median earnings by 2020, whereas the 'Real' Living Wage is based on meeting acceptable living standards. For example, individuals need a certain income to be able to meet needs relating to nutrition, physical activity, housing, social interactions, transport, medical care and hygiene.

However, in 2019/20 the Government's National Living Wage was £8.21 per hour while the UK Living Wage was £9.30 per hour and the London Living Wage was £10.75 per hour. Therefore, the National Living Wage is still lower than the minimum income standard (i.e., a £36 pound increase each week is required for a single, full-time working individual to maintain an acceptable standard of living).

1.2.3 Food (In)security Definition and Measurement

Food insecurity is described by the Low-Income Diet and Nutrition Survey (2007) as a difficulty that individuals experience in accessing nutritionally adequate foods and a limited/uncertain ability to acquire nutritious foods in socially acceptable ways to meet preferences for a healthy life. Food insecurity has varying degrees of severity; early stages involve worry about whether there will be enough food, followed by compromising food quality, variety and quantity, and severe stages involve going without food and experiencing hunger (Taylor & Loopstra, 2016).

The majority of research on food security has been conducted in Canada and the USA; most likely due to both countries having measured food security for a number of years. Food security is measured annually since 1995 in the USA by the United States Department of Agriculture (USDA) using the monthly Current Population Survey (CPS) which is a nationally representative survey conducted by the Census Bureau for the Bureau of Labor Statistics. Food security is also measured in Canada by Statistics Canada in the Canadian Community Health Survey (CCHS) since 2005 to enable monitoring of household food security over time. In the USA, food security has been measured using the Household Food Security Survey Module (HFSSM). For adult only households, the HFSSM includes 10 questions such as "In the last 12 months, were you ever hungry but didn't eat because you couldn't afford enough food?". For households with children, the HFSSM includes 18 questions with additional child specific

questions, such as “In the last 12 months, did you ever cut the size of any of the children’s meals because there wasn’t enough money for food?” Both versions are based on a time period of the last 12 months. The survey identifies various levels of food security with completed surveys given a score and categorising households with high or marginal food security (surveys scoring 0-1) as being food secure and households with low or very low food security (scoring 2-6) as food insecure. The main method of measurement in Canada is also the Household Food Security Survey Module (HFSSM) adapted from the method used in the USA.

Although there has been rigorous measurement and monitoring of household food security in the USA since 1995 and Canada since 2005, there is little indication that levels of food insecurity are significantly reducing. Recent statistics in a report by Jenson et al. (2019) found little change in the prevalence of food insecurity in the USA. The report showed that 11.1% of households experienced food insecurity in 2018, compared to 11.8% in 2017, and 4.3% of households experienced very low food security in 2018, compared to 4.5% in 2017. Children and adults were food insecure in 7.1% of USA households with children in 2018, with very low food security among 0.6% of children. Likewise, Tarasuk and Mitchell (2020) draw on data, for 103,500 households, from Statistics Canada’s Canadian Community Health Survey in 2017-2018 and found that 12.7% of households experienced some level of food insecurity in the previous 12 months in Canada. Food insecurity is more prevalent among households with children in Canada and in 2017-2018 more than 1 in 6 children lived in households that experienced food insecurity.

High numbers of children experiencing food insecurity is particularly problematic as a recent review in the USA identifies the poor nutritional quality of food insecure children’s diet (Eicher-Miller & Zhao, 2018). Using food-security assessment measures indexed to 2017, 16 studies evaluating food insecurity and dietary outcomes for children showed a relationship between food insecure children aged 1-5 years old and lower vegetable intake compared with food secure children. There was also a relationship between food insecure children, aged 6-11 years old, and higher added sugar intake compared to food secure children. However, some of the studies included in the review used parental reports of children’s food/drink intake which may not be reliable if parents are unaware of children’s food/drink consumption outside of the household. Despite this, the review provides consistent evidence of poor diet quality for food insecure children. Additional support for this has been provided more recently in a study by Landry et al. (2019) which addressed this limitation and relied solely upon (n=598) children’s self-reported dietary intake from two 24-hour recalls. Diet quality was assessed using the Health Eating Index (2015) and food security status was assessed using a 5-item adapted version of the Child Food Security Assessment (CFSA), which has previously been validated with children from 6 years of age. The study found food insecure children had a lower diet

quality which included lower amounts of greens, beans, seafood and plant protein and higher amounts of added sugar compared to food secure children. This study did not use a nationally representative sample, although it does provide further detail on the quality of food insecure children's diets.

In the UK, the Department for Work and Pensions (DWP) only recently agreed to measure food security through the Family Resources Survey (FRS) using ten food security questions from the United States Department of Agriculture (USDA) survey (The Food Foundation, 2019, b). Initial results published by the DWP (in March 2021) demonstrated the prevalence of household food security in the UK were similar to the national rate (4% of households experienced low food security and 4% experienced very low food security). However, households with one adult and one or more children were more likely to experience food insecurity than the overall rate nationally. For all households with children, the percentage experiencing low food insecurity increased as the number of children increased from 14% for households with one child to 22% for households with three or more children. A prior research study by Taylor and Loopstra (2016), which uses a nationally representative sample, also suggests that there are high levels of food insecurity in the UK. Taylor and Loopstra (2016) gathered data by carrying out telephone interviews with 1000 young people and adults using the Food Insecurity Experience Scale (FIES). This scale consists of eight questions, asking people about their ability to get enough food in the past year. The findings showed approximately 10% of people aged 15 or over in the UK were classed as food insecure as they reported experiences of struggling to get enough food to eat. Approximately 5% of people aged 15 or over in the UK experienced severe food insecurity, which involved having gone a whole day without eating at times during the year because they could not afford enough food. A recent systematic review by Jenkins et al. (2021) has found that in the UK, austerity measures which includes reductions to public spending and welfare reform, are linked to increased food insecurity and foodbank use.

To cope with food insecurity, Puddephatt et al. (2020) found that individuals use various strategies in order to alleviate food pressures. These include participant reports of rationing food by skipping meals, consuming small portions, cooking in bulk and prioritising children's food intake. However, findings of restricting food intake to ensure children had food was based on only a small proportion of the sample who had children in their household. Nevertheless, prior studies have also supported this finding (Purdam et al. 2016). However, despite research findings of parents restricting their own food intake in attempt to provide their children with food (Puddephatt et al., 2020), prior research has demonstrated that parents are not always able to shield children from the impacts of food insecurity (Harvey, 2016).

Recently, a report by the Select Committee on Food, Poverty, Health and the Environment (2020) collected submissions of 105 pieces of written evidence and evidence from 44 verbal witnesses. The final report concluded that the UK food system is failing many individuals due to an inability to access food and/or to be able to afford a healthy diet. The report identifies the exacerbating health inequalities from food insecure individuals consuming poor diets and makes numerous recommendations to the government for change. These include ensuring the accessibility of Healthy Start vouchers, Free School Meal Provision and Holiday Hunger programmes for children at risk of food insecurity. More recently, this report has received further support from the UK EndChildFoodPoverty campaign, which is supported by the Child Food Poverty Task Force formed by Marcus Rashford and includes 20 charities and food industry members (Bogan, & Ralling, 2020).

1.2.4 Food Banks

Across the UK and in other countries such as Canada and the USA, food banks and food charity organisations have been utilised to support individuals experiencing food insecurity. Researchers have suggested that there has been a rise in food bank usage in recent years (Loopstra et al., 2015; Loopstra, 2018). To illustrate, The Independent Food Aid Network, which is an organisation supporting food banks, focused on food parcel distribution data in 20 Scottish local authorities from 91 food banks in The Independent Food Aid Network. These data were collated with The Trussell Trust (2019) data, which is the largest foodbank network in the UK (Goodwin, 2020, a). The results provided an estimate of approximately half a million emergency food parcels distributed across the UK between 2018-2019 from food banks in The Independent Food Aid Network and The Trussell Trust. However, it is important to note that the data gathered by Goodwin (2020, a) only considered Independent Food Bank Networks in Scotland, rather than including the entire UK. More recently, The Trussell Trust (2020, b), found that 1.9 million three-day emergency food supplies were distributed during 2019-2020, which was a 18% increase from the previous year. Approximately 700,000 three-day emergency food supplies out of 1.9 million food supplies provided to individuals during 2019-2020 went to children. Therefore, Lambie-Mumford and Green (2017) state that the provision of food parcels to children by foodbanks has grown and charitable organisations are now playing a bigger role in caring for children in neo-liberal societies, such as the UK.

A report by Jitendra et al. (2017) from the Trussell Trust identified reasons for food bank use and found a rise in foodbank usage, particularly in areas of full Universal Credit rollout. This involves a 16.85% average increase in referrals for emergency food in these areas which is more than double the national average of 6.64%. One of the main reasons for food bank use included a six-plus week waiting period for a first Universal Credit payment. However, this has recently been reduced to a 5-week waiting time. Yet, despite this, a recent report by The

Trussell Trust (2019) found that even a minimum five weeks wait for Universal Credit without income or with a Department for Work and Pensions (DWP) Advance Payment has led to acute and immediate financial hardship with a continued increase to food bank use. The Advance Payment is a loan from the government which must be re-paid and is offered to claimants moving onto Universal Credit while they wait for their first payment which is substantially longer wait than the previous welfare system of approximately two weeks. Further support for these findings is provided in a recent study by Reeves and Loopstra (2020), who used data on the introduction of Universal Credit and data on food bank usage from The Trussell Trust food bank network. The findings of this study demonstrated that an increase in the prevalence of Universal Credit was associated with an increase in food parcel distribution. This suggests that individuals are struggling to access sufficient food, despite receiving benefits from the Universal Credit system.

There are currently various food aid charities operating in the UK. FareShare (2019) is a food charity which acts as a wholesaler by redistributing surplus foods to other charity organisations (n=10,963) including food banks, hostels, schools, youth clubs, breakfast clubs and various other services which provide meals to vulnerable individuals. FareShare campaigns for the government to feed people first rather than food insecure individuals having to rely on surplus food and urges the government to ensure it costs food companies the same to donate surplus food as it would to dispose of this food waste. The use of surplus food to feed hungry people has been criticised as this approach may undermine campaigns to address the drivers of food insecurity and remove government responsibility for ensuring the right to food (discussed further on page 29 and 30) (Caraher & Furey, 2017).

The Trussell Trust (2019) is another food charity organisation which provides food for vulnerable individuals, with a network of 427 food banks, over 1,200 distribution centres and tens of thousands of volunteers across the UK. The Trussell Trust is also an antipoverty charity which campaigns to end the necessity of food banks. However, despite campaigning for government support for individuals experiencing food insecurity, The Trussell Trust and FareShare have accepted millions of pounds and surplus waste food donated by corporate food companies such as Asda (Caraher & Davison, 2019). More recently, the environmental secretary announced £15 million to support the expansion of charitable surplus food distribution (Department for Environment, Food & Rural Affairs, 2018). However, waste food is less likely to convert into meals, therefore these food companies are transferring their food waste for free into and at the cost of the third sector rather than paying to dispose of their food waste at the landfill or to animal feed. Therefore, promoting partnerships with corporate food companies and food aid charities as effective ways of solving hunger is primarily benefiting the food companies. It boosts the food companies' reputation through good publicity which fulfils

their corporate social responsibility and removes the responsibility from these corporate companies to pay real living wages (Caraher & Davison, 2019). The variation in the supply of surplus foods also means this food cannot be relied upon to meet individuals needs and this denies an individual the right to shop for affordable food to meet their personal preferences (Caraher & Furey, 2017).

The Independent Food Aid Network is yet another food charity organisation which also supports food banks, yet they are an independent organisation to the Trussell Trust. The Independent Food Aid Network connects, supports and advocates 335 food aid providers and the network include 276 organisations operating 368 independent food banks regularly distributing emergency food parcels at least once a week (Goodwin, 2020, a). However, unlike FareShare and The Trussell Trust, The Independent Food Aid Network have generally resisted relationships with large retailers or have established more informal relationships at a grass-roots level, due to ethical concerns about the corporatisation of food aid (Power et al., 2020). The redistribution of surplus food to emergency food aid providers may provide immediate short-term relief, yet charitable food aid will never be a solution for individuals who are unable to afford to buy food for themselves as this does not address the causes of food insecurity (Caraher & Furey, 2017).

Foodbank usage is not a satisfactory measure of food insecurity because not everyone experiencing food insecurity may access a foodbank. For example, Garthwaite (2016) carried out an ethnographic study over two years in a food bank located in the North East which included (n=110) interviews and observations. The findings revealed that the majority of foodbank users experienced stigma, fear, and embarrassment at having to use a foodbank. This fear could result in people refusing to access emergency food aid. However, it is important to note that these data are from food bank users from one Trussell Trust foodbank in one area of the North East England and therefore may not be representative of other food banks across other areas in the UK. Nevertheless, the study addresses this limitation and identifies similar findings from other studies carried out in other areas of the UK. A study by Purdam et al., (2016) reviewed a UK case study, analysed UK government surveys, such as the FRS (previously discussed on page 20) and carried out observations and interviews with (n=34) food bank users for indicators of food insecurity. The findings suggested that individuals were concerned about using a food bank due to the stigma of food aid and visiting a food bank involved overcoming feelings of embarrassment and shame.

Despite food banks being a last resort for individuals, food banks are still playing a crucial role in providing immediate solutions to individuals deprived of food (Bazerghi et al., 2016). The right to food is a fundamental human right which the UK has been committed to fulfilling, yet

the existence of food charities indicates that the UK government's obligation to ensure individuals have a right to food is failing and not being fulfilled (End Hunger UK, 2019). The Children's Future Food Inquiry report by The Food Foundation (2019, a) includes young people's views and experiences of food from a low-income perspective. This report identifies areas which should be addressed in policy, such as supporting parents/carers to provide children with a healthy meal by considering food costs when making changes to wages and welfare benefits, to ensure children can access nutritious food. Food charities in the voluntary sector such as food banks provide a temporary solution for food insecure individuals and food insecurity is more likely solved by government investment in welfare entitlements (Loopstra, 2018). Therefore, food banks do not solve the underlying problem that people's incomes are not enough to cover the cost living (Perry et al., 2014). The "Hungry for change: fixing the failures in food" report by the House of Lords Select Committee on Food, Poverty, Health and the Environment (2020) acknowledged the vital role that food banks play, yet they emphasised that food banks exist as a short-term solution to fill gaps in the social security system.

Food insecure food bank clients may also be at a heightened risk of experiencing obesity (Cooksey Stowers et al., 2020; Loopstra, 2018). To illustrate, the food insecurity paradox (further discussed on page 40 and 41) states that experiences of food insecurity can lead to undernutrition and recurring hunger due to food scarcity, but also to overnutrition due to the overconsumption of poor nutritional foods in times of food abundance, which can lead to overweight and obesity (Tanumihardjo et al., 2007). The overconsumption of food in times of food abundance has been explained as individuals having to account for food scarcity later and a coping strategy to deal with the stress of experiencing food insecurity (Keenan et al., 2021; Neelon et al., 2017). Relying on food banks can contribute to the overconsumption of poor nutritional foods as the food provided at food banks may not be nutritionally adequate. To further illustrate, a systematic review concluded that the produce individual's access from the foodbank is limited and more likely to be of a poor nutritional standard (Bazerghi et al., 2016). Foods provided by the foodbank included nutrient-dense foods and an insufficient number of dairy products, fruit and vegetables. Therefore, despite qualitative reports from (n=24) foodbank clients in the UK revealing that they valued healthy eating, foodbank clients were unable to afford healthy food (Puddephatt et al., 2020). Relying on food aid charities such as food banks as a long-term solution for food insecurity can be detrimental to health and widen health inequalities (Cooksey Stowers et al., 2020). Increasing benefits to ensure individuals can afford food rather than relying on food aid is a more plausible solution to address food insecurity (Caraher & Furey, 2018).

1.2.5 Poverty, Learning Loss and Gaps in Educational Attainment.

In the USA, there is an abundance of research into learning loss experienced by children after the school summer holidays (for example, see Cooper et al., 1996), which is more evident for children of a lower socio-economic status compared to children of a higher socio-economic status, creating gaps in educational attainment (Alexander et al, 2007). To illustrate, a study by Sandberg et al. (2013), viewed (n=317) students' loss in oral reading skills, measured by the R-CBM, after the summer break. The R-CBM was used at two time points: once in the spring and a second time in the fall. The R-CBM requires an assessor to give students a score based on the number of words read aloud correctly from passages at their grade level in 1 minute. The findings indicated that learning loss occurred for children in grades two and three and did not occur for children in grades four and five. Differential learning loss also occurred for children in grade two which meant children eligible for reduced price lunch (used as a measure of family income) and with special education status experienced greater learning loss compared to children not eligible for reduced price lunch and in general education. However, the same passages were used in the spring and fall, therefore there was the possibility of a test-retest effect in this study because the students read the same passages.

To prevent summer learning loss, research studies have suggested children should participate in summer learning programs (Blazer, 2011; von Hippel, 2019). The positive impacts of summer learning programs have been demonstrated in a study by Little et al. (2018), which examined the effects of participation in a summer program on mathematics achievement. Children's (n=220) mathematic achievement was measured using Measures for Primary Grades (MPG) for students in kindergarten through the second grade, while Measures for Academic Progress (MAP) was used for students in second grade and beyond. Students who participated in the summer program (n=85) made moderately larger mathematics achievement gains than students who did not participate (n=135). This included students who qualified for free or reduced lunch, indicating the summer program can support students across a range of income backgrounds. However, the study may have underestimated gains in mathematical achievement as the test which was used to assess mathematic achievement was broad and did not directly focus on the mathematic areas which the summer program addressed.

In the UK, there is a paucity of research focusing on learning loss, and summer programmes in the UK typically provide a range of activities for children including a focus on nutrition and sports skills (Graham et al., 2016), rather than solely focusing on academic content such as reading. The first UK study to investigate whether there is evidence of learning loss in the UK due to the school summer holiday break was carried out by Shinwell and Defeyter (2017). The findings of this study provided evidence of learning loss, as children (n=77) attending schools of a low socio-economic status have lower spelling scores after the summer break. However,

despite the findings demonstrating a loss of learning during the school summer holidays, children caught up and improved beyond this after 7 weeks of teaching.

Alternatively, in the UK, prior studies have focused on and identified gaps in educational attainment. The Marmot Review (2020) suggests that children of a lower socio-economic status have lower levels of educational attainment compared to children of a higher socioeconomic status. The findings of this review demonstrate that inequalities tend to worsen as children progress through primary and into secondary school. However, other factors may also play a role in children's educational attainment. For example, a study by Kiernan and Mensah (2011) used longitudinal data from the UK Millennium Cohort Study which used the Foundation Stage Profile to assess children's educational attainment. Family income, family resources and demographic information assessed whether children were in poverty and had low family resources. Using a parenting index, positive parenting behaviours and attitudes were also measured in which higher scores reflected parenting behaviours that were more favourable for children's achievement such as promotion of reading and learning. The findings demonstrated children from poor families and with less family resources had lower educational attainment scores compared to their more advantaged peers in their first year of school. Children with parents who scored higher for positive parenting were also more likely to have higher educational attainment scores. Yet, children living in poverty were less likely to have parents who scored higher for positive parenting. However, the study did not investigate this finding further.

1.2.6 Poverty, Food Insecurity and Physical Health

Childhood poverty can have negative physical health implications which may have a lasting impact into adulthood and children living in poverty are also more likely to live in poverty during adulthood (Conroy et al., 2010; Harper et al., 2003). Children living in poverty are also more likely to consume a poor-quality diet, which may contribute to physical health problems including tooth decay and dental caries (Cameron et al., 2006; Ravaghi et al., 2019).

Individuals in poverty are more likely to smoke, be physically inactive, obese and consume a poor diet compared to higher socio-economic groups (Dowler, 2008; Gidlow et al., 2006; Haustein, 2006; James et al., 1997; Noonan, 2018). Therefore, a higher proportion of adults in poverty have physical health problems including diabetes, high blood pressure, heart disease, strokes and cancers (James et al., 1997; Lee & Carrington, 2007; Rabi et al., 2006; Ward et al., 2004).

The few research studies focusing on the impacts of childhood food insecurity upon physical health have mainly been carried out in the USA, which measure food security levels on an

annual basis, rather than the UK. A study by Ryu and Bartfeld (2012) used Kindergarten Cohort data from the Early Childhood Longitudinal Study which followed students from kindergarten entry in 1998–1999 for 9 years and assessed children’s food security status four times using the USDA measurement (described on page 24). The findings demonstrated that persistent food insecurity (experiencing food insecurity at all four assessment periods) was associated with lower health status in eighth grade. Yet, despite the use of a nationally representative sample in this study, children’s general health status may have been over/underestimated as they were based on interviews with parents rating their child on a 5-point scale, from poor to excellent. Nevertheless, Robson et al., (2017) explain the association of food insecurity with poor health by demonstrating that food insecure children living in the USA display risky health behaviours. This includes skipping breakfast, a lack of sleep, smoking and alcohol consumption which may make them more likely to experience poor physical health. However, this study assessed food security status using a single item on a survey, rather than using the most commonly used USDA measurement which is considered the gold standard (Ahn & Norwood, 2020). Using alternative measurements of food security presents challenges including the possibility of overestimating the number of individuals experiencing food insecurity (Ahn & Norwood, 2020).

A study by Nord (2013) suggests that youth are less likely to be food insecure than adults in the same households, yet the impacts of food insecurity on adult physical health is also an under-investigated topic in the UK. Since food security levels were not routinely measured by the government until more recently, there are few studies which have investigated the impacts of food insecurity on individuals in the UK. Furey et al. (2019) carried out an online survey (from September to November, 2018) with adults (n=944) in the UK which included the Food and Agriculture Organization’s Food Insecurity Experience Scales and a self-reported health evaluation. The findings demonstrated that respondents who self-reported poorer health status were more likely to be in food-poor households, as were those who had more children. More recently, a study by Yau et al. (2020) investigated adults (n=2551) living in the UK with cross-sectional data from wave 1 of the International Food Policy Study using the USDA measurement of food security status. The findings demonstrated that individuals experiencing food insecurity in adulthood were more likely to consume unhealthy diets and be overweight, along with having poor mental health, stress and poor physical health. Also, the likelihood of experiencing food insecurity was higher for participants living with children, especially in single-parent households, compared to participants living alone. This study sample, when weighted, was representative of the UK adult population. However, both Furey et al. (2019) and Yau et al. (2020) relied on self-reports of health, therefore participants could have over and/or underestimated their health status.

1.2.7 Poverty, Food Insecurity, Mental Health and Wellbeing

Mental health refers to an individual's realisation of their own potential, who can cope with the normal stresses of life, work productively and contribute to their community (World Health Organization, 2018), whereas mental wellbeing refers to an individual's experience of their life as well as a comparison of life circumstances with social norms and values. An individual's subjective experiences includes their overall sense of wellbeing, life satisfaction and general happiness and their life circumstances (i.e., social relationships, health, education, work, surrounding environments and housing) (World Health Organization, 2012).

Adults living in poverty are more likely to experience mental health problems compared to adults not living in poverty (McManus et al., 2016). Research has also shown that parents living in poverty, with poor mental health, can negatively affect their parenting behaviours and consequently children's mental health (Fitzsimons et al., 2017; Gupta, 2017). Katz et al. (2007) explain that poverty causes some parents to be more stressed, depressed or irritable which disrupts their parenting practices and styles and can negatively affect outcomes for children. A review of the lived experiences of parents living in poverty using four UK qualitative studies published between 1998–2016, found that poverty is combined with multiple hardships and has detrimental consequences on the physical and mental health of parents (Rose & McAuley, 2019). The review acknowledges the damaging impact that financial stress has on parents and their parenting behaviours. However, parental reports on the impacts of poverty on children should be viewed with caution as children may conceal their own experiences and the effects of poverty from their family (Ridge, 2011).

The impact of poverty on children's wellbeing has been well documented (Cho, 2018; Ridge, 2011; Saunders & Brown, 2020; The Marmot Review, 2020). Yet, there is a paucity of research on the impact of poverty on parent wellbeing, particularly in the UK. A review by Nelson et al. (2014) viewed the factors associated with wellbeing for parents and concluded that poor sleep, financial problems and greater negative emotions are related to poor wellbeing for parents. Difficulty falling asleep, which has been viewed as negatively impacting sleep quality; financial problems; and poor emotions are all factors which have been found to be more likely for individuals in poverty (Chen, 2019; Gallo & Matthews, 2003; Pressman & Scott, 2009). Experiencing greater negative emotions is problematic as the Broaden and Build Theory suggests that positive emotions can promote the discovery of novel and creative ideas, actions and social bonds. This is important as this helps to build an individual's personal resources (ranging from physical to psychological resources) to successfully cope in stressful situations (Fredrickson, 1998, 2001).

The association between poverty and poor mental health in children has been recognised in research studies in the UK and other countries such as USA (Poole-Di Salvo et al., 2016; Wickham et al., 2017). A recent study, carried out in England, included a dataset of (n=28,160) adolescents who completed the self-reported Strengths and Difficulties Questionnaire in schools (Deighton et al., 2019). The study found that young people who were eligible and in receipt of free school meals were more likely to experience mental health difficulties compared to young people not eligible for free school meals. This study provides important findings from a large sample on the differences in children's mental health for deprived versus less deprived populations.

A systematic review of studies in the UK over a 10-year period from 1998 to 2008 concluded that poverty may prevent children from forming social relationships and participating in social situations (Ridge, 2011). This systematic review provides convincing evidence of the importance of creating social connections and sustaining friendships to promote children's sense of wellbeing. The author highlighted that children in poverty often experienced feelings of shame, sadness and fear of being isolated due to the lack of activities and opportunities accessible to them. Children living in poverty may also have lower levels of wellbeing as they are more likely to encounter adverse experiences in childhood including abuse or neglect compared to individuals from a higher socio-economic status (Lacey et al., 2020; The Marmot Review, 2020). This may be explained by the negative impacts that poverty has upon parenting abilities, which is highlighted on page 34 (Gupta, 2017).

Despite few studies focusing on the impacts of food insecurity on parent's mental health and wellbeing in the UK, studies in USA and Canada have demonstrated an increased risk of mental illness for individuals experiencing food insecurity (Martin et al., 2016). The family stress model suggests that food insecurity increases parental stress which negatively impacts upon parenting ability and affects children's outcomes (Ashiabi & O'Neal, 2008). For example, a qualitative study by Knowles et al. (2016) focused on parents (n=51) and found that food insecurity can negatively impact upon mental health. Parents in food insecure households recognised that economic hardship and food insecurity causes toxic stress as parents provide experiences with depression, anxiety and fear. This study provides a useful insight into parental views on the impacts of food insecurity on mental health, however, the authors mainly focused on mothers' experiences due to low participation of fathers.

Research studies have associated experiences of food insecurity with poor subjective wellbeing (Frongillo et al., 2017), however, few studies have focused solely on the impacts of food insecurity on adult's wellbeing. A systematic review by Bruening et al. (2017) was one of the few academic research papers to specifically focus on parents and the impact of food insecurity

on emotional wellbeing. This review included 12 longitudinal studies and concluded that food insecurity increases the risk of poor emotional health, while poor emotional health also increases the risk of food insecurity. However, this review did not include studies carried out in the UK, and only considered studies in USA. The review was also limited as cross-sectional and qualitative research studies were excluded, yet the authors did not provide an explanation for excluding studies which used these research designs.

In USA and Canada, food insecurity has also been associated with poor mental health in children and adverse childhood experiences (Jackson et al., 2019; Melchior et al., 2012). A rapid review by Aceves-Martins et al. (2018) aimed to determine the nature, extent and consequences of food insecurity affecting children under 18 years old in the UK. This review included 109 studies and found an association between child food insecurity and poor mental health, along with associations to other outcomes including developmental, psychological, behavioural problems, poor social interactions and academic performance. However, the authors identify a limitation of this review in that only five UK studies were included. Regardless of this, the review provides an insight into the numerous negative effects of food insecurity across countries on children's mental health.

Food insecurity experienced by children may also have a negative impact upon wellbeing (Connell et al., 2005). A research study by Bernal et al. (2016) carried out in USA found that (n=404) children's experiences of food insecurity was associated with feelings of shame. However, the questionnaire used in this study measured feelings of shame by relying on one single item and did not utilise the standardised USDA measurement of food insecurity (discussed on page 24) which may have resulted in an overestimation of individuals experiencing food insecurity (as mentioned on page 33). A study by O'Connell (2018) used qualitative reports from families (n=45) to examine the experiences of food insecure households and is one of the few reports focusing on a UK sample. The findings support prior studies in USA and include young people experiencing hunger, food sacrifices for younger siblings, sharing food with parents, feelings of shame and social exclusion due to a lack of resources to participate in social occasions, such as inviting friend's home. However, these studies (Bernal et al., 2016; Connell et al., 2005; O'Connell, 2018) focused on adolescents aged 11+ years old and did not consider primary school aged children. This is important as prior research has demonstrated children's awareness of food insecurity from as young as 8-9 years old (Fram et al., 2011; 2013).

Clearly, food insecurity is a public health concern which can have negative impacts upon individuals physical and mental health. Qualitative findings from interviews (n=19) with senior stakeholders in Northern Ireland have suggested that physical and mental health outcomes as a

result of household food insecurity can also lead to a reduced contribution to the workforce and the economy, and increased cost pressures on the National Health Service (Beacom et al., 2021). Therefore, business and policy responses to this issue have the potential to improve the economy as well as improving individual's physical and mental health.

1.2.8 COVID-19 and Food Insecurity

While the empirical data for studies presented in this thesis were collected prior to the outbreak of COVID-19 and therefore not the focus of this thesis, it is important to include a short discussion of recent studies and reports concerning the impact COVID-19 as these reports may influence future policy data recommendations. The COVID-19 pandemic has disproportionately impacted the health of ethnic minority groups and those living in poverty, who may be more vulnerable to poor health, increasing existing health inequalities (Mathur et al., 2020; The Marmot Review, 2020). The global pandemic COVID-19 has also recently exacerbated food insecurity levels in the UK and brought this issue to the forefront. Therefore, figures on food insecurity may no longer represent the current reality.

Loopstra (2020) viewed food insecurity levels in the UK during the COVID-19 crisis. The analysis uses data from the Food Foundation's commissioned online YouGov poll which was carried out during the 7-9th April 2020 and involved 4,343 adults 18+ years old. The poll used questions adapted from the USDA Food Security Survey module (as discussed on page 24) and showed that the number of adults who are food insecure is estimated to have quadrupled under the COVID-19 lockdown in the UK. Adults at a high risk of food insecurity have also reported income losses of more than 25%. Adults with children eligible for free school meals are at a high risk of food insecurity arising from a lack of money as they have to unexpectedly pay for food that would have normally been provided through free school meal provision. However, to participate in this study, individuals were required to have internet access to complete the survey, which may have presented a barrier to participation for some groups (Van Dijk, 2017; Van Deursen, & Van Dijk, 2019).

Recent findings from the Trussell Trust (2020, b) show that foodbank use increased by 81% in the last two weeks of March 2020, when lockdown started, compared to the same time last year. Since April 2019, there was a 95% increase in the number of families with children that received a parcel from a foodbank which accounts for 46% of the total increase from April 2019. Reasons for household referrals during this period were mainly due to low income (43% of households) and the number of referrals made for this reason have more than doubled with a 102% increase in comparison to the same period last year. Similarly, the Independent Food Aid Network (2020, b) collated data from 83 independent food banks operating across the UK and found 354,613 emergency food parcels distributed between February-November 2020 during

lockdown compared to 168,560 food parcels during the same period in 2019, which is an 110% increase.

An online survey of 2309 adults with children gathered by YouGov, and an online survey of 1064 children gathered by Childwise in August-September 2020, were analysed by The Food Foundation (2020, a) and showed a high demand for Free School Meals during the Autumn period. The data, acquired through the survey conducted by Childwise, shows that 29% (equivalent to 2.2 million children) of children aged 8-17 are registered for Free School Meals, with 42% of these children (900,000) newly registered to the scheme. While 8% of children (over 600,000) said they were worried about not having enough food for lunch at school this term. Despite this major spike in demand, schools are struggling to provide hot lunches, with only 32% of all children aged 8-17 saying they were eating hot meals from the canteen, and shockingly 3% of children (180,000) saying they skipped lunch entirely. Data gathered through the YouGov survey revealed that 32% of households with children have experienced a drop in income since late March. 42% of parents with children aged 0-3 years old and/or pregnant women were not aware of the Government's Healthy Start scheme which provides vouchers for fruit, vegetables and milk. Yet demand is undoubtedly there, with 65% of households with pregnant women and/or children aged 0-3 years old who do not currently receive Healthy Start vouchers saying it would make it easier for them to buy more milk, fruit and vegetables for their family. 32% of those say they have a limited budget for food and struggle to afford the fruit, veg and milk they need.

The massive increase in demand for Free School Meals shows the hard-hitting socioeconomic consequences of the COVID-19 crisis is exacerbating existing social, economic and health inequalities and bringing these issues to the forefront (Bambra et al., 2020; Defeyter et al., 2020). However, a campaign led by Marcus Rashford has ensured children and struggling families are provided with additional support during the COVID-19 crisis. The campaign for Free School Meals to be extended during the crisis caused successful U-turns from the government which resulted in the funding of Free School Meals over the summer holidays and winter holidays in 2020, with additional support of £170 million for local councils to help struggling families.

1.2.9 Diet Quality, Obesity, Food Prices and the Environment

In the UK, the Eatwell Guide (2018) is used as a guide to promote a healthy diet. This guide defines a healthy diet as at least 5 portions of fruit and vegetables daily and food and drinks of lower fat, salt and sugar from three main groups (carbohydrates, proteins and dairy and alternatives). The guide also recommends consuming 6-8 glasses of water daily and reducing sugar-sweetened beverages, processed meat and red meat intake. However, research suggests

children from low-income areas consume poorer diets compared to children from higher-income areas. For example, a study by Thomas et al. (2019) conducted an online survey of 3348 children and young people, aged 11-19 years of age, in the UK and found that children and young people from low-income areas consumed foods of higher fat, salt and sugar compared to children from higher-income areas. This included a higher likelihood of consuming sugary/energy drinks and a reduced likelihood of consuming healthier options, such as fruit and vegetables, in higher quantities. A limitation of this study is the measurement of deprivation using The Index of Multiple Deprivation (IMD) which is an area-based measure rather than an individual measure of socio-economic status. Measuring the deprivation levels of an area an individual resides in does not establish whether an individual is personally deprived.

A study by Johnson et al. (2018) classified deprivation using household socioeconomic position based on the social class and income of the householder with the highest income. An analysis of the data from four-day food diaries completed by 4636 children for the UK National Diet and Nutrition Survey (NDNS) (2008-2014), showed differences in dietary pattern scores, with children from a lower socio-economic status consuming more obesogenic diets. This included consuming energy-dense, high-fat and low-fibre foods/drinks. Consequently, the authors concluded that children of a low socioeconomic status are at higher risk of gaining weight. However, the study found no evidence of an association of dietary pattern score with the Body Mass Index (BMI) of the participants. Conversely, a study by Noonan (2018) used data from wave six of the UK Millennium Cohort Study to demonstrate that (n=10,736) adolescents living in poverty were more likely to be overweight, obese and consume a poorer diet compared to individuals who were not classed as living in poverty. Adolescents living in poverty (using the relative measurement of poverty) had higher Body Mass Index (BMI) and consumed a poorer diet which included more frequent consumption of sweetened drinks and fast food and less frequent consumption of fruits and vegetables, compared to adolescents not living in poverty. However, children's dietary intake was recorded using a 7-point Likert scale on the frequency of fruit, vegetable, sweetened drink and fast-food consumption. Therefore, a limitation of this study was that the dietary data did not include detail on children's entire diet.

Differences in food intake amongst food secure versus insecure households has been demonstrated in a few studies in the UK. For instance, Ebadi and Ahmadi (2019) used data (n=3118) from the Food and You Survey (2016) and found that food insecurity, measured using the USDA measurement of food security, is a strong determinant of fruit and vegetable intake. Food secure households have higher intakes (47%) of fruit and vegetables compared with food insecure households (33%). However, one limitation of this study is that it does not consider other foods/drinks, which are important to dietary intake. Yet, findings from studies in other developed countries such as the USA which measure and have investigated food

insecurity more extensively, have provided further support for Ebadi and Ahmadi (2019) study findings as they have also found that food insecure children consume a poorer diet compared to food secure children (Fram et al., 2015).

Diet quality refers to scores or indices which are used to assess how well an individual's diet agrees with a predetermined ideal diet (Hodge & Bassett, 2016). As previously discussed on page 25 and 26, food insecure children have lower diet quality scores compared to food secure children, as assessed by viewing compliance to dietary guidelines from the Healthy Eating Index (2015), which is a valid and reliable measure to assess overall diet quality in USA (Landry et al., 2019). This is concerning, as poor diet quality has been associated with poorer mental health for children and adolescents (O'neil et al., 2014). Although the systematic review by O'neil et al. (2014) is cross-sectional and therefore cannot determine the cause and effect, this study provides a useful insight the impacts of poor diet quality, with the findings mirrored in research studies in the UK and across other countries (Jacka et al., 2010; Jacka et al., 2013; Kulkarni et al., 2015). In contrast, high diet quality has been found to have a positive impact upon quality of life, and mental and physical health related outcomes such as IQ, mental health, blood pressure, body composition, and prevalence of metabolic syndrome (Dalwood et al., 2020; Wu et al., 2019).

Poor diet quality has also been associated with increased risk of obesity (Perry et al., 2015). In the UK, obesity rates are currently high with 1 in 5 children in Year 6 and 1 in 10 children in Reception classified as obese in 2016/17 (NHS Digital, 2018). Inequalities are widening in obesity, excess weight and severe obesity for boys and girls in Reception and Year 6 with the largest increases seen in the most deprived areas (Public Health England, 2020, b). In response to these high levels of childhood obesity in the UK, the government has set out the aim of reducing the rate of childhood obesity within the next ten years in the Childhood Obesity Plan (2016). This plan identifies that obesity rates are disproportionately higher in children from low-income households and black and minority ethnic families. This is of particular concern as the second chapter of the Childhood Obesity Plan (2018) states that children who are obese or overweight have a disproportionate likelihood of developing type 2 diabetes and liver problems during childhood. They are also more likely to experience bullying, low-esteem and a lower quality of life and they are highly likely to go on to become overweight adults at risk of cancer, heart and liver disease.

Due to the increasing vulnerability of food insecurity among low-income groups (Loopstra et al., 2019), and the poor diets consumed by children from low-income families and children experiencing food insecurity, the food insecurity paradox provides a plausible explanation for the association between low income and obesity (further described on page 30). One of the few

studies in England focusing on this by Neelon et al. (2017), concluded that area deprivation was associated with obesity and food insecurity. This study acknowledged that this is due to the overconsumption of food in times of food abundance to account for food scarcity later along with the intake of cheap, calorie dense, poor nutritional foods which promote passive overeating. However, it is important to note that this study relied on self-reported survey data of (n=7070) nursery managers and did not collect individual measures of children's weight or food security status. A more recent study in the UK used a questionnaire which was distributed at foodbanks and online to explain the association between food insecurity, poor diet and obesity. The findings of the study demonstrated that (n=604) individuals ate as a coping strategy to deal with the stress of food insecurity (Keenan et al., 2021).

The rising price of healthy food may be a contributing factor to the likelihood of families purchasing unhealthy foods, specifically for low-income families. For example, a study by Jones et al. (2014) suggests that healthy diets are less affordable and low-income families may be unable to afford a nutritious diet. This study used data from the UK Consumer Price Index and the UK Department of Health's National Diet and Nutrition Survey from 2002– 2012. Food and drinks (n=94) were categorised by the Food Standards Agency nutrient profile as either "more healthy" or "less healthy". The findings demonstrated that prices have risen from 2002-2012, with the mean price of 1000 kcal being £2.50 for less healthy items and £7.49 for more healthy items in 2012. The price of healthy items rose faster than less healthy items and were more expensive with 1000 kcal costing £0.10 more on average per year for more healthy items when compared to less healthy items. However, the authors of this study acknowledge that the number of foods and beverages included in the study is small and only reflects those foods included in the Consumer Price Index rather than a full range of available foods.

In addition to this, shop promotions of unhealthy foods may be another contributing factor increasing the likelihood for low-income families to purchase unhealthy foods. To illustrate, a quantitative survey which collected data from adults (n=302) aged 18-75 found that promotions cause 64% of those surveyed to purchase greater volumes of an item and 76.5% to easily purchase confectionery and savoury snacks. Three-quarters (76%) of those surveyed believed promotions are more prevalent for less healthy foods compared to healthy foods. Those surveyed also reported that if healthy food were cheaper, this would encourage consumers to make healthier food choices. Increasing the price of less healthy foods (such as confectionery and savoury snacks) could also impact positively on purchasing behaviours (McPoland et al., 2020). Low-income individuals primary influencing factor when buying food is the cost with less concern about the health aspects of food (Darmon & Drewnowski, 2015; Puddephatt et al.,

2020). Therefore, more support should be targeted at encouraging the promotion of food that is consistent with healthy eating and making them more affordable.

More recently, a brief carried out by O'Connell (2018), used research from the Minimum Income Standard (MIS) on what counts as a socially acceptable diet in the UK and the costs compared to families actual spending on food. The findings demonstrated that 2.2 million, households with children in the Living Costs and Food Survey (LCFS) in 2013 were spending less on food than needed for a nutritious and socially acceptable diet, which has increased from 1.4 million, in 2005. O'Connell (2018) also gathered children's self-reported eating behaviours from 2005-2014 and concluded that children from low family affluence groups reported less healthy eating behaviours than those in higher family affluence groups. Households being unable to afford a nutritious diet is important as prior research has suggested that parents influence children's food intake through modelling behaviour when eating meals together in the home environment (Spence et al., 2010).

The accessibility of healthy foods may also be a barrier to a healthy diet, as research suggests that vulnerable communities are more likely to be situated in food deserts (Hendrickson et al., 2006), where individuals have reduced access to shops selling healthy produce, and food swamps where individuals have increased access to unhealthy food shops such as fast-food takeaways (Bernsdorf et al., 2017; Dubowitz et al., 2015; Yang et al., 2019). To illustrate, a narrative review by Janssen et al. (2017) viewed the role of the environment on takeaway consumption. The review states that economic disadvantage in the food environment appears to be a strong determinant of access to out-of-home foods such as takeaway foods and consequent intake. The findings from Janssen et al. (2017) review provide an understanding of the environmental impacts upon the takeaway consumption of children and adults from a low socio-economic status. Yet, these findings are concerning as the consumption of takeaway foods has also been associated with greater odds of obesity (Burgoine et al., 2014).

In 2020, the Food Foundation analysed data on the location of food outlets from the Ordnance Survey's Points of Interest (2019, a) dataset focusing on local authorities in England. Calculating takeaway food outlets as a proportion of all food outlets, the findings indicated that approximately 14% of local authorities have seen more than a 5% increase in the proportion of fast-food outlets during the past 18 months. This is compared with just 1% that have seen more than a 5% decrease. The highest proportions of takeaway outlets were seen in the most deprived local authorities. Although the Ordnance Survey's Points of Interest does not represent all outlets sufficiently, such as convenience stores, this method is one of the most complete sources of food outlet locations available in England (Burgoine & Harrison, 2013). These study findings are of particular relevance to individuals on low income as they may be less able to

afford transport to access alternative food shops outside of the community (Caraher et al., 1998). Therefore, lower-income families need to shop locally and more frequently than higher income families who own a car (Furey et al., 2001). Consequently, access to a higher number of unhealthy food shops within the community may increase the likelihood of reliance on these foods (Bernsdorf et al., 2017), and associated with high rates of obesity, resulting in children born in 2020 being part of a reception class with 13% overweight and 9% obese (The Food Foundation, 2020, b).

During the school term, there are various schemes in schools to increase children's uptake of nutritious food, particularly for low-income children. All government funded schools are required to adhere to School Food Standards to ensure all children are provided with a nutritious meal, which provides advice on the types of foods to serve and how much to serve (Department for Education, 2015). For example, one or more portions of fruit and vegetables should be served each day. Free school meal provision is provided to children from low-income families and as a universal benefit for all children aged 4-7 years old attending a government funded school in England (Department for Work and Pension, 2013). Children are able to observe other children's food-related behaviour at school such as the acceptance of novel foods (referred to as positive modelling), which may increase the likelihood of other children trying new foods (Greenhalgh et al., 2009). Therefore, school meals can help to create variety in children's diets by increasing the likelihood of children trying new foods, along with supporting parents in balancing tight food budgets (Carduso et al., 2019).

Low-income families are also provided with milk, fruit and vegetable tokens through the Healthy Start Scheme with children under four years old accessing one £3.10 voucher per week and children under one years old accessing two £3.10 voucher per week. This policy has been found to improve the nutritional content of households' shopping baskets during the school term (Griffith et al., 2018). The Department of Health also funds a School Fruit and Vegetable Scheme to support low-income families by providing all 4 to 6-year-old children with a piece of fruit or vegetable each school day which may positively impact upon children's diets (Wells & Nelson, 2005). While some schools offer Breakfast Clubs to provide children with a nutritious and universal offer of breakfast which is reaching 1750 schools in disadvantaged communities and found to be particularly useful in improving the diets of children from low-income areas (Crawford et al, 2019; Defeyter et al., 2015; Harvey-Golding et al., 2016).

However, during the school holidays children are unable to access government funded initiatives to support nutritional intake. A few studies have investigated whether there are any differences in nutritional intake during the school holidays compared to the school term, with rather mixed results (Brazendale et al., 2017 Grimes et al., 2014; MacDiarmid et al., 2009).

Similarly, there has been an increasing number of research studies suggesting that low-income children are at a heightened risk of food insecurity during the school holidays (Forsey, 2017; Graham et al., 2016), which could have a negative impact upon children's diets (Gill & Sharma, 2004). However, despite an increase in academic research studies focusing on the negative impact of food insecurity during the school holidays on children, these studies are also still in their infancy (Stewart et al., 2018).

1.2.10 Physical and Sedentary Activity Levels

The World Health Organisation (2020) defines physical activity as any bodily movement that requires energy expenditure including walking, running and playing sports. The Chief Medical Officers (2019) recommend participating in at least 60 minutes of moderate to vigorous-intensity physical activity every day. This can improve muscular and cardiorespiratory fitness and improve bone and functional health (World Health Organisation, 2020). On the other hand, inactive behaviours, also referred to as sedentary behaviours, are defined by the Chief Medical Officers (2019) as undertaking little movement or activity and using little energy above what is used at rest. Examples include sitting in a chair and lying down whilst reading or watching the television.

Children's activity levels can differ based on family income. To illustrate, a study by Broderson et al. (2007) utilised data from a cohort of 5863 students, aged 11-12 years of age, involved in a 5-year longitudinal study to examine children's physical and sedentary activity levels. Socio-economic status was determined using the Townsend Index, which is an area-based measure. The findings demonstrated that sedentary behaviours were greater for children of a low socio-economic status compared to children of a higher socio-economic status. Yet, the physical activity findings were mixed, with females of a low socio-economic status participating in less physical activity compared to females of a higher socio-economic status. Yet, no differences were found in males of a low versus high socio-economic status. However, the researchers measured physical activity using self-reports of the number of days spent in physical activities, rather than using self-reports or accelerometers to measure the duration of time spent in physical activities.

A more recent study by McWhannell et al. (2019) found differences in both the physical and sedentary activity levels of 53 children from low and higher socio-economic backgrounds. This study determined socio-economic status by school postcode, using the English Indices of Deprivation (2015) and measured physical activity levels using accelerometers, and conducted 53 focus groups to find out children's experiences of physical activity during playtime. Accelerometer results showed that low physical activity levels and high levels of sedentary behaviours were more prevalent in children of a lower socio-economic status compared to

children of a higher socio-economic status. Focus group results revealed that children from the low socio-economic status school were unable to provide an explanation of the importance of participating in physical activity compared to children from the higher socio-economic status school. However, this study focuses solely on children's physical and sedentary activity during playtime at school as the authors identify playtime as a crucial opportunity for physical activity. Yet, despite this, the study provides important findings on the differences in activity levels for children from low versus higher socio-economic backgrounds using both objective and subjective method (n=110).

Structured settings outside of school such as afterschool and summer programs are environments which have the potential to increase children's physical activity and reduce sedentary time (Tassitano et al., 2020). Yet, this may also depend upon parents influences as children are more likely to spend time physically active if their parents support, encourage and motivate them to do so (Wilk et al., 2018). Parental support included transporting children to places to be active. Children's activity levels may also depend upon their socio-economic status as differences have been found between low and high socio-economic groups outside of the school setting (Brockman et al., 2009).

Dzewaltowski et al. (2010) found that providing children, particularly of a low socio-economic status, with numerous physically active opportunities outside of school time can increase children's self-efficacy. The Social Cognitive Theory by Bandura (2001) refers to the importance of self-efficacy which suggests that if you believe that you can perform a behaviour successfully, you will be more likely to engage in that behaviour. This is important because Craggs et al. (2011) found that children with higher levels of self-efficacy had smaller declines in physical activity compared to those with lower levels of self-efficacy.

Socio-economic differences in activity levels have been explained in a study by Brockman et al. (2009) using focus groups with 113 children. The authors state that children from middle and higher socio-economic schools report engaging in more sports clubs and organised activities after school compared to children from low socio-economic schools. Children from low socio-economic schools reported cost as a significant barrier for participating in physical activity. Therefore, the authors suggest that families of a low socioeconomic status may have poorer access to affordable facilities to participate in physical activity compared to more affluent families.

Building upon and extending Brockman et al. (2009) findings, Jago et al. (2017) conducted a further study using accelerometers to calculate time spent in physical and sedentary activity alongside a self-reported questionnaire to establish setting. Results indicated that children's

participation in organised physical activity at school and in the community is associated with increased physical activity and reduced sedentary time. This highlights the importance of attending community activity groups to ensure children have access to organised physical activity which is particularly important during school holidays when children are unable to access organised physical activity at school.

Ensuring children can access physical activities which they enjoy outside of school is important for increasing children's activity levels, as the Expectancy Value Theory suggests that children's participation in activities is dependent upon their enjoyment and interest in the activity (Simpkins et al., 2012). The Expectancy Value Theory by Eccles suggests that children's self-concepts, which refers to their beliefs about themselves, shapes their performance expectations in an activity which guides children's choice in participating in an activity (Eccles & Harold, 1991). To elaborate, children's motivation to participate in an activity may also depend on whether they are able to succeed in the activity and whether the task is too difficult. This may differ by gender as stereotypes associated with an activity shape different self-concepts for males and females on their ability to succeed in the activity (Eccles & Harold, 1991). Age and gender differences on the time children spend in physical and sedentary activities are evident in the literature. Females spend less time in physical activity and more time in sedentary activity compared to males. As children get older, they also spend less time in physical activity and more time in sedentary activity (Corder et al., 2015; Cooper et al., 2015; Leech et al., 2014; Trost et al., 2002). Therefore, access to a range of different age-appropriate physical activities outside of school are important to increase children's physical and reduce sedentary activity.

During the school term, children are encouraged to participate in physical activity as the Childhood Obesity Plan (2016) recommends that children should spend 30 minutes of daily physical activity at school during the school term. Furthermore, Chapter 2 of the Childhood Obesity Plan (2018) encourages primary schools to adopt the Daily Mile which is an active mile initiative to help engage children in physical activity during the school day. Schools that are maintained by local authorities must adhere to the National Curriculum and encourage children to be physically active by providing compulsory Physical Education classes (Public Health England, 2020, a). The government also provides Sports Premium to primary schools which includes funding £320 million to ensure primary schools can improve the quality of the physical activity they offer (Department for Education, 2020, b).

Despite efforts in schools to engage children in physical activity, research has previously found children have low physical activity levels in school (Bailey et al., 2012; Daly-Smith et al., 2021; Grao-Cruces et al., 2020; Mooses et al., 2017). Therefore, interventions have been

implemented to increase children's physical activity levels at school, including physically active lessons which may have the potential to increase physical activity (Daly-Smith et al., 2018), by allowing children to replace sedentary time with light physical activity (Morris et al., 2019). A study by McCulloch et al. (2019) which investigated an intervention that incorporated physical activity in classroom learning found that children's enjoyment was central to their active engagement in the classroom. This finding also further supports the Expectancy Value Theory discussed on page 46. In addition to this, the Government Cycling and Walking Investment Strategy (2017) aims to increase the percent of primary school children walking to school from 49% in 2014 to 55% by 2025 using methods such as improving road safety. Research has demonstrated that a walk to school initiative could increase children's physical activity as children's chances of meeting daily physical activity guidelines are doubled when children actively commuted to school every day (Daly-Smith et al., 2011).

While there are a considerable number of research studies that have investigated physical activity levels either in school, or in children's commute to school, not many studies have examined children's physical activity outside of the school environment. A study by Eyre et al. (2014) examined environmental facilitators and barriers to physical activity for children living in deprived areas by gathering the views of 59 parents in focus groups and an environmental questionnaire. Parents reported a number of barriers in the environment that limited children's physical activity including poor access to open spaces/facilities and poor safety (including anti-social behaviour) in the neighbourhood which may result in higher levels of sedentary behaviours such as watching TV indoors. This study provided an insight into parental views of the environmental factors preventing children's participation in physical activity, which is important as prior studies suggest parental support positively effects children's activity levels (Wilk et al., 2018). However, this study did not consider actual proximity of environmental barriers for children in deprived areas. Jones et al. (2009) addressed this limitation using a GIS database provided by Bristol City Council to locate public greenspaces and a self-report questionnaire completed by 6821 respondents to assess frequency of greenspace use, frequency of participation in physical activity and environmental perceptions of greenspace access and safety. The 2004 English Index of Multiple Deprivation (IMD) was used to measure neighbourhood deprivation in this study. The findings demonstrated that deprived areas are within closer proximity to greenspace, which has been viewed to promote physical activity, yet they were less likely to use them compared to those in less deprived areas to participate in physical activity due to negative perceptions (e.g., safety concerns).

The surrounding environment, including the weather, such as the cold or rain, has also been found to negatively impact upon physical activity levels (Duncan et al., 2008). Therefore, during autumn and winter, when these weathers are most prevalent, children participate in

increased sedentary time and lower levels of physical activity compared to during the spring and summer (Atkin et al., 2016). However, research suggests this does not apply during the school summer holidays (Brazendale et al., 2017; Domone et al., 2016). For example, a review of (n=190) research studies in USA by Brazendale et al. (2017) revealed that the lack of consistent and formal structure during the school summer holidays may be causing a decrease in physical activity, an increase in sedentary activity (including spending a longer amount of time on screen-based activities and sleeping) and resulting in weight gain for children, which was referred to as the 'Structured Days Hypothesis'. During the school term, children have decreased physical activity and increased sedentary behaviours on weekends when compared to weekdays (Kallio et al., 2020). Brazendale et al. (2017) suggested the structured environment of weekdays during the school term may help to protect children by regulating obesogenic behaviours through restricting caloric intake, reducing screen time occasions, regulating sleep schedules and providing compulsory physical activity opportunities. These factors may contribute to widening the health inequality gap and are particularly evident and harmful for ethnic minority and low-income children (Brazendale et al., 2018; Weaver et al., 2019).

In the UK, there is a lack of studies focusing on children's activity levels during the school summer holidays. One of the only UK studies to consider this by Mann et al. (2020) suggests that children (n=463) are less physically active during the summer holidays compared to the school term. Children's body mass index increased significantly, whereas cardiorespiratory fitness decreased significantly over the school summer holidays. Yet, this study does not consider sedentary activity levels. A review by Campbell et al. (2015) acknowledges that low-income families may experience difficulties during the school holidays not just in terms of providing childcare and nutritious food, but also to provide enriching physical and learning activities to replace the provision of school. Recently, a study by Morgan et al. (2019) suggests that holiday clubs may support children's poor activity levels by increasing time spent in physical activity and the number of children adhering to physical activity guidelines. This is similar to findings in the USA of the positive impact of summer camps on children's physical and sedentary levels during the school summer holidays (Brazendale et al., 2017; Hickerson & Henderson, 2014).

Consequently, Morgan et al. (2019) suggests that school holiday programmes may provide an effective intervention to increase physical activity levels for children from low-income households, who often participate in low levels of physical activity, and reside in neighbourhoods with a limited number of environmental factors (e.g., a safe environment) that support physical activity (Jones et al., 2009; Nelson et al., 2007). Overall, despite initial studies suggesting children from low-income households have poor activity levels during the school

summer holidays, there are a limited number of studies that have investigated this important topic.

1.2.11 Childcare, Wellbeing and Hunger in the Holidays

A report conducted by Hirsch (2019) for the CPAG found that the cost of bringing up a child, when including housing, council tax and childcare, had increased by 19.4% for lone parent families and 5.5% for couple families since 2012. The 30-hour a week free childcare entitlement has been implemented to support parents with the rising childcare costs. However, Dewar and Ben-Galim (2017) identify that this scheme is based on working 16 hours at the national minimum or living wage. This means that many single parents who are job seeking or who are in low pay jobs and zero-hour contracts, are likely to miss out.

Combined with a lack of support to cover childcare costs, a survey carried out by the Family Childcare Trust (2016) found a shortage of childcare and lack of affordable holiday clubs in the UK, particularly during the school holidays. A more recent survey carried out by The Childcare Trust (2018) identified that more than 50% of children under the age of 11 are likely to be left alone in the house with no adult supervision during the summer holidays. The Holiday Childcare Survey (Cottell et al., 2019), found that overall costs of childcare during the summer is double the price compared to term time. However, there are considerable variance in prices, according to region and in areas such as London, the price of childcare can be up to 80% higher than average. This survey identifies both the lack of childcare and the unaffordability of childcare, specifically for children aged 4-7 years old. Findings from the Family Childcare Trust (2016) survey identified the largest gaps in childcare provision were for children aged 12 years or over, families living in rural areas and children with special education needs and disabilities.

The combination of a lack of affordable and available childcare may negatively impact upon parents' ability to work, specifically during longer periods when childcare may be required such as the school holidays. Simmonds and Bivand (2008) authored a report for the Joseph Rowntree Foundation and found seasonal patterns of individuals leaving work, with July to September showing rises in benefit claims for single parents and mothers with partners. The out of work patterns may be linked to the school holiday effect whereby parents have an inability to maintain work due to a lack of affordable and accessible childcare during the summer school holidays. To establish the reasons behind out of work patterns, Booth et al. (2013) investigated whether 1000 parents of children under 15 years old experienced any barriers to accessing out of school childcare provision. Results from telephone surveys established that 95% of parents used childcare services in the past six months and 17% of parents experienced work-related difficulties due to childcare issues which prevented them

from doing paid work. Parents identified more affordable and extended hours of childcare would enable them to work.

In addition to being a barrier for parents to work, for those parents who do work and rely on childcare provision, they are unable to work longer hours. An analysis of data from the Department for Education's Childcare and Early Years Survey of Parents 2014-2015 by Haddad et al. (2018) provided further support for the finding that parents experience work difficulties due to the unavailability and unaffordability of holiday childcare. The survey findings also revealed parents working part-time are prevented from working longer hours (30.2% and 38.3%) and even for full-time workers, there is a significant minority who would work more hours if holiday childcare were available for more hours each day (16.6%) and was more affordable (20.5%).

Supporting parents to remain employed during the school holidays by providing childcare is important as it could lead to a reduction in the number of families accessing food aid (Graham et al, 2016). Stewart et al. (2018) also identifies the importance for low-income families to be able to access appropriate childcare, enriching activities and nutritious food during the school holidays in the UK. More recently, there has been an increase in holiday clubs set up by many third sector organisations within the UK providing free or low-cost childcare provision with the offer of a meal for children (Mann et al, 2017). Without access to holiday clubs, recent research has suggested that the school holidays may have a negative impact upon children's mental wellbeing. A quantitative study by Morgan et al. (2019) focused on children's wellbeing during the school summer holidays in Wales.

The authors gathered survey data on 103, 971 adolescent's wellbeing during the summer holidays using the Short Warwick-Edinburgh Mental Wellbeing Scale, which is a self-report survey method. Family affluence was determined by The Family Affluence Scale which is a child self-report survey. The findings demonstrated that low socio-economic status was associated with poorer mental wellbeing and 65.2% of this association was mediated by summer holiday experiences. This study demonstrates the negative impact of the school summer holidays on the wellbeing of children from low-income families. These included experiences of hunger, loneliness, spending only a short amount of time with friends and declines in physical activity.

In USA, a study by Nord and Romig (2006) found that households with school-age children also had a higher prevalence of food insecurity in the summer holidays compared to other households. This study used the Current Population Survey Food Security Supplement from 1995 to 2001 and demonstrated seasonal differences in food insecurity. Summertime food

insecurity, also known as holiday hunger, has also been found in the UK, despite an absence of academic studies focusing on this. A report by Kellogg's (2015) which involved an online survey on YouGov with parents (n= 580) of children aged between 5-16 years old found the school holidays place an extra burden on the food budget of a third of parents in the UK. This includes 14% of parents reducing the quantity of children's meals and some parents skipping meals to feed their children. This issue may not just be experienced by children receiving the government-funded Free School Meal provision during the school term, as many households experience increased financial pressures during non-term time due to childcare and activity costs as well (Machin, 2016).

More recently, a study by Stretesky et al. (2020) investigated the impact of the school summer holidays on parent's wellbeing. More specifically, the authors note that the school summer holidays are a particularly stressful time of year for many low-income parents due to childcare needs and experiences of "Holiday Hunger" (as defined on page 18). Defining the school summer holidays as a potentially stressful event, Stretesky et al. (2020) found that out of 252 parents with school age children, 64.8% of these experienced some level of holiday hunger and scored higher on the Impact of Event Scale; a scale used to measure stress. The authors also found that holiday hunger partially mediated economic hardship (such as poverty) and parental stress and conclude by stating government policies should be implemented to address holiday hunger.

A Feeding Britain report (Forsey, 2017) estimated that approximately three million children are at risk of Holiday Hunger in the UK, with two million of these children from working families. The All-Party Parliamentary Inquiry into Hunger (2015) reports evidence of food poverty in the UK during the school holidays (with oral evidence received from 155 witnesses and 246 written submissions). The inquiry referred to the need for local communities to be provided with support to tackle school holiday hunger and recommended holiday provision all year round in each region of the UK. This was also supported in a recent briefing by Moore and Evans (2020) who stated that schools are an ideal environment to intervene and reduce food inequalities, yet the wider social context should also be considered. The authors recommend that the government should permanently extend the Holiday Activities and Food (HAF) programme to address food inequalities families experience during the school holidays. The Department for Education initially addressed the need for holiday provision to be funded in the UK to tackle holiday hunger by providing £2 million of funding in 2018 and an additional £9 million of funding in 2019 and 2020 for Holiday Food and Activities during the school summer holidays. More recently, in 2020 the government announced funding of £220 million for the holiday programme "Holiday Food and Activities" to be implemented throughout England during 2021. In other areas of the UK, holiday provision has also received government funding.

The Welsh Government provides up to £1 million funding for holiday provision (Welsh Government, 2020), whereas the Scottish Government allocated £2 million to fund holiday provision (Scottish Government, 2019).

1.2.12 Peer Reviewed Research on the Implementation and Impacts of Holiday Provision

In response to holiday hunger, there has been a rise in the implementation of charitable provision for children in the form of feeding initiatives, such as holiday breakfast clubs and holiday provision clubs (Lambie-Mumford & Sims, 2018; Mann et al., 2017). Holiday provision sites (also referred to as holiday clubs and/or hubs) are described by Mann et al. (2018) as an offer of free or low-cost food, physical activity and childcare during the school holidays. Holiday provision sites/clubs/hubs in the UK offer an informal service delivered by voluntary and community organisations along with some local authorities (Mann & Defeyter, 2017).

The implementation of holiday provision was initially investigated in a study by Mann et al. (2017) using preliminary survey findings from (n=837) organisations delivering holiday provision. This study viewed the geographical locations and types of holiday provision sites implemented across the UK. The findings demonstrated a rise in provision, particularly in London, and found the majority of sites were either voluntary or community-based groups delivering free food and activities for primary school aged children with the support of paid and voluntary staff, and partnerships with organisations.

More recently, Mann et al. (2018) extended on Mann et al.(2017) study using census of holiday clubs and Lower Layer Super Output Areas data for England to establish whether holiday provision sites are equally distributed in low-income areas. The authors suggest that more focus should be given to Black, Asian and minority ethnic groups as provision focuses primarily on areas with White and English/British communities in need. Nevertheless, holiday provision sites are accessible for individuals located in the most deprived communities. Similarly, Mann et al. (2018) focused on the scale of holiday provision implemented in Northern Ireland to add to the national picture of the availability and access of holiday provision. Findings from a survey completed by (n=136) organisations hosting holiday provision showed fragmented distribution of holiday clubs which were mainly operated by third sector organisations and relied heavily on volunteers. Many organisations delivering holiday provision also charged families to attend, which may make these sites less accessible for all families on low incomes. However, a limitation of these studies, which the authors acknowledge (Mann et al. 2017; Mann et al., 2018; 2018), is the use of a non-probability-based sample and relying on organisations to distribute surveys to holiday provision sites, which may

result in some sites being missed. Nevertheless, as there is currently no known sampling frame of holiday provision sites in the UK, these studies provide the most accurate data to date on the piecemeal holiday provision available in the UK for low-income families.

More recently, a qualitative research study by Mann et al. (2020) focused on the implementation of holiday provision by gathering the views of (n=14) senior stakeholders responsible for facilitating or implementing a programme of holiday provision. Although the study findings identified the necessity of utilising and developing existing community assets to address the need for provision, they also identify funding barriers, restricted capacity and little sustainability due to the lack of government support and reliance on communities. This study provides a unique perspective on holiday provision as it is one of the first published academic studies to consider senior stakeholder views.

The impact of holiday provision which provides free/low-cost food and activities for low-income families in the UK was initially investigated by Defeyter et al. (2015) using the views of staff (n=15), parent (n=18) and child (n=17) attendees in North West England and Northern Ireland. The findings of this study demonstrated a range of nutritional, social and financial benefits for holiday breakfast club users. Yet this study did not consider holiday clubs offering lunch provision, which is the most common meal offered at the majority of holiday club sites (Mann et al., 2017). Graham et al. (2016) addressed this by gathering the views of staff members (n=14) hosting holiday provision which offered lunch and activities in the South of England and Wales. Staff recognised that holiday provision may be able to alleviate experiences of food insecurity and social isolation experienced by many families during the school holidays by providing nutritious food, physical and social activities and new learning experiences. Although this study provides a useful insight into holiday provision in the UK, this study is limited as other service users' views and experiences (i.e., children and parents) are not considered.

A study by Long et al. (2018) followed up on Graham et al. (2016) findings and viewed the impacts of the food provided at holiday clubs on household food security. Parents (n=38) of children attending holiday clubs (n=7) in the UK completed a survey which measured food security status using the six-item short form of the household food security scale and the benefits of holiday club using three closed-end questions. The results demonstrated that attending holiday club can help to mitigate household food insecurity, as food insecure households benefit the most from holiday clubs compared to food secure households. Despite the small sample used in Long et al. (2017) study, this is one of the first studies in the UK to investigate whether holiday clubs benefit households experiencing food insecurity. More recently, a qualitative research study involving interviews with parents (n=21) by Shinwell and

Defeyter (2021) revealed that children's attendance at a holiday club helped food last longer at home, yet food insecurity was a constant factor in their lives throughout the year. Therefore, holiday provision may help low-income families attenuate the experience of food insecurity, yet they do not completely eliminate this.

More recently, Morgan et al. (2019) evaluated the "Food and Fun" holiday programme in Wales to view the impacts of holiday provision focusing on the opportunities for healthy eating and physical activity using the views of staff, parents and children. Interviews with staff (n=32) revealed the importance of trusted staff within a safe environment. Parent (n=69) and child (n=74) focus groups and parent (n=84) and child (n=196) surveys demonstrated children's diets improved (67% consumed more fruit and vegetables, 66% less sugary snacks and 81% less sugary drinks) and they made new friends (75%). Results from the activity monitors (n=41) worn by children demonstrated they were more likely to achieve the daily recommended 60 minutes of physical activity when attending the club (71%) compared to non-club days (48%). The study findings provided preliminary evidence on the impacts of holiday provision, yet Wales host holiday provision in schools, therefore other settings such as community centres are not considered, which a large proportion of holiday provision in the UK are located in (Mann et al., 2017). Similarly, a study by Holley et al. (2019) viewed the impacts of holiday provision focusing on the opportunities as well as the challenges of holiday provision offering free food. Sports club leaders (n=17) hosting the "Fit and Fed" holiday provision pilot found clubs provided children with numerous opportunities including enhancing food experiences, food confidence, social interactions and promoted positive behaviour. Yet the challenges identified by sports club leaders included operational difficulties due to a lack of resources and each club differing in terms of what they aimed to achieve (e.g., differing emphasis on the importance of nutrition). However, these findings are limited to holiday provision located in sports club venues.

Addressing the limitations of Morgan et al. (2019) and Holley et al. (2019) study, a qualitative research study by Stretesky et al. (2020) used interview data from staff/volunteers (n= 64), parents (n= 77) and children (n= 220) attending a range of holiday club settings (i.e., community centres, church halls and schools) in the North East of England. This study viewed the impact of holiday provision on the wellbeing of service users. Study findings demonstrated that stakeholders acknowledged the importance of networks located within the community for holiday provision organisers to access. These community networks provided a diverse range of resources for attendees such as engaging in enriching activity provision which can positively impact upon wellbeing. Yet, the authors recognise that some holiday provision sites experienced financial pressures as they lacked funding to operate sufficiently and relied more heavily on community organisations.

One of the latest peer-reviewed papers on holiday provision by Long et al. (2021) focused on quantitatively assessing parent wellbeing based on child holiday club attendance. The “Warwick Edinburgh Mental Wellbeing Scale” was used to assess parental (n=133) wellbeing across 17 holiday clubs in the North East. The findings demonstrated that parents’ wellbeing improved when children had access to a holiday club during the school summer holidays, compared to during a school summer holidays without access to a holiday club. After a summer of attending a holiday club, a reduction in social isolation and increased relationships built by parents and children attending the clubs were the most important factors relating to higher parental wellbeing. The authors state that despite the study limitation of using a pre-post-test design which could cause changes in test scores to occur due to repeated testing, the findings are relatively consistent and have been supported in prior qualitative reports.

Another recently published paper by Shinwell et al. (2021) focused solely on children’s views of holiday provision. Using focus groups with (n=31) children from three holiday clubs in Northern Ireland, the findings of this study suggest that club attendance has improved children’s self-confidence, development of new skills, provided a range of activities and social opportunities in a safe environment. Yet, the findings showed mixed responses regarding their intake of nutritious foods provided by the clubs. This study provides an interesting perspective as it is one of the first published papers to solely focus on children’s voices, yet the authors understand that this study focused solely on clubs within Northern Ireland and may not be applicable to other areas across the UK.

Clearly, there are a range of benefits that children and their families can gain from attending holiday provision including benefits to finances, education, physical health and mental wellbeing (Graham et al., 2016; Morgan et al., 2019; Stretesky et al., 2020). Yet, there are also a range of challenges to delivering provision including a lack of funding, resources and capacity which renders holiday provision to be unsustainable (Mann et al., 2020; Stretesky et al., 2020). However, there are only a few academic research studies which provide an insight into the implementation and these impacts of holiday provision. Consequently, as this is still a relatively new area and further investigation into holiday provision is required.

1.2.13 Large-Scale Holiday Food and Activity Programmes

Despite a lack of academic research papers on holiday provision, evaluations from third sector organisations have also viewed the implementation and impacts of various holiday programmes across the UK. Holiday provision is currently unregulated, which means there is no governance on how these programmes should operate. Therefore, each programme implementing holiday provision differs slightly in terms of the food and activities offered and the type of organisation offering support (i.e., school, church or community organisation). Therefore, third sector

organisations have carried out evaluations of different holiday programmes operating across various areas in the UK.

A holiday programme in the West Midlands was evaluated by O'Connor et al. (2015) and referred to as "Holiday Kitchen". This programme operated through existing local community sites and aimed to reduce low-income children and families' financial and emotional strain while improving their aspirations, social inclusion, nutrition and wellbeing. A Theory of Change model was used in the Holiday Kitchen evaluation to outline different outcomes from each stakeholder group gathered using a range of methods including photographs, parental questionnaires, funder feedback sessions, staff focus groups, and interviews with volunteers and holiday provision centre managers, and child friendly activities (food evaluation, tree of hope, washing line, weather map, thought and speech bubbles) to establish their views and impacts of provision. The findings demonstrated that child attendees reported an improvement in wellbeing, learning about healthy food and engaging in exercise and enriching activities. Parents also reported their child's nutrition and fitness has improved, it reduced parents' financial strain, and provided opportunities for family bonding, learning and social inclusion. Although staff/volunteers and centre managers viewed the programme as accessible for families who most needed the support, they identified operational difficulties including a need for planning time and flexibility in what they offer to suit their community. Regardless of these challenges, using a community led partnership to implement holiday provision using existing infrastructure and staff resources was viewed a success by funders. This evaluation provided a useful insight into a holiday programme operating at community sites, yet a limitation is the lack of robust, scientific measures used to gather data, which is the case with many of the third-sector evaluations on holiday programmes.

The school holiday programme in Derbyshire, which was evaluated by Hicken et al. (2016), involved the provision of food and activities across different settings (including schools, children's centres, church communities, green spaces, leisure and community centres) to support low-income families during the school holidays. The programme aimed to work with existing organisations who work with children and have the appropriate policies and practices in place to deliver holiday provision. FareShare played a key role in the programme, providing food for the organisations delivering holiday provision. The authors focused on stakeholder views of the food and activities provided using an online survey from (n=66) staff and stakeholders involved in developing and implementing the 19 projects and a food and activity questionnaire from (n=869) children and parents. The findings of the evaluation indicated the service users enjoyed the food and activities provided, yet a lack of fruit was provided, and additional activities could have been incorporated at holiday provision sites. The recommendations from the evaluation included more time to plan and advertise, restricting the

use of stigmatising terms such as “Holiday Hunger”, improving communication, food and deliveries from FareShare, and long-term sustainability required. However, a limitation of this evaluation is that there were no clear aims provided for the evaluation.

In Wales, the “Food and Fun” holiday programme, which was evaluated by McConnon et al. (2017), aimed to prevent children going hungry, improve health and promote learning. Holiday provision sites provided a free breakfast and lunch, and a programme of enrichment activities including one hour minimum of physical activity and nutritional education for a total of 12 days over 3-4 weeks during the school summer holidays. The evaluation focused on the impacts of the holiday programme on children’s health and wellbeing, parents and overall family life. This evaluation also provided important information regarding the costs of implementing school-based holiday provision which they estimated at £30.71 per child per day. Further detail on the methods used and findings from this evaluation have been published and discussed further on page 54.

More recently, “A Day Out, Not a Handout” summer holiday programme, implemented in the most deprived areas in the North East of England, and was evaluated by Defeyter et al. (2018). This summer holiday programme aimed to address child food insecurity, emotional wellbeing and social isolation during the school holidays. This evaluation used a mixed method approach to investigate the opportunities and challenges of holiday provision. This included focusing on the potential relationships between holiday provision and the wellbeing of children, parents and staff, along with children’s’ health and nutrition and parents’ stress, isolation and financial strain. The qualitative findings and quantitative findings gathered from parent surveys from this report have been published and discussed previously in further detail on page 54 and 55. Quantitative data (which have not been published) were also collected in this evaluation at (N=17) holiday club sites during the school summer holidays. A survey including the Day in the Life Questionnaire (DILQ) and a food and activity scale were used to collect data from children, whereas a survey including the Strengths and Difficulties Questionnaire were used to collect data from parents. The findings from parents (N=133) and (N=266) children’s surveys demonstrate the wellbeing of service users and diets of children improved, and children’s physical activity levels, social and learning opportunities increased. This report demonstrated a range of positive impacts beyond providing nutritious, yet the authors acknowledge that the sample is limited to the North East and not nationally representative, which is the case with all third sector evaluations on holiday provision.

The summer holiday programme implemented in Glasgow was evaluated by Glasgow City Council (2018, 2019, 2020). The holiday programme aimed to enable community organisations in Glasgow to provide nutritious food for children to support their wellbeing and create a

healthier relationship with food during the school holidays. In 2018, views of the (n=97) funded organisations highlighted positive impacts on children (providing healthy foods, new skills, social and physical opportunities to improve wellbeing), families (reduced stress and social isolation, increased finances, skills, support and advice), communities (strengthening relationships and businesses using locally sourced food) and the organisation (increased community trust and new partnerships and volunteers). However, planning and delivery timescales were short, and many organisations reached capacity. In 2019, feedback provided from organisations suggested that children have tried new and healthy foods, improved behaviour, socialised, learnt new skills, were healthier and more confident and reduced family's financial pressures. In 2020, due to the COVID-19 pandemic, meals were delivered to children and children were provided with activity packs (including cooking and arts and crafts supplies) due to the majority of activities taking place online. Service providers and users commented on the impacts of the holiday programme, with reports suggesting the programme supported user's mental health and wellbeing. However, in the evaluation reports by Glasgow City Council (2018, 2019, 2020), it is unclear on the methods used for the data presented, including how many participated in the research in the 2019 and 2020 evaluation report.

In West Cheshire, a holiday programme evaluated by Francis et al. (2019) aimed to provide food and activities (including nutritional education) over the school summer holidays for children and their families. The evaluation focused on working with a range of activity and food providers to develop an understanding of impact, effectiveness and best practice of the holiday provision, along with exploring the necessity for longer term food support and services. The evaluation used interview data from parents, children, and staff and observational methods. The findings demonstrated improved family wellbeing through social opportunities, activities and nutritional food provided at the holiday sites. However, the authors identified small budgets restricting the opening times of some holiday provision sites and additional staff/volunteer support required to support children with special needs. This evaluation provided interesting qualitative findings regarding the potential positive impacts of holiday provision on children which mirrors prior evaluation reports (e.g., findings from Defeyter et al. 2018), yet this evaluation lacked detail on the methodology including participant numbers and demographic information (e.g., age).

Other third sector evaluations of holiday programmes have been completed by Street Games' which focus on their "Fit and Fed" holiday programme in; Hertfordshire (2018) Wales (2019), and London and the South East (2019). The Fit & Fed programme aims to tackle holiday hunger and provide a range of activities, specifically sports-based activities, which is flexible to the needs of each local community the holiday provision sites are operated in. Quantitative (child workbooks) and qualitative (focus groups and surveys with parents, and

surveys with Herts Sports Partnership staff, coaches and partners) findings from Hertfordshire (2018) demonstrated social, financial, physical, nutritional and educational benefits for service users in safe and accessible environments. Staff were viewed as role models, although they experienced operational challenges with recruiting service users, identifying the need for a flexible approach. Yet, the evaluation did not provide detail on participant numbers or the findings of pre and post changes from children's workbook. Street Games found similar findings in Wales (2019), and London and the South East (2019). Qualitative surveys by coordinators (n=14) in Wales revealed clubs provided new activities, increased collaborations, engaged ministers and provided useful staff training (e.g., nutrition and food hygiene skills). Qualitative surveys by children in Wales (n=239), and London and the South (n=over 150) revealed learning, new friends, foods/activities and opportunities to keep physically active for child attendees. However, little detail was provided in these reports on the demographics of participants.

In 2019 and 2020, Street Games also received funding from the Department for Education for their "Fit and Fed" programme to be carried out in the North East of England. This was referred to as 'Newcastle's Best Summer Ever' which involved over 70 local partners providing food which adhered to the School Food Standards and providing enhancing activities which engaged families and children. Local partners acknowledged the need for open access and flexible holiday provision which has supported prior study findings (O'Connor et al., 2015). However, the evaluation methods used were unclear of how data was collected, with whom, and how many.

In London, the Kitchen Social programme works with existing grass-roots organisations, referred to as "hubs", to build up their capacity, share good practice and deliver free or low-cost nutritious food and activity provision for low-income families during the school holidays (The Mayor's Fund for London, 2016, a). This programme aims to address food insecurity and support low-income children and parent's physical and mental well-being during the school holidays. Kitchen Social have worked with over 200 community organisations which includes youth clubs, community centres, libraries, activity playgrounds, schools and churches in 24 London boroughs since the programme was launched in 2017 (see Figure 1.1 for hub locations) (Kitchen Social, 2021). See Table 1.1 for further details on Kitchen Social. The first report evaluating the pilot project of the Kitchen Social Programme (Mayor's Fund for London, 2016, b) focused on the logistics of implementing holiday provision and found that hubs offered varied delivery models, yet all hubs required training support and physical resources. A further Kitchen Social report by Defeyter et al. (2018) focused on the operation of provision using a hub staff survey (n=39). The findings demonstrated that hubs operate in a range of venues in deprived locations with full-time staff, part-time staff and volunteers. Hubs served hot and cold

meals adhering to School Food Standards (supported by food charities) alongside a range of activities which adhered to daily physical activity recommendations. Yet, hubs required additional funding and support with staff/volunteer training and recruitment. Staff described children gaining social, educational, physical and behavioural benefits from attending hubs, although this was based on staff views as the impacts of hubs on service users were not measured.

More recently, a literature review by Evans (2020) was commissioned by the Department for Education and viewed the evidence on the impact of school holidays on pupils from disadvantaged homes by reviewing existing holiday food provision evaluations. The review focused on the extent of holiday hunger and learning loss in the UK, including best practice on encouraging participation and attendance at holiday provision and the impacts on disadvantaged groups. However, findings revealed there are evidence gaps in the UK as only a few providers of holiday activities with food had sufficient data to determine best practice or value for money in holiday food and activity delivery.

Evaluations on holiday programmes carried out across the UK provide interesting findings of the potential challenges (lack of funding, resources, recruitment and capacity) of implementing holiday provision and potential impacts (socialisation, improved nutrition, finances, health and wellbeing) of holiday provision on service users, yet these evaluations are limited due to many reports lacking scientific methods and details of the methods/participants. The majority of holiday programmes appear to have similar intentions of increasing physical activity, improving nutritional intake and offering opportunities to learn and socialise (Forsey, 2017; Mann et al., 2017). However, there are different models of holiday provision, with variations in the types of activities and food offered. Therefore, each holiday programme could have differing impacts (e.g., some holiday programmes may focus more on improving nutrition, physical activity or learning) (Holley et al., 2019). Since there are currently few academic studies and evaluations of holiday provision in the UK, further investigation is required.

1.3 A Socio-ecological Model of Health and the Kitchen Social programme

Various different theories were considered to underpin this thesis. Maslow's (1943) theory of human motivation was considered as this theory identifies an individual's needs which motivates their behaviours. This theory identified that once an individual's most predominant need is met, the individual aims to achieve the next highest need. If an individual meets their basic physiological needs (access to food, water, warmth and rest), they are then motivated to meet their basic needs of achieving safety and security. After achieving their basic needs, an individual strives to meet their psychological needs, which includes belonging and love needs (intimate relationships and friends) followed by esteem needs (prestige and feelings of

accomplishment). The final need at the top of Maslow's (1943) hierarchy is self-fulfilment needs where an individual can reach self-actualisation by achieving their full potential. However, to achieve self-actualisation, an individual must master the previous needs. Therefore, being unable to achieve basic needs such as access to sufficient food, may cause an individual to be unmotivated to achieve other human needs such as forming successful relationships. However, as this theory focuses on individuals and does not consider the complex environmental factors which impact an individual, this theory was not used to underpin this thesis.

Another theory which was considered to underpin this thesis was Bronfenbrenner's Ecological Systems Theory as this is based upon the belief that a person's development is affected by everything in their surrounding environment. Bronfenbrenner identifies five environmental systems with which an individual interacts: the microsystem (i.e., the immediate environment), the mesosystem (i.e., individual's connections), the ecosystem (i.e., the indirect environment), the macrosystem (i.e., social and cultural values), and the chronosystem (i.e., changes overtime). Bronfenbrenner emphasizes the importance of studying children in multiple environments, also known as ecological systems, in attempt to understand their development (Bronfenbrenner, 1992). The current thesis is not framed under this model as this thesis focuses on studying children mainly in holiday hubs. Hence, this did not enable the collection of complete data across different systems.

Instead, the socio-ecological model of health was used to underpin this thesis as this theory considers the multiple levels of influence which affects and is affected by individual's behaviour. This is important to consider because public health initiatives are complex and may be better understood by considering numerous levels of influences (Townsend & Foster, 2013). A socio-ecological model explains that an individual's behaviour shapes and is also shaped by society and the environment (Townsend and Foster, 2013). Health behaviours are influenced by multiple social (i.e., interpersonal factors such as family and community factors such as social networks which exist among groups) and cultural dimensions (i.e., organisational factors such as informal structures and policy factors such as laws regulating behaviours) (Stokols, 1996). Yet, human health is not solely influenced by environmental circumstances as a variety of personal attributes (i.e., intrapersonal factors such as genetics) can also influence health. This model refers to a dynamic interplay between situational and personal factors (Stokols, 1996).

This thesis will focus on the Kitchen Social programme (discussed on page 59 and 60) which offers free/low-cost food and activities for low-income children and families at various holiday hub sites across London (see Figure 1.1. for a visual representation of the hub locations and

Table 1.1 for further details on the operation of Kitchen Social). The discussion of each study in this thesis which focuses on the operation and impacts (on child and parent wellbeing, and child diet and activity levels) of the Kitchen Social programme will be applied to the socio-ecological model of health (see the discussion section in Chapters 3, 4, 5 and 6). This model will be useful to gain a better understanding of the multiple factors which influence and are influenced by the health-related impacts of the Kitchen Social holiday programme.

Table 1.1 The operation of the Kitchen Social holiday programme (regarding funding, costs to attend the hubs, training, stakeholders involved, number of days of operation and the hub criteria to be part of Kitchen Social).

Funding	Hub cost	Training	Stakeholders Involved	Days of operation	Hub criteria to be part of Kitchen Social
£1500 each year for 3 years.	Each hub must be free or low-cost (minimal fee of £5 per day) to attend.	Holiday Provision Handbook, Training Sessions and a Cooking and Volunteer Handbook.	Kitchen Social programme coordinators. Funders (i.e., Berkeley foundation), food charity organisations (including the Felix Project and FareShare) and child and parent attendees.	At least 20 days throughout the year.	Must be located within an area of deprivation, provide at least one hour of daily physical activity, at least 20 days of free meals and 75% must be hot cooked meals which closely meets School Food Standards.



Figure 1.1. Location of holiday hubs involved in the Kitchen Social holiday programme.

1.4 Conclusion and Aims of this Thesis

The literature reviewed in this chapter suggests that child poverty rates are rising, particularly in London, putting more children at risk of experiencing food insecurity (Joseph Rowntree Foundation, 2018; Leeser, 2019; Loopstra et al., 2019). Children are at a heightened risk during the school holidays when they receive no school support which consequently results in low-income families struggling to provide childcare, nutritious food and enriching activities during the school holidays (Gill & Sharma, 2004). Instead, children face hunger, a lack of physical activity and social isolation during the school holidays resulting in poor wellbeing (Graham et al., 2016; Long et al., 2018; Morgan et al., 2019). A number of grass roots community-led holiday programmes already offering activities included food in their offer, while other community-led holiday programmes have been set up to provide free or low-cost food and activities across the UK in response to this (Mann et al., 2017). These holiday programmes have the potential to improve the wellbeing of children and families attending (Graham et al., 2016), although research reviews identify gaps in the literature on these initiatives stating they require more academic research on the operation and outcomes (Lambie-Mumford & Sims, 2018).

Although holiday provision sites do not have to comply to any specific regulations (Stretesky et al., 2020), some programmes of holiday provision, such as the Department for Education (2020, a) holiday provision pilots and the Kitchen Social programme, ask sites to follow guidelines such as the School Food Standards. Holiday provision sites report that they offer nutritional food/drink (Forsey, 2017) and are increasingly being required to adhere to healthy eating guidelines (Stretesky et al., 2020). Yet, little is known regarding children's food/drink consumption at holiday provision sites. Similarly, despite the offer of physical activities (Forsey, 2017), only one study has focused on time spent in physical activity at provision sites and found an increase on an attending versus non-attending day (Morgan et al., 2019). However, it is unknown whether differences in time spent physically active still applies when compared to usual activity practices during the school term. Consequently, a recent research review (Holley et al., 2019) concluded that there are insufficient research studies on holiday provision, and they require further investigation.

CHAPTER 2: Methodology

2.1 Introduction

This chapter will focus on the theoretical framework, methodology and methods used in this thesis to investigate the views of stakeholders on the operation of holiday provision and impacts on the wellbeing of parent and child attendees and impacts on the physical and sedentary activity levels and nutritional intake of child attendees in the UK. This chapter will discuss the theoretical framework of pragmatism and the use of a mixed methods methodology. This chapter then focuses on the use of a mixed methods sequential design, the socio-ecological framework and the quantitative and qualitative methods used to collect and analyse data for the three studies in this thesis. Finally, the chapter discusses the ethical considerations taken into account when undertaking the research studies.

2.2 Pragmatism

Pragmatism is a paradigm which believes philosophically in being concerned with applications, using procedures that “work” to solve and understand a particular research problem (Patton, 1990). Pragmatism offers an alternative approach to positivism/post positivism and constructivism, by focusing on the problem being researched instead of focusing on the methods used (Morgan, 2007; Morgan 2014). A pragmatic paradigm was used to inform this thesis as this approach allows for the use of both quantitative and qualitative methods to best understand practical research problems in the real world (Creswell, 2003). Therefore, by using a pragmatic approach to this thesis, the method chosen for each study is dependent on how best to answer the research question (Johnson & Onwuegbuzie, 2004). The pragmatist approach allows for the use of a mixed methods research design as the researcher acknowledges the complexity of the social world and the value of more than one method to address the research questions (Creswell, 2003).

2.3 Mixed methods Research Design

A mixed method design was used in this thesis which involves the use of both qualitative and quantitative methods to answer research questions to allow for a complementary approach to explain phenomenon (Williams, 2007). The integration of qualitative and quantitative approaches is useful in that it allows for a more complete investigation (Johnson & Onwuegbuzie, 2004).

Quantitative methods are able to quantify results to establish the relationship between variables to provide an objective measure of reality, whereas the qualitative method allows the researcher to explore and better understand the complexity of a phenomenon by gaining an in-depth insight (Williams, 2007). Quantitative data may be utilised in a way, which supports or expands

upon qualitative data and effectively deepens the description (MacKenzie & Knipe, 2006). It is recognised that the integration of different types of data can generate insights into a research question, resulting in an enriched understanding of complex research problems (Tariq & Woodman, 2013).

However, mixed methods designs are not without their challenges. Due to the use of both quantitative and qualitative methods, the researcher is required to have an extensive knowledge and expertise in both areas (Creswell et al., 2011). Quantitative research methods will require the researcher to reach a larger sample than qualitative methods (Yilmaz, 2013), which may be difficult with “hard to reach” populations (Shaghghi et al., 2011), whilst qualitative research methods include a lengthy process to transcribe verbal into written data and analyse these data (Farrelly, 2013). Therefore, balancing the demands of both research methods may be difficult to achieve. Nevertheless, mixed method designs have been successfully used by researchers previously and are identified as being particularly useful to investigate complex health interventions (Tariq & Woodman, 2013). For example, previous investigations into holiday provision (Defeyter et al., 2018) and community-based nutritional and physical activity interventions with groups from a low socio-economic status (Everson-Hock et al., 2013) have used mixed method designs. Therefore, it was deemed an appropriate research design for the current programme of work.

2.4 Sequential Mixed Methods

An exploratory sequential mixed methods design was used to inform the studies in this thesis. Typically, in these designs, the researcher presents the study in two phases, with the first phase involving qualitative data collection (e.g., interviews) to explore a phenomenon with a small number of participants, followed by quantitative data collection (e.g., questionnaires) with a large number of participants to explain relationships found in the qualitative data (Cresswell et al., 2003; Creswell et al., 2011). The intention of this method is for the quantitative studies to expand on the variables found in the qualitative findings (Cresswell et al., 2003). The findings of both phases are integrated and interpreted in Chapter 6 (general discussion). One advantage of this approach is that it allows the researcher to initially explore a phenomenon and form the variables from this initial qualitative phase to then test and inform the quantitative phase to expand on this qualitative phase (Cresswell et al., 2003; Heigham & Croker, 2009).

In this thesis, the initial qualitative study involved descriptions of how holiday provision is implemented and delivered, along with the impacts that holiday provision has on the wellbeing of service users. Further exploration of the factors at holiday provision which may positively impact upon children and parents’ wellbeing along with additional information on how holiday provision operates was necessary to gain a better understanding of an under-researched area.

The results of the qualitative study consequently informed the following two quantitative studies in this thesis which focused on the physical and sedentary activities of children that participated in holiday provision for Study 2, and the nutritional intake of children that participated in holiday provision for Study 3. These two areas were specifically chosen for Study 2 and Study 3 as the impacts of the activities and food provided at holiday provision are mentioned across all stakeholder groups in the qualitative study and deemed to be particularly important for service users attending. In addition to this, the literature review showed children commonly have poor diets and activity levels during the school holidays, particularly children from low-income areas. In contrast, some research studies have suggested that access to free/low-cost holiday provision, which reportedly provides healthy foods and physical and enriching activities for low-income children, may enable children's diets and activity levels to improve during the school holidays. Yet, since few research studies to date have focused on this, Study 2 and Study 3 will investigate whether these areas further of whether holiday provision impacts upon children's diet and activity levels.

2.5 Socio-ecological Theoretical Framework

As holiday programmes are a relatively new area within the literature, there is no theoretical framework on holiday programmes. Rather than provide a theory on a holiday programme, the research in this thesis intends to gain more in-depth knowledge on a holiday programme. More specifically, the research in this thesis intends to focus on the Kitchen Social holiday programme which operates across London. The government have only recently announced funding for local authorities to implement the Holiday Activity and Food (HAF) programme across England. Prior to this, many areas in the UK have had different holiday programmes, like the Kitchen Social programme, which would provide funding and support to individual holiday provision sites/clubs/hubs. Therefore, evidence of the operation and impacts of a holiday programme in this thesis are specific to the Kitchen Social programme across London. Yet, each study in this thesis are discussed in relation to the socio-ecological model of health. The socio-ecological theory focuses on the interrelations between intrapersonal, interpersonal, community, organisational and policy factors upon human health (described in further detail on page 61). This model was deemed to be useful for underpinning this PhD, because public health initiatives are complex and multiple levels of influence should be considered (Townsend & Foster, 2013).

2.6 Study 1: Qualitative Methods

Qualitative research generates detailed and complex accounts from participants to seek patterns and explore differences amongst participant's views and opinions (Braun & Clarke, 2013). An inductive approach to the qualitative method allows the researcher to collect rich and descriptive data regarding a specific phenomenon which is particularly useful to gain a more in-

depth knowledge of an under-researched topic, rather than developing a new theory in the area (Braun & Clarke, 2006; Gelo et al., 2008). The first element of data collection involved using qualitative methods in Study 1 of this thesis to explore the views and experiences of stakeholders on the operation of holiday provision and the impacts upon service user's wellbeing. Semi-structured interviews and focus groups were utilised to gather qualitative data and inform future studies in this thesis.

An advantage of qualitative research methods is that they capture and communicate individual participants' points of views and experiences in their own words which will provide the detailed, descriptive data needed to deepen our understanding (Yilmaz, 2013). In contrast, a weakness of qualitative methods is the possible bias of the researchers' presence on the individuals being studied. Carr (1994) states the relationship between the researcher and participants may actually distort findings. On the other hand, Carr (1994) identifies that the relationship the researcher forms with participants can also be viewed as a strength as it can facilitate the collection of valuable, meaningful data. The researcher and the participant spend time together and build rapport, therefore the data may be more honest and valid.

The data that qualitative research produces are subjective and open to interpretation by the researcher which may be disadvantageous as the researcher's own thoughts and experiences can influence the data analysis (Malterud, 2001). Yet, the interpretation of qualitative data by the researcher could also be advantageous, as Braun and Clarke (2013) recognise that this subjectivity allows researchers to make sense of and access participants context-specific observations and opinions. Another criticism of qualitative research is the use of a sample which is not representative of the population, although not all research designs are concerned with generalising from a sample to a population of people (Thompson, 1999). Qualitative studies use deep descriptions to inform our understanding of phenomenon and sample selection is based on the ability of the subject to provide data relevant to the research question (Morse et al., 2002). Therefore, the generalisability of the sample is not necessarily relevant in qualitative research.

2.6.1 Semi-structured Interviews and Focus Groups

The methods used in Study 1 of this thesis involved interviews and focus groups. A qualitative approach was used in Study 1 to collect data from children, parents, staff and senior stakeholders as these groups of individuals are a service user of holiday provision or are directly involved in either funding or implementing holiday provision. Each stakeholder group was involved in Study 1 as previous research has suggested that effective communication amongst stakeholders is necessary for an intervention to be successful (Frieden, 2014). Therefore, it is important to gather the views of all stakeholders involved in the intervention

and to analyse the data for commonalities and differences across each level of the intervention. This also includes incorporating children's voices, as it is recognised that qualitative research should ensure children's views are considered for the development of policy and practice which is aimed at children (Ridge, 2011). Consequently, involving the relevant stakeholders helps to identify priorities, understand the problem and help identify solutions that may make a difference to future implementation of an intervention and the associated outcomes (O'Cathain et al., 2019).

Interviews were the preferred method of qualitative data collection for the adult participants involved in Study 1, which are described as one-on-one discussions between an interviewer and an individual to gather information on a specific set of topics which can be conducted in person or over the phone (Denscombe, 2014). The researcher carried out interviews (rather than focus groups etc.) with adult participants as they allow the researcher to gather their perceptions and opinions on complex and sensitive issues by establishing rapport and trust between the researcher and participant (Ginsburg, 1997; Louise Barriball & While, 1994). In Study 1, parents, staff and senior stakeholders were recruited via email or through information disseminated at holiday hubs. Due to availability, some interviews took place face to face, whereas other interviews took place via telephone. Senior stakeholder participants had a choice of participating in either a telephone or face to face interview and both methods were viewed to be appropriate for Study 1. Opportunities for face-to-face contact with a researcher is thought to establish a sense of rapport and provide a 'natural' encounter (Irvin et al., 2012). In comparison, telephone interviews are a cost-effective method, and they provide an opportunity to obtain data from groups who are unable to meet in person due to being located at a distance, which was the case for some of the senior stakeholders in Study 1 (Sturges & Hanrahan, 2004).

To collect data on children's views in Study 1, focus groups were used rather than interviews. Heary and Hennessy (2002) describe a focus group as a dynamic discussion involving a small group of participants led by the researcher which seeks to gain an insight into the participants' experiences, attitudes and/or perceptions. Focus groups involving children typically consist of between four and six children, with participants generally being of a similar age. Discussions tend to last between 30 and 90 minutes with the goal of maximising the interaction of participants. The rationale for children participating in focus groups rather than individual interviews was because the peer context encourages children's involvement, facilitates self-disclosure and decreases self-consciousness to allow for the production of elaborated accounts (Kennedy et al., 2001). Therefore, focus groups were considered the most appropriate method to investigate children's views regarding holiday provision, in Study 1, as it also allowed them to feel more comfortable, rather than having to talk solely to the researcher whom they be less familiar with (Gibson, 2007). The researcher carried out focus groups with children in the hub

as this was a familiar setting for children which may have increased their confidence and trust in the researcher by providing developmentally appropriate ways for children to express themselves with minimal disruption to their day (Gibson, 2012).

One benefit of conducting interviews and focus groups is that individuals provide in-depth descriptions of their perceptions and experiences, which are a valuable complement to the quantitative data (Harrell & Bradley, 2009). Another benefit is that they are regarded as useful for gathering emotions, experiences and feelings (Denscombe, 2014). Participants can provide their own views and opinions which can allow the participant to feel valued, rather than asking them to fill out a questionnaire using pen and paper. Using verbal rather than written words may allow individuals who experience literacy problems to express themselves sufficiently (Cohen et al., 2007; Harrell & Bradley, 2009), which is particularly important when gathering the views of children who may have poor writing skills. A disadvantage is that the researcher cannot provide anonymity for the respondents and they must reveal their identity to the researcher which increases the likelihood of socially desirable responses. However, the researcher can analyse and report the interview data so that the identity of the participants is not revealed and make the participant aware that this will be the case (Abdullah & Raman, 2001).

In both the interviews and focus groups with stakeholders, a semi-structured process was used. Harrell and Bradley (2009) describe semi-structured interviewing/focus-groups as a guide consisting of standardised questions and topics that must be covered. However, the researcher may also use probes to ensure that enough information is gathered from the participant to fully understand the participant's views on a particular research topic. An advantage of using a semi-structured approach to collect data in interviews and focus groups is the flexibility of this method (Newcomer et al., 2015). The researcher can follow a structured interview schedule to ensure the same questions are asked to each participant for consistency. Yet, the researcher has the freedom to ask additional questions and express an interest to encourage a complete response from the participant or gain clarity on a comment which may be of interest and relevance (Harrell & Bradley, 2009). This is referred to as probing, which is particularly important for focus groups with younger children as they may go off topic and the researcher is able to check that children are responding to the questions that the researcher has asked (Morgan et al., 2002). This method also provides opportunities to explore sensitive issues and clarify inconsistencies within respondents' accounts to thoroughly understand the answers provided (Louise Barriball & While, 1994), and to follow up on respondent's answers to obtain more information which the individual may not have shared otherwise (Abdullah & Raman, 2001). Probing also maximises the potential for interactive opportunities between the respondent and interviewer which helps to establish a sense of rapport and reduce the risk of socially desirable answers (Louise Barriball & While, 1994; Patton 1990).

However, a disadvantage of using a semi-structured interview/focus groups is that probing could compel the respondent to make false claims if they think the researcher will be satisfied by a different response (Harrell & Bradley, 2009). To overcome this problem, using prior interview skills, the researcher was aware of the need to listen very attentively to the respondent's answer in order to determine whether the answer is clear and complete. The researcher also understood the necessity of being familiar with the purpose of the question to know when the answer is sufficient (Harrell & Bradley, 2009). Experienced qualitative researchers along with experts in holiday provision from the Healthy Living Lab informed the development of semi-structured interview/focus group schedules for all stakeholder groups (children, parents, staff and senior stakeholders) in Study 1. The interview/focus group schedules contained both closed questions and open-ended questions to gain a better understanding on the operation and delivery of hubs, along with the potential impacts of hubs on the wellbeing of service users. The interview/focus group schedules are available in Appendix Cii, Appendix Ei, Appendix Eii and Appendix Eiii.

2.6.2 Qualitative Analysis

There are currently no existing published theoretical frameworks available relating to holiday provision that could have been used for a deductive approach to thematic analysis, which involves analysing the data based on existing theory or knowledge. Instead, an inductive approach to thematic analysis was adopted to analyse the qualitative data, as Study 1 intended to gather rich, descriptive data for a further insight into the operation and impacts of holiday provision. This inductive approach to thematic analysis by Braun and Clarke (2006) which was utilised is a useful tool to provide detailed data and creates themes strongly linked to the data themselves. This is particularly useful when investigating an area which is currently under-researched, as is the case with holiday provision. Thematic analysis is used to produce themes and sub-themes of the data. A theme captures a common, recurring pattern across a dataset, organised around a central organising concept, whereas a subtheme shares the same central organising concept as the theme but focuses on one notable specific element (Braun & Clarke, 2013).

The steps taken in the qualitative analysis have been informed by Braun and Clarke's (2006) six-phase guide to thematic analysis. The first step involves the researcher familiarising themselves with the data by transcribing the verbal data into written form and repeatedly reading the data. Throughout the process, the researcher takes notes while looking for patterns of meaning in the data. Once the researcher is familiar with the data, the next stage involves generating initial codes from the data. Initial codes involve interesting extracts within the data relating to the research question. Once the initial codes have been identified, these can then be collated together to create themes which involves considering how codes may be combined to

create overarching themes. Themes should then be reviewed, which may involve separating themes, collating themes together, reviewing and refining the final themes. Appropriate sub-themes should be used for themes which may be too complex. Once the final themes have been created, these should be defined and named to explain what the theme consists of and what aspect of the data each theme captures. The data may have a main overarching theme and sub-themes within these themes to provide another level of meaning to a theme. The final stage of thematic analysis is writing up and reporting the content and meaning of the patterns in the data (themes and sub-themes).

2.6.3 Validity and Reliability

Validity refers to the accuracy of findings, whereas reliability is concerned with the consistency of findings (Brink, 1993). Reliability and validity are terms which are often used and treated separately in quantitative studies. In qualitative research, researchers focus on ensuring the research findings are credible and trustworthy (Golafshani, 2003; Noble & Smith, 2015). Qualitative findings are based on the subjective interpretation by the researcher which may be subject to personal biases and influence the results (Brink, 1993; Noble & Smith, 2015). However, steps can be taken to ensure interpretations of data are consistent and transparent.

In Study 1, the steps taken to ensure consistency and transparency included using verification strategies to gather and analyse data (Morse et al., 2002). To illustrate, the researcher discussed the interview and focus group schedules with experienced qualitative researchers to gather advice and to avoid using misleading questions. Researchers from the Healthy Living Lab, who are experts in holiday provision, also proof-read the adult interview schedules and child focus group schedules to ensure questions were appropriate and worded sufficiently. Further steps which were taken to ensure consistent and transparent data were collected from participants involved building trust, as prior research identifies this is an important element (Gibson, 2012). In the qualitative study of this thesis, the researcher took precautionary steps to build trust with the participants which included ensuring the preferences of participant groups were met in interviews and focus groups. For example, telephone interviews were more appropriate for some senior stakeholders in Study 1, therefore the researcher adapted the qualitative study to allow telephone interviews to be carried out to ensure some senior stakeholders were not excluded from participating in the study. Interviews and focus groups for other senior stakeholders, staff, parents and children were carried out face-to-face in the holiday hub to ensure the participants were in a familiar environment and did not have to travel to take part in the research study. Furthermore, the researcher built a rapport with the holiday hub lead who was responsible for the children accessing this service, and the researcher was readily available throughout the day of interviewing, answering any questions that participants may have had.

Additional steps to ensure transparency of data included recording all interviews and focus groups using a digital recording device. Each recording was transcribed verbatim, and each written transcript was checked back against the original recording to ensure accuracy of the transcription. Examples of participant transcripts are available in Appendix Fi, Appendix Fii, Appendix Fiii and Appendix Fiv. Recording interviews allows for identical replication of the contents which will facilitate analysis as it provides a detailed insight into the performance of both the respondent and the interviewer. Recording interviews also reduces the potential for interviewer error by ensuring data is correctly recorded (Louise Barriball & While, 1994). These recordings were also checked against the matched written transcripts by a second researcher to ensure the transcripts were 100% accurate.

To analyse data, computer assisted data analysis software programs have the potential to facilitate a more rigorous approach to qualitative data analysis as they provide an audit trail of data analysis from start to finish that can be viewed to show how the researcher came to their conclusions (Bringer et al., 2004). To analyse the data for Study 1, NVivo was used, which is a programme to assist the researcher in recording, storing, indexing, sorting, and coding qualitative data. NVivo is a data management tool which is useful for organising data and helping to make sense of data during the process of analysis (Li & Seale, 2007). NVivo is particularly useful for large data sets. For an example, using NVivo for a large number of interviews can allow clear coding structure which can help with the creation of themes and the searching of data (Wong, 2008). Reliability analysis was also carried out on 10% of the data (following the recommendations from Mouter & Noordegraaf, 2012) using Cohen's Kappa statistic to assess the agreement of the qualitative analysis between the first and second coder. Following this, codes were refined, and Cohen's Kappa statistic re-assessed the agreement between the first and second coder again. The results are provided in Chapter 3.

In Study 1, the researcher used a non-probability purposive sampling strategy to ensure that participants who were involved in funding, designing, implementing or attending holiday provision were included to guarantee an appropriate sample was used. These participants were chosen to ensure that they had knowledge of the research topic so that they could sufficiently address the research question (Etikan et al., 2016).

2.7 Study 2 and Study 3: Quantitative Methods

Study 2 and 3 used quantitative research methods to further examine the qualitative findings from Study 1. Quantitative research involves quantifying data to objectively measure reality and is independent of the researcher. The intention of quantitative research is to predict, explain or confirm relationships between variables in order to create generalisable findings to a wider population (Braun & Clarke, 2013; Williams, 2007). The aim of Study 2 was to investigate the

time children spent in physical and sedentary activities, the number of physical and sedentary activities children participated in, children's adherence to daily physical activity recommendations and the amount of energy children expended during the school summer holidays compared to during the school term. To assess children's physical and sedentary activity levels, the Youth Physical Activity Questionnaire was used. The aim of Study 3 was to examine children's diet quality and adherence to the School Food Standards on an attending versus a non-attending hub day. To assess children's food and drink intake, a 24-hour food recall was used with the assistance of the Young Persons Food Atlas to estimate portion sizes. These quantitative measures will be discussed in further detail, which will include highlighting the reliability and validity of these measures.

Yilmaz (2013), refers to the advantages of using quantitative research methods which include the ability to effectively measure and compare the behaviour of a large number of participants using a limited set of questions. Another advantage identified by Yilmaz (2013) is the time and cost effectiveness of quantitative research methods, such as questionnaires, which are quick and easy to administer. However, Yilmaz (2013) also points out a disadvantage of quantitative research methods, that they do not allow respondents to describe their feelings, thoughts, and experiences with their own words. Hence, the meaning participants ascribe to the phenomenon studied is not considered. Yet, as this thesis utilised a mixed methods design, the researcher was able to overcome this and benefit from the strengths of both quantitative and qualitative methods.

2.7.1 Youth Physical Activity Questionnaire (YPAQ)

As there is not a gold standard method for the measurement of physical and sedentary activity levels, various methods have been used in research studies to collect these data (Dishman et al., 2001). Physical activity refers to bodily movement which results in energy expenditure (Powell et al., 2011). Therefore, studies have viewed the amount of energy expended using the doubly labelled water method to establish individual's activity levels. Sirard and Pate (2001) describe this method further. A dose of radio-labelled isotope ($^2\text{H}_2^{18}\text{O}$) is orally administered and oxygen atoms in expired CO_2 equilibrate with the oxygen atoms in the body water. Over 5-14 days, ^2H is removed as water and ^{18}O is removed as water and CO_2 . The difference between the times taken for this to be removed from the body is proportional to CO_2 production (energy expenditure). Although this technique provides accurate reports of energy expenditure, the isotope used for this method is difficult to obtain and expensive (Dishman et al., 2001; Sirard & Pate, 2001). Sirard and Pate (2001) also identify another disadvantage of using the doubly labelled water method, which is the inability for this method to provide information on the duration of physical activities to investigate adherence to the recommended daily physical activity guidelines, which was one of the aims of Study 2.

In addition to this, objective methods are frequently used to measure physical activity levels which includes heart rate monitors, accelerometers and pedometers. These devices have the advantage of reducing the subjectivity that may be experienced using questionnaire methods and can be used with a large group of individuals if they can be obtained (Sirard & Pate, 2001). Heart rate monitoring is less frequently used because during sedentary or light intensity activities, an individual's heart rate can be affected by factors other than body movement, such as increased temperature (Livingstone et al., 1992). In contrast, the use of pedometers may be advantageous as this is a simplistic electronic device which can estimate the miles walked or number of steps over a certain time scale. However, pedometers do not have time sampling capabilities so they cannot provide detail on frequency or intensity of physical activity (Welk et al., 2000). Instead, accelerometers are more sophisticated and measure body movement to produce a number of counts. Yet accelerometers cannot assess the type of activities that an individual has participated in and they have limited ability to assess activities such as cycling (Sirard & Pate, 2001). Sirard and Pate (2001) recommend combining accelerometer data with questionnaire data to improve the accuracy of research by accounting for both the time spent physically active and the type of activities participated in. Nevertheless, objective methods may still be difficult to obtain for some research studies due to the cost or other factors (Troost, 2007).

Alternatively, more cost-effective methods which have been used to research children's activity levels are various self-report measures which include self-report/parent proxy diary methods and interview-administered/self-report questionnaires. However, self-report diary methods involve a relatively high participant burden of maintaining diary completion, therefore this technique has limited use (Sirard & Pate, 2001). There are also a limited number of validated methods which involve parental reporting (Sallis & Saelens, 2000). In Study 2, as children activity levels are recorded in school time versus holiday time, it was also inappropriate to use parental reports of children's activity levels as parents will not be present during school time. Studies have also used interview-administered surveys which focus on children's self-reported activity levels instead (Sirard & Pate, 2001). Yet the authors also acknowledge that interview-administered surveys may not be reasonable as they have a relatively high burden due to the time taken to individually assess each participant.

The Physical Activity Questionnaire for Children (PAQ-C), seemed to be the most commonly used self-report questionnaire completed by children. Self-report questionnaires are an inexpensive method which allows large numbers to be assessed while maintaining a low respondent burden (Sirard & Pate, 2001). The PAQ-C is a questionnaire which requires children to self-report their physical activity levels during the prior 7 days to establish their general activity patterns throughout the school year. However, the PAQ-C handbook states that

this questionnaire is only suitable for use in the school term and only assesses activities for individuals in the school system (Kowalski et al., 2004). As one of the main aims of Study 2 was to compare levels of physical activity in school to school holiday clubs, the PAQ-C did not appear to be the most appropriate measure.

Instead, Study 2 used the Youth Physical Activity Questionnaire (YPAQ), developed by Corder et al. (2009) at Cambridge University. This questionnaire was the most appropriate alternative questionnaire for children to complete as this questionnaire can be used for data collection during the school term and school holidays. The YPAQ is a self-report questionnaire completed by children which uses an activity list to ask children about 45 different types of activities (physical and sedentary activities) over the past 7 days. Children could select participation in as many activities as they liked (coded 0 as not participating and 1 as participating) and the questionnaire also provides children an opportunity to report 'other' activities they participated in.

The YPAQ questionnaire was amended in Study 2 to allow for data collection over 3 days rather than one week. 3 days has been deemed enough time for weekly estimations of physical activity and by reducing the number of recall days, this should reduce the amount of time that children spend completing the questionnaire (Han & Dinger, 2009). Reducing the time children spend completing the questionnaire is important in Study 2 for assessing children during the school holidays when they attend the hub as they have limited time in the busy hub environment. In Study 2, children recorded the amount of time spent in each activity, each day, in the YPAQ to allow the researcher to predict daily physical activity levels to investigate children's adherence to daily physical activity recommendations, which was one of the aims of Study 2. The YPAQ was also amended in Study 2 to ensure each questionnaire reflected the time period of data collection. For example, during the school term, the questionnaire asked how long it took children to "Walk to School", whereas during the school summer holidays, the questionnaire was amended to ask children how long it took to "Walk to Holiday Hub". The researcher also added some activities to ensure the list was up to date. For example, "Talk on the phone" was amended to "Talk/Text on the phone". Gardening was also added to the YPAQ as this is considered to be a physical activity (Chief Medical Officers, 2019) and a prior evaluation of holiday provision found that children are provided with gardening activities at most venues (Defeyter et al., 2018). Therefore, this ensured the YPAQ was able to gather information on all physical activities that children may participate in. The questionnaire is in Appendix K where all of the activities on the activity list included in the YPAQ can be found.

2.7.2 Data Analysis

Data from the YPAQ were inputted into SPSS.v25 and each activity was classified as either a physical or sedentary activity using prior published research studies which have done this (Brooke et al., 2014; Klitsie et al., 2013), along with guidance from the Chief Medical Officers (2019). Data from the YPAQ included data on the types of physical and sedentary activities children participated in, the amount of time children participated in each activity and the amount of energy children expended from each activity. The data were analysed by a series of One-Way Repeated Measures ANOVA Tests and Wilcoxon Signed Rank Tests. To examine the estimated amount of energy expended from each activity, information from the Youth Compendium of Physical Activities was utilised which provides details on the estimated energy cost (energy expenditure: EE) associated with different physical and sedentary activities (MET scores). A MET, or metabolic equivalent, is a unit that represents the metabolic cost of a physical or sedentary activity which differs based on the child's estimated basal metabolic rate (BMR, or the energy the body needs to function while at rest).

The most recent version of the Youth Compendium of Physical Activities was used in Study 3, as this further developed the first version by providing children's MET_y values, rather than adult MET_y values. Children's MET_y values for activities were derived from literature reviews, data analysis, and imputation (Butte et al., 2018). This is important as children have higher basal metabolic rates per unit body mass than adults which means they typically expend more energy per kilogram of body mass when participating in activities compared to adults. On average, youth values do not reach adult levels until late in adolescence which limits the usefulness of the first versions of the Youth Compendium of Physical Activities (McMurray et al. 2015).

The most recent Youth Compendium of Physical Activities has been found to be invaluable in translating self-reported data concerning physical activity in children into EE units. The Youth Compendium of Physical Activities provides a list of 196 common activities that children participate in along with the estimated energy cost (energy expenditure: EE) associated with each activity (MET scores). The MET_y values for specific activities are presented for four age groupings and BMR was calculated using the Schofield equations accounting for sex, age-group and body mass of the child. For example, playing "volleyball" for 6-9-year olds has a MET_y value of 5.0. This means that, for a child this age, playing volleyball has an energy cost about 5 times higher than BMR. However, these values are best used to represent group-level estimates for energy expenditure (EE).

2.7.3 Validity and Reliability

As previously discussed on page 72, in quantitative research, validity is the accurate measurement of a particular concept, whereas reliability is the accuracy of a tool to consistently produce the same result from a participant sample (Kimberlin & Winterstein, 2008). The researcher took precautions prior to testing by choosing a suitable method to produce valid and reliable results.

The method chosen to assess children's physical and sedentary activities in Study 2 was the Youth Physical Activity Questionnaire (YPAQ) (as discussed on pages 76). This questionnaire has been previously assessed in terms of the criterion validity and measurement agreement in a Scotland-wide study by McCrorie, Perez and Ellaway (2017). The findings of the study demonstrated a reasonable ability to rank moderate to vigorous physical activity for adolescents aged 12-13 years old (MPVA). The validity and reliability of the YPAQ was also assessed in British adolescents (n=25) by Corder et al. (2009). The YPAQ was found to have good reliability and valid at ranking MVPA in children aged 12-13 years old. Therefore, the YPAQ has been shown to adequately rank individual's overall physical activity. In a systematic review of studies that used PA questionnaires between 1997-2011, the YPAQ was shown to have strong reliability (ICC = 0.79–0.86) (Helmerhorst et al., 2012).

Due to the fact that past research (Evans et al., 2020) has shown that on average children only attend holiday provision approximately 2-3 times per week, the YPAQ was amended to collect data on children's PA and SA across 3 days. Children provided time estimations for each day to allow the researcher to view the percentage of children meeting daily physical activity recommendations. In addition to practical considerations, accelerometer data from a study carried out by Han and Dinger (2009) determined that physical activity did not differ between 3 and 7 days, indicating that a 3-day time period is enough to provide an estimate of weekly activity. Therefore, to account for weekday activity levels, gathering at least 3 days of self-reported activities has been deemed a valid period of time compared to 7 day periods (Kohl et al., 2000; Lee & Trost, 2005; Pate et al., 2003; Sallis et al., 1993; Scheers et al., 2012). Although multiple 1-day recalls have been recommended, studies have acknowledged that this may not always be possible (Lee & Trost, 2005), which was the case in Study 2, because this can be too time-consuming for children (Ainsworth et al., 2015). Therefore, recalls were completed in one testing period, rather than collecting daily records across each of the 3 days.

One of the challenges with using questionnaire methods is that once the questionnaires have been distributed, if any items are unclear to respondents, ambiguities cannot be clarified (Abdullah & Raman, 2001). Therefore, it is recommended for questionnaire items to be carefully paraphrased so that no confusion is possible. In Study 2, the researcher addressed this

potential problem by checking the YPAQ used child-appropriate language and the participants completed the questionnaire in the presence of the researcher. This approach enabled the researcher to establish good rapport with respondents in Study 2 and allowed the researcher to clarify questionnaire items and participant responses to items if necessary.

With self-reported methods, studies acknowledge the burden of recalling time spent in and the types of activities participated in throughout each day on children's memory (Trost, 2007), therefore this method has the disadvantage of being at risk of recall errors (Mindell et al., 2014). However, Livingstone and Robson (2000), states that children over 7 years old are cognitively capable in recalling their participation in activities as there is a rapid increase in abilities from this age. However, Baranowski (1988) suggests that children younger than 10 may struggle to recall how long they took part in an activity and what activities they took part in. Therefore, children aged 7-10 years old were offered more support when they completed this questionnaire and holiday hub staff were utilised as they have knowledge on the length and type of activities children took part in to facilitate children's recall. Additionally, the questionnaire provided an activity list of common physical and sedentary activities that children can check off along with segmenting the day (at hub/school, not at hub/school). These additional steps were beneficial in Study 2 as Baranowski (1988), argued that memory recall can be enhanced through the use of these memory cues.

It is also important to consider the issue of social desirability bias (Sirard & Pate, 2001), which is described as a tendency for individuals to provide responses which are consistent with social norms and expectations (Jago et al., 2007). Social desirability bias could result in an underestimation of time spent in less socially desirable activities such as sedentary behaviours and overestimation of time spent in more socially desirable activities such as physical activities. However, Motl et al. (2005) state that this may be more of a concern for interview administered self-report measures of physical activity, rather than a self-administered physical activity questionnaire as this method increases the privacy of reporting. To mitigate social desirability bias, in Study 2, children were made aware that their data would be kept private, and their identity would not be revealed (Abdullah & Raman, 2001). This was particularly important for children who required additional support in completing their questionnaire by the researcher or holiday hub staff, therefore decreasing their privacy of reporting.

In Study 2, Children were selected to participate in the study because they attended a holiday hub and thus may be more engaged in activities than non-attendees. All of the hubs which the participants were recruited from were also located in deprived areas. Therefore, Study 2 used a non-probability purposive sampling strategy, which meant the findings cannot be generalised

beyond the population included in this study as the participants are not representative of the general population.

2.7.4 Previous Day Food Recall

In terms of collecting data regarding dietary intake, the researcher had to choose from various data collection methods. Barrett-Connor (1991) discusses the use of diet history or food frequency questionnaires as a measure of dietary intake as these measures are used in research studies to estimate usual or habitual diet and dietary patterns at the group level. However, the author also identifies that participants are restricted to a certain list of foods with these methods which may not represent food consumed by children from different cultures. Ensuring the measure considers different cultural foods is particularly important as Study 3 took place in London, and London has a diverse population with the highest percentages of ethnic minority groups (including African, Indian and Caribbean) and the lowest percentages of White British compared to other areas in England and Wales (Office for National Statistics, 2012). Weighted food diaries have also been used in prior research studies which involves the weighing of foods typically over 3 to 7 days to record dietary intake. Although this method is viewed as an accurate method, it is time consuming and is often associated with poor compliance (Barrett-Connor, 1991). Therefore, this method would be too problematic in Study 3 due to the time constraints in the hub environments.

An alternative method of dietary assessment which is frequently used is the 24-hour recall which involves self-reports of all food and drinks consumed during the past 24 hours (Barrett-Connor, 1991; Hill & Davis, 2001). This method provides detailed dietary information which may be missed through other methods such as food frequency questionnaires, which do not allow for the collection of detailed information (Rutishauser, 2005). Large scale studies including the UK Low Income Diet and Nutrition Survey (LIDNS) have relied on 24-hour recalls to collect nutritional data and have recommended this method as the most appropriate method of dietary assessment (Holmes, Dick & Nelson, 2008). However, Holmes, Dick & Nelson (2008) recommend 4 days of 24-hour recalls, as gathering data on food and drink intake from one day is not sufficient to account for habitual food intake (Rutishauser, 2005). Despite this limitation, one day recall can provide a snapshot of food and drink intake (Rockett & Colditz, 1997).

After considering the advantages and disadvantages of the various methods used for collecting nutritional data, the 24-hour recall method was viewed to be the most suitable method for Study 3 of this thesis. The multiple pass method for the 24-hour recall was used in Study 3 which requires respondents to report a quick list of foods/drinks consumed during the previous day from midnight to midnight. Respondents are then required to provide further detail on each

food and drink item (time eaten, description, quantity, portion size, leftover portion). This food and drink list is reviewed, and the researcher will clarify and prompt the participant to ensure all food and drink is recalled (Nelsen et al., 2012). This method is advantageous as the researcher is present which means tools can be provided to assist participants with portion size estimation, for example it can be useful to have an example plate, bowl measuring cups and spoons to assist respondents (Nelsen et al., 2012). Additionally, this method of dietary assessment has been recommended as being appropriate for low-income populations (Vucic et al., 2009), which makes this method applicable to Study 3 of this thesis. The 24-hour recall method can also be completed over a period of time which is slightly longer than 24 hours (Rutishauser, 2005), which is ideal for Study 3 due to the restricted times the holiday hubs operate for during the school holidays.

2.7.5 Young Persons Food Atlas

One limitation of using the 24-hour recall method, compared to weighed food diary methods, includes the inability to gather portion size estimations (Wrieden et al., 2008). Gathering portion size estimations is important as this provides more precise information of food/drink intake which allows the researcher to carry out a more detailed analysis on the macronutrient content of the food/drinks that children consumed. Therefore, the use of portion size assessment tools has been deemed as an appropriate alternative to weighed intakes with young children to assist children in estimating portion sizes for the 24-hour recall method. This is useful because weighing all food/drink intake is impractical and not always possible when trying to assess food intake in a real-life setting (Foster et al., 2009; Thompson & Subar, 2017; Wrieden et al., 2008).

Photographs have been suggested as a useful aid in assessing portion sizes for adults (Robinson et al., 1997). However, existing food photographs designed for use with adults and based on adult portion sizes have been found to be inappropriate for use with children (Frobisher & Maxwell, 2003). Foster et al (2006) found that using age-appropriate photographs for portion size estimates of food/drink increases children's accuracy when compared with estimates using photographs designed for adults. Children's portion size estimates using age-appropriate photographs have also shown to be of a similar accuracy to adult estimates (Foster et al., 2009; Foster & Adamson, 2014).

Consequently, the researcher also provided children with age-appropriate food photographs to increase the accuracy of portion size estimates for children to recall their food/drink intake in Study 3. More specifically, Study 3 used a portion size estimation tool, referred to as the Young Persons Food Atlas, which was developed and validated by Foster and

Adamson (2012). This tool has been found to increase children's accuracy in reporting food/drink consumed and leftover when tested with children using the 24-hour recall compared against weighed tools. Foster et al. (2017) provides further details on this and refers to The Young Persons Food Atlas as a comprehensive tool which provides age-appropriate food photographs from the National Diet and Nutrition Survey for dietary assessment with children. The Food Atlas contains 2055 photographs on A4 pages of 104 different foods which are organised into a 206 page long printed booklet by food category (e.g., meat and products, fruits and vegetables etc). Separate versions of the Young Person's Food Atlas have been developed to represent food photographs relevant for different age groups. Study 3 used the Primary Young Persons Food Atlas for children aged 4-11 years old and the Secondary Young Persons Food Atlas for children aged 11-16 years old.

2.7.6 Data Analysis

The researcher made note of each food/drink item that children consumed and the amount of food that children identified as being served and leftover using the codes provided by the portion size photographs in the Young Persons Food Atlas (codes are provided by each food/drink photograph) during the 24-hour recalls. One code represented the amount of food children consumed, and one code represented the amount of food children leftover (if any). The researcher used the dataset from the Young Persons Food Atlas which provides the portion size for each code to establish the food children consumed, in grams, for each food item at each time point throughout the day (breakfast, lunch and dinner).

Information from the food/drink recalls were then inputted into Microdiet to produce data of greater detail and granularity. Microdiet is a user friendly, extensive and flexible database of foods and nutrients which can be modified by the user with up to 150 nutrient values available for each food. The software calculates nutrient totals which can be compared with a selected set of dietary reference values. Nutrient totals can be examined to determine the contribution of each food on the list to the energy breakdown for individual meals throughout the day. The availability of computer software has made it possible for dietitians to provide much higher quality information (Bassham et al., 1984). For an example, research to inform primary school nutritional policy by identifying which midmorning snack would be more beneficial to consume from an appetite control perspective was determined using Microdiet Software Package to find out breakfast, lunch (school dinner and packed lunch) and evening energy intake and macronutrient composition (percentage from carbohydrate, protein and fat) (Rumbold et al., 2013).

In Study 3, the Microdiet output used the McCance and Widdowson's Composition of Foods Integrated Dataset 2015 (UK 2015 CoFIDS, 7th Edition) and the researcher also used the

McCance and Widdowson's 'composition of foods integrated dataset' and composition of old foods (2019) to produce nutrient groups which were inputted into SPSS version 25.

The nutritional data were analysed to assess children's overall diet quality. A priori methods were used in Study 3, which typically refers to the use of scores or indices to assess how well an individual's diet agrees with a predetermined ideal diet and are often referred to as measures of diet quality (Hodge & Bassett, 2016). In Study 3, children's overall diet quality was assessed using a novel diet quality measure based on the UK Eatwell Guide (2018), which the UK population is recommended to adhere to for a healthy diet. Children were assessed on eleven nutrient groups which identify whether children meet the UK Eatwell Guide's recommendations for the number of grams/mg/grams/portions or percent of energy which should be consumed daily. Each nutrient group is given an individual score, which is collated together to create an overall diet quality score based on the UK Eatwell Guide (further detail on the diet quality scoring is provided in Chapter 5). In addition to this, children's lunch-time meal was solely assessed to view adherence to the School Food Standards on both an attending and a non-attending hub day.

In Study 3, Paired Samples T-Tests and Wilcoxon Signed Rank Tests were carried out in SPSS version 25 to compare (1) children's diet quality across an entire day and (2) adherence of children's lunch to the School Food Standards (SFS) on an attending versus a non-attending hub day.

2.7.7 Validity and Reliability

In studies conducted in what can be referred to as real world settings, the use of self-reports can be a practical method to measure and analyse food intake (De Castro, 2000). However, one of the issues with using the 24-hour recall method to collect dietary data, is that prior research suggests that self-report methods increase the risk of either under or over reporting of food due to poor memory recall (Foster & Bradley, 2018; Macdiarmid & Blundell, 1998). On the other hand, using the multiple pass method of food/drink recall during the 24-hour recall method (as described earlier by Nelsen et al., 2012) has led to improvements in food/drink recall (Rankin et al., 2010). To elaborate, recall of food/drink can be improved by using strategies included in the multiple pass method such as the researcher reviewing recalled information and probing for further information. Therefore, 24-hour recall, specifically using the multiple pass method, has been found to be a valid and reliable measure for assessing children's self-reported food/drink intake (Holmes et al., 2008; Livingstone & Robson, 2004; Rankin et al., 2010).

Another concern with using self-report methods includes socially desirable responding (Foster & Bradley, 2018; Macdiarmid & Blundell, 1998), yet this can be overcome by using children's reports of food/drink intake. To illustrate, prior research has demonstrated that children provide

more accurate reports of their own food and drink consumption compared to parental reports (Burrows et al., 2013). Also, parents may have a lack of knowledge of what children consume out of the home environment and occasionally what they consume in the home environment when unsupervised (Livingstone et al., 2004). Therefore, it is not plausible to rely on adults recall of children's food/drink intake under conditions in which the child consumes food without the parent's presence (Baxter et al., 2008). Research suggests children are able to participate in their own food recall at approximately 7 years old rather than relying on parental reports, and are accurate in doing so (Burrows et al., 2013; Livingstone et al., 2004; Sobo et al., 2000).

The researcher's presence can remove some of the burden off children when completing dietary assessments, as this enables any queries or uncertainties to be addressed immediately (Cohen et al., 2007). Furthermore, it typically ensures a good response rate if dietary assessments are undertaken with the support of the researcher on a one to one basis. It also ensures that the research task is sufficiently completed (the researcher can check there is no missing data) and filled in correctly (e.g., correct recording of breakfast, lunch and dinner). Therefore, this method is advantageous due to the relatively low participant burden (Holmes et al., 2008). To capture habitual consumption of foods, multiple recalls of at least 3 days are required to capture between-day and seasonal variability in foods (Foster & Bradley, 2018), which increases the burden on participants.

The multiple pass method of the 24-hour recall was viewed to be the most appropriate for Study 3, completed by children attending holiday provision, as the strengths outweighed the weaknesses of using this method. However, this method was amended slightly in Study 3 by recording children's food/drink intake over a period of time slightly over 24-hours. Typically, prior studies have recorded food/drink intake over a 24-hour period (for example, Raffoul et al., 2019). In contrast, the recall period in Study 3 was approximately 26 hours, rather than 24 hours, to ensure that the entire previous day of food and drink intake consumed by children could be accounted for during the limited hub opening times. Some holiday hubs did not open until 10am, whereas some children consumed their breakfast at 8am. This means by focusing solely on the prior 24 hours, the researcher would not have been able to record the food/drink children consumed for their breakfast meal. This increased time period may increase the memory burden on children, yet to remove some of the burden off children completing the dietary assessment, the researcher also supported children to report the food and drink they consumed (Cohen et al., 2007).

In addition to amending the recommended time period for recalling food/drink intake, the researcher also decided to focus solely on one 24-hour recall on an attending day, and one 24-

hour recall on a non-attending day, despite 3 days of food/drink recall recommended (Foster & Bradley, 2018). This was appropriate for Study 3 as asking children to recall their dietary intake across 3 days is not reasonable in a holiday hub setting due to the time restraints in these environments and the high burden of completing this task for children. In a holiday hub setting, there are sporadic attendance rates, which prevents the researcher from assessing children's dietary intake across numerous days. Instead, one day of dietary recall was gathered from children on an attending day, and on a non-attending day as Rockett and Colditz (1997) suggest this is still valuable in providing a snapshot of population means for dietary intake. Holmes, Dick and Nelson (2008) stated that if the research aim is to identify average consumption in a population, a single 24-hour recall for individuals from a target population is sufficient.

Study 3 of this thesis also used a non-probability purposive sampling strategy, like Study 2, therefore the findings of the study could not be generalised beyond the population involved in the study (as discussed on page 79 and 80).

2.8 Ethical Considerations

The research studies carried out in this thesis adhered to the ethical guidelines of the British Psychological Society and gained ethical acceptance by Northumbria Universities Health and Life Science Committee. The ethical procedures followed in this thesis include gaining ethical acceptance from the governing board, gathering fully informed consent, reminding participants of their right to withdraw, ensuring confidentiality and following the Data Protection Act.

Prior to collecting any data at the holiday hubs, the researcher obtained an enhanced DBS check. To recruit participants to each study, all hubs involved in the Kitchen Social programme were provided with details about the study via email, and upon expressing interest, were then provided with an information sheet and a consent form if they wished for their hub to participate. Similarly, parents were approached at the hub and provided with information regarding the research studies verbally and provided with an information sheet if they were interested in participating in the qualitative study, or if they were interested in their child participating in the qualitative and/or quantitative studies. Once children had received fully informed written parent consent, the researcher approached each of these children to verbally inform them of the study. If the child wished to participate in the study, they were provided with an information and consent form. The information sheet provided details on why the study was being carried out, selection criteria, what the study involves and what will happen with the information provided. The information and consent form provided for children were written using age appropriate language in a child-friendly format and verbally explained by the researcher. The child information and consent form for each study are provided in Appendix Ci, Appendix J and Appendix P. The parent/carer information and consent forms for each study

are provided in Appendix Bi, Appendix Bii, Appendix Oi, Appendix Oii, Appendix Ii and Appendix Iii. Hub leads, hub staff and senior stakeholder information and consent forms are also provided in Appendix Ai, Appendix Aii, Appendix Di, Appendix Dii and Appendix Diii.

Upon completion of the studies, debrief sheets were provided and verbally read by the researcher to participants that participated in the study. Debrief forms provided details on how the data will be used, the storage of the data collected, method used to anonymise data for confidentiality and who to contact for questions and concerns. The debrief forms for each study are provided in Appendix Ciii, Appendix Eiv, Appendix L and Appendix R. The data collected from each study (Study 1, Study 2 and Study 3) were anonymised using unidentifiable codes to replace participant names to ensure data remains confidential. All data are also securely stored to ensure data protection is not breached. Full details of sampling strategies, recruitment and material used are outlined in further detail in the methods section of each study in this thesis (Study 1, Study 2 and Study 3).

CHAPTER 3: An exploration of the views of stakeholders on the operation of the Kitchen Social holiday programme and the impacts upon service users.

3.1 Introduction

This chapter will provide a review of research relating to the need for and operation of holiday provision, and the potential benefits of holiday provision including the potential impacts upon children and parents' wellbeing. This chapter will then present the current study aims, along with the method and findings, followed by the limitations and a conclusion.

During the school holidays, Gill and Sharma (2004) suggest that low-income families are at a higher risk of facing financial pressures resulting in being unable to afford food for their children. Families whose children normally receive Free School Meal provision while at school must provide an extra meal across the school holidays. The National Food Strategy Part One (2020) report also estimates that an additional 1.5 million children aged 7-16 year olds would benefit from free school meals during term time. In addition, parents are faced with having to make choices regarding childcare and appropriate leisure activities for their children during the school holidays, many of which can be quite costly. Therefore, this may be challenging for low-income families and Graham et al. (2016) states there is a growing concern of "holiday hunger" which is defined as children being unable to access a sufficient supply of nutritious foods during the school holidays. It has been estimated that approximately 3 million children may not have access to a sufficient quality and quantity of food during the school holidays (Forsey, 2017). This can have a negative impact upon both children's and parents' wellbeing during the school holidays (McConnon et al., 2019; Stretesky et al., 2020).

To address the issue of holiday hunger, a number of community organisations that were already offering activities included food in their offer. While other community organisations set up holiday provision at community centres, schools, churches and other venues to provide free or low-cost food and activities. More recently, as discussed in Chapter 1, the government responded to this issue by funding the Holiday Activity and Food Programme which reached 50,000 children in 2019 and could benefit an additional 1.1 million children across England. (The National Food Strategy Part One, 2020). The number of holiday provision sites have grown in communities throughout recent years (Mann et al., 2017), and the majority of these sites are based in disadvantaged communities (Mann et al., 2018). However, few academic research papers have focused on the operation and impact of holiday provision.

Qualitative investigations of holiday provision in the UK are scarce. As previously discussed in Chapter 1, a qualitative investigation of holiday breakfast clubs by Defeyter, Graham and Prince (2015) revealed a need for holiday provision and discussed the nutritional, social and

financial benefits for service users accessing holiday breakfast clubs. However, this study focused on holiday clubs providing breakfast in schools as holiday clubs were still relatively new. As holiday clubs started to develop, researchers were afforded the opportunity to explore the operation and benefits of holiday clubs that offered lunch (Graham et al., 2016). The authors found that staff (n=14) thought that holiday clubs may relieve the financial strain for parents. Staff also viewed holiday clubs as a valuable source of support as they provide food, learning experiences, physical and enjoyable activities for service users. Likewise, a qualitative study by Holley et al. (2019) explored holiday sports club leaders (n=15) views and also found staff reported benefits of holiday clubs for attendees which included opportunities for children to socialise, gain enhancing food experiences, confidence and promoting positive behaviours. However, the study findings also identified issues including constrained club resources due to low funds, and the focus on nutrition varied across sites. Although, both Graham et al. (2016) and Holley et al. (2019) provide a valuable contribution to holiday provision literature, there are gaps in both studies as the authors did not consider other stakeholder's views.

More recently, Mann et al. (2020), produced one of the first published papers on (n=14) senior stakeholder views (co-ordinators, funders and policymakers) of the need, best practice and barriers for holiday provision. This study found that there was a need for holiday provision due to the increased financial pressures on families and revealed the best practice of implementing holiday provision which included utilising existing community assets. Yet, there were also barriers to delivering holiday provision which involved lack of funds, capacity and sustainability without government support. Although this study provided a useful insight into the implementation and delivery of holiday provision, the authors did not consider the views of service users. The latest published paper by Shinwell et al. (2021) focused on children's views of holiday provision using focus groups (n=31) at holiday clubs (n=3) in Northern Ireland. The findings suggested that children accessed a safe environment, various activities, social opportunities, learnt new skills and confidence at the holiday clubs. However, children's views on the nutritional content of the food provided at the clubs were mixed. Although this study provides a unique perspective as it is one of the first academic papers to focus on children's views of holiday provision, the participants were recruited from a small number of clubs in Northern Ireland which may limit the applicability of these findings across the UK.

There is also a paucity of research studies focusing on the impact of holiday provision, specifically research studies on the wellbeing of service users, with the majority of research studies derived from evaluative reports, rather than academic research papers. For example, a recent evaluation of West Cheshire holiday provision by Francis et al. (2019) involved researcher observations and interviews with staff, parents and children to explore whether holiday provision impacts upon children's wellbeing. The findings suggested that holiday clubs

improve the wellbeing of children who attend. However, this evaluation was limited as little detail was provided on the methodology. This evaluation was also a third-sector report, therefore the research included in this report was not peer reviewed.

As further discussed in Chapter 1, one of the few academic research papers focusing on the impact of holiday provision on wellbeing was carried out in Wales by McConnon et al. (2019). Quantitative findings using surveys with parents (n=84) and surveys (n=196) and activity monitors (n=41) with children, revealed that children participate in physical activity for a longer amount of time, consume more nutritious foods and make new friends from attending a holiday club. Qualitative findings from staff (n=32), parents (n=69) and children (n=74), also suggested that holiday provision can support the whole family during the school holidays by also allowing parents to attend clubs. Therefore, McConnon et al. (2019) concluded that holiday provision improves children and parent's health and wellbeing. However, the authors focus on a holiday programme which delivers holiday provision solely in schools, and therefore may not be applicable to other holiday provision sites (e.g., community centres and schools).

More recently, an academic research study by Stretesky et al. (2020) utilised qualitative data from various holiday hub settings and included each key stakeholder (children (n=220), parents (n=77) and staff (n=64)) to view the resources used by holiday clubs to improve service user's wellbeing. The findings indicated that all holiday clubs, regardless of the setting, utilise various assets and relationships in the community to improve wellbeing (e.g., such as surfing lessons). The most recent peer-reviewed paper on a holiday programme investigated the associations between different factors and parent wellbeing (Long et al., 2021). Parents (n=133) wellbeing was assessed using the "Warwick Edinburgh Mental Wellbeing Scale". The results showed that parents wellbeing improved when children had access to a holiday club during the school summer holidays, compared to during a school summer holidays without access to a holiday club, and modelling showed that parent wellbeing was associated with increased social interaction. Both Stretesky et al. (2020) and Long et al. (2021) used data from an evaluation of a holiday programme "A Day Out, Not a Handout" in the North East of England by Defeyter et al. (2018). However, this evaluation did not view children's wellbeing using quantitative measures and focused on parental reports of their children's mental health instead, with the findings suggesting that attending a holiday programme had no impact upon children's mental wellbeing.

Due to the gaps in the literature, the first aim of Study 1 was to explore the views of children, parents, staff and senior stakeholders on the operation of the Kitchen Social holiday programme, a holiday programme located in community settings across London. The operational aspects include the types of activities and food, and the length and number of hours

the programme offers (Shinwell et al., 2021). The second aim of Study 1 was to explore participants views about the impacts of holiday hubs on the wellbeing of service users. The research questions of this study include: Do stakeholders have similar views on the operation of the Kitchen Social programme? Do the Kitchen Social holiday programme improve parents and children's wellbeing? Study 1 extends upon previous qualitative studies which have investigated holiday provision by including each key stakeholder involved in implementing, operating and attending holiday provision (holiday programme funders/partners, delivery staff and service users; children and parents) to view the impacts of holiday hubs on children and parents' wellbeing. This study differs to prior qualitative research papers which focus on wellbeing as this study includes each key stakeholder group (senior stakeholders, staff, parents and children) and includes a range of different holiday hub settings (e.g., community centres, churches and schools) unlike prior studies (e.g., Morgan et al., 2019).

3.2 Methods

3.2.1 Study Design

This study used a qualitative approach with semi-structured interviews to gather staff, parents and senior stakeholders' views and experiences, and focus groups to gather children's views and experiences of the Kitchen Social programme. Senior stakeholders included the Kitchen Social coordinators, staff working for organisations that provide funding to the Kitchen Social programme and food charity organisations that provide surplus food to the Kitchen Social hubs. Semi-structured interviews/focus groups were viewed to be a useful method as they allow the researcher to probe further into potentially sensitive issues mentioned by the participant (Louise Barriball & While, 1994). This method has also been used in previous published qualitative research on holiday provision to gather the views of staff members (Graham et al., 2016). Focus groups were viewed as an appropriate method to gather data from children, rather than interviews, as they are recommended for children to allow for more efficient interactions by providing an engaging environment (Gibson, 2007; Shinwell et al., 2021). More detail on semi-structured interviews and focus groups can be found in the Methodology in Chapter 2.

3.2.2 Participants

A convenience sample was used to access the hubs with support from the Kitchen Social coordinators. Overall, there were 28 staff, 26 parents, 24 children and 17 senior stakeholders who participated in either a semi-structured interview or focus group.

Out of the senior stakeholders, there were 7 participants who were co-ordinating or running the Kitchen Social programme, 2 working for the Mayor's Fund for London (which provides funds for the Kitchen Social programme), 2 from external funding organisations, 1 member from the Kitchen Social steering group, and 5 members (in 4 interviews) from food organisations

(including surplus food charities). The number of each participant group from each hub, the periods that these hubs were open for and the locations of each hub are shown in Table 3.2.

It has been proposed that qualitative interviews should continue until a saturation point is reached. Saturation refers to the stage at which no new themes are identifiable within the data and the inclusion of further interviews does not serve to add new themes to the data set (Baker & Edwards, 2012). Due to the time constraints of the school summer holiday period and running dates of the hubs, it was not possible to concurrently collect and analyse data until the point of saturation when no new themes were identified. The researcher intended to revisit the hubs during another holiday period if more interviews and focus groups were needed to reach data saturation, yet this was not necessary. The researcher aimed to recruit approximately 15-20 participants per group and 3-6 focus groups (staff, parents and children) as Braun and Clarke (2013) state these sample sizes tend to be common in research that aims to identify patterns across data. The demographic data on staff, parents and children are presented in Table 3.1.

Table 3.1. The number, gender and ages of all participants involved in Study 1, along with the ethnicities of staff, parents and senior stakeholders.

Participant groups:	Staff	Parent	Children	Senior stakeholders
Number of participants	28	26	24 (4 focus groups)	17 (16 interviews)
Recruitment period	6 weeks summer holidays 2018	6 weeks summer holidays 2018	6 weeks summer holidays 2018	July 2018-February 2019
Number of males and females	12 males, 16 females	2 males, 24 females	12 males, 12 females	3 males, 14 females
Mean age and age range	18-64 years Mean age of 37.6 years	31-67 years Mean age of 39.8 years	5-15 years Mean age of 10.4 years	23-59 years Mean age of 37.07 (missing data from 2 participants).
Ethnicities of participants	Black African: 21.4% (6) Black Caribbean: 25% (7) White English: 42.8% (12) White Irish: 3.6% (1) British: 3.6% (1) French: 3.6% (1)	Black African: 46.2% (12) Black Caribbean: 26.9% (7) Bangladeshi: 15.4% (4) White English: 7.7% (2) Indian: 3.8% (1)	No data collected on ethnicity.	White English: 64.7% Black African: 5.9% Dutch: 5.9% French: 5.9% White Scottish: 5.9% (missing data from 2 participants)

3.2.3 Materials

An information and consent form were provided to all participant groups who expressed an interest in taking part in the study, which also included questions to gather demographic information for those people that agreed to participate in the study (Appendix Bi, Appendix Bii, Appendix Ci, Appendix Di, Appendix Dii and Appendix Diii). A separate semi structured interview/focus group schedule was developed by the researcher for each participant group (staff, parents, children, and senior stakeholders). The interview and focus group schedules focused on the organisation, delivery, impact (specifically on service user wellbeing) and any recommendations to improve holiday provision. These interview/focus group schedules were comprised of mostly open questions to gain insights into the participant's views and experiences, although a few closed questions were also included in the schedule (see Appendix Cii, Appendix Ei, Appendix Eii and Appendix Eiii). Debrief forms were provided to all participant groups upon completion of the study (see Appendix Ciii and Appendix Eiv). The researcher also used a Dictaphone (which is a digital recording device) for the recording of interviews/focus groups to allow for identical replication when transcribing verbal into written data.

3.2.4 Procedure

Upon receiving ethical approval from the Northumbria University Ethical Committee of the Faculty of Health and Life Sciences, the Kitchen Social coordinators contacted all the holiday hubs participating in their programme to find out which hubs would be interested in taking part in this study. Those holiday hub leaders who expressed an interest in this study gave permission for the researcher to contact them directly via email with further information about the study. The researcher sent further details about the study including an information form and consent form (see Appendix Ii and Appendix Aii) to all hub leaders who had expressed an interest in participating in the study. Nine hubs consented to take part in this study. The researcher arranged dates and times with the participating hubs to visit and recruit staff and parents for semi-structured face-to-face interviews. The parents/carers who visited the hub on the day and staff/volunteers working at the hub on the day were approached by the researcher and verbally made aware of this study. For those who expressed interest, they were then given a written information and consent form (see Appendix Di and Appendix Diii) that provided further details about the study. Upon receiving written consent, the researcher then invited staff and parents to participate in an individual interview at a mutually convenient time. At the start of all interviews, the researcher briefly described the aims of the study and the rationale behind the interview. Participants were reminded of their right to withdraw from the study at any time, their right to stop the interview at any point, including skipping any questions they felt uncomfortable answering. All participants consented to interviews being recorded using a Dictaphone for subsequent data analyses. Participants were assured that all interviews would be

transcribed and then anonymised by replacing their name with an unidentifiable code. The interview data would remain confidential, and all data would be safely stored where only the researcher would have access to both the recording, transcription and any produced database. The interviews ended when the researcher had asked a sufficient number of questions to cover all topic areas on the interview schedules and the participant(s) had nothing else to add. Interviews lasted approximately 40 minutes. Upon completing interviews, parents and staff were provided with a written debrief form (see Appendix Eiv). Parents were also given a £5 Tesco voucher to compensate for their time.

Similarly, the researcher also arranged dates and times with the participating hubs to visit and the parents/carers who visited the hub on the day were approached by the researcher to make them verbally aware of the children's focus groups. Parents who were interested in their child being involved in this study were provided with an information form and consent form (see Appendix Bi) providing further detail about the focus groups. Children who had written consent from their parents to take part in the study were then approached by the researcher to make them verbally aware of the study. Children were provided with age-appropriate information and consent forms (see Appendix Ci). Only children who had provided their written consent to participate and who had written parental informed consent participated in focus groups. Participants also agreed to the focus group being recorded using a Dictaphone for subsequent data analyses. Upon receiving both written consent forms, the researcher then arranged for children to participate in focus groups at the holiday hub they attended at a convenient time. At the start of all focus groups, the researcher briefly described the aims and rationale of the study. Participants were reminded of their right to withdraw from the study at any time, their right to stop the interview at any point and skip any questions they felt uncomfortable answering. The researcher informed all participants that focus groups would be transcribed and then anonymised by replacing their name with an unidentifiable code. Focus group data would be safely stored where only the researcher would have access to both the recording, transcription and any subsequent database to ensure data remains confidential. Focus groups ranged from four to six children and lasted approximately 30 minutes. The focus groups ended when the researcher had asked a sufficient number of questions to cover all topic areas on the focus group schedule and the participants had nothing else to add. In addition to receiving a written debrief (see Appendix Ciii), children were verbally debriefed. Children also had the option of choosing a sticker as a token of appreciation.

The Kitchen Social coordinators also contacted all the senior stakeholders involved in the Kitchen Social programme to find out who would be interested in taking part in this study (this included Kitchen Social coordinators who were also classed as senior stakeholders of the programme). Senior stakeholders who expressed interest in the study agreed to be directly

contacted via email by the researcher. The researcher provided senior stakeholders with further details of the study which included an information form and a consent form (see Appendix Di, Appendix Dii and Appendix Diii). Those stakeholders who provided written consent were invited to participate in an interview which took place either a face-to-face (n=7) or via the telephone (n=10) based on participant preference on a date and time which was convenient for the stakeholder. Both face-to-face and telephone interviews were conducted with senior stakeholders to allow the participant to choose their preferred method to reduce participant burden and encourage participation. Participants also agreed to the interview being recorded using a Dictaphone for subsequent data analyses. At the start of all interviews, the researcher briefly described the aims and rationale of the study. Participants were reminded of their right to withdraw from the study at any time, their right to stop the interview at any point and skip any questions they felt uncomfortable answering. The researcher informed all participants that interviews would be transcribed and then anonymised by replacing their name with an unidentifiable code. Interview data would be safely stored where only the researcher would have access to both the recording, transcription and any subsequent database to ensure data remains confidential. Each interview lasted approximately 40 minutes and ended when the researcher had asked a sufficient number of questions to cover the questions from the interview schedule and the participants had nothing else to add. At the end of each interview, participants were provided with a written debrief (see Appendix Eiv).

3.3 Data Analysis

Each recording was listened to and transcribed by the researcher. Example transcripts are provided in Appendix Fi, Appendix Fii, Appendix Fiii and Appendix Fiv. The data were analysed using thematic analysis which is an approach developed by Braun and Clarke (2006) to allow the researcher to examine and identify themes within the data (further details in the Methodology in Chapter 2). To conduct the analysis, all the transcripts were inputted into NVivo 12 to assist with the organisation of data. Due to the different roles and experiences each group has at the holiday hubs (staff, parents, children, and senior stakeholders), it seemed only rationale to view each stakeholder group separately rather than collate this data together for coding. Inductive thematic analysis was used to gain a broad and rich insight into holiday provision.

Reliability analysis was also carried out on 10% of the qualitative findings (as recommended by Mouter & Noordegraaf, 2012). A second coder, who has prior experience of analysing data using thematic analysis, read transcripts and coded the data according to the themes and sub-themes. The results of the inter-rater reliability tests show substantial agreement (Cohen's Kappa= .78) between the researcher and the second coders interpretation of the transcripts. Following discussions of the coding discrepancies, the agreement between the researcher and

second coder for the interpretation of the transcripts increased (Cohen's Kappa= .95) to show almost perfect agreement. The second coder also checked an audio recording against a written transcript and confirmed that there was 100% agreement for the written transcript completed by the researcher and the corresponding audio recording.

Table 3.2. Number of participants from each hub, hub locations, opening times and days and the number of weeks each hub delivers.

Hub number	Hub type and location	Number of staff interview participants	Number of parent interview participants	Number of children interview participants	Opening times and days	Number of opening weeks
Hub number 1	Community centre in Barnet	3	3	6	Monday to Thursday 11:30-1:30pm.	4 weeks
Hub number 2	Community Centre in Brent	3	2	4	Wednesday and Thursday 10-1pm.	6 weeks
Hub number 3	Community centre in Brent	7	3	0	Monday to Thursday 9:30-3pm	4 weeks
Hub number 4	Church in Southwark	2	7	0	Wednesdays and Thursdays 11-1pm.	6 weeks
Hub number 5	Community centre in Islington	5	1	8	Monday to Friday 10-5pm.	5 weeks
Hub number 6	Community farm in Tower Hamlets	2	0	0	Wednesday and Thursdays 11-12:30pm.	5 weeks
Hub number 7	Community centre and adventure playground in Lambeth.	3	3	0	Monday to Friday 10-4pm	6 weeks
Hub number 8	Community centre in Westminster	3	3	0	Monday to Friday 10-4pm	5 weeks
Hub number 9	School in Tower Hamlets	0	4	6	Monday to Fridays 9-12am	4 weeks

3.4 Findings

Participants reflected on their knowledge and experiences of the Kitchen Social hubs and shared their views on the operation and benefits of these hubs. A summary of the themes and sub-themes from each participant group are presented in the following tables: Table 3.3, Table 3.4, Table 3.5 and Table 3.6.

3.4.1 Themes and Sub-Themes from Children’s Focus Groups.

There were four key themes from the focus groups with children: (1) influence on children’s wellbeing, (2) support for children and parents, (3) enjoyment of healthy food provided, and (4) increase the choice and variety.

Table 3.3. Themes and sub-themes from children’s focus groups.

Theme 1 and subthemes	Theme 2 and sub-themes	Theme 3	Theme 4
influence on children’s wellbeing. <u>Sub-theme A:</u>	support for children and parents <u>Sub-theme A:</u>	enjoyment of healthy food provided	increase the choice and variety.
enjoyment and socialisation. <u>Sub-theme B:</u>	safe and accessible environment. <u>Sub-theme B:</u>		
new enriching and physically active opportunities. <u>Sub-theme C:</u>	respite for parents.		
avoidance of negative emotions.			

3.4.1.1 Theme 1. Influence on Children’s Wellbeing.

Discussions with children revealed that they feel positive emotions when they attend the hub, which includes feelings of happiness. Children mention they have fun and enjoy the time they spend at the hubs. Children have the opportunity to take part in activities which may also positively impact upon their overall wellbeing, such as taking part in physical activities and cooking activities. Children also acknowledge that attending the hubs may prevent them from experiencing negative emotions, such as feeling bored. However, children also mention that they may experience negative emotions at the hubs when other children misbehave. Poor behaviour at the hub may prevent children from attending and should be managed appropriately by the staff to ensure that this does not occur.

3.4.1.1.1 Sub-theme 1a. Enjoyment and Socialisation.

Children frequently state that the holiday hub makes them feel happy, which shows that children associate the hubs with positive emotions. Numerous children (n= 8) state this when discussing how attending the hub makes them feel and why they attend.

“the club makes me happy” (focus group 4)

“when we come into summer club, we always erm come in with a big smile and then we always have fun activities” (focus group 4)

Children mention that the activities at the hubs are fun. Children discuss the holiday hub environment itself and mention the positivity and acceptance they experience from attending: *“it’s really fun like you’re all accepting” (focus group 2)*. Therefore, it is apparent that children want to attend the hub and attendance is unlikely to be solely based on the parent’s decision: *“my friend told me that when you are 8 you can come here, so when I was 8, I tried it out, and I really really liked this” (focus group 2)*. Nevertheless, parents may still play an important factor in terms of attendance, especially for younger children. For example, one child commented they attend the hub because a guardian sent them: *“my mum sent me to my Godfathers and he told me to come here” (focus group 3)*.

Children also refer to the social connections that they have made at the hub. Children discuss the new friends they have made at the hub and how hubs afford them the opportunity to meet ‘new’ people. Therefore, the hub environment is viewed as a place to meet new and existing friends during the school holidays:

“we get to meet new people like loads of new people came” (focus group 5)

“some of your friends might be here” (focus group 4)

The social connections that children make at the hub also extends to the staff members working at the hubs, as children mention the friendly staff as a further reason for attending. The hub

environment is therefore viewed as a place where children can socialise with both the staff and their peers accessing the hub:

“I like talking to the staff- maybe not necessarily just about youth club, about whatever you want to talk about” (focus group 5)

3.4.1.1.2 Sub-theme 1b. New Enriching and Physically Active Opportunities.

Children discuss the different range of activities that they have access to, which includes offsite trips and visits: *“erm and they do a lot of things and there's plenty of trips” (focus group 5).*

Children acknowledge that they are given numerous varied opportunities at the holiday hub.

This finding suggests that children appreciate and value the activities offered by hubs as they refer to this as one of the reasons they attend: *“and has so many games to play that's why I like to come here a lot” (focus group 3).*

Most importantly, children are provided with a choice in which activities they wish to participate in and how they spend their time at the hub. Children point out that they do not get told that they must participate in certain activities upon arrival, rather they are provided with a range of options: *“when you come here, they don't really tell you this is what we're doing today like there's options” (focus group 5).* More specifically, the choice in activities offered to children often includes new experiences. For example, children refer to novel ways for them to be physically active such as by participating in roller-skating: *“roller skates and I've never done roller skating” (focus group 3).*

Children also discuss learning new skills from these new experiences at the holiday hub, such as learning how to use music recording devices: *“some of what I do in radio is a bit like how to DJ I don't know the name the things you push up and down and then microphone and then music and stuff, so I learnt how to use those” (focus group 1).* Children refer to these learning opportunities as being fun: *“but they do it's like learning but in a fun way” (focus group 1).* Thus, hubs provide a range of learning opportunities for children and young people, some of which may be essential life skills such as learning to work effectively as a team: *“how to work together like teamwork help each other out” (focus group 3).* Therefore, the hubs provide a supervised environment for children and young people to try a range of novel activities and experiences.

Importantly, children report that they are offered a range of physical activities in which to participate in, allowing them to keep physically active at the hub. In contrast, children mention that they are often physically inactive when not attending a holiday hub. Indeed, one child mentions a complete lack of physical activity on days they do not attend a holiday hub.

“I get more active because we play dodgeball and we do lots of sports” (focus group 5)
“so, then I don't come on Friday, on Friday I just lie in bed” (focus group 3)

Children identify the hubs as an environment where they can reduce their time spent in sedentary media activities, as there are a range of alternative physical activities for them to participate in which they may be unable to access at home. More specifically, sedentary media activities appeared to be particularly prevalent amongst children when they did not attend the hubs compared to the activities they mention participating in when they do attend the hubs:

“probably just stay at home playing on Xbox” (focus group 5)
“my mum would like yell at me and stuff because I am playing on my game too much” (focus group 2)
“I would just stay home and watch Netflix” (focus group 5)

Some hub sites provided children with access to sedentary media, as some children (n=3) mentioned playing on video games and computers at the hub, although this could be viewed positively as some children may not have access to computer games at home. Nevertheless, these appear to only be accessed by children occasionally at the hubs as these hubs provide a range of other activities: *“sometimes we also play computer games” (focus group 6).*

3.4.1.1.3 Sub-theme 1c. Avoidance of Negative Emotions.

Many children (n= 14) reported that they experience negative emotions when they are not at the holiday hub, such as feeling bored. Children refer to the hub as a place that alleviates the boredom they would otherwise experience during the holidays.

“because my house is boring” (focus group 5)
“yep, because I had nothing to do during the holidays” (focus group 6)
“I would just be bored in my room” (focus group 2)

Although children reported experiencing negative emotions when they are not at the hub, children also reported experiencing negative emotions at the hub and suggested ways of avoiding these emotions. For example, children mention negative behaviour and negative social situations as being a barrier for attending the hub.

“Participant: I don't come on Friday's cause
Interviewer: why don't you come on Friday's?
Participant: it's because no people just don't behave on a Friday when it comes to the movie
Interviewer: and does that stop you from coming?
Participant: yeah” (focus group 3)

However, children also pointed out that the staff at the holiday hub actively manage children's behaviour according to social and cultural norms: *“but in here they will tell you off they will say language, they say your language so” (focus group 6).*

3.4.1.2 Theme 2. Support for Children and Parents.

Children refer to the holiday hubs as a means of providing a supportive environment for both themselves and their parents. Children value the safety and accessibility of this provision, along with the impact that the provision has on their parents in terms of providing them with suitable childcare and enabling parent's time to themselves or time to carry out work commitments.

3.4.1.2.1 Sub-theme 2a. Safe and Accessible Environment.

The focus groups with children (n= 4) involve discussions around holiday hubs providing them with a safe and accessible environment to spend time in during the school holidays. Children clearly view playing out on the street as being unsafe, suggesting a need for children to be able to access a safe environment where they can be supported by adult supervision.

“because we'll choose something that we want to do for the day and then we'll sign in and then because we have chosen that's where we'll be so they will all know where we are so safety” (focus group 1)

“yeah, so it's keeping you off the street” (focus group 6)

The focus groups show that the hubs are accessible for families who are financially struggling during the school holidays. For example, children appeared to be aware of the financial difficulties their families may be facing, as they state that they access the hub because there is no cost of attending: *“because it's free” (focus group 5)*. Children demonstrate that they are aware of their parents experiencing difficulties paying for food and activity provision during the school holidays:

“our mums are broke” (focus group 5)

“yeah, it just saves us money” (focus group 5)

Therefore, children attending the hubs seemed to understand the necessity of having free activities as their families may be unable to afford any alternative: *“yeah because it's an option it's better than just going out and not having any money going anywhere” (focus group 5)*.

Children also reveal that the number of children that attend the hubs is increasing, suggesting that there is a demand for access to a holiday hub within communities: *“there's more people now yeah” (focus group 2)*.

3.4.1.2.2 Sub-theme 2b. Respite for Parents.

Children recognised the wider support that hubs provide the parents of children accessing holiday provision. This included some children (n=4) talking about the difficulties that their parents may experience when carrying out certain tasks in their presence such as cooking and cleaning:

“yeah, because they have like more time to like clean and cook and get ready without us like” (focus group 3)

“there would be certain stuff that they wouldn't be able to do because we were with them” (focus group 1)

Instead, the holiday hubs provide parents with extra time to undertake any chores by providing childcare.

The hubs are aimed at children, yet they clearly provide numerous benefits for parents. Providing children with a place to go during the school holidays is particularly advantageous for working parents. Having free childcare support enables parents to work without having to worry about finding alternative support during the summer holidays, when they may struggle to balance work alongside the presence of their children.

“so, my parents have said they have work and they don't want to do it when I'm messing about in the house, in case, I do something wrong” (focus group 2)

“when my mum goes to work, I can't stay at home by myself because my mum is worried about the house” (focus group 2)

3.4.1.3 Theme 3. Enjoyment of Healthy Food Provided.

Children refer to the food served at the hub as being homemade food rather than readymade food that their parents buy: *“yeah erm like the coleslaw is like homemade like we normally buy it and what they make it themselves here” (focus group 1)*. Children also pointed out that it is unlikely that they would consume the food served at hub everyday if they did not attend:

“because they do like special food that you wouldn't normally eat everyday” (focus group 6).

Children view the food that is served at the hubs as being healthy and they mention a range of different fruit and vegetables that they have consumed when attending the hubs: *“I love the cucumber, that's healthy “ (focus group 4)*. Some children (n= 10) also mention getting involved in preparing the food provision. Enabling children to become involved in food preparation is an effective method to increase children's vegetable consumption. For example, one child discusses cutting pieces of beetroot to create a similar resemblance to rice:

“yeah, we made pink rice before pink rice is basically beetroot, but it just looks like rice” (focus group 4)

Some children (n= 3) also mention the variety of foods that are served at the hubs and many hubs provide different menus and food options each day; *“so they have like different varieties of food” (focus group 3)*. One child recognises that the food provision is also accessible for children from different cultural backgrounds. For example, for those children who eat meat, the use of halal meat helps to remove potential barriers to meat consumption and does not segregate food provision: *“all of the meat is halal” (focus group 3)*. Moreover, children appear to enjoy being offered different foods to try.

Some children (n=3) discuss cultural differences in terms of food consumed at home to the hub. Children referred to the food choices at the hub as being ‘British food’: *“erm well it's not really that my mum doesn't cook them at home she just cooks different types of food because the food we have here is kind of like British food” (focus group 2)*. This suggests that the hub includes children from different cultural backgrounds. However, children reported that despite cultural differences in the food served, they enjoy consuming the food *“the food's really nice” (focus group 2)*.

Children report consuming different types of foods at home compared to the food provided at hubs: *“we don't have them as often as we have them here but we still do have them at home sometimes” (focus group 2)*. Therefore, for some children, this enabled them to try new foods: *“some things that my mom couldn't cook like because she's not able to or doesn't know how to so it's good to try different foods stuff you have never tried before” (focus group 2)*.

However, the hub venues may have the potential to negatively impact on children’s food intake by providing access to unhealthy food: *“crisps you can buy chocolate you can buy Haribo” (focus group 3)*. Children mention opportunities to purchase and consume unhealthy foods when they access the hub due to the option of nearby vending machines or shops: *“because we use the vending machines” (focus group 3)*. This only applies to some hubs which offer drop in and out holiday provision allowing children to access alternative foods from nearby shops or vending machines.

3.4.1.4 Theme 4. Increase the Choice and Variety.

Children discussed a number of improvements that could be made to the hub, which include access to more activities. One child suggests that the hubs could provide new activities to participate in, which would increase the activity options available and provide more choices for children.

*“well, I’ve got one thing to like they can improve this place, have more games to play”
(focus group 3)
“they should get some new stuff to do” (focus group 6)*

One child suggests making the lunch area bigger: *“hmm I don't know like it depends on the budget, maybe to make the lunch area a bit bigger” (focus group 1)*. While another child alternatively recommends allowing fewer people to access the hub to prevent having to extend the space: *“less people because it's too crowded” (focus group 1)*. This suggests that there is many children accessing the hubs and further strategic investment is required to meet demand in some areas.

3.4.2 Themes and Sub-Themes from Interviews with Parents.

The 5 key themes from the interviews with parents include: (1) supporting families on low-income, (2) accessible holiday provision, (3) range of new and engaging opportunities, (4) trying ‘new’ and nutritious food, and (5) developing holiday provision to reach a wider audience.

Table 3.4. Themes and sub-themes from parent interviews.

Theme 1 and sub-themes	Theme 2 and sub-themes	Theme 3 and sub-themes	Theme 4 and sub-themes	Theme 5 and subthemes
supporting families on low-income. <u>Sub-theme A:</u> demand for provision during the school holidays. <u>Sub-theme B:</u> financial issues without hub support. <u>Sub-theme C:</u> positive influence on overall wellbeing.	accessible holiday provision. <u>Sub-theme A:</u> good awareness and location of holiday provision. inclusive holiday provision. <u>Sub-theme C:</u> positive and safe community environment.	range of new and engaging opportunities. <u>Sub-theme A:</u> creative and physical activities alleviating boredom. <u>Sub-theme B:</u> new experiences and skills. <u>Sub-theme C:</u> Structured and social environment.	trying 'new' and nutritious food. <u>Sub-theme A:</u> food provision is healthy and enjoyable. <u>Sub-theme B:</u> diverse food experiences.	developing holiday provision to reach a wider audience.

3.4.2.1 Theme 1. Supporting Families on Low-Income.

Holiday hubs are viewed as a supportive environment, particularly for disadvantaged families who, without access to Kitchen Social hubs, may experience difficulties paying for food and activities for their children during the school holidays. Some parents discuss the high demand for holiday hubs and financial issues they experience without access to holiday hubs, while other parents acknowledge that they have saved money by accessing the holiday hubs. Parents discuss the boredom their family would experience without holiday hubs and the positive impact that this has on their wellbeing overall.

3.4.2.1.1 Sub-theme 1a. Demand for Provision during the School Holidays.

Parents constantly emphasise the need for school holiday hubs, during the summer holidays and during other holiday periods such as half term. Parents discuss the need for appropriate childcare as there are limited availability of local holiday provision within their area. This is not only evident through parent's statements, but also through the increase in hub attendance rates that parents report. One parent mentioned that the hub their child attends reaches capacity, and thus they need to sign up early.

“and again, you should not only be doing the summer holiday you should open it through the Easter holiday too or half terms” (parent 17)
“I mean for my daughter there isn't anything else locally kind of thing” (parent 2)
“erm since we have been involved it has grown in size” (parent 6)
“you need to sign up early because if you sometimes if you wait too late the numbers the spaces get filled quite quick” (parent 9)

However, one parent acknowledged that there may be less need for provision during shorter holiday periods, *“because I find the other half term holidays are much shorter and can be just spent with family” (parent 26)*. This suggests the long school summer holiday proves to be more difficult in terms of childcare, food, and activities, although the shorter school holiday periods should not be ignored by providers as some parents (n= 6) identify that there is a need for childcare etc. during all school holidays: *“it should run all holiday periods, all holiday periods” (parent 17)*.

A few parents (n= 4) state that that they would seek alternative holiday hubs within the area if the hub they currently attended was not available: *“I think we would definitely try and find somewhere else where to take the kids” (parent 22)*. Therefore, access to holiday hubs may be crucial for some families during the school holidays.

3.4.2.1.2 Sub-theme 1b. Financial Issues without Hub Support.

Parents discuss the financial issues that they experience, particularly during the school holidays when they do not have access to holiday provision. Under these circumstances, parents state that they are unable to afford sufficient food or activities during the school holidays. This appears to be prevalent for the majority of parents (n= 18).

“stay at home all day with your child and you think about oh I'm struggling to pay this one there is no food but at least she goes somewhere here and then they do something, and they give- they provide food for them is very important” (parent 4)
“it's really really helpful like it helps me financially as well because I don't have to- for Mondays to Thursdays I don't have to worry about giving them lunch” (parent 5)
“going out-just walking out is expensive” (parent 17)
“just giving them experiences that some of the parents here can't afford to give their children” (parent 1)

A few parents (n= 2) report that without access to food provision at the hubs, more families may have had to use a food bank during the school holidays: *“but if they are doing the er cooking here it will reduce a bit more of people coming to the food bank I would say yeah” (parent 18)*. One parent recalls having to borrow money to afford activities during the school holidays: *“I have to like borrow money to take her somewhere” (parent 19)*. Therefore, for some parents, without access to holiday hubs they could find themselves in debt, going further into debt, or relying on emergency food provision. Using food banks would not fully address

the challenges that parents experience during the school holidays as they would still be required to pay for activities to entertain their children.

Some parents state that the hubs have enabled them to save money, whilst others state that they have spare money to use for activities on the days they do not have access to the hub (n=4). Therefore, on days children do not attend the hub, they may be able to access activities that they otherwise would not have been able to afford. This suggests that financially, the hubs have a positive knock-on effect for parents and their families.

“which means that I take that money out and then on the Friday when we are not having lunch club or at the weekend, I can treat them to go out somewhere or something” (parent 6)

“so, with this being here in the local environment it saves twice as much money” (parent 20)

Parents refer to not just the expense of paying for food and activities during the school holidays, but also the expense of alternative childcare provision during the holidays. This can be a challenge for parents due to the financial restraints they experience: *“because as mothers if you are working you can't afford to pay for erm childcare because it's so expensive so this one will help you” (parent 19)*. The majority of parents (n= 14) state that hubs provide affordable childcare for both working and single parents to allow parents to work or carry out essential tasks, such as cooking. Two parents mention that the holiday hubs provide them with opportunities to apply for jobs by providing their child with childcare. This demonstrates the potential for school holiday hubs to support working parents, parents seeking work, and parents to carry out important household tasks.

“so, it's really handy as well especially if you are a working mum” (parent 3)

“erm summer times one of the biggest problems for parents- single parents” (parent 3)

“It gives me time for myself and it allows me to prepare for other things cooking or keep to my appointments if I have any” (parent 20)

“like me now right now I have time to apply for jobs and look on the internet” (parent 22)

3.4.2.1.3 Sub-theme 1c. Positive Influence on Overall Wellbeing.

Holiday hubs have the potential to relieve stress, depression and worry for parents accessing this holiday provision. The holiday hubs are valued by parents, and parents frequently refer to their own happiness and appreciation towards the holiday hubs being available for their children to attend. Therefore, it is made clear by many parents (n= 13) that the availability of holiday hubs positively impacts parent's wellbeing.

"number one being at home with the kids will stress you, you will get depressed"
(parent 14)

"like sometimes it saves you from stress"(parent 14)

"the club has been really helpful" (parent 12)

The holiday hubs appear to have a positive impact on children's wellbeing as children feel happy and they have fun when they attend the hub. Numerous parents (n= 12) recite positive experiences that children have from attending the hubs during the holidays as a reason for their attendance.

"but yeah, it's good the children are happy" (parent 3)

"yeah, it makes them happy all the time in the morning when you tell them we are going to this" (parent 15)

"it's a place where we allow children to have a happy summer holiday and with my children, they have had a great holiday" (parent 9)

Parents further express positive impacts that hub attendance has on children; suggesting that hubs allow children to develop their personal qualities. To expand on this, parents (n= 9) note that children's level of self-confidence and level of self-esteem improves, and they have become more resilient and independent from attending the hub. This suggests that the holiday hubs can have a positive impact on the development of children and young people.

"she's actually building that up so it's to boost her self-esteem" (parent 26)

"I think it improves their confidence it improves it gives them better communication skills" (parent 20)

"I think for- I think in terms of resilience" (parent 9)

"To play independently without being supervised constantly I know they are watching him but not somebody with him" (parent 8)

3.4.2.2 Theme 2. Accessible Holiday Provision.

Parents discuss the accessibility of the provision in terms of location of the hub, along with awareness of holiday hubs within the community. Parents refer to the provision as being inclusive through hubs providing suitable opening hours and offering a variety of foods and activities. Parents also discuss the safety of the hub environment, providing children with a safe place to go and giving parents peace of mind.

3.4.2.2.1 Sub-theme 2a. Good Awareness and Location of Holiday Provision.

A large proportion of parents (n= 17) report that the hubs are well located with good transport links for individuals accessing the provision who do not live within walking distance:

“yeah, I think it's quite central it's easy to get to from loads of different places and good transport links so” (parent 2)

“they have always made it accessible I mean we live all the way over on the other side so we've got several ways of getting there and even if you have to bus it, the bus stop is at the top of the road, there's loads of parking here, so it is very accessible” (parent 6)

On the other hand, one parent stated that the hub is local to the majority of individuals attending: *“yeah I mean it's erm it's local to everyone erm it shouldn't be an issue for people to get to so yeah” (parent 23)*. Local, community-based hubs that are accessible by good transport links appears to be important in terms of access. This is especially important for families who may not have access to a car and are unable to afford expensive forms of transport.

Children attended hubs at either community centres or schools hosting holiday hubs and both seemed to work well for service users. Families trust holiday provision at community centres as they are familiar with the people, whereas provision held at schools allows families to build better relationships with teachers. Both community centres and schools should be considered as suitable places to provide holiday hubs, as both clearly provide benefits and are accessible environments for families.

“because it's local and I know the people I know that they are a good community, community spirit” (parent 10)

“and then come back and collect them erm but for parents that are coming here it is definitely- for me it has been beneficial because we are coming here, we are communicating and erm other adults as well and getting to know the teachers as well” (parent 23)

Parents appreciate a wide range of communicative methods to find out information about hubs; including information provided at community centres, schools, and through word of mouth within the community. This demonstrates the importance of using various methods of communication to inform families who may particularly benefit from holiday provision during the school holidays.

“I do know the primary school get informed about it now so” (parent 6)

“I think they have leaflets as well” (parent 19)

“usually there erm main form of communication that we have is with the staff here, which is nice it is more personal” (parent 26)

3.4.2.2.2 Sub-theme 2b. Inclusive Holiday Provision.

Some of the parents (n= 6) mention holiday hubs are inclusive in terms of the opening hours and low price of hub attendance. Some hubs offer free provision for children to access, whilst other hubs charge a small yet affordable price for children to attend. Parents report that many hubs accommodate children of different ages, and this is particularly useful for parents who have children of different ages.

“and I was interested I found that it was a good price the hours were good” (parent 3)
“so, it's good, it's a good and different variety of things for all ages” (parent 3)

Parents acknowledged that hubs provided a wide range of activities and different foods for children to access. Providing a choice in food and activities prevents children from feeling excluded. For example, some parents identified that children may have been unable to eat certain foods, such as meat due to dietary requirements. Therefore, by providing a suitable alternative, children will not miss out.

“there's also the option of the vegetarians or the meat as well” (parent 11)
“no, they can choose what activities they want to go and do yeah a lot of them voluntary go to do it” (parent 3)

Parents also view the hub as being inclusive because of the abilities of the staff members working at the hubs. The skills of hub staff were a key considering factor for parents to utilise the hubs and suggests that relationships and expertise of the staff working at the hubs play an important role in families accessing holiday provision.

“erm so they've got such a wide range of qualified staff” (parent 1)
“the staff were friendly and stuff so yeah I thought it would be the right place for him to come” (parent 3)

A few parents (n= 5) also refer to the importance of having well-trained, skilled, and experienced staff involved in hub delivery due to the support they can offer to children in care, children experiencing developmental disorders and children with learning and communication difficulties. Generally, parents who may have children or may know of children that need extra assistance at the holiday hubs find the staff are able to support these children.

“erm because you have got some children that come with learning difficulties” (parent 9)
“he's here and there's qualified teachers that work here so I know that he is getting the support that he needs really and it's the right support so” (parent 3)
“they've got an SEN specialist, so a person who works with all the children with special educational needs, they've got a-level teacher's, they've got people who teach

cooking in establishments, erm so they've got such a wide range of qualified staff"
(parent 1)

3.4.2.2.3 Sub-theme 2c. Positive and Safe Community Environment.

A large proportion of parents (n= 9) also talk about the safety element that the hub provides. Parents are aware that the hub is a place where children can go, and they will be safe. The hubs also have staff present to facilitate with ensuring their child's safety. Some hubs use a sign in and out procedure demonstrating that they are fully aware of child safeguarding.

"signing in and out children- there are lots of staff that are here to watch them so yeah" (parent 3)
"and there's people here like watching them you feel safe because they are in a safe place" (parent 19)

For many children during the school holidays, the streets are one of the main options for alternative places to play, yet many parents do not view the streets as being safe: *"I don't want her doing running on the streets because that's otherwise what they would all be doing"* (parent 7). Parents (n= 8) associate spending time outside on the street with negative behaviours: *"and they have someone supervising them so they will not go outside and go joining gangs or anything like that, this is this is good for kids"* (parent 19). Therefore, by the hubs providing children with an alternative place to play, the hubs may prevent children from participating in anti-social behaviour and gang violence.

3.4.2.3 Theme 3. Range of New and Engaging Opportunities.

Parents refer to the range of new opportunities that children receive from attending the holiday hubs. They appreciate that their children are offered creative and physical activities to participate in which prevents their children from being bored during the school holidays. They state that their children are occupied and gain new experiences and skills from attending the holiday hubs. Parents view the holiday hubs as a positive social environment where children have a structured day and both parents and children can meet new people.

3.4.2.3.1 Sub-theme 3a. Creative and Physical Activities Alleviating Boredom.

Many parents (n= 13) find that children are able to remain physically active during the school holidays by accessing the holiday hubs. This suggests that the holiday hubs may be able to provide children with opportunities to increase their physical activity during the school holidays:

"they have definitely got a physical element that you know keep them active through the summer holidays" (parent 2)
"the kids play sports like my son is usually outside running around playing sports out there" (parent 11)

Alternatively, without the holiday hubs, many parents (n= 9) mention alternative activities that their children participate in which involves free community-based activities such as playing in the park or accessing public libraries. However, parents acknowledge that this may become repetitive over a long period of time:

“if the club is not here, where can I take them, the only thing is to take them to the park” (parent 16)

“so, it’s like the only option is like take them to the park” (parent 14)

“how many times can you take a child to a park” (parent 20)

“take them to the park they will get bored of it already like playing in the park” (parent 16)

Consequently, parents (n= 10) mention their children spend longer periods of time looking at screens during the school holidays due to the high cost of alternative activities. Therefore, parents associate their children’s physical inactivity and an increasing amount of time participating in sedentary activities with being unable to access holiday provision:

“or if you don’t go to the park, they have got the computer, their iPad whatever and they are right in front of the screen so” (parent 13)

“instead of sitting and watching TV... all he would be doing is play a video game or computer” (parent 8)

Parents also value the enriching, creative opportunities available to their children at the hubs: *“even stuff like this just being able to play with colours and paints and you know let your creative side out which I think is really important for children” (parent 11)*. By having access to various physical and creative activities, the majority of parents (n= 18) report that children are kept occupied:

“one the biggest thing is actually getting them entertained it’s sometimes harder than even feeding them” (parent 5)

“it keeps the kids occupied” (parent 20)

On the other hand, when children do not attend holiday provision, a large proportion of parents (n=16) talk about their children’s experiences of boredom in the school holidays. This highlights the importance of the provision of a range of activities in addition to meals:

“because they get bored in the holiday time” (parent 24)

“it’s something to do instead of being bored at home” (parent 10)

3.4.2.3.2 Sub-theme 3b. New Experiences and Skills.

Many parents (n=21) state the holiday hubs provide children with multiple opportunities to engage in new experiences, try new foods and activities. This includes learning to cook and gaining important knowledge around healthy eating: *“it's teaching them basic skills because some of them are not going to have you know be at home until they are 25 or 21 or- so just being able to cook a basic meal for yourself and from that when they're young just learning about health and safety in the kitchen “ (parent 1)*. This also includes activities which may help to prevent loss of learning during the school holidays, for example, one hub encourages children to participate in a quiz each day: *“I mean it's good but that is a quiz that is also playing and learning as well- yeah because what happens when they go back to school, they don't forget about it what they've learnt” (parent 8)*.

Parents state that there is a range of activities available to children, and children are actively encouraged to take part in activities which may be outside of their comfort zone: *“a lot of stuff ain't cool to do but they try and encourage all kids to take part in all activities and it forces them to do things that are out of there you know their norms” (parent 1)*. Children are also able to access activities which some parents point out that they would not have access to in their home environments: *“it's like also having the opportunity to do things that we can't do at home as well” (parent 6)*.

These learning opportunities are also offered to parents at some hubs which provide sessions for parents to attend. The sessions at the hubs involve teaching parents' new skills through a variety of activities, including various cooking activities: *“and erm cookery course that we did, so many things that we have actually learnt (parent 12)*. These are accompanied by information about foods such as appropriate portion sizes: *“yeah the food served here is portion controlled even now from them I learn how to portion my children's er food” (parent 17)*. Parents learning also extends to trying novel foods and activities at home: *“there was a lady who came to show us er how they eat, they taught us how to make some healthy snacks which I tried at home, I buy all those snacks” (parent 17)*. Hence, hubs play a vital role in upskilling parents with important skills and knowledge about food, food preparation and cooking. They also have the potential to have a knock-on effect in the home environment for a long-term impact on the health of families.

3.4.2.3.3 Sub-theme 3c. Structured and Social Environment.

Some parents (n= 11) reported that hubs provide children with structure and routine that then supports them to return to school in September. Similarly, other parents (n=3) acknowledge that it provides their child with something to talk about upon their return to school. Therefore, the hubs have provided children with a routine that may be comparable to the school day.

“and erm yeah I just thought they’ll have a structure in place” (parent 26)
“so, when they go to school, they have got something to tell their class” (parent 15)
“it’s just like the normal routine of going to school” (parent 12)

Parents also identify that children integrate with other children from different backgrounds, and different age groups, and they meet new people from attending the hub. Many parents (n= 17) mention the social aspect that hubs provide when discussing the motivations for their children attending and the additional benefits of accessing holiday hubs during the holidays.

“they come to socialise- with all the kids from different backgrounds” (parent 13)
“you get to meet other you know other children different age groups as well so it’s nice” (parent 20)
“my kids have met loads of kids” (parent 1)

Some parents (n= 4) state that the holiday hub is beneficial as children sit around the table to eat together at lunch time where they are provided with encouragement to consume their food through social modelling from children reinforcing eating behaviours.

“if they’re being exposed and then you see if another child is sitting there and eats it, he sees it and he will copy and eat it” (parent 8)

Parents also emphasise the benefits of having the holiday hubs available in terms of the social opportunities this provides for parents as well. A few parents (n= 3) found that they formed new friendships that continued outside of the hub environment; allowing parents to socialise with other parents during the holidays. Some hubs encourage family time with opportunities for parents to be involved by volunteering and opportunities to get involved in activities and food provision at hubs.

“yeah, erm it helps us to socialise with other adults as well” (parent 23)
“and it’s been really nice because like one of the mums we’ve had -last week we went and had a cup of coffee so that was quite nice” (parent 6)
“so, I now volunteer so being part of the volunteers and then having children coming here-it is useful for me and good for them to be here” (parent 16)
“but being here and they are doing something at least I can sit with them have that time with them that’s precious time with them” (parent 16)

3.4.2.4 Theme 4. Trying ‘New’ and Nutritious Food.

Parents refer to the food that the hubs offer as being healthy and enjoyable. Parents value the hot meal their children are provided with during the day which means that parents do not have to provide children with lunch on the days they attend the hub. Parents also state that their children have a diverse experience with food when they attend the hub as they consume novel foods.

3.4.2.4.1 Sub-theme 4a. Food Provision is Healthy and Enjoyable.

Parents state that children enjoy the food provided at hubs and that the food is one of the motivating factors for children to attend. Parents appear to value that their children are provided with healthy foods at the hub, rather than processed foods. Parents also suggest that children are provided with at least one healthy meal a day when they have access to the hubs, which may prevent children from going hungry during the holidays.

“here they serve food, and you know that even erm motivates the kids to come out”

(parent 16)

“it's like it's an environment where healthy food is prepared, it's not processed food it's healthy food” (parent 9)

“I mean it does help when they come home if they have had a hot meal, you know like a substantial hot meal during the day so when they come home, they are not as hungry “ (parent 2)

Parents suggest the hubs alleviate the pressure off the amount of food they have to provide throughout the entire day when their children are provided with their lunch-time meal at the hub. For example, some parents (n= 3) mention that the hubs provide a substantial meal which fills up their children and allows parents to provide a smaller quantity of food for their children's evening meal. Therefore, the food provision at hubs may influence children's food consumption during the evening. To illustrate, on the day's children attend the holiday provision, their evening meal may be smaller and of less nutritional quality since parents know that their child has already consumed a nutritious meal during the day.

“then maybe they will have snack, maybe a little snack that's it- but to me it helps me a lot so they have already had something, so I don't have to stress myself in thinking oh what are they going to eat what are they going to eat” (parent 14)

“you know so and they are full already so it's really helpful” (parent 5)

3.4.2.4.2 Sub-theme 4b. Diverse Food Experiences.

Holiday hubs provide food that may differ from the food that children consume at home. For example, some parents (n= 5) identify cultural differences between the foods their child usually eats compared to the food provided at the hub.

“no, it's different from what I have at home because me, I am an African, mostly when I go home, I cook my African food but when they come here, they eat other food and they enjoy it” (parent 17)

Other parents (n= 14) mention that children are encouraged to consume foods that they might not usually eat, for example, one parent states that their child has tried and eaten vegetables at the hub. This suggests that the hubs have the potential to impact upon children's dietary habits and eating behaviours.

“yeah, like my little girl she wouldn't eat lots of erm mincemeat or curries with the veggies she doesn't really like them, but from the holiday activities she's been coming to she's been trying them and she's eating erm” (parent 13)

“I think he enjoys the process where there's things that he wouldn't necessarily eat at home he's been eating here” (parent 2)

“some food sometimes she say oh I don't like it but when she comes here or goes to school, she eats it” (parent 4)

Some parents (n= 4) consider the alternative food experiences for children if parents were required to provide a packed lunch for them to take to the holiday hubs. For example, one parent states that it is better for children to be consuming the same foods. Packed lunches increase the likelihood of children being judged as they may enable children to identify those less fortunate who may not have as much food or have lower nutritional quality food in their lunch box. While another parent acknowledges the likelihood of the food being poor quality in the packed lunch as they describe packed lunch contents as being filling “stodgy” food, rather than necessarily healthy food.

“yeah, instead of bringing a packed lunch and it's better they eat the same food” (parent 15)

“so, it's not just a sandwich, most kids who have packed lunch they just have a sandwich, so they spend the whole holidays on bread and stodgy stuff” (parent 11)

On the other hand, parents (n=5) also considered children's experiences with food during the school holidays without access to a holiday hub. For example, parents identified that children usually consume a higher quantity of food in the home environment during the school holidays: *“because the children eat more during the holidays, they are home and they are just eating” (parent 5)*. While a few parents also reported that the food children consume at home during the school holidays may be of a poor nutritional quality. For example, one parent refers to processed food as the main source of food that parents purchase during the school holidays: *“I think ok so there is this thing that parents do when it comes to the holidays and they are like right I need to go get freezer food” (parent 11)*. Therefore, the holiday hubs may also be able to prevent children from over-consuming food of a poor nutritional quality during the school holidays.

3.4.2.5 Theme 5. Developing Holiday Provision to Reach a Wider Audience.

Parents discussed the potential to spread the reach of hubs to ensure all children are catered for. Some parents (n= 6) suggested that the hubs could increase the number of activities offered, with one parent recommending additional trips, while another acknowledged the need for the space to be extended for more indoor activities. Parents also proposed extending the age range, allowing hubs to reach more children. However, they recognised the need to increase the funding in order to extend provision as parents acknowledge the lack of funding as a barrier to extending provision.

“erm, I think maybe a bit more activities for them to do” (parent 21)
“I think it would nice it would be nice to go out on more trips” (parent 21)
“yeah, like I said earlier they could provide like more outdoor activities more erm erm even if some more erm activities, indoor activities as well like bigger places” (parent 12)
“only the fact of the age restrictions it's a shame it doesn't go up to 16” (parent 7)
“it's all expense at the end of the day isn't it that's the trouble it's all financing” (parent 6)

A few parents (n= 4) mentioned that more hubs should be available in different geographic locations, or alternatively advertise the hub for other areas to attend. The holiday hubs are viewed as being accessible for the majority of parents, yet one parent highlighted that travel to the hub was a barrier. Another parent suggested that the hubs could extend the opening hours further to improve access for working parents. This suggests that existing provision could be extended to additional areas, and hubs could open for longer periods of time, to remove these barriers for parents. However, additional funding will likely be required to extend holiday provision.

“they should just introduce more you know apart from doing it in this area do it more” (parent 17)
“so, if I don't have the transport fare that might be a barrier” (parent 12)
“erm they could potentially I know I've spoken do like an extended programme for parents who do work” (parent 2)

3.4.3 Themes and Sub-Themes from Staff Interviews.

There were 6 key themes from the interviews with staff which include: (1) need and demand for holiday provision, (2) accessible and structured holiday provision, (3) support from the community and food organisations, (4) varied healthy and accessible foods, (5) range of new and enriching experiences and (6) holiday provision needs to expand.

Table 3.5. Themes and sub-themes from staff interviews.

Theme 1 and sub-themes	Theme 2 and sub-themes	Theme 3 and sub-themes	Theme 4 and sub-themes	Theme 5 and sub-themes	Theme 6 and sub-themes
need and demand for holiday provision. <u>Sub-theme A:</u> high uptake of provision by lowincome families. <u>Sub-theme B:</u> supporting household expenditure.	accessible and structured holiday provision. <u>Sub-theme A:</u> convenient and good quality holiday provision. <u>Sub-theme B:</u> safe environment.	support from the community and food organisations. <u>Sub-theme A:</u> community partnerships and the Kitchen Social programme are essential. <u>Sub-theme B:</u> positive staff experiences and relationships.	varied healthy and accessible foods. <u>Sub-theme A:</u> attraction of nutritious food. <u>Sub-theme B:</u> one size does not fit all. <u>Sub-theme C:</u> food positively influencing behaviours and consumption.	range of new and enriching experiences. <u>Sub-theme A:</u> tackling social isolation. <u>Sub-theme B:</u> opportunities to learn and reduce sedentary behaviours. <u>Sub-theme C:</u> positive influence on wellbeing.	holiday provision needs to expand. <u>Sub-theme A:</u> increased demand for holiday provision. <u>Sub-theme B:</u> difficulty reaching individuals in need of holiday provision.

3.4.3.1 Theme 1. Need and Demand for Holiday Provision.

Staff report high attendance rates at the hubs and state that there is a demand for the holiday hubs. Staff also highlight a need for the holiday hubs due to difficulties families experience during the school holidays, such as the lack of alternative safe places for children to play and experiences of food insecurity. Staff also identify the financial benefits that the hubs provide families through the provision of low-cost or free holiday provision. Staff discuss the necessity of the holiday hubs due to parent's inability to afford food and activity provision for their children during the school holidays. Some hubs also provide additional food support, which includes the distribution of food parcels.

3.4.3.1.1 Sub-theme 1a. High Uptake of Provision by Low-Income Families.

The majority of staff (n= 18) emphasised the need for holiday provision to support children and parents, specifically for low-income families and children with additional needs. Staff members also referred to the high levels of deprivation within their area. This demonstrates that staff are aware of food poverty during the school holidays:

“it's open access but we do erm target low-income families erm young people from deprived backgrounds erm young people who have got erm additional needs” (staff 3)
“in this area I'm very aware that poverty is an issue” (staff 7)
“we kind of became involved because this area in (names London borough area) has like one of the highest deprivation levels, erm it's the sixth highest for obesity in the country, erm there's kind of lots of reasons that healthy food is needed in the area” (staff 25).

Staff identify issues of overcrowded housing in London, along with identifying the lack of green outdoor space within certain areas of London. This leaves families with a lack of space for activities:

“for lots of them they don't have the space to have to play around and we can help in our small ways to actually bring parents and their children together in a facilitating environment as I say a lot of them don't have that facility at home, they don't have that erm they their room is just a bed in there they can't do much with them, eating on a table that's not happening” (staff 16)
“erm a lot of our families erm are overcrowded, erm so you know 6 whole weeks in an overcrowded home you know” (staff 13).
“well, it's sort of needs-needs for the area so erm where we are based has the least amount of green space in (names London borough area) so there's not a lot of space for the kids to just be together” (staff 3)
“I think lots of people come to the farm because they need or want to access kind of outdoor space, in (names London borough area) lots of people live in tower blocks erm and don't have any outdoor space kind of-well their own so well all open spaces are everyone's garden really erm so I think lots of families especially because we have lots of play resources and a treehouse and that kind of thing but in that kind of outdoor environment that we have” (staff 15)

This suggests that one of the reasons for families accessing provision during the school holidays may be due to the lack of alternative places for children to play. Therefore, holiday provision provides children with appropriate spaces to play during the school holidays when low-income families may not have access to any alternative place to go.

3.4.3.1.2 Sub-theme 1b. Supporting Household Expenditure.

Staff acknowledge that many parents cannot afford entertainment for children in the holidays. Staff state that the hubs support parent's household expenditure by providing entertainment for children to access free of charge or at a very low-cost.

“if you want to do days out again that's more money and more money so I think this helps definitely helps parents to do to be able to do more with their children” (staff 28)

Some staff (n= 4) describe hubs as being able to replace a holiday abroad for those families who cannot afford this during the school summer holidays. Staff also found that hubs provide children with new experiences that parents may not be able to afford. This reiterates the importance of the activities that hubs provide alongside the importance of food provision.

“oh, I do I think it has made a big difference in the sense that not all the families can afford to go away” (staff 3)
“it gives them a platform to try new things erm open them up a bit and give them new experiences and some parents might not be able to afford to do” (staff 3)

Staff also report of families being unable to afford food during the holidays and that families have saved money through the food provision. Some hubs provide additional help for families by allowing parents and young people to take food home and act as a food bank.

“she couldn't even afford to have food at home for them at the moment and we was like just bring them here” (staff 3)
“there's some parents that come and we say the foods here do you want to come and help yourself because we know there struggling so they take it but we are doing it non-official, we are not a food bank” (staff 20)

3.4.3.2 Theme 2. Accessible and Structured Holiday Provision.

Staff state that the hubs are accessible and informative to ensure their community members are aware of their holiday provision. Staff also try to remove any barriers at their holiday hub which might prevent children and parents from attending. Staff also mention the structure at the hub, with appropriate policies and procedures in place ensuring that consistent provision is offered.

3.4.3.2.1 Sub-theme 2a. Convenient and Good Quality Holiday Provision.

The majority of staff (n= 15) viewed their hub as being inclusive by offering open access provision in an easy to reach venue for low-income families. Staff use a number of different methods to ensure effective holiday provision, including marketing the holiday hub through distributing leaflets to referrals (i.e., from schools, Kitchen Social or social services) and word of mouth. Staff also consider the transport links to hubs for attendees who may not live within walking distance of the hub.

“it’s open to anyone” (staff 1)

“Kitchen Social actually referred somebody and then social services do some referrals and parents kind of say oh we know of this family and they need you know they don’t have much money but over the summer the kids need stuff to do” (staff 22)

“whereas for those children- for those parents who don’t have erm siblings or peers in the area and they get a leaflet then they’re then informed about it as well, so I think each way works for different people” (staff 12)

“or they will say oh somebody told me that their child comes here so can mine, do you know what I mean so by word of mouth”, (staff 12)

“erm it’s central to everything, it’s got good transport erm facilities into the building” (staff 2)

The hubs are not quality assured, yet staff highlight the implementation of certain procedures which they adhere to. For example, staff/volunteers have police checks and provide food which adheres to School Food Standards, to ensure their holiday provision is safe and providing nutritious food for children. In addition to this, staff are provided with training to ensure they are able to safely provide food for children during the school holidays.

“there’s no volunteers no anybody unless they’ve got DBS” (staff 4)

“we erm tried to sort of stick to the guidelines we’ve been given which is erm you know the healthy sort of meals for schools” (staff 7)

“yes, so I mean that goes without saying if you are in the kitchen erm you would be trained in handling food and storage etc so yeah” (staff 2)

3.4.3.2.2 Sub-theme 2b. Safe Environment.

Staff identify the safety of children accessing these hubs as being a very important element for parents who have children attending hub: *“so they- yeah I think the parents are- like to know that their children are safe” (staff 10)*. Some staff (n= 6) mention the health and safety policies and procedures in place, which shows the staff commitment to safeguarding the children who are in their care.

“once they are in our care- the children are in our care they do not leave the building unless the parents allows them to go and get food which may be across the road, some of them live locally, other than that once the children are in here they cannot go out of there, we more or less erm put bands on them on their arm, green bands for them to be

coming out if they are allowed/permitted to come out and if they haven't got a band they are not allowed to come out the building” (staff 27)

Other staff (n= 10) emphasise the importance of having a safe place to go to prevent children causing trouble and spending time on the streets. Staff, like parents, also highlight the issues surrounding gang and knife crime culture within their communities. Staff state the importance of children having access to the holiday hubs during the school holidays to prevent children getting involved in anti-social activities.

“it's a place to come and place for them to go they wouldn't be out on the streets causing bother or just you know doing whatever” (staff 22)

“that's the one thing that I would say they need more of centres like this for children in every single area because we have got knife crime that's on the rise” (staff 17)

“there has been an issue in the past with gangs and anti-social behaviour on this estate so lots of parents don't want their kids hanging out” (staff 22)

3.4.3.3 Theme 3. Support from the Community and Food Organisations.

Staff discuss the Kitchen Social programme and the importance of establishing effective partnerships working to support the operation of hubs. Staff also mention the volunteers from the community offering additional support and providing important links to wider community involvement. Finally, staff discuss the development of new relationships between staff and service users.

3.4.3.3.1 Sub-theme 3a. Community Partnerships and the Kitchen Social Programme are Essential.

Numerous staff members (n= 12) discuss the involvement of the community in their provision through partnerships providing referrals, facilities, and resources for the hub. Staff highlighted the partnerships with food charities and receipt of donations that assisted with serving meals at the hubs. This suggests that staff rely heavily on the community for their hubs to operate and demonstrates the importance of relationship building within the community for essential resources.

“I think that just the partnerships- the local partnerships the- I mean you know with like I said the (says name) sports centre the new (says name) sports centre, which is also part of the area, so it's literally ten minutes up the road erm you just get loads of different er you know fractions working together within the area” (staff 2)

“so, this project the (names food charity provider) project is brilliant because they bring us like crates and crates of everything, so there was actually a week where we just had potatoes the whole week and I really did feel sorry for the kids, potatoes again I was like well you know we have got a lot, so we need to use them but erm it's all fresh” (staff 13)

Staff consider their provision to be viewed positively within the community, especially in terms of bringing individuals from the community together: *“erm so yeah in terms of the impact that it has on the community I think one of the main impacts is that it brings people together”* (staff 13). This also includes community members volunteering at the hub: *“by like week 2 or week 3 there were new volunteers that live in the community that wanted to kind of help and take part as well”* (staff 18). This is beneficial as this means hubs do not have to spend as much on paid staff each hub day which is particularly important due to the low funding hubs receive: *“it is quite important the volunteers to be here because it makes up staff numbers as well”* (staff 17).

The Kitchen Social programme itself is viewed as an important partnership for hubs because the Kitchen Social coordinators can provide additional opportunities and support to the hubs. For example, Kitchen Social provides hubs with funding for food as well as being able to help fund materials for activities. While one staff member recognised one of the Kitchen Social coordinators going beyond providing a basic offer of funding food, by also providing support to the hub staff.

“with Kitchen Social and (names Kitchen Social coordinator) they are like well we can actually get you money for arts and crafts material we can do this, what about this opportunity” (staff 3)
“and she's always there if you need anything” (staff 3)

3.4.3.3.2 Sub-theme 3b. Positive Staff Experiences and Relationships.

Staff perceive the positive relationship between themselves and the children and families to be an important element of the hub: *“whereas you know to my mind the big part of the success of these things is the actual relationship the children have with the staff who work here”* (staff 5). In some hubs, staff have pre-existing relationships with service users from prior term-time provision and they refer to the holidays as an important opportunity to work with these children all year round: *“you know where you've been working with a lot of these kids for a long time actually, they don't just come to holiday programme they come all year round”* (staff 22).

Some staff (n= 11) found that having hub workers who live within the community or have a similar background to individuals living within the community produces an enhanced relationship between staff and the children and families accessing the hub: *“I mean I grew up in here but I didn't grow up with the generation that is here now, I was a lot younger when I grew up here, but there is some volunteers that do live in the area and they have a better connection with the children because they know them and they see them growing up”* (staff 18).

Hosting holiday provision within these communities is clearly beneficial with some staff identifying previous attendees returning as volunteers themselves or service users again:

“we’ve got a couple of volunteers the same like him who came as young people” (staff 13).

This suggests that the provision is valued and shows the importance of developing relationships with individuals in the community as they may return to the hub to either re-attend or provide support to staff.

Staff highlight that for the holiday hubs to run successfully, it is very important to have staff or volunteers with relevant experience who are engaged in the hub: *“my background in youth work that kind of allows me to engage” (staff 18).* The staff are viewed as role models for the children by encouraging positive behaviour: *“yeah it’s guidance, role models” (staff 19).* However, the staff themselves also gain a rewarding and enjoyable experience, and one staff member points out that they benefit from working at the hub as they can use this holiday provision themselves by bringing their children along.

“it’s so fun it’s extremely rewarding” (staff 13)

“also, I think that quite a few of our staff members have got children of their own and erm it allows for them to work and bring their children with them” (staff 3)

3.4.3.4 Theme 4. Varied Healthy and Accessible Food.

Staff discuss the food that is offered at the hubs and they identify the food as a key reason for children attending the hubs. Staff mention the importance of the food, along with the different methods of serving food across hubs. Staff also consider the wider reach of the provision in terms of the knock-on effect this may have in the home environment in terms of changing behaviours and relationships with food in the long term.

3.4.3.4.1 Sub-theme 4a. Attraction of Nutritious Food.

Staff discuss the importance of serving healthy food at holiday hubs and the overall importance of having this food available to ensure children can access a healthy meal each day during the school holidays: *“I think the food is- it does make a difference to the kids yeah because I think at least you know they are getting a good meal, like when I bring my daughter here, I think well at least she is getting a good healthy meal” (staff 5).*

The staff recognise that some families may be experiencing food insecurity, with reports of children arriving to the hub hungry. Therefore, the food provision ensures that children receive a meal during the day; helping to alleviate food insecurity: *“to give all of them food because it’s really erm what should I say- it’s a really er good programme to be at if at the end of the day you can supplement their food as well because as you know a lot of the children they don’t get to eat, they love coming here but I can’t guarantee that they have ate before they come here because as soon as they walk through the door they are hungry” (staff 27).*

The staff view the food as being accessible as the hubs try to serve a wide-ranging menu with a variety of food: *“I think this overall it's pretty good you know the food quality you know so yeah because it's a good variety of food”* (staff 5). This includes some staff (n= 7) recognising the importance of providing vegetarian options to ensure all children are catered for: *“you know we've got a vegan young person who comes so you have to cater for that and we've got some vegetarians “* (staff 20). Some hubs, depending on availability, also offer children second portions of food. Staff provide the rationale that providing children with second portions prevents food waste:

“there's never any food waste erm so even after lunch what there will be there will always a-seconds and whoever still wants food if there is anything left then they will be able to have the opportunity to come back and get er some extra” (staff 2)

3.4.3.4.2 Sub-theme 4b. One Size Does Not Fit All.

Staff highlight the different methods used to cook and serve the food provision at their hub. Some hubs hire a chef to cook the food, whereas at some hubs, the staff or volunteers cook the food. This is determined by a number of factors including the cooking skills of staff, the number of available staff, and whether hubs have enough funds to hire a chef. Hubs provide children with a hot meal when they are on-site, however, when children go on day trips, the majority of hubs provide a cold packed lunch. Although the majority of staff (n= 13) claim that they prefer providing hot food, staff do state that both hot and cold food is well received.

“(says staff name) takes the main lead in that but I'm quite happy to go and cook in the kitchen” (staff 20)

“so, he's a qualified chef erm but so we pay him to do cooking, the thing is the background I come from you know I would prefer someone to do it because it's one of them things that you have to get that part right” (staff 5)

“in the first year I did all the cooking erm because we couldn't find anyone that could cook so erm so yeah that was quite full on the first summer because erm it took a lot of my time” (staff 7)

“I think the mixture has worked yeah, I think it has all been when we are in house it has all been hot erm and we only have the cold packed lunches when we go on a trip” (staff 15)

“it's good to get a hot meal... I think it's better cause it holds them more, it's more filling than if you got a sandwich” (staff 10)

In terms of the serving methods used, some staff members (n=9) mention that hot food is usually handled by staff for safety reasons and portion control, and children are able to provide guidance to staff of what food they want on their plate. Alternatively, wraps and side salads can be self-served by children. Involving children in the serving process of the food can provide them with good practice for the future. However, despite staff expressing variation in whom is responsible for cooking and serving the food, staff at the hubs highlight the importance of providing the food rather than focusing on how this is done.

“we put the salad on we put the breads on and then they go and sit down but anything to do with hot foods because obviously that is a health and safety issue erm so therefore I have to take responsibility for serving hot food” (staff 17) “it’s all about portion control I think as well... just to kind of make sure that each child is fed the same amount or at least enough for the age group erm (says cooks name) do the-do the serving” (staff 18)
“so, it's quite good to teach them serving skills” (staff 23)

3.4.3.4.3 Sub-theme 4c. Food Positively Influencing Behaviours and Consumption.

Some of the staff (n= 6) consider the children’s views and opinions regarding the food they serve at hubs: *“kids have a vote, four weeks up there's a menu that goes out, we show the kids if they are happy, if they have any allergies, they just tell us and she does the cooking but everything she has done so far is amazing everyone's happy with it” (staff 1)*. However, a few staff members (n= 3) also discuss the importance of using strategies to ensure children consume healthy foods and unfamiliar foods. Involving children in the process of preparing and cooking meals makes them more likely to try or consume foods: *“and cook it they feel like they have to eat it because they have got a sense of pride so I think it was more like that as well so getting children to like try stuff and eat stuff” (staff 24)*. Therefore, children may be more open to trying new foods at the hub that they would not normally consume at home: *“definitely we have erm children whose eating habits change erm they start eating more salads, fish erm, big culture backgrounds so things like fish, pies, cod. Originally, they don't want it because they are used to like the fried fish- snapper Jamaican fish whatever erm we'll start breaking down those those behaviours, those patterns” (staff 13)*. This suggests that staff attempt to get a balance between serving ‘novel’ foods whilst using a number of strategies to ensure that the children will eat it, and hopefully enjoy the food.

Two staff members also refer to the food provision taking pressure off the evening meal: *“definitely for parents knowing they haven't got to cook a main meal and can just give them a sandwich when the kids come home” (staff 20)*. By providing children with a hot meal during the day, parents may not have to feed their children a substantial evening meal. Other staff (n= 16) also mention the potential of parents taking the leftover food provision home with them to alleviate more pressure on providing food at home: *“so kids take it home if they want to like they always take their leftovers anyway but if there's food left over erm then the kids can take more home” (staff 8)*.

Other staff (n= 4) mention that the hubs provide healthy options for children in attempt to reduce children’s consumption of unhealthy food at takeaway shops in the community: *“I mean we do have a few chicken and chip shops down the road, but we are trying to deter away from that” (staff 14)*. Some hubs only provide food for children on certain days due to a lack of funds, whereas other hubs provide free food every day. In addition to this, some hubs operate

drop in and out holiday provision whereas other hubs have children attending the full day. Therefore, hubs which operate drop in and out access to their hub allow children to purchase their own food at nearby food shops: *“so they you know they do go to McDonald's or you know some of them just do come back with sandwiches”* (staff 28). Yet one of the hub leaders has suggested the quantity of unhealthy food that they buy reduces when children have the option of free food at the hub: *“you know because it's open access some of them will go out and they will buy sweets, but the quantity that they're eating has gone down”* (staff 20). This suggests that providing free food at the hubs may have the potential to prevent or reduce children's consumption of unhealthy food.

3.4.3.5 Theme 5. Range of New and Enriching Experiences.

Staff state that holiday provision may help to mitigate social isolation during the school holidays by providing families with opportunities to socialise. Staff discuss various learning opportunities and the potential to gain essential experience and qualifications from attending the hubs. They also refer to the opportunities at hub to reduce the amount of time children spend in sedentary behaviours during the school holidays. Staff also mention the positive impact that the holiday hubs have on the wellbeing of service users. Collectively, staff view the hubs as a means of improving families overall experience of the school holidays.

3.4.3.5.1 Sub-theme 5a. Tackling Social Isolation.

Staff discuss the opportunities for children to mix with children from other ethnicities and ages at the hubs: *“kids engaging with different kids like finding different kids from different age groups or ethnicities and combining them and just building bonds”* (staff 1). They also identify the potential for children to meet new people and socialise with other children and staff to develop their social skills: *“definitely engagement, improvement of social skills as well”* (staff 14). The staff view this as being particularly important as they identified negative experiences of social isolation during the school holidays which both children and parents are likely to encounter without these opportunities at the hub: *“and also they get isolated in the holidays”* (staff 15).

Parents are also able to develop social relationships and relate to other parents that they meet at the hub whether from attending the hub themselves or from dropping/picking up their child at the hub. Holiday provision provides a place for families to socialise during the school holidays. Some staff (n= 14) mention that their hub also offers sessions for parents to attend so that children and parents can enjoy quality time together.

“gives the parents also a chance to kind of socialise and unwind a little bit” (staff 22)

“so basically, the parents would never have the chance to bond together cause either one the kid be at school or they're working late and this is a great activity so parents and kids can join together and communicate and get to know each other more” (staff 1)

3.4.3.5.2 Sub-theme 5b. Opportunities to Learn and Reduce Sedentary Behaviours.

Staff mention that children are learning and having fun at hubs as they discuss the different kinds of activities that children can participate in when they attend the hub: *“I guess yeah because obviously they learn to cook as well, they do different stuff with cooking, so they learn to make different stuff” (staff 9)*. Children participate in a wide range of activities which allows them to learn new skills. This includes learning to cook and learning about healthy eating. Children also have the opportunity to take part in tailored activities identified by (n=7) staff as an attempt to reduce summer learning loss during the school holidays through the use of holiday hubs: *“we also from our learning loss programme where you know while they are out of school they can still learn and have some kind of educational or academic learning erm taking place” (staff 2)*.

Some hubs also offer children the opportunity to gain volunteer experience, qualifications and incentives from attending their provision: *“and what ends up happening is that we push a few of the boys and girls that we've got working with us in the holiday period as volunteers into that so they can get paid work and they can go through and do erm sports educated courses and also do sports er skill workshops and stuff like that which is good” (staff 27)*. This may be particularly important for some of the older children attending hubs; providing them with an interactive environment which can provide them with skills which may facilitate them in terms of employability in the future.

Staff also emphasise that this learning process can also extend to the parents. Some hubs offer parents opportunities to learn and access additional information at the hubs, such as getting advice for eating healthy on a budget. Other staff (n= 4) also mention that some parents take up the offer of volunteer opportunities from these hubs. This suggests that the hubs may also be able to provide parents with opportunities to learn and gain experiences.

”and they will come to me and how did you make it so you know I try to educate as much parents as well that you can feed your children healthy food on a low budget” (staff 18)

“in the past we have had some parents who want to get involved in volunteering” (staff 6)

Holiday hubs provide children with opportunities to go on trips and to get involved in a range of creative and physical activities which they may be unable to do at home: *“yeah so a lot of*

the activities they wouldn't- you wouldn't do at home” (staff 4). This alleviates boredom and allows children to be creative and stay active during the school summer holidays:

“(says staff name) was asking some of the children like if you weren't here in the summer what would you be doing? – I would be at home bored” (staff 18)

“they are being creative they are using their imagination” (staff 17)

“I think you know for some of them the physical activity is really good as well” (staff 6).

“they do activities in the morning like exercises as they want to keep them active” (staff 10)

Staff state that access to these activities at the hub ensures that children do not just stay indoors watching TV, on social media or playing on computer/video games all holiday:

“just sitting at home, some of them just played computer games” (staff 6). However, some hubs do also provide access to media-based activities on site such as films and computer game activities. Yet, this may be viewed positively as some children may not have access to media-based activities at home, and staff will interact with children to ensure that they participate in other activities to prevent them from spending all day on media-based activities at the hub: *“go sit on the computers or just be quite closed and we do try and kind of break that down break the bonds down and get them involved with all the other stuff that we have got going on” (staff 23).*

3.4.3.5.3 Sub-theme 5c. Positive Influence on Wellbeing.

Staff refer to hubs as providing a supportive environment for children that encourages them to be responsible and improves their confidence and self-esteem. Staff report that children have fun and feel happy at the hub. Therefore, staff refer to the positive impact that the holiday hubs can have on children's mental wellbeing during the school holidays. Children feel positive when they attend the hub, and they develop and gain positive qualities as well.

“it's giving them that responsibility so that's good” (staff 4)

“to build their self-esteem and increase their confidence” (staff 13)

“it's nice seeing them happy” (staff 4)

Additionally, staff mention that hubs may also have a positive impact on parent's wellbeing. The majority of staff (n= 21) discuss the fact that hubs provide childcare for parents, allowing them to either go to work or have a break from childcare duties. Staff also refer to opportunities for respite for parents along with enabling them to do other important tasks such as apply for jobs. Therefore, the hub is referred to by staff as being particularly important for parents.

“it allows the parents to go to work without any issues” (staff 14)

“it's I think a lot of it is a break for the parents do you know what I mean particularly the single parents who really do you know what I mean it is a lot for them to kind of you know cope with” (staff 5)

“you know parents need this so they can have their respite as well” (staff 17)

“parents have said I managed to get some decorating done in the house I've been trying to do for 2 years last year because the kids were out so I could actually get you know make some make an improvement others other parents searched for work because they had the time and the space” (staff 20)

Some staff (n= 7) also discuss the poor mental health that some of the parents may experience during the school holidays. For example, without access to the hubs, some parents mention that they would feel stressed during the school holidays. Staff view the school summer holidays as a long period of time which could be particularly challenging on the mental wellbeing of parents on low-income if they could not access a hub.

“because six weeks is a very long time and if you live in a home where you don't have a lot of facilities because of your financial situation it can become very stressful” (staff 17)

3.4.3.6 Theme 6. Holiday Provision Needs to Expand.

Staff discuss the expansion of provision due to the increased demand of the holiday hubs by individuals living in their communities. However, staff also mention that they experience problems in reaching more of the families in need. Staff discuss the potential to expand the holiday hubs to reach more families and to remove any barriers which may prevent families from attending, such as increasing the opening hours of hubs. Staff also mention the importance of avoiding the stigmatisation of holiday provision by providing universal access to hubs.

3.4.3.6.1 Sub-theme 6a. Increased Demand for Holiday Provision.

Staff discuss the potential improvements which could be made to hubs. These improvements include the possibility of extending the opening hours and days of the provision along with opening their provision during the shorter holiday periods such as the Easter school holidays. A few staff members (n= 3) also recommend the expansion of holiday hubs to other geographic locations to reduce the barriers that some families experience such as affording travel expenses to access their hub.

“in terms of improving it I mean I think you know erm potentially you know we could run it for a bit longer” (staff 5)

“we could do all the holidays, we could do half-term you know we could do Easter” (staff 13)

“yeah, that would be one thing maybe finances getting here you know not having the money to get on the bus to come” (staff 15)

“ideally it would be nice if there was more lunch clubs in different venues” (staff 4)

Some staff (n=12) mention an increase in the numbers of children attending hubs:

“definitely viewed as a positive thing, I think the growing numbers erm back that up” (staff

2). Therefore, other staff (n= 6) discuss the importance of having a suitable hub environment to ensure they have the capacity to deliver a quality holiday provision to these increasing number

of attendees: *“I would like to see probably a bigger space unit so they could expand the building to accommodate for more” (staff 17).*

However, staff also discuss the need for additional funding to allow hubs to expand: *“I just think like more funding is needed in order for this to grow” (staff 14).* Additional funding would also enable staff numbers to increase, although increasing volunteer numbers could also be a useful method to increase the workforce without putting a strain on budgets: *“I think kind of recruiting regular or consistent volunteers would also really help” (staff 25).*

3.4.3.6.2 Sub-theme 6b. Difficulty Reaching Individuals in Need of Holiday Provision.

A few staff (n= 3) discuss the difficulties they face in ensuring that all the families who may not be able to afford food and activity provision during the school holidays are able to access the holiday hubs. Other staff (n= 3) also refer to a stigma of accepting free food and activities at community centres. This suggests that hubs could still improve, and hubs should be carefully marketed to reduce stigma.

“I think there is definitely more we can do to access more families who need the provision” (staff 25)

“I think it has suffered a bit maybe from people thinking it's for poor people, I think there is a little bit of a stigma in some parts for that you know” (staff 5)

Some staff (n= 3) experienced difficulties in reaching certain groups of people. The lack of diversity within some of the hubs may potentially prevent individuals from attending, regardless of whether they do need financial support in the form of free food and activities. This again reiterates the importance of ensuring that the hubs offer universal access for anyone to attend to allow individuals of different demographic groups to access the provision.

“I think the only thing that may prevent some families from coming is er because we're based in- we're located in an area that has a very high black population so therefore the- a large proportion of our members are from a sort of ethnic background” (staff 3)

3.4.4 Themes and Sub-Themes from Senior Stakeholder Interviews.

There were five key themes from the interviews with senior stakeholders: (1) positive experience for children and families, (2) Kitchen Social supports communities to build capacity, (3) poverty and the need for the Kitchen Social programme, (4) lack of hub sustainability due to low funding and staff levels and (5) training and reach of holiday provision needs to improve.

Table 3.6. Themes and sub-themes from senior stakeholder interviews.

Theme 1 and sub-themes	Theme 2 and sub-themes	Theme 3 and sub-themes	Theme 4	Theme 5
positive experience for children and families. <u>Sub-theme A:</u> safe and accessible environment. <u>Sub-theme B:</u> free food and childcare. <u>Sub-theme C:</u> entertainment, learning, physical and social opportunities.	Kitchen Social supports communities to build capacity. <u>Sub-theme A:</u> essential support and resources. <u>Sub-theme B:</u> partners providing additional food and funding. <u>Sub-theme C:</u> Kitchen Social developing through a learning approach.	poverty and the need for the Kitchen Social programme. <u>Sub-theme A:</u> addressing holiday hunger and poverty. <u>Sub-theme B:</u> growth of holiday provision.	lack of sustainability due to low funding and staff levels.	training and reach of holiday provision needs to improve.

3.4.4.1 Theme 1. Positive Experience for Children and Families.

Senior stakeholders discuss the holiday hub environment as being safe and preventing children from getting involved in anti-social behaviour. Senior stakeholders identify the Kitchen Social programme as being accessible by providing open access to reduce stigma. Senior stakeholders also refer to the importance of free food, childcare and entertainment for service users to access at holiday hubs. Service users are provided with opportunities to learn, socialise, and have an overall positive experience at hubs during the school holidays.

3.4.4.1.1 Sub-theme 1a. Safe and Accessible Environment.

The majority of senior stakeholders (n= 11) view the holiday hubs as a safe environment for children and parents to access. Replicating parents and staffs' views, senior stakeholders also acknowledge that access to holiday hubs may help to prevent children from getting involved in gangs and knife crime by keeping children off the streets.

“if they are out on the streets just having to keep themselves- try to keep themselves out of trouble- when we had the hubs come together, they actually said that they opened a hub at one building and the gang violence around that area just stopped” (stakeholder 12)

“somewhere safe to stay, I mean four of the hubs I have been too either the youth workers or the kids themselves have brought up fear of knife crime” (stakeholder 14)

A large number of senior stakeholders (n= 8) viewed the holiday hubs as being accessible for service users as they are open access to reduce stigma, although a high proportion of senior stakeholders (n= 8) recognise the importance for Kitchen Social hubs to target children in receipt of free school meals and pupil premium. Therefore, the Kitchen Social hubs are located within areas of high deprivation to increase the likelihood of reaching this target group.

“it’s open right it’s open so nobody is going to be turned away if they want the food so it’s no stigma at all” (stakeholder 13)

“firstly, they want to feed children in a non-stigmatised way” (stakeholder 9)

“children that would definitely-are way more likely not to be having three meals a day when they are in the school holidays because they rely on that meal at school” (stakeholder 16)

“so, I think that the hubs that we are working with erm are in the best position on the outreach I think they erm they are able to because they have got existing relationships with people in the community, they are able to- they are ideally positioned to erm get to the people that are in most need” (stakeholder 6)

3.4.4.1.2 Sub-theme 1b. Free Food and Childcare.

The majority of senior stakeholders (n= 11) highlight that the Kitchen Social programme was developed to address the need for healthy food provision to support families during the school holidays. Senior stakeholders state that providing a healthy meal for children should be the first priority for hubs.

“well with Kitchen Social because they put a real erm a real point on having healthy food that erm is nutritious for the kids” (stakeholder 11)

“it is about the kids just having healthy food during the holidays” (stakeholder 13)

“I think the first thing we need to focus on is still making sure they get that meal, so none of the funding should go towards erm anything outside of that until they have got that healthy meal inside of them” (stakeholder 16)

Senior stakeholders acknowledge that some hubs invite parents to participate in the food provision at the hub. While one senior stakeholder suggests that by providing children with a meal during the day, parents may have a larger quantity of food at home, which could potentially prevent parents from having to skip a meal. Senior stakeholders (n= 4) discuss the additional support that some holiday hubs provide, which includes offering family’s supplementary food to consume at home. Therefore, holiday hubs may be providing food for the entire family.

“if parents come along parents are also welcome to eat too” (stakeholder 5)

“more than that I think by feeding the kids you are actually also feeding the parents because that means maybe the parents don't have to skip a meal in order to feed the kids because they know the kids have got a great lunch” (stakeholder 3)
“lots of the hubs also give food parcels out at the end of the day to the people that are coming along” (stakeholders 8)

Some senior stakeholders (n= 3) state that hubs can reduce the stress and anxiety that parents may experience in regard to providing food during the school holidays for their family by providing children with access to free or low-cost holiday provision. Senior stakeholders also identify that hubs offer parents access to affordable childcare by providing children with a place to go during the school holidays. This allows parents to have some respite and enables some parents to go to work.

“they value the fact erm it eases the financial burden as well as I say because most hubs are free that's the whole point” (stakeholder 13)
“and erm are struggling and then that the fact that they are not getting regular meals at school is compounded by the challenge of childcare costs during the holidays” (stakeholder 8)
“young people being at holiday provision and it's enabling those parents to work or manage the household or indeed to have some time off and to have respite” (stakeholder 7)

3.4.4.1.3 Sub-theme 1c. Entertainment, Learning, Physical and Social Opportunities.

The majority of senior stakeholders (n= 9) mention that hubs have a positive impact on children by providing entertainment and fun through a range of enriching and physical activities. Hubs have the potential to ensure that children remain engaged during the school holidays. This demonstrates the awareness that senior stakeholders have on the difficulty's parents may also face in providing enriching activities alongside food during the school holidays.

“it's a really good way to keep them entertained isn't it” (stakeholder 2)
“I think the children go along because in the holidays erm you know being able to access really good quality activities, I think for young people it's all about the erm the experiences and the activities and the fun that's on offer” (stakeholder 7)

Senior stakeholders view hubs as an environment which provides children with learning and physically active opportunities. More specifically, the majority of senior stakeholders (n= 12) mention that children are learning how to cook and gaining knowledge on healthy eating. Providing children with activities that facilitate learning may help to reduce gaps in educational attainment. Providing children with physical activities at the holiday hubs can also help to keep children active during the school holidays. Children's learning also has a knock-on effect in the home environment. For example, some hubs provide recipes for children to take and cook at home. Senior stakeholders emphasise the importance of children passing on the information that they receive at hubs to families in the home environment for a long-term impact on health.

“most hubs do have some erm cooking erm shared cooking shared meal or cooking element to them so erm I mean personally I just think that erm the food and food education and cooking skills are highly important piece of the puzzle for erm Public Health nutrition in this country” (stakeholder 8)

“I did a lot of reading around the educational attainment that while they're in school their educational level is going up but if they stop and don't do anything for the summer than they actually educational loss where they lose some of that learning and they actually start further back than they would have done if term had just kind of carried on and that's nothing to do with food that's purely about being stimulated” (stakeholder 12)

“actually, even just the kids taking back some of the food or taking back some of the recipes, that kind of stimulate conversation at the home between the parents and the kids as well” (stakeholder 12)

“I can still see the benefits of them in terms of the physical activities and educational stuff” (stakeholder 8)

“erm keep them learning keep them active” (stakeholder 13)

Senior stakeholders reveal that children have the opportunity to socialise with others by participating in hub activities when their parents are not present at the hub. While parents also have opportunities to socialise, either by attending a session themselves or when dropping and picking up their children. A high proportion of senior stakeholders (n= 9) also recognise the issue of social isolation, particularly for low-income families during the school holidays and the potential of holiday hubs to mitigate this.

“to maintain those social skills, the socialising aspect is really important” (stakeholder 8)

“they also start to build relationships with other erm parents who take their children so it's not only a socialising opportunity for the children but for themselves (parents) too er so then they can sort of build a support network also and get them out the house for a lot more erm more people” (stakeholder 5)

3.4.4.2 Theme 2. Kitchen Social Supports Communities to Build Capacity.

Senior stakeholders discuss the positive impact of the Kitchen Social programme on the capacity of hubs. The Kitchen Social programme provides additional support to hubs, such as enabling hubs to network and build rapport with other organisations to leverage further funding and volunteers. The Kitchen Social programme also introduces hubs to charity organisations in London who provide free surplus food to enable hubs to gather supplementary food supplies. Senior stakeholders express the importance of hubs sharing good practice to ensure that the Kitchen Social programme is constantly developing and tailoring the support that they provide hubs.

3.4.4.2.1 Sub-theme 2a. Essential Support and Resources.

Senior stakeholders acknowledge that the Kitchen Social programme enables hubs to build capacity. Kitchen Social provides funding for hubs to purchase food and food equipment, along with training which includes a quality assurance mark. Senior stakeholders discuss the criteria

which hubs need to meet, which includes the number of days they open and training requirements, before they can receive funding and refer to themselves as a Kitchen Social hub.

“so, they get cash support which they can use on a range of things so £1,500 erm and some use it to buy food, some use it to buy equipment or other things erm they also get kind of some capacity building support which we have a number of resources that we share. We also help hubs with things like er you know getting the right certificates in place and if they have any questions so it’s quite a lot of day to day support that we give as well erm they come to City Hall for a training on how to deliver the hubs” (stakeholder 4)

The majority of senior stakeholders (n= 9) state that Kitchen Social hubs bring communities together to empower them, as the Kitchen Social programme provides extra funding and support for existing hubs who already offer holiday provision. Therefore, senior stakeholders acknowledge that the Kitchen Social programme supports hubs with an existing infrastructure, rather than focusing on setting up new hubs, due to the small amount of funding they provide.

“I think yeah in terms of just having somewhere like that is really good, so I think it empowers communities” (stakeholder 16)
“it’s a very small amount, it’s an added activity and what that means is we are funding them that money in order to add food provision onto their existing activities, so what we are not doing is funding those hubs to provide their core activities, so that means we can only work with centre’s or youth hubs or schools or any other organisation that already covers its core funding needs and core activities in another way, and through that we can add food on as an additional activity. What we can’t really do and where we have really struggled is to fund a hub to set up using that money” (stakeholder 7)

Some of the senior stakeholders (n= 5) refer to the importance of having a flexible delivery model of holiday provision, based on an asset-based approach. For example, hubs may differ depending on the resources of the hub, in terms of whether the food is prepared onsite or offsite. Schools are set up to provide food for children during the school term, therefore they are already prepared for providing food onsite during the school holidays as they have access to a kitchen and cooking equipment. On the other hand, community centres etc., may not have access to a kitchen and cooking equipment onsite and may need support in preparing the food provision offsite. Nevertheless, senior stakeholders understand that both onsite and offsite food preparation is effective in providing food provision for children to access at the hub.

“some of them have partnerships with existing organisations that deliver food, others will go and buy the food themselves” (stakeholder 4)
“the schools have signed a disclaimer erm it’s you know we don’t feel the school needs training because they have everything there” (stakeholder 13)
“it’s very different, what we have learnt is that it’s because there isn’t a one size fits all so what I think we did not anticipate is the range of organisations in the program from quite well established and well-equipped youth centres to erm adventure playground that have got no cooking equipment whatsoever” (stakeholder 13)

3.4.4.2.2 Sub-theme 2b. Partners Providing Additional Food and Funding.

Senior stakeholders discuss the role of the Kitchen Social programme in making hubs aware and encouraging them to use food provided by various surplus food charities available in London. Senior stakeholders view the surplus food charities as supporting the food provision that hubs offer and saving hubs money by providing a flexible, free food offer. Some senior stakeholders (n= 4) mention that Kitchen Social has positively impacted the food deliveries from surplus food charities by ensuring they only provide healthy food. This shows another benefit of being part of a large network like Kitchen Social for hubs providing holiday provision.

“in terms of drawing down other resources you know we’re aware like with the surplus food with the surplus food that tends to be something that we have worked to make the hubs aware of to work with the surplus providers” (stakeholder 7)

“the money that they would spend on food they can spend that on other things and we also deliver it straight to their door to make it easy for them because a lot of charities are very erm short of resources” (stakeholder 8)

“to ensure that they understand what the hubs do and what their needs are so for example, erm we have worked really closely with the surplus food providers for them to understand what school food standards are and how to provide good quality surplus food to school food standards er so things like ensuring there are a lot of fruit and vegetables in there and taking out any food that would be categorised as erm you know high calorie low nutrient” (stakeholder 7)

A few senior stakeholders (n= 3) view the reputation of the Kitchen Social programme as an important factor for the credibility of hubs. Senior stakeholders discuss the benefits of Kitchen Social introducing hubs to large corporate companies which has allowed hubs to create useful partnerships. Hubs are introduced to other organisations to leverage additional funding and resources. For example, professional chefs who are employed by companies supporting Kitchen Social have volunteered their time and offered their skills at hubs. This suggests that Kitchen Social can provide networking opportunities to allow individual hubs to create long-term relationships with organisations which can further add to their provision.

“the Mayor's Fund and the association with the Mayor's Fund does help organisations in terms of their credibility and awareness of the brand and at the local level what we found is a lot of the organisations that are working within Kitchen Social are better able to have a conversation with people in their community and often they get support from them as well you know” (stakeholder 6)

“we also introduce them in the network to certain food providers” (stakeholder 6)

“so erm the hub have been very clever and formed their own direct relationship so now they are getting raffle prizes you know dinner for two from (states restaurant company name) using them to fundraise for their own purposes that's really good so they can now use that as their community resource for themselves” (stakeholder 14)

3.4.4.2.3 Sub-theme 2c. Kitchen Social Developing through a Learning Approach.

Senior stakeholders state the Kitchen Social programme is constantly changing as their knowledge and experience of holiday provision grows. For example, a few of the Kitchen Social co-ordinators (n= 3) discussed the potential of improving hub training by providing online resources to ensure that hubs are benefitting from the resources provided by accessing these when they are required. This suggests that Kitchen Social need to improve the training they offer individual hubs.

“I suppose the program is constantly changing as it grows and as we learn erm so yes there is a need for change as the knowledge and the experience grows” (stakeholder 14)

“if we provide them like an online training then if somebody goes then another person it will be easier for them to re-do it- pick it up “ (stakeholder 5)

Kitchen Social encourages hubs to share good practice on what has worked well in their hub and what has worked well from the additional support provided by Kitchen Social: *“we would share this practice and explore what models are actually working well” (stakeholder 15)*. This suggests that Kitchen Social programme coordinators engage with individual hubs to ensure the communities are involved in shaping what they think works.

3.4.4.3 Theme 3. Poverty and the Need for the Kitchen Social Programme.

Senior stakeholders identified holiday hunger and poverty as the main reason for the implementation and funding of the Kitchen Social programme. More specifically, senior stakeholders refer to poverty in London where the Kitchen Social programme is based. Senior stakeholders also mention that the need for holiday provision is evident through the growth in the number of hubs available. They recognise the role of various recruitment methods to spread awareness of the Kitchen Social programme and individual holiday hubs.

3.4.4.3.1 Sub-theme 3a. Addressing Holiday Hunger and Poverty.

Despite holiday hubs being recognised as a short-term solution rather than addressing the root causes of poverty, senior stakeholders viewed a need for an immediate response to the issue of holiday hunger. The majority of senior stakeholders (n= 15) referred to the importance and increasing need to address holiday hunger and high rates of food poverty in London and throughout the UK. One senior stakeholder explains that the cheap price of unhealthy food in London is one of the reasons why low-income families consume a high quantity of unhealthy foods, whilst another senior stakeholder acknowledges the knock-on effects of food insecurity contributing to childhood obesity and tooth decay.

“to reduce food insecurity in London and holiday hunger” (stakeholder 15)

“one of the biggest problems that fresh fruit and vegetables are more expensive than doughnuts and have high calorific value, so they fill you up” (stakeholder 1)
“with what we see with childhood obesity, with erm tooth decay, with the lack of education around food erm and I'm sure you know about this all anyway but the huge epidemic of problems like co-morbidity is associated with being obese being overweight and it's uncontrollable and if we are going to be supporting something as important as this, we need to also have an education piece to it” (stakeholder 16)

Some senior stakeholders (n= 9) also state that the Kitchen Social programme has raised awareness of holiday hunger and supported the inquiry led by the All-Parliamentary Group on Hunger which reported evidence on the need for holiday provision in the UK. This suggests that the Kitchen Social programme may have a long-term impact on the implementation and continued operation of hubs.

“I don't think without things like Kitchen Social and other programs like it, I don't think the Department for Education- well Frank Field wouldn't have put forward his bill” (stakeholder 3)
“I think it draws attention to issues that lots of people oblivious about erm you know when the stories run in the papers about the local holiday hubs and how it needs help, I think it just draws attention to the need that there is in communities” (stakeholder 3)

3.4.4.3.2 Sub-theme 3b. Growth of Holiday Provision.

Senior stakeholders discuss the programme constantly expanding throughout London and the importance of service users being able to access this provision throughout all holiday periods as they recognise the need for continuous support to low-income families. A few senior stakeholders (n= 3) state that well-established holiday hubs have children returning each year to attend and the staff at these hubs retain service users through good relationships between hub staff and service users.

“seeing people that are coming are staying with the programme and carrying on afterwards as well so yeah I think they are getting better at on-boarding, then they are staying in the programme which is a success and there is more of them coming and there is more of them in the pipeline as well definitely” (stakeholder 12)
“it's actually not just a problem for the summer holidays it's every school holiday to a lesser extent” (stakeholder 8)
“I think if certainly they have been going for quite a while, they just get returning numbers” (stakeholder 9)
“they want to come there because they know the person knows them and they understand them and won't judge them and that's what keeps them sending their kids there” (stakeholder 5)

Senior stakeholders coordinating the Kitchen Social programme demonstrate that they use various recruitment methods to recruit holiday hub organisations: *“so basically we just we do everything” (stakeholder 5)*. For example, they use networking, word of mouth and online resources e.g., the Kitchen Social website:

“there is many ways er we sort of go online, we look for different people, we talk to the hubs that we already know to see if they know anybody local” (stakeholder 5)
“we also have our website so if anybody has heard about us and they go on the website there is like erm a little enquiry form that they sort of put in there and we contact them and we say this is what we do, do you want to get involved” (stakeholder 5)

Kitchen Social coordinators communicate and are involved with individual hubs as they discuss their knowledge surrounding what hubs have tried and what works best for them in terms of recruitment. Individual hub recruitment methods include leaflets and school support, with word of mouth deemed the most effective method. This is important to ensure the availability of holiday provision is known to those in the community who would benefit from this support.

“most of it has been word of mouth cause erm I think some of them have tried like social media and things like that but people are not generally looking for that kind of stuff to put it on social media so they can easily be overlooked but yeah they do posters and leaflets I know some of them go to erm schools- primary school, secondary schools they try to partner up with them erm and they go out there after school or something, hand out leaflets to the parents or maybe get the teachers to put it in the schools” (stakeholder 5)

3.4.4.4 Theme 4. Lack of Hub Sustainability due to Low Funding and Staff Levels.

Senior stakeholders mention the issues that individual hubs experience with hubs either relying on volunteers to support staff or hubs being volunteer-led and have difficulties retaining the volunteers. Senior stakeholders understand that small organisations may particularly experience problems with applying for funding compared to bigger organisations due to time constraints from low staff numbers and high volunteer turnover. However, the majority of senior stakeholders (n= 10) recognise that all hubs may experience uncertainty on access to sufficient funding.

“a lot of them run with volunteers so volunteer management is something they struggle with because you never know who is going to be there to help out so volunteer management is an issue” (stakeholder 13)
“the smaller purely volunteer led temporary organisations- fundraising is a big issue” (stakeholder 3)
“there’s a real sort of piecemeal funding picture available to holiday provision... most hubs do not have the time or resource to do that they don’t have people who are able to spend their time writing funding bids because their time is spent running the hubs” (stakeholder 7)
“that is a massive issue- the funding is really tight” (stakeholder 16)

Some of the senior stakeholders (n= 4) recognise the need to evidence the impact of holiday hubs to secure funding. While the majority of senior stakeholders (n= 15) emphasised the necessity to change policy to ensure hubs are sustainable and can continue operating in the future by getting support from central government and securing long term funding.

“I think it needs to be continually evidenced and it needs to almost be in so much black and white that the government can't not respond to it” (stakeholder 16)
“for us to significantly reduce the scope of the problem the government have to be behind it and the government have to be providing a set amount of funding to every single local authority across the country to enable them to then provide a holiday provision programme that is suitable for that area “ (stakeholder 16)

3.4.4.5 Theme 5. Training and Reach of Holiday Provision Needs to Improve.

A few senior stakeholders (n= 4) state that holiday hubs may have a longer-term impact if they are provided with more tailored training of healthy eating and cooking for staff and volunteers. This is to ensure they have the same level of skills which they can then pass onto parents.

“to improve it just give it more consistency and more support for the staff and volunteers and actually empowering them to have new skills and you know not just accept that a ready meal is what mum gives them at home, so this is sufficient for the holiday hub I think” (stakeholder 16)

Similarly, some senior stakeholders (n= 5) also emphasise the importance of trying to increase parent involvement at hubs to ensure cooking skills and knowledge on eating healthy foods is passed on to parents, rather than relying on children to pass on skills and information. Senior stakeholders highlight the volunteering and experience which could upskill parents and benefit them in terms of employability.

“also, to invite parents in and create more of a community and parents to actually learn skills erm in terms of cooking and how they can eat healthily on a budget” (stakeholder 16)

“but also, for parents to get involved you know some of our parents are doing a bit of volunteering they feel they you know they can kind of contribute to something that they also benefit from so I think there's a bit of empowerment thing going on as well” (stakeholder 4)

“to communicate with parents and to create erm family spaces you know that opportunity is something that we welcome and being able to access opportunities that are designed for them you know for example around erm support into employment” (stakeholder 7)

A few senior stakeholders (n= 2) understand the difficulties that individual hubs face when it comes to reaching families that would benefit from accessing holiday hubs. While some senior stakeholders (n= 4) understand that staff at hubs may create unintended barriers which may prevent individuals from attending. Hub barriers may be out of the control of staff, and these include language, religious and cultural factors preventing access for some individuals. For example, one staff suggests that bringing communities together which comprise of diverse individuals can sometimes be difficult.

“it is difficult to reach those hard to reach people” (stakeholder 12)

“I think as well there may be especially in London lots of different demographics, lots of different cultures, religions and actually bringing communities together sometimes can be difficult” (stakeholder 16)

“because they don't know they don't really speak the language too well erm so you get like the parents they don't really know so they won't go there because nobody explains to them exactly what it is (stakeholder 5)

3.5 Discussion

The aim of the current study was to explore the operation of Kitchen Social hubs and the impact that they may have on service user's wellbeing. The findings of the current study lend support to the research question that the Kitchen Social holiday programme may have a positive impact on children and parents' wellbeing. Overall, Kitchen Social hubs appear to provide various benefits for service users in terms of their overall health and wellbeing. However, the Kitchen Social programme, and thus associated impact on users may vary across hubs due to the hub model, flexible offer of food, activities provided, and community assets. Although the findings of the current study demonstrate that the operation of Kitchen Social hubs at the community level may vary, hubs are required to adhere to guidelines to ensure some elements are consistent across hubs. For example, at an organisational level, the Kitchen Social programme requires all hubs to ensure that 75% of the food they serve consists of hot cooked meals and the Cooking Handbook and Training provided to hubs supports them in providing meals which adhere to School Food Standards. However, senior stakeholders identify that training may need further progression to ensure staff can pass on knowledge to parents, or parents should be more involved at hubs to ensure they receive appropriate training on cooking etc., to increase the likelihood of this knowledge and skill being practiced in the home environment.

At the community and organisational level, individual hubs involved in the Kitchen Social programme provide open access holiday provision targeted at low-income families. The importance of ensuring holiday programmes are universally accessed is mirrored in prior investigations of holiday programmes (Holley et al., 2019; Stretesky et al., 2020). This is to reduce the stigmatisation of provision, while parents and staff also identify the benefits of being able to access a holiday programme, which is inclusive of children of different ages, disabilities and backgrounds at the individual level. Prior research which has viewed the geographic location of holiday programmes across Lower Super Output Areas in England found that holiday hub/club sites are located in areas of high deprivation across England, therefore reaching those in need (Mann et al., 2018). Yet, the current study identified that some hubs experience difficulties reaching all those families who may need further support in the school holidays. Therefore, despite stakeholders identifying the growth of service users accessing holiday provision, they also identify the need to ensure more hubs are made available at the organisational and community level in other geographic locations to increase the access to more families in need. This is supported by prior research which identifies that holiday programmes are piecemeal and should be implemented on a wider scale (Graham et al., 2016; Mann et al., 2018).

All stakeholder groups refer to the delivery of Kitchen Social hubs in terms of recognising the need to further extend provision and secure sufficient, long term, funding for holiday hubs. Despite previous research showing that holiday provision sites have increased throughout England in recent years (Mann & Defeyter, 2017), the current study suggests that there is still a need for more provision, both in terms of coverage and breadth. This finding is supported by evidence cited in an inquiry led by the All-Parliamentary Group on Hunger. This inquiry reported evidence, from a number of sources, that holiday provision sites lack sufficient funding for them to be sustainable (Forsey, 2017). The current study suggests that one of the main reasons impeding expansion of hubs is lack of funding from central government at the policy level. Furthermore, due to the low level of hub funding, the hubs are understaffed at the community level. Yet, individuals within the community have offered their time by volunteering or providing use of their facilities which may save the hubs money on staff and resources. This supports prior research by Mann et al. (2020) who identify the importance of the community factors which includes volunteers to support the delivery of holiday provision along with the necessity of government support at the policy level to ensure that holiday provision is sustainable, and providers of holiday provision can access sufficient funding.

At a community and organisational level, both staff and senior stakeholders discuss the impact of the support from the community and Kitchen Social regarding hub delivery. It is recognised that hubs need additional funding. However, hub staff are creative in utilising community resources and benefits from their involvement in Kitchen Social. Hubs benefit from the coordination and support from Kitchen Social and are provided with additional funding from Kitchen Social for food and activities, although the funding they provide is limited. The current study supports previous research regarding the importance of community resources on the operation of holiday provision. For instance, Stretesky et al. (2020) identify holiday hubs as community organisations and show that hubs benefit from relationships within the community. These community relationships allow hubs to access additional resources which may be essential to the implementation of effective holiday provision. The current study demonstrates that the networks that hubs develop are used to leverage important community resources which play a role in attenuating poverty during the school holidays. For example, networking with food charities and local food providers allows hubs to leverage material goods at a community level including a range of foods to enable hub staff to provide a meal for children when they attend the hub which can impact upon children at the individual level. Therefore, holiday hubs may provide a variety of resources for children to access.

Additional common themes across stakeholder groups (children, parents, and staff) includes the recognition of the ability for the holiday programme to have a positive impact upon children's wellbeing at the individual level. A prior research study by Morgan et al. (2019. b) found

survey responses from Welsh children, who do not access a holiday programme, experience loneliness and lack of opportunities for social interaction which negatively impacts on their wellbeing during the school holidays. Yet, the authors recognised that providing children with access to a holiday programme may mitigate the negative experiences and positively impact upon their wellbeing during the school holidays at the individual level. The potential for holiday provision to positively impact children's wellbeing is also supported in prior research studies which suggest children's wellbeing improves (Stretesky et al., 2020) and children's self-confidence improves (Shinwell et al., 2021) from attending holiday provision. The self-determination theory by Deci and Ryan (1985) states that children participate in activities and engage with environments which bring them enjoyment and satisfaction. This theory refers to an intrinsic motivation for participation, which is dependent on the individual's personal enjoyment. Therefore, as the current study found that children enjoy the activities at the hub, according to the self-determination theory, children may be intrinsically motivated to attend holiday provision to participate in these activities. Fredrickson (1998, 2001) hypothesised that the experience of positive emotions facilitates more adaptive responses to the environment, which creates greater learning opportunities, and this then further facilitates a positive impact on wellbeing. Therefore, as the current study findings demonstrate that children experience positive emotions and learning experiences when they attend the hub, the holiday hubs may positively impact upon children's wellbeing at the individual level.

Common themes across stakeholder groups (children, parents, and staff) also includes the positive impact of holiday provision upon parent's wellbeing. This is important for parents at the individual level as parents who have children attending holiday provision may be at risk of holiday hunger (Graham et al., 2016) and a prior research study has suggested parents experiencing holiday hunger (also referred to as summertime food insecurity) also experience stress and poor wellbeing during the school holidays (Stretesky et al., 2020). This current study finding of holiday provision positively impacting parent's wellbeing is also supported by a prior qualitative research study by Graham et al. (2016) with staff working at the holiday hubs. The findings of this study showed that holiday hubs have the potential to support parent wellbeing by reducing social isolation and financial strain during the school holidays which improves the overall wellbeing of parents.

The interpersonal influences of the social element which both children and parents experience at holiday provision is also identified by all stakeholder groups as being important for service users at the individual level. This finding is further supported by a qualitative study that showed having friends at holiday hubs was an important factor for children attending, alongside facilitating children to take part in structured activities (Graham et al., 2016). Children and parents may benefit from interpersonal influences including friendships and social networks

that they have created, or maintained, through holiday hub attendance. Recent research has identified that holiday hubs provide a location to bring people together to form friendships and access reliable sources of information, advice, practical and emotional support (Stretesky et al., 2020). Positive impacts on children and young people's subjective wellbeing from attending may consequently sustain their participation at the holiday hubs overtime (Mahoney et al., 2003).

Throughout interviews with staff working at holiday hubs, staff focused on their own interpersonal influence within the hubs in terms of their relationships with children and parents accessing holiday provision. Previous research has suggested that children's emotional wellbeing may be improved through participation in activities outside of school term, and that this is particularly prominent when children have a supportive relationship with an activity leader (Mahoney et al., 2002). Parents and children may receive additional benefits from the relationships they form with staff, which extend beyond food provision. For instance, previous research which has focused on the benefits of holiday provision, according to hub staff, identified the importance of parents and children building relationships with staff members (Graham et al., 2016). In the current study, this also included the management of children's behaviours at some hubs to ensure children did not display anti-social behaviours at the individual level and prevented other children from attending. This suggests that the interpersonal influence of children's relationships with staff members are an important factor to enable children to have a positive experience at holiday hubs at the individual level.

Across all stakeholder groups, the ability for parents to access informal childcare through the holiday programme is acknowledged and deemed important for parents at the individual level. Research carried out by Craig and Churchill (2018) found that access to childcare can reduce stress levels for parents and provide them with a break from caring responsibilities. Therefore, it is clear that access to childcare, whether formal or informal, has a positive impact on the wellbeing of service users. However, numerous studies have recognised the difficulties that parents face finding affordable and enriching childcare providers (Booth et al., 2013; Cottell et al., 2019). Furthermore, reports have highlighted the importance of removing barriers such as the lack of affordable and available childcare providers that promote low-cost or free provision (Simmonds & Bivand, 2008). Specifically, Cameron and Jarvie (2016) stated that accessible, high quality and affordable holiday childcare is essential for families. This again highlights the importance of the free/low-cost holiday hubs at the community level involved in the Kitchen Social programme for families, specifically during the school holidays.

All groups in the current study described the hubs as safe and accessible environments which was considered to be an important factor for the service users accessing these hubs. The

importance of a safe place to play has been acknowledged by prior research (Holloway & Pimlott-Wilson, 2014), along with the lack of safe places for children to play in the wider environment (Smith & Barker, 2001). Research carried out in the UK recognises that holiday provision and extended school provision can provide children from disadvantaged backgrounds with a safe environment to play (Diss & Jarvie, 2016). The lack of accessible provision for children has been identified in research, with clear gaps for certain groups of individuals including children with disabilities and children from low-income families (Rutter & Stocker, 2015).

Furthermore, staff and senior stakeholders also recognised the risks of knife crime and gang violence present in London, which can be prevented through providing children with alternative places to play such as access to holiday provision. This is important for low-income areas as weapons offences are over 3 times as prevalent in the most income-deprived compared to the least income-deprived areas in London (London's Poverty Profile, 2020). This was recognised by the Mayor of London in 2018 when the Violence Reduction Unit was set up to tackle these crimes along with the underlying causes. However, despite these efforts, there have been substantial government cuts to community services in recent years which families living in disadvantaged communities may rely on (Hastings et al., 2015). Reductions in funding for local community services including closures of numerous youth centres and Sure Start centres has left families with few safe places to go (Sawyer & Bagley, 2017).

Stakeholders identify the activities that children can access during the school holidays at the hubs as being just as important as the food at the individual level. This includes taking part in new activities and experiences, along with learning new skills and knowledge. For example, some children learnt to cook. Due to the stagnation in learning for children during the school holidays (Shinwell & Defeyter, 2017), these learning experiences are particularly important. Prior research also recognises that parents struggle financially to fund their children's participation in enriching activities across the school holidays (Gill & Sharma, 2004). Stakeholder groups also specifically refer to the importance of creative activities which children have the option of participating in at the hubs to alleviate boredom during the school holidays. This supports prior research involving qualitative interviews carried out with staff involved in holiday provision, who identified that the activities offered at the hubs alleviated boredom for children by providing them with enriching cultural and sports activities (Graham et al., 2016). Additionally, a review of the school holidays, for children from low-income families, identified that when children have limited opportunities to attend holiday hubs, they often experience boredom (Stewart et al., 2018).

Each stakeholder group in the current study appreciated the necessity of children accessing activities that encourage children at the individual level to be physically active during the school holidays and reduce the time spent participating in sedentary activities. Likewise, McConnon et al. (2017), found that children were more likely (by 23%) to meet the recommended 60 minutes of moderate to vigorous physical activity per day during the school summer holidays on days they attended holiday hubs compared to days they did not attend. These findings are supported in a qualitative study by Emm-Collison et al. (2019), which explored parent's views on their child participating in physical activity during the school holiday and identified the activities offered at holiday provision as a reason for their child attending. There is a plethora of research on the importance of replacing sedentary activity with physical activity to ensure that children are meeting physical activity guidelines (e.g., Daly-Smith et al., 2018), which is identified by the stakeholder groups as a benefit of the holiday hubs. Previous research suggests that children who are influenced by the policy level to meet physical activity guidelines are more likely to have better wellbeing at the individual level compared to children not meeting these guidelines (Breslin et al., 2012). Hence increased physical activity at holiday hubs is likely to have a positive impact on children's health and wellbeing.

Across all stakeholder groups, the importance of nutritious food provision provided at the holiday hubs is discussed. All stakeholder groups mention Kitchen Social hubs as a means of providing children with healthy food during the school holidays which may influence children's dietary intake at the individual level. The current study findings suggest that children's consumption of healthy foods served at the hub may be influenced at the interpersonal level by peers, which is also supported by prior investigations of holiday provision (Holley et al., 2019). Stakeholders mention the hubs provide home cooked meals, where food is cooked from scratch, which were associated with healthier dietary intakes for children in the current study. Previous research has shown that children from the lowest socio-economically disadvantaged households consume home-prepared dinners and family meals less frequently than children from higher socio-economic households, mainly due to the lack of food preparation supplies (Appelhans et al., 2014). Additionally, research has found that children living in deprived areas experience food shortages and consume more unhealthy food than those living in more affluent areas (Francis, et al., 2019).

When discussing the value of healthy foods in the current study, parents also mention the importance of hubs helping children to avoid processed foods. This is beneficial as processed and ultra-processed foods (foods that usually contain ingredients that you would not typically add when cooking homemade foods such as additions of chemicals, sweeteners or preservatives) can have negative impacts upon health by increasing the likelihood of chronic

non-communicable diseases and obesity (Monteiro et al., 2018; Rauber et al., 2018; Rauber et al., 2020 a, 2020 b). Staff and parents in the current study recognise that the provision of a meal at the hub may also take the pressure off providing a substantial evening meal for their children. This is important as prior research suggests that during the school holidays children and/or parents may be required to skip meals or be served a smaller quantity or quality of food to ensure they get fed (Graham et al., 2016; Kellogg's, 2015).

Senior stakeholders mention the need for holiday provision due to experiences of holiday hunger (described on page 18 by Graham et al., 2016) and poverty. More specifically, the hubs are able to provide families with support for childcare, food and activities, which is recognised by stakeholders. Areas of deprivation are evident in London, with one in six children living in London experiencing food insecurity (Greater London Authority, 2019). Therefore, free food provision that holiday hubs are providing is a necessity, and this is supported by research that has shown that parents struggle, financially, to provide children with sufficient food during the school holidays (Defeyter, Graham & Prince, 2015). Similarly, in a report titled, "A Day Out, Not a Handout" that evaluated school summer holiday provision in the North East of England, parents reported that access to food and activity provision increased their wellbeing by relieving the financial strain they would otherwise experience (Defeyter et al., 2018).

In relation to the socio-ecological model of health, the findings of Study 1 suggest that different levels of influence at Kitchen Social are associated with the wellbeing of service users. At an individual level, children's personal enjoyment in response to the physical activities, nutritious food and opportunities to learn which were on offer at the hub positively affected their wellbeing. Children's access to free/low-cost food and activities at the holiday hubs may also be positively associated with their parents' wellbeing by reducing financial pressures. At an interpersonal level, children's relationships with other children and staff, and parent's relationships with other adults including parents and staff at the Kitchen Social hubs were key for providing social support and associated with children's wellbeing. At the community level, community assets (i.e., volunteers, food resources and activity space) and good availability and access to Kitchen Social hubs reduces financial pressures for parent's and allows children to access free/low-cost nutritious foods and enjoyable activities. This in turn appears to be associated with children's and parent's wellbeing at the individual level. At an organisational level, Kitchen Social requires hubs to follow safeguarding guidelines, daily physical activity recommendations and School Food Standards to ensure hubs are safe, providing free/low-cost physical activities and nutritious foods. At a policy level, the Kitchen Social programme is influenced by welfare policies, safeguarding policies, physical activity guidelines and School Food Standards. Therefore, the organisational and policy levels positively influence children and parent's wellbeing at the individual level by reducing financial pressures and providing

enjoyable activities through the provision of free/low-cost activities and nutritional food within a safe environment.

This study expands upon previous studies which have investigated holiday provision using qualitative investigations by focusing specifically on the impacts on wellbeing of service users with children, parents, staff and senior stakeholders. There are few qualitative studies on holiday provision which have focused on the wellbeing of service users (Defeyter et al., 2018; Francis et al., 2019; McConnon et al., 2017) and only one peer-reviewed qualitative study known to date which has included senior stakeholders' views (Mann et al., 2020).

3.6 Study Limitations and Future Research

An advantage of this study is that it involved a good representation of Kitchen Social hubs by incorporating various holiday hub settings, including schools, community centres and a church throughout different boroughs of London. Another advantage is the inclusivity of the current study, as this study included participants from various ethnic backgrounds, including ethnic minorities. This is beneficial as it allowed the researcher to represent the diversity of attendees and their views, and it suggests a wide reach of the Kitchen Social programme. The inclusion of ethnic minorities in the current study goes against a prior research study by Mann et al. (2018), who found that holiday provision hosted by third sector organisations (community groups and churches) are less likely to be located in areas with a high percent of ethnic minority residents.

However, this study focused solely on the Kitchen Social programme which delivers holiday provision, and due to there being no universal model of holiday provision, these findings cannot be generalised to other programmes providing holiday provision due to potential differences across programmes. On the other hand, qualitative reports are used to gain a deeper understanding of a particular phenomenon, rather than being able to test or confirm any assumptions. Due to the subjectivity of qualitative results, any insights from this study should be tested and further explored using quantitative studies to prove or disprove the current study findings. In addition to this, this study solely focused on the views of service users, rather than also including the views of parents and children who did not attend holiday provision. Therefore, this study was unable to capture the reasons for children and parents not accessing holiday provision. The current study referred to the importance of preventing the hubs from being stigmatised. Yet, it is recognised that this may be a reason for children not attending holiday provision.

Despite these limitations, the findings from the current study show the importance of the community in regard to the operation of holiday hubs, and the importance of the relationships,

and the hub environment, within the community. These factors are critical in influencing positive wellbeing in service users. The findings also suggest that during the school holidays, when children have access to holiday hubs, children's behaviours in terms of participation in physical activities and consumption of fruit and vegetables increases; while unhealthy behaviours (e.g., spending long periods of time engaged in sedentary activities, and consuming processed foods) decrease. Dietary and activity habits are highly correlated with the socio-economic status of the individual (Watt et al., 2009), and these behaviours are particularly important for the health of children, and to the longer-term reduction in health inequalities (Herman et al., 2014; Hirvensalo, & Lintunen, 2011).

Findings of the current study therefore demonstrate numerous benefits on service users' wellbeing, including the positive impact of nutritious food and activities on wellbeing. The current study reports nutritious food being provided by hubs as one of the main aims of the Kitchen Social programme, yet little is known regarding whether children are consuming the food they are served at hubs and whether this is improving children's diet. Additionally, the benefit of having access to activity provision when they attend the hub, specifically physical activities rather than spending an increasing time in sedentary activities, is an under-researched topic. Few studies have focused on the activity levels of children attending holiday provision during the summer, specifically comparisons between summer holiday to the school term time. Therefore, the following studies will address both nutritional intake and physical and sedentary activity levels of children attending holiday provision in the following two chapters.

CHAPTER 4: Physical and Sedentary Activity Levels during the School Summer Holidays and the School Term.

4.1 Introduction

This chapter will go into further detail on research studies investigating the physical and sedentary activity levels of children during the school holidays compared to the school term, along with research studies which have focused on children's activity at holiday programmes during the school holidays. The current study aims, along with the method and findings, followed by the limitations and a conclusion will also be provided in this chapter.

As mentioned in Chapter 1, the Chief Medical Officers (2019) recommend 60 minutes of daily physical activity. However, evidence from NHS Digital (2020) suggests that children rarely meet these recommendations, with only 18% of children meeting recommended physical activity guidelines each day. There were also significant inequalities based on family income, with 39% of children from the least affluent families participating in less than 30 minutes of physical activity a day, compared to 26% of children from the most affluent families. Likewise, the Low-Income National Diet and Nutritional Survey (LNDNS) also reported that children from low-income backgrounds were even less likely to meet recommended activity guidelines compared to the general population (Nelson et al., 2007).

As discussed in Chapter 1, during the school term various initiatives take place to increase children's physical activity and reduce sedentary behaviours, such as access to compulsory Physical Education classes. However, children's physical activity levels at school have still been found to be typically low (Bailey et al., 2012; Daly-Smith et al., 2021; Grao-Cruces et al., 2020; Mooses et al., 2017), whereas children's physical activity levels during the school holidays are currently an under researched area in the UK. A recent study that investigated children's level of physical activity in the UK school holidays found that children (n=108) spend less time in light physical activity during the school term compared to during the school holidays (Nagy et al., 2019). On the other hand, Mann et al. (2020) found opposing results when considering the school summer holiday period versus the school term and is one of the only UK studies (to date) to make this comparison. Children's (n=409) Body Mass Index (BMI) and cardiorespiratory fitness (CRF) were measured using a 20-meter shuttle run test, which is a validated marker of physical activity levels, four times during the academic year (October, February, June and September) and either side of the school summer holidays (July-September). The findings demonstrated BMI remained level during the academic year but increased significantly during the summer break and CRF continued to increase during the school year before decreasing significantly over the summer break. Pupils from the most deprived areas saw significantly greater reductions in CRF over the summer break. This suggests that children are less physically active during the summer holidays compared to the

school term, specifically children from the most deprived areas. However, both Nagy et al. (2019) and Mann et al. (2020) study do not acknowledge children's sedentary activity levels which is important as the Chief Medical Officers (2019) suggest that spending an increasing amount of time in sedentary activity can have a negative impact upon health.

As previously discussed in Chapter 1, a research study by Brazendale et al. (2017) conducted in the USA identified the importance of viewing children's activity levels during the school summer holidays. This study suggests that children gain weight during the school summer holidays due to a decrease in physical activity and increase in sedentary behaviours when children cannot access the structured school environment, referred to as the "Structured Days Hypothesis". However, research studies suggest that providing children with opportunities to participate in physical activity throughout the year can prevent a decrease in physical activity levels during the school summer holidays for children. For example, a research study by Hickerson and Henderson (2014) found children attending summer day camps (n=150) and residential camps (n=114), nearly met or exceeded physical activity guidelines of 60 minutes per day by achieving a high step count. This suggests that during the school summer holidays, summer camps provide children with an environment where they can access opportunities to be physically active. However, Hickerson and Henderson (2014) may have underestimated the amount of physical activity children participated in as increased opportunities for physical activity were measured through pedometer step counts, yet pedometers are unable to record information on time spent in physical activities. Brazendale et al. (2017) addressed this limitation by assessing the time (n=1,061) children spent in physical activity at summer day camps focusing on health by using accelerometers. The findings demonstrated that children were spending a longer amount of time in physical activity. This included 70% of children spending 60 minutes in moderate to vigorous physical activity. Therefore, the authors concluded that summer day camps can increase the time children spend being physically active. This is particularly important as the Chief Medical Officers (2019) state that spending a longer amount of time in physical activity can have greater health benefits.

However, summer day camps in USA differ to holiday clubs which operate in the UK, as children in summer day camps in USA spend approximately 8-10 hours per day at the camp (Beets et al., 2013). In contrast, an evaluation of a holiday club programme in the North East (A Day Out, Not a Handout), reports a large variation in opening hours, days and weeks of holiday clubs in the UK, with the majority of clubs opening for only 4 hours per day (Defeyer et al, 2018). Studies in the UK acknowledge the importance of children participating in physical activity during the school holidays, which can be facilitated by holiday provision. For example, a qualitative study carried out by Emm-Collison et al. (2019) revealed that (n= 2,555) parents valued school holiday clubs offering physical activity to children as they seek holiday

provision which can help to reduce their children's sedentary behaviour's and increase activity levels during the school holidays. Sawyer et al., (2018) state that children living in deprived areas experience barriers to physical activity such as anti-social behaviour in the neighbourhood they reside in. Therefore, it is particularly important for community organisations to provide access and offer physically active opportunities to support low-income children to participate in physical activity.

Despite research identifying the importance and potential for holiday hubs to increase children's physical activity and reduce sedentary behaviours (Emm-Collison et al., 2019; Sawyer et al., 2018), and an increasing number of holiday hubs offering physical activities to help children meet physical activity guidelines (such as in the Department for Education's pilot in 2018 and 2019), research studies on children's activity at holiday hubs in the UK are rather limited. One of the few published qualitative studies which focused on the impacts of holiday hubs found staff reports of children receiving encouragement to remain physically active and reduce sedentary behaviours at holiday hubs during the school summer holidays (Graham et al., 2016). Although the qualitative studies provide a useful insight into the impacts of holiday clubs, they are unable to provide an accurate measurement of time spent in physical or sedentary activity. To date, an evaluation of the "Food and Fun" project in Wales by Morgan et al. (2019) is the only quantitative study (known to date) which investigated the time children spent in physical activity at a holiday hub. This study compared children's physical activity levels based on hub attendance in the UK. The findings of this study demonstrated that children engaged in more physical activity (by 17 minutes), with 71% of children meeting recommended guidelines for daily physical activity on attending days, compared to 48% on non-attending days. However, this study did not compare children's activity levels in the school holidays to usual activity levels during the school term which is important as prior research suggests that children spend more time in physical activities during the school term versus the school summer holidays (Brazendale et al., 2017; Mann et al., 2020).

To address these gaps in the literature, the aims of the current study are as follows:

1. To investigate the number and amount of time children spend participating in physical activities during the school summer holidays compared to term time across the 3 days.
2. To investigate the number and amount of time children spend participating in sedentary activities during the school summer holidays compared to term time across the 3 days.
3. To investigate the percentage of children who meet recommended daily physical activity guidelines of 60 minutes during the school summer holidays compared to term time on each of the 3 days.
4. To compare children's energy expenditure during the school summer holidays compared to the term time across the 3 days.

Does children's participation in physical activities in terms of the number of physical activities, and time spent engaged in physical activities differ when attending the Kitchen Social programme versus school term time? Does children's participation in sedentary activities in terms of the number of sedentary activities, and time spent engaged in sedentary activities differ when attending the Kitchen Social programme versus school term time? Does the number of children meeting daily physical activity guidelines differ when attending the Kitchen Social programme versus school term time? Does the amount of energy children expend differ when attending the Kitchen Social programme versus school term time?

4.2 Methods

4.2.1 Study Design

This study employed a 2x2 mixed factorial design. The first factor, a within subjects' factor, was test time which had two levels: during holiday hub (time point 1) versus school term time (time point 2). The second factor, a between subjects' factor, was gender which had two levels: males and females. The dependent measures were the (1) number of physical activities, (2) number of sedentary activities, (3) minutes spent in physical activity, (4) minutes spent in sedentary activity, (5) the overall number of calories expended across the 3 days, and (6) the percentage of children adhering to physical activity guidelines on day 1, day 2 and day 3.

4.2.2 Materials

4.2.3 Youth Physical Activity Questionnaire

An amended version of the Youth Physical Activity Questionnaire (YPAQ) (Corder et al., 2009) was used to collect data on the physical and sedentary activities that children took part in, and the amount of time spent undertaking these activities, across three consecutive days. The questionnaire consists of 45 different activities along with two opportunities to write down other activities they have participated in which are not included on this activity list. Participants are asked to estimate in minutes how long they spend in each activity each day.

The Youth Physical Activity questionnaire was originally designed to collect data on the frequency and time spent in different activities across the past seven days. The original questionnaire is a self-report measure that has been validated in adolescents aged 12-13 years old and has been deemed as having good reliability (Corder et al., 2009; Helmerhorst et al., 2012). Furthermore, this questionnaire has been used in previous studies to collect type and frequency of activity with younger children from 9-10 years of age (Atkin et al., 2013; Brooke et al., 2014). Studies have used this questionnaire to gather data on how frequently children took part in various physical activities and used accelerometers to measure the length of time that children were physically active (Brooke et al., 2014).

The original questionnaire gathers data on the total amount of time children spent in each physical and sedentary activity across 7 days. However, the current study amended the Youth Physical Activity questionnaire to 3 days to gather data on the amount of time children spent in each physical and sedentary activity each day (day 1, day 2 and day 3), which allows these data to be compared to recommended guidelines for daily physical activity. Gathering data on type and time spent in activities across 3 days is a sufficient number of days to account for children's usual activity patterns (Sirard & Pate, 2001). Reducing the recall period from 7 days to 3 days reduces participant burden and recall bias on time estimation, as collecting data within a holiday hub setting can be challenging due to the time constraints within these environments (further details provided in the Methodology Chapter 2).

The questionnaire was amended to enable data collection across the school summer holiday. For an example, "travel to and from school" was altered to "travel to and from holiday hub" (further details on the YPAQ are provided in Chapter 2). Gardening was also added to the YPAQ and considered a physical activity, as the most recent guidelines from the Chief Medical Officers (2019) consider gardening to be a physical activity and a prior evaluation of holiday provision found that the majority of venues provided gardening activities for children (Defeyter et al., 2018). The questionnaire layout and font were also edited to ensure the questionnaire was visually appealing and easy for children to complete. The amended questionnaire can be found in Appendix K. The response format collects nominal data followed by time estimations. Scores are collated by adding the number of physical activities and sedentary activities that children took part in overall, and then the time spent in physical and sedentary activities that children took part in overall, on day 1, day 2 and day 3. Table 4.2 also shows which activities in the YPAQ are classified as physical and sedentary which was derived from prior studies using the YPAQ which viewed children's physical and sedentary activity levels (Brooke et al., 2014; Klitsie et al., 2013) (further detail provided under data analysis).

4.2.4 Youth Compendium of Physical Activities

Data on children's weight was collected by the researcher, during the summer holidays, using scales to weigh each child in order to calculate children's energy expenditure for each activity they took part in. Three children did not want to participate in this part of the data collection; therefore, these children were excluded from subsequent energy expenditure analyses. The Youth Compendium of Physical Activities (Butte et al., 2018) was used to assist with the calculation of children's energy expenditure. Children's BMR score (basal metabolic rate) was calculated from their age and weight using the equation provided by the Youth Compendium of Physical Activities (Butte et al., 2018). Using the METy value of an activity, the BMR score of the child and the amount of time the child spent in the activity, the researcher could then calculate the amount of energy expended from the activity. The amount of time (in minutes)

spent in each activity was gathered from the questionnaire's that children completed, along with the information from the Youth Compendium of Physical Activities to create a final score of how many calories the child expended from the activity.

4.2.5 Participants

This study adopted a non-probability purposive sampling strategy. Non-probability sampling involves recruiting participants to a study based on the subjective judgement of the researcher (Mohsin, 2016), and purposive sampling involves the recruitment of a participant group meeting a certain criterion such as being well-informed of the phenomena being researched (Etikan et al., 2016; Mohsin, 2016).

An initial sample of n=55 children were recruited at time point 1 (school summer holidays) from one secondary school hub, one primary school hub and two community hubs. These children were tested again at time point 2. However, at time point 2 (school term) n=8 children were unavailable which resulted in a small sample size of n=10 primary school aged children. Due to the small sample size and incomplete data for these children, primary school children were excluded from further analysis. This resulted in a final sample size of n=37 children from one secondary school hub (n=30) and one community hub (n=7). Data on children's age and gender were collected via the self-report questionnaire which children completed twice (during the summer holidays and during the school term). The demographic details are provided in Table 4.1.

Table 4.1. Demographic details of children participating in Study 2.

	Number of participants	Age range
Male	24	10-14 years old (standard deviation: 1.167; mean: 12.33)
Female	13	10-14 years old (standard deviation: 1.235; mean: 12.23)
Total	37	10-14 years old (standard deviation: 12.3; mean: 1.175)

4.2.6 Procedure

This study gained ethical approval from Northumbria Universities Ethical Committee of Health and Life Sciences. All hubs offering term time and school summer holiday provision were invited to take part in this study by the Kitchen Social coordinators. Those hubs that were interested in taking part were then sent further information and a consent form (Appendix H), about the study via email. In total, 5 hubs were interested in participating in the study. Overall, the final number of participating hubs included two school hubs and two community hubs. Upon receiving written consent from the Hub Leaders, the researcher sent parent information (Appendix Ii) and consent forms (Appendix Iii) via email to each hub so that they could assist with the recruitment process. The researcher then arranged dates and times to visit each hub individually during the school summer holidays to recruit child participants.

On the dates the researcher visited the hubs, the researcher approached those children who had parental consent to take part in the study to verbally provide information about the research study. Those children who were interested in taking part were then given an information and consent form (Appendix J) which included more details on the study. Children were given an opportunity to ask any questions to ensure that they fully understood the research study. Children provided written consent to complete the Youth Physical Activity Questionnaire (YPAQ) to gather children's self-reported activity levels (including physical and sedentary activities) and to be weighed individually by the researcher using scales. Upon children providing written consent to take part in this study, children individually stood on the scales to provide their weight (once during time point 1: the school summer holidays) and completed the YPAQ (see Appendix K) on two separate occasions. Once during the summer holidays (time point 1) and once during the school term (time point 2). At each data collection point, children completed the YPAQ as a group in a quiet room and were reminded that they could withdraw their consent to participate at any time by informing the researcher or a member of hub staff. Children were also offered support in completing their questionnaire by the researcher and hub staff. Upon completion of the YPAQ, Children were verbally debriefed following each data collection time point. Children were also offered a sticker as a token of appreciation for their participation at each data collection time point. Upon completion of the study, children were provided with a written debrief form (Appendix R).

4.2.7 Observations

The researcher made observations and took notes at each holiday hub testing site on the different activities offered by each hub, along with information on the operation of the hubs. The hubs did not provide an activity schedule for the activities that children could participate in when they attended the hub. Therefore, the researcher made note of this instead. This observational data provides a snapshot of one typical day at the hubs.

4.3 Results

4.3.1 Data Coding

To classify each activity on the YPAQ as either physical or sedentary, prior studies (Brooke et al., 2014; Klitsie et al., 2013) along with guidance from the Chief Medical Officers (2019) were used (see Table 4.2). Each child was given a score of 1 for each physical activity and sedentary activity they participated in followed by time estimates, in minutes, for each activity on each day. If a child did not take part in any activity during the past three days, they were given a score of 0. The total number of physical activities that each individual child participated in were then added to produce a total score across 3 days. The total number of sedentary activities that each individual child participated in were also calculated in the same manner, for an example, if a child participated in reading and watching TV on day 1, 2 and 3, across the 3 days they would have a total sedentary activity score of 6. Each individual child self-reported the amount of time (in minutes) for their participation in each activity. For each individual child, total time for each day and overall total time was calculated by adding the time spent in physical activities and time spent in sedentary activities.

The Youth Compendium of Physical Activities was used in conjunction with the age and weight of each participant to calculate individual energy expenditure from each reported activity. Children's BMR score (basal metabolic rate) was calculated from their age and weight (Butte et al., 2018). Each child's total energy cost for each activity was then calculated by $METy \times BMR \times \text{minutes spent in the activity}$ to create a final score of how many calories the child expended from the activity. The total amount of energy expended by each child from across all of the activities they participated in were then added to produce a score of the number of calories expended overall across the 3 days.

The results are presented firstly by showing the number of physical activities and sedentary activities that children took part in during the summer holidays compared to the school term. Then results on the overall time across the three days (in minutes) that children took part in physical activities and sedentary activities during the summer holidays compared to the school term are presented. The results then show the overall total amount of energy expenditure from all of the activities that children participated in. Finally, the results present the number of children who meet the recommended 60 minutes of physical activity, per day as recommended by the Chief Medical Officer (2019).

Table 4.2. List of the classifications of each activity included in the YPAQ as either physical or sedentary.

List of activities classified as a physical activity.	List of activities classified as a sedentary activity.
Walking to holiday hub/school	Travel by car / bus / tube to holiday hub/school
Cycling to holiday hub/school	Art & craft (e.g., pottery, sewing, drawing, painting)
Bike riding	Playing musical instrument
Aerobics	Classroom-based tasks
Baseball/ dodgeball/rounders	Play indoors with toys or pets
Basketball/volleyball	Playing board games/puzzles/cards
Catch/throw ball	Sitting talking/singing
Netball	Reading
Dancing	Listen to music
Football	Playing computer games (e.g., PlayStation/Gameboy/Xbox)
Gymnastics	Talk/text or play games on mobile phone/tablet/iPad
Hockey (field or ice)	Using computer/internet
Martial arts/boxing	Watching TV/videos
Cricket	
Rugby	
Tennis/badminton/squash/other racquet sport	
Jogging	
Running	

Swimming
Tag/chase/IT
Trampolining
Bowling
Playing on park equipment
Rollerblading/rollerskating
Ice-skating
Skateboarding
Skipping/Skipping rope
Scooter
Walking the dog
Walk for exercise/hiking
Gardening activities
Doing household chores

4.3.2 Data Analysis

Analysis of children’s physical and sedentary activity during the school term compared to the school summer holidays was carried out using either a One-Way Repeated Measures ANOVA or a Wilcoxon Signed-Rank Test. The non-parametric test was used for data that were not normally distributed, which is an assumption of a One-Way Repeated Measures ANOVA.

Table 4.3. Difference scores for the significant Wilcoxon Signed Rank Test results.

Activity type	Difference score
Number of physical activities across 3 days	<i>2</i>
Time spent in physical activities across 3 days	<i>180</i>
Time spent in sedentary activities across 3 days	<i>855</i>

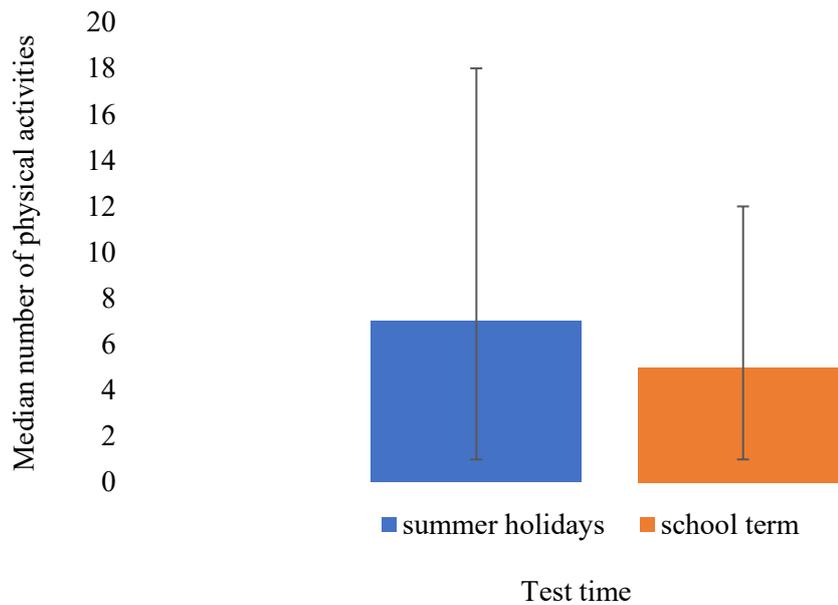


Figure 4.1. Median scores and percentiles for the number of physical activities children participated in according to test time across 3 days.

4.3.2.1 Total Number of Physical Activities Across 3 Days.

There was a significant difference of test time on the number of physical activities children participated in across 3 days ($z = -3.831, p < .001$). Children participated in a greater number of physical activities during the summer holidays (Mdn= 7) compared to during the school term (Mdn= 5).

4.3.2.2 Total Number of Sedentary Activities Across 3 Days.

There was no significant difference of test time on the number of sedentary activities that children participated in across the 3 days ($F(1,35) = 1.904, p < .176$). There was also no significant difference of gender ($F(1,35) = 3.608, p < .066$) and no significant difference of test time x gender ($F(1,35) = .902, p < .349$) on the number of sedentary activities that children participated in.

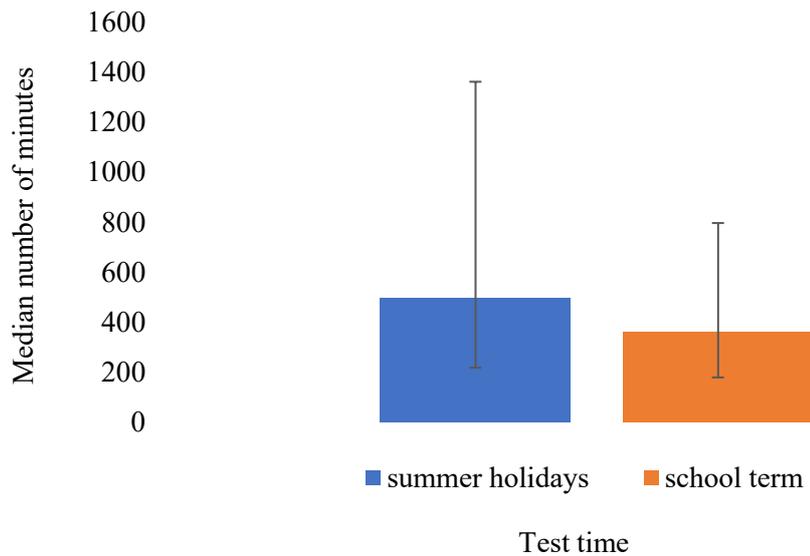


Figure 4.2. Median scores and percentiles for the number minutes children spent participating in physical activities according to test time across 3 days.

4.3.2.3 Total Minutes spent in Physical Activities Across 3 Days.

There was a significant difference of test time on the total time that children were physically active across 3 days ($z = -3.440, p = .001$). Children spent more time being physically active during the summer holidays (Mdn= 498) compared to during the school term (Mdn= 360).

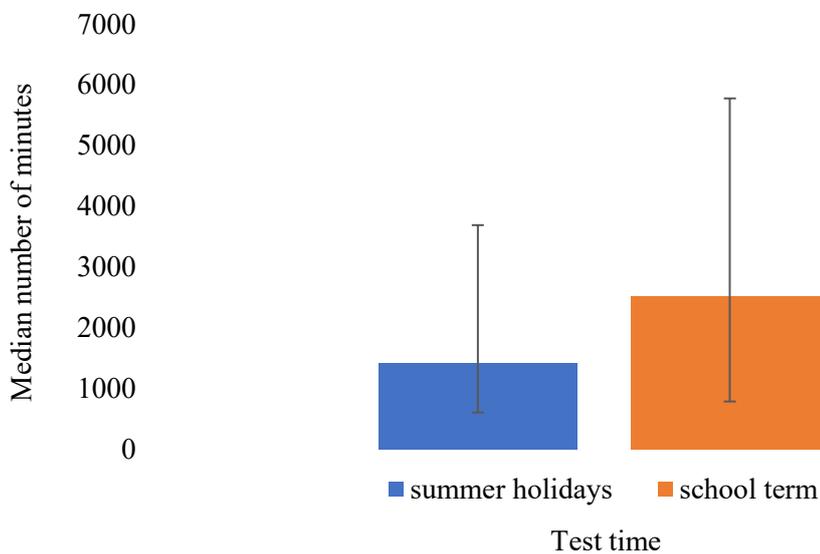


Figure 4.3. Median scores and percentiles for the number of minutes that children spent participating in sedentary activities according to test time across 3 days.

4.3.2.4 Total Minutes spent in Sedentary Activities Across 3 Days.

There was a significant difference of test time on the total time that children spent in sedentary activities across 3 days ($z = -3.251, p = .001$). Children spent more time in sedentary activities across 3 days during the school term (Mdn= 2515) compared to during the summer holidays (Mdn= 1420).

4.3.2.5 Total Energy Expenditure from Participation in Activities Across 3 Days.

There was no significant difference of test time on energy expended overall across the 3 days ($F(1,32) = .475, p < .469$). There was no significant difference of gender on energy expended overall across the 3 days ($F(1,32) = 1.435, p < .240$). There was also no significant interaction of test time x gender on energy expended overall across the 3 days ($F(1,32) = .019, p < .891$).

4.3.2.6 Met or Exceeded Physical Activity Guidelines on Day 1.

There was no significant difference of test time on number of children who met or exceeded physical activity guidelines on day 1 ($z = -1.508, p < .132$).

4.3.2.7 Met or Exceeded Physical Activity Guidelines on Day 2.

There was no significant difference of test time on number of children who met or exceeded physical activity guidelines on day 2 ($z = -1.291, p < .197$).

4.3.2.8 Met or Exceeded Physical Activity Guidelines on Day 3.

There was no significant difference of test time on number of children who met or exceeded physical activity guidelines on day 3 ($z = -1.897, p < .058$).

4.3.2.9 Observations of Hubs

Table 4.4 shows the operational aspects of each hub including opening days, times and weeks along with age limits, the numbers and limits of attendance and whether the hub service is drop in and out. The observations show that the hubs opening weeks range from 2 to 6 weeks. During the opening weeks, both hubs operated on weekdays from Monday to Friday. Both hubs also provided a full day of holiday provision. Hub 2 offered a drop in and out service, whereas Hub 1 required children to attend for the entire day. Both hubs recorded children's attendance and did not have a maximum number of children who could attend. Each hub also had age limits ranging from 8 to 16 years old. On the day that the researcher made note of the observations at the hubs, the number of children attending ranged from 21 to 24, and staff numbers ranged from 5 to 13 members of staff. Both hubs also provided volunteers to assist the staff members (ranging from 1 to 4 volunteers).

Table 4.5 shows the different activities offered at each hub and the structure of the hub days from one day of observations at the hubs. The researcher found that Hub 2 offered more structured activities compared to Hub 1. To illustrate, Hub 1 provided a range of structured workshops for children to participate in throughout the day, with the choice of free play during break times. While Hub 4 does offer structured outdoor activities, they mainly focus on offering a range of unstructured activities for children to take part in throughout the day (both indoor and outdoor). Both hubs offered trips offsite for children to attend if they received permission from a parent or guardian. Despite the hubs offering different activities, both of the hubs offered some form of physical and creative activities for children both indoors and outdoors. These observations are also mirrored in Study 1 which revealed that hubs offered a range of physical and creative activities for children to participate in.

Table 4.4. Operational information on the hubs participating in the final sample for Study 2.

Hub	Type of hub	Opening days	Opening times	Weeks and dates of operation	Attendance monitored and limit	Age limits	Number of staff, volunteers and children	Drop in/out service
1	School	Monday to Friday	8:30-4pm (2:30pm on Fridays).	Week 1: 29 th -2 nd August and week 2: 19 th -23 rd August 2019.	Attendance recorded. No maximum	Age limit for each week: Week 1: Year 6 pupils. Week 2: Year 9 and 10 pupils.	13 staff members 4 volunteers 24 children	No
2	Youth club	Monday to Friday	10-5pm	22 nd July-30 th August 2019	Attendance recorded. No maximum	8-16 years old	5 staff members 1 volunteer Approximately 21 children	Yes

Table 4.5. Information on the activity provision offered by both hubs involved in Study 2.

Hub	Date of observations	Activities offered	Trips offered	Free play or structured activities	Available spaces for activities
1	23/08/2019	9:15-10:15am: Meditation, self-reflection, moving around/coordination activity, 10:15-11am: Dragons Den presentation preparation to solve a world problem of their choice, 11am: free play break, 11:15-12:15-1pm: Lunch, 1pm-2:30pm: Presenting to peers and family on Dragons Den idea.	Yes	Both; structured activities throughout the day and break times include free play. School hired an outside organisation to run a structured programme.	Inside classrooms and outdoor play area.
2	01/08/2019	No set times of activities. Activities offered: pool table, football table, air hockey table, computer games (including PlayStation), table tennis, outdoor games (dodgeball in sports court), arts and crafts, keyboard and books.	Yes	Both; structured sports sessions are offered along with free play.	Inside the centre and in the outdoor area.

4.4 Discussion

This study is one of the first UK studies (known to date) to focus on children's physical and sedentary activity levels during the school summer holidays compared to the school term. This study investigates the number of and time children spent in physical and sedentary activities across 3 days. This study also investigates the time spent in physical activity each day to allow for comparisons to recommended daily physical activity guidelines. In addition to this, time spent in each activity were used alongside information from the Youth Compendium of Physical Activities to establish the amount of energy that children expended across 3 days during the school summer holidays versus the school term.

The current study found that children participate in a greater number of physical activities during the school summer holidays compared to during the school term. This suggests that children had access to a wider variety of physical activity at holiday provision compared to at school. This finding is supported by the researcher's observations took at each holiday hub site visited to collect physical and sedentary activity data from children. These observations show that children were offered a range of different physical and creative activities to participate in. Children had access to activities both indoors and outdoors, which included access to trips offsite. Therefore, children clearly had access to a wider range of activities at the holiday hubs compared to at school.

In addition to this, the current study provides a novel finding to the literature by showing across all 3 days children spend significantly longer participating in physical activities during the summer holidays compared to during the school term. This finding opposes the few studies that have investigated children's physical activity levels during the summer holidays versus the school term. Prior research has found that children spend less time participating in physical activity during the summer holidays compared to school term time (Brazendale et al., 2018; Mann et al., 2020; McCue et al., 2013). the authors evaluating the school summer holiday programme implemented in Wales found that children spend more time engaging in physical activity when they attend the holiday hub compared to a non-attending day (Morgan et al., 2019). Therefore, holiday hubs at the organisational level may be enabling children to increase the amount of time they spend in physical activities at the individual level.

In the current study, despite children engaging in physical activity for a longer period of time during the summer holidays, there was no significant difference in their energy expenditure compared to during the school term. Therefore, this finding suggests that the additional time spent in physical activity during the summer holidays does not make an overall difference to the amount of energy used compared to the school term. Children expend additional energy

through participation in other activities during the school term so there is no difference in the number of calories that children burn during summer versus school time.

In addition to comparing time spent in physical activity whilst attending holiday hub to the school term, the current study also compared the number of minutes spent in physical activity each day (Day 1, Day 2 and Day 3) to recommended guidelines for daily physical activity. The results showed that there was no significant difference on day 1, day 2, and day 3 on the number of children who met or exceeded the physical activity guidelines during the summer holidays versus school term time.

The findings of the current study show that children reported spending a longer period of time in sedentary activities during the school term compared to during the summer holidays across the 3 days. However, this may be explained by the increased proportion of time that children spend participating in classroom-based activities during the school term compared to the school summer holidays. Classroom-based activities were included in the YPAQ as an activity option that children may have participated in and has been classified as a sedentary activity in the analysis for this study. Recently, studies have focused on interventions which involve children participating in physically active lessons, with results suggesting that these have the potential to increase children's physical activity levels at school (Daly-Smith et al., 2018). Children have even replaced sedentary time with light physical activity through the implementation of physically active lessons (Morris et al., 2019). This may be a useful source of knowledge for schools to reduce sedentary time during the school term and for holiday hubs as it will provide a useful method of merging educational and physical activities into one activity.

In regard to the socio-ecological model of health, Study 2 fits within this model because the findings suggest children's physical and sedentary behaviours during the summer holidays versus the school term may be influenced by differing factors. Children's physical and sedentary activity levels at the individual level may depend upon various levels of influence including the variation and number of different physical activities offered at the hubs compared to school. At the interpersonal level, children may be influenced by staff and parents being role models or social modelling of other peers which could influence children's individual level of physical and sedentary behaviours. At the community level, access to a sufficient space and equipment to provide physical activities and staff who are trained to provide this may influence children's behaviour at the individual level. At an organisational level, the Kitchen Social programme recommends for hubs to provide at least one hour of physical activity per day whilst schools provide Physical Education lessons to help children adhere to physical activity guidelines at the individual level. At the policy level the government recommendations of daily physical activity guidelines may also influence children's activity levels at the individual level.

Clearly, there are different levels of influence on children at school versus at a holiday hub which is positively impacting upon their physical and sedentary activity levels at the hub as children are more physically active and less sedentary at the hub than at school.

A strength of the current study is the use of weekday versus weekday activity patterns, as prior research has suggested that there are activity differences on weekend days compared to the weekdays (Scheers et al., 2012). Research studies suggest that children take part in less physical activity during the weekend compared to weekdays (Duncan et al., 2007; Rowlands et al., 2008). Therefore, the current study compared weekday versus weekday activity levels by focusing solely on activity on school days during the school term and activity on holiday hub days during the school summer holidays.

On the other hand, a limitation to the current study is that there was no control group for comparison. Future research should extend the current study by comparing children attending a hub to children who do not attend a hub during the school summer holidays. A control group would provide insight into whether the increase in physical activity and decrease of sedentary activity is dependent on hub attendance during the school summer holidays.

Despite the limitation, this study is the first in the UK (to date) which compares the physical and sedentary activities that children participate in during the school summer holidays to the school term. In conclusion, the findings of the current study demonstrate that children spend an increased amount of time in physical activity and decreased amount of time in sedentary activity during the school summer holidays compared to school time.

CHAPTER 5: Diet Quality Score and Adherence to the School Food Standards based on Hub Attendance.

5.1 Introduction

This chapter investigates research relating to the food provision children are provided with during the school term, the need for children to access food provision during the school holidays, and food provision provided at various holiday programmes. The current study aims, along with the method and findings, followed by the limitations and a conclusion will also be provided in this chapter.

As chapter 1 identifies, child poverty rates have risen in recent years reaching 30% in the UK (Joseph Rowntree Foundation, 2018), and figures in London are higher than the UK average with 37% of children living in London experiencing child poverty (Leeser, 2019). Children experiencing poverty are also more likely to experience food insecurity (Andreadi et al., 2018; Wight et al., 2014). The Mayor of London's report (2019) states that 400,000 children under 16 years old struggle to afford or access enough food in London. Despite the Eatwell Guide (2018) recommending a balanced diet including 5 portions of fruit and vegetables a day, while cutting down on foods high in saturated fat, sugar and salt, Nelson et al., (2007) suggests that low-income children consume an excess of foods/drinks which fall into the category of being high in saturated fat, sugar and salt. Low-income populations may be more likely to consume a less balanced diet as consuming a diet which meets the UK's Eatwell Guide recommendations is unaffordable for many families on low incomes (Scott et al., 2018). The high cost of healthy foods can therefore be viewed as a barrier for individual's purchasing and potentially consuming healthy foods (McPoland et al., 2020).

Schools can influence children's nutritional intake as government funded schools must provide nutritious meals for lunch by adhering to School Food Standards (2014). Positive peer modelling (viewing other children's accepting behaviours with food) may promote children's consumption of novel foods (Greenhalgh et al., 2009). Therefore, children's consumption of food with peers in the school environment provides children with the potential to consume new and healthy foods. In addition to this, the government has implemented Free School Meal provision to support low-income children in accessing school meals through a means tested and universal approach (for children aged 4-7 years old) (Department for Work and Pension, 2013). There are also various other government implemented schemes which exist during the school term to provide children with free and healthy food provision. For example, some schools offer a Breakfast Club for children to access a nutritious breakfast at school, which can have positive impacts upon children's diets (Defeyter et al., 2015). Also, the School Fruit and Vegetable Scheme is available at all state funded schools and may positively impact the diets of children

aged 4-6 years old by providing one fruit or vegetable each school day (The Big Lottery Fund, 2005; Wells & Nelson, 2005).

Research suggests that children's dietary intake is improved due to the nutritional support provided during the school term (Lucas et al., 2017), whereas during the school holidays, children are unable to access the provision of free, nutritious foods provided by state funded schools. Therefore, the benefits children may receive from the nutritional support during school term (such as improved dietary intake) are not accessible during the school holidays and food intake during the school holidays would be expected to negatively differ and be the least ideal. Yet surprisingly, few studies have investigated children's food/drink intake during the school holidays. A research study by Brazendale et al. (2017) suggests that children consume a poor diet during the school summer holidays. This has been supported in a research study by Grimes et al., (2014) which found that on days children do not attend school, children's diets consisted of higher levels of fat, saturated fat and sugars compared to school days. However, these studies were carried out in USA and Australia and may not be applicable to the UK. The only UK study (known to date) which focused on term time and school holiday food/drink consumption was carried out by MacDiarmid et al. (2009). The findings demonstrated no differences in children's energy and fat intake during the school term versus the school holidays. The study also found no differences in children's energy and fat intake on weekdays versus weekends. However, MacDiarmid et al. (2009) study was carried out over 10 years ago, and since then children's diets may have changed. The method also relied upon Australian healthy eating guidelines to categorise foods/drink as healthy and not healthy, rather than using the UK Eatwell Guidelines.

In USA, the USDA's Summer Meals Program provides a free, nutritious meal to combat food insecurity during the school summer holidays for children from low-income backgrounds (Miller, 2016). Conversely, in the UK, there has been a growth in holiday provision set up to support families at risk of food insecurity with the intention of providing nutritious food to replace their school meal, alongside activities, for low-income children during the school holidays (Holley et al., 2019; Mann et al., 2018). However, holiday provision is not regulated, and legislation should be implemented to ensure children are provided with a nutritious meal at holiday provision sites which meets the School Food Standards to mirror the meal they receive at school during term time (Mann et al., 2020). Research by Long et al. (2018) suggests that holiday clubs are successful in mitigating food insecurity as food insecure households were found to benefit more from holiday provision compared to food secure households. However, despite the provision of food at hubs to support families experiencing summertime food insecurity and the intention of hubs to provide children with nutritious foods, there are a lack of research studies investigating the impacts of holiday provision on children's nutritional intake.

An evaluation by Defeyter et al. (2018) of a North East holiday programme “A Day Out, Not a Handout” found that children (n=266) consumed a larger number of “healthy foods” for lunch on a hub day versus a non-hub day. However, Defeyter et al. (2018) coded data in terms of “core” and “non-core” food which is the system used in Australia to refer to discretionary and non-discretionary food items (Grimes et al., 2014), rather than using the UK Eatwell Guidelines to establish adherence to a “healthy” diet. Nevertheless, this method has been used in prior published studies in the UK (MacDiarmid et al., 2009), and may have been the most accessible since Defeyter et al. (2018) did not collect data at a macronutrient level. Similarly, a published study by Morgan et al. (2019) examined the “Food and Fun” holiday clubs in Wales and found that children (n=196) consumed more fruit and vegetables (67%), less sugary/fizzy drinks (81%) and less sugary snacks (66%) on club days compared to nonclub days. However, this study used subjective survey methods by relying on children’s interpretation of “healthy” food rather than collecting data on the food and drinks that children consumed to assess whether children consume a healthy diet.

It is important to consider low-income children’s dietary patterns as there is evidence presented in Chapter 1 of an association between dietary habits and health related outcomes.

The studies identified in Chapter 1 which assess children’s overall diet are essential because the relationship between dietary intake and health is very complex and cannot be captured by studying single dietary components (Ocké, 2013). Studies assessing children’s overall diet quality which are included in Chapter 1 identify that a poor diet quality is related to poor mental health outcomes for children (O’neil et al., 2014). In contrast, there are positive outcomes associated with a high diet quality for children including improved IQ, mental health, blood pressure, body composition and prevalence of metabolic syndrome (Dalwood et al., 2020; Wu et al., 2019).

The findings from Study 1 in this thesis suggest the healthy food provided at hubs impacts upon children’s diets and children consume a lack of healthy food without hub access. Also, some hubs provided open access provision where children can access food off-site. Therefore, it is unknown whether children are consuming the food provided at the hub, or whether they rely more on nearby unhealthy food shops. Alternatively, if children do consume the food provided at hub, it is unknown whether this makes any difference to their overall diet quality. Therefore, considering the findings from Study 1 and due to the gaps in the literature, it was important to investigate the impacts of food provision at hubs on the overall diet quality of children attending.

The purpose of the current study was to examine children's food and drink consumption during the school holidays across a weekday when they attend a holiday hub compared to a weekend day when they do not attend. The aims of this study are; (1) to investigate children's food and drink consumption across an entire day to find out whether children's diet quality based on the UK Eatwell Guide differs based on hub attendance, and (2) to investigate children's food and drink consumption at lunch to establish whether children's food and drink intake meets School Food Standards and whether this differs based on hub attendance. This study intends to answer the following research questions; (1) Does children's diet quality differ overall across the entire day according to the Eatwell Guide based on hub attendance? (2) Does children's lunch time meal meet School Food Standards and does this differ based on hub attendance? These research questions are important to consider because the Eatwell Guide is recommended by the government to support the UK population in following a healthy diet. In addition, Kitchen Social recommends for hubs to provide lunch time meals which meet the School Food Standards to help children consume healthy foods/drinks.

5.2 Method

5.2.1 Study Design

This quasi-experimental study utilised a repeated measures design: a day attending hub versus a non-attending hub day. The dependent measures were (1) diet quality and (2) adherence of the lunch meal to School Food Standards on an attending versus a nonattending hub day.

5.2.2 Participants

Children were recruited to this study using a non-probability purposive sampling strategy (description provided on page 158). In total, 63 children were recruited from 5 holiday hubs participating in the Kitchen Social programme. Due to sporadic attendance rates, 6 children recorded their food intake at only one time point and these children did not attend again during the remainder of the testing visits conducted by the researcher. Therefore, a second recording of food intake could not be followed up with these participants. The remaining sample of 57 children (33 females and 24 males) recorded their food intake at both time points. The age range included in this study of 7-16 years old (mean age: 10.81, standard deviation: 2.039) was used as this was the target population of the hubs which consented to participate in this study, and Livingstone and Robson (2000) state that children aged 7+ are cognitively capable of retrospectively recalling their food and drink intake.

5.2.3 Materials

5.2.4 Food and Drink Recall

Nutritional data were collected via a retrospective recall (Appendix Q). Typically, prior studies have recorded food/drink intake over a 24-hour period (for example, Raffoul et al., 2019).

However, in the current study it was necessary to collect data over a slightly longer period of approximately 26-28 hours rather than 24 hours to ensure data was gathered from what children ate and drank throughout the entire previous day during the limited hub opening times (as shown in Table 5.10). This was important as some hubs did not open until 10am, whereas some children consumed their breakfast at 8am. This would mean the breakfast meal would have been missed if the researcher focused solely on the prior 24 hours. Further details on the rationale for using this method is provided in Chapter 2.

5.2.5 Young Persons Food Atlas

Children's recall of food and drink consumed was assisted by the Young Persons Food Atlas developed by Foster and Adamson (2012). The Young Persons Food Atlas (see Appendix S) is a booklet containing child-friendly photographs of various portion sizes of different foods and drinks. The Young Persons Food Atlas is a validated tool and has been shown to be as accurate as parents food/drink recall for children aged 11-16 years old (Foster et al., 2009; Foster & Adamson, 2014). However, this tool has also been used in younger age groups, from 4-11 years, with results showing that children's portion size estimates were more accurate using age-appropriate food/drink photographs compared to when children were using photographs of adult's portion sizes (Foster et al., 2006). Therefore, this tool was used in the current study to assist children with estimations of portion sizes and cooking brands, allowing the researcher to collect more accurate detail to report children's nutritional intake across an attending versus a nonattending hub day (further details in Chapter 2).

5.2.6 Procedure

Ethical approval was gained from the Faculty of Health and Life Science's Ethics Committee at Northumbria University. The Kitchen Social co-ordinators contacted all of the holiday hubs participating in the Kitchen Social programme and invited them to participate in this study. Those hubs that expressed interest in the study were contacted by the researcher and were provided with further details of the study and a consent form (Appendix N). Overall, 5 hubs consented to take part in the study. The hubs involved in this study operated from adventure playgrounds and community centres (see Table 5.10 for further hub details). Once the researcher had received written consent from the hub leaders, the researcher sent parent information (Appendix Oi) and consent forms (Appendix Oii) to each hub leader via email to allow hubs to assist with the recruitment process. The researcher then arranged dates and times to visit each hub to recruit child participants who had returned a parental consent form providing permission for their participation in the study.

During the research visits at the hubs, the researcher approached each child whose parents had provided fully informed consent and verbally informed each child of the research study. Those

children who were interested in taking part were then given an information and consent form (Appendix P) which provided them with further details of the study. Prior to commencing the research, children had the opportunity to ask any questions to ensure they fully understood the research study and provided written consent to participate in this study. Children were then asked to recall their food and drink intake (Appendix Q) from awakening to going to sleep the prior day on two separate test occasions: on an attending hub day and on a non-attending day. For both test occasions, children were asked to recall their dietary intake for the entire previous day. The researcher supported each individual child with this task using the Young Persons Food Atlas (example provided in Appendix S) to assist them in the estimation of portion sizes and cooking brands of the food and drinks they consumed. The research study took place in a separate room at each hub site to reduce the possibility of children being distracted and the researcher was present with the children to ensure they were supported in completing this. On both days of data collection, the researcher reminded children of their right to withdraw from the study at any point by informing the researcher or the hub leader. Upon completion of the study, children were verbally debriefed and provided with a written debrief form (Appendix R). Children were offered a sticker as a token of appreciation, on both data collection days, for their participation.

5.2.7 Observations

The researcher made observations at each holiday hub testing site which included taking food photographs and taking notes of the foods served and operational aspects of the hubs (presented in Table 5.8, Table 5.9 and Table 5.10). Photographs of food were taken to provide a visual representation of the typical portion sizes offered at hubs. As some hubs did not provide a menu for the food served during the school holidays, the researcher instead gathered observational data on one day for a snapshot of the food provision at hubs. Study 1 suggested that there were differences with certain aspects of the food provision at hubs, for example some hubs differed in terms of access to suitable kitchen facilities. Therefore, this study recorded differences in the delivery and organisation of hubs.

5.3 Data Coding

5.3.1 Diet Quality

The Young Persons Food Atlas was used to assist children with portion size estimates. Each food and drink image in the Young Persons Food Atlas contained a reference number which was recorded when children identified the photograph which corresponded to the portion size served and the portion size they had left (if any). The reference numbers were entered into the Young Persons Food Atlas database to obtain the portion size in grams of each food and drink item that children were served and had leftover (if any). The researcher was then able to work

out the portion size in grams that the child consumed by subtracting the leftover portion size (if the child left over any food or drink) from the portion size served.

There are different approaches for studying the overall diet of an individual as Ocké (2013) outlines. However, the current study focused on researcher-defined scores of diet quality, which are based on guidelines for a healthy diet. More specifically, the UK Eatwell Guidelines (2018) were used to evaluate children's diet quality on a day they attended a holiday hub compared to a non-attending day. Eleven groups were formed to assess children's diet quality out of score of 110. Equal weighting is given to each diet quality group as shown in Table 5.1 (10 being the highest score each child can reach per group) and a higher score reflects greater compliance to the UK Eatwell Guide. To get a score of 10 in one of the categories, the child must have met the recommendation from the UK Eatwell Guidelines.

Seven of the categories are based on children's nutritional intake, whereas four of the categories are based on the actual foods and drinks consumed throughout the day. For the categories based on nutritional intake, the percentage of energy from children's diets (specifically from sodium, free sugar, fat, saturated fat, carbohydrate, protein and fibre) were used to establish whether children met the UK Eatwell Guidelines recommendations for each of the nutrient groups. The percentage of energy for each nutrient group in children's diets were calculated using Microdiet, apart from for free sugars (free sugars includes added sugars in any form and natural sugars) and fibre. To calculate children's free sugar and fibre intake, the McCance and Widdowson's 'composition of foods integrated dataset' and composition of old foods (2019) on the nutritional content of food in the UK were used. The researcher estimated the number of grams from free sugars and fibre in each food/drink item consumed by children, for each day, by viewing the amounts present in similar foods in the McCance and Widdowson's 'composition of foods integrated dataset' and composition of old foods (2019). The number of grams from free sugars and fibre from each food/drink item were collated and converted to a percentage of energy to provide a diet quality score for free sugar and fibre intake based on the UK Eatwell Guides recommendations for each day (an attending and non-attending hub day). For example, the UK Eatwell Guidelines recommend consuming >50% of food energy from carbohydrates which would equate to a diet quality score of 10.

Grams of foods/drinks were used to establish whether children consumed the recommendations for dairy products (including milk, cheese and yoghurts), water, fruit and vegetables and processed meats (including burgers, ham, bacon, sausages and salami). For dairy consumption (cheese, milk and yoghurt), the researcher viewed whether children met recommendations from the Eatwell Guide (2018) of consuming 3 portions of dairy food each day. To calculate water consumption, the researcher used the Eatwell Guide (2018) recommendations of 6-8 glasses of

water daily, which equates to consuming at least 1200 grams of water each day. To calculate fruit and vegetable consumption, the researcher used the Eatwell Guide (2018) recommendations of consuming at least 5 portions daily and 80 grams equating to one portion size. To calculate processed meat consumption, the researcher used the Eatwell Guide (2018) classifications of which food items are processed and the recommendation of consuming under 70 grams of each of these food items each day. The recommendations for each individual diet quality category are shown in Table 5.3 which children must meet for a score of 10 in each category (which equates to a total score of 110 if children meet each of the 11 categories). This method is based on previous research which has focused on the diet quality of children in Singapore using food-based dietary guidelines of the Singapore Health Promotion Board (Brownlee et al., 2019). Scoring from 0 to 10 is continuous and children can get any score from 0.0 to 10 (for example, a child could have a final diet quality score of 7.4).

Table 5.1. The total number of categories from nutrients and foods/drinks consumed and the equal weighting of each group equating to a diet quality score of 110.

Final categories (7) proposed to use from nutrients	Score towards overall diet quality (110)	Final categories (4) proposed to use from foods and drink	Score towards overall diet quality (110)
Free Sugar intake	10	Dairy products	10
Sodium intake	10	Processed meat	10
Fat intake	10	Fruit and vegetables	10
Saturated fat intake	10	Water intake	10
Protein intake	10		
Carbohydrate intake	10		
Fibre	10		

5.3.2 School Food Standards

In addition to this, the lunch meal that hubs serve and the food/drink that children consumed from this lunch meal were compared to the School Food Standards. As only one day of food intake at the hub was recorded, weekly recommendations were not included. Children received a score out of 12, with a higher score demonstrating a higher adherence of their lunch-time meal to the School Food Standards. The scoring categories from the School Food Standards which were used are presented in Table 5.2.

Table 5.2. The requirements from the School Foods Standards which were used to compare to children's lunch meal at each hub and on an attending and a non-attending hub day.

School Food Guideline recommendations
A. Starchy foods
1. One or more portions of food from this group every day
B. Fruit and vegetables
1. One or more portions of vegetables or salad as an accompaniment every day
2. One or more portions of fruit every day
C. Dairy and alternatives
1. A portion of food from this group every day
2. Lower fat milk must be available for drinking at least once a day during school hours
D. Protein sources
1. A portion of food from this group every day
E. Discretionary foods
1. No snacks, except nuts, seeds, vegetables and fruit with no added salt, sugar or fat
2. No confectionery, chocolate or chocolate coated products
3. Desserts, cakes and biscuits are allowed at lunchtime, and they must not contain any confectionery
4. Salt must not be available to add to food after it has been cooked
5. Any condiments must be limited to sachets or portions of no more than 10 grams or one teaspoonful
F. Healthier drinks
1. One of the below permitted drinks
• Plain water (still or carbonated)
• Lower fat milk or lactose reduced milk
• Fruit or vegetable juice (max 150ml)
• Plain soya, rice or oat drinks enriched with calcium; plain fermented milk (e.g., yoghurt) drinks
• Combinations of fruit or vegetable juice with plain water (still or carbonated, with no added sugars or honey)

- Combinations of fruit juice and lower fat milk or plain yoghurt, plain soya, rice or oat drinks enriched with calcium; cocoa and lower fat milk; flavoured lower fat milk, all with less than 5% added sugars or honey • Tea, coffee, or hot chocolate

Combination drinks are limited to a portion size of 330mls. They may contain added vitamins or minerals, and no more than 150mls of fruit or vegetable juice. Fruit or vegetable juice combination drinks must be at least 45% fruit or vegetable juice

Table 5.3. Examples of how many ml/mg/g/portions/percent of energy children would need to consume for the lowest and highest scores (a score of 0 and 10).

Diet quality category	Diet Quality Score – 0	Diet Quality Score - 10
Category 1. Free sugar intake	10%	<5% food energy
Category 2. Sodium intake	1.5 times recommended intake + (7-10 years: 2953.75mg+ 11-18 years: 3544.5mg)	Sodium intake recommended by age group (7-10 years: 1969.17mg 11-18 years: 2363mg)
Category 3 Fat intake	>45%	<35%
Category 4 Saturated fat intake	16% or more	<11%
Category 5. Protein intake	<10%	>14.5 and <15.5% of food energy
Category 6. Carbohydrate intake	40% or less	>50% percent of energy
Category 7. Dairy products	0 portions	3 portions (1 portion of milk: 200ml, cheese: 30g and yoghurt: 125g)
Category 8. Fibre intake	0	>30g
Category 9. Processed meat	70+g	0 grams
Category 10. Water intake	600 grams or lower	6+ glasses (1200g)
Category 11. Fruit and vegetables	0 grams	5+ portions

5.4 Results

5.4.1 Data Analysis

The Young Persons Food Atlas was used to calculate the portion size of each food and drink item consumed by each child which was recorded during the 24-hour recall. The portion size of each food and drink item each child consumed was calculated in grams and entered into Microdiet nutritional analysis software (v.4.1, 2016, University of Salford, UK). Using the McCance and Widdowson's Composition of Foods Integrated Dataset 2015 (UK 2015 CoFIDS, 7th Edition), the grams of food and drink consumed were converted into macronutrients and energy (kcal) to provide greater detail and granularity for sodium, fat, saturated fat, carbohydrate and protein. To calculate the amount of energy (kcal) and macronutrients (grams) from free sugars and fibre in each food/drink item, the researcher used the McCance and Widdowson's 'composition of foods integrated dataset' and composition of old foods (2019). The recommendations from the Eatwell Guide (2018) were used to view whether children consumed enough macronutrients as a percent of energy (from free sugars, sodium, fat, saturated fat, protein, carbohydrate and fibre). The Eatwell Guide (2018) was also used to view whether children consumed the recommended number of grams/portion sizes from processed meat, fruit and vegetables, dairy and water.

These data were then entered into IBM SPSS Statistics 25. Children's (n=57) food and drink intake were analysed using Paired Samples T-Tests and Wilcoxon Signed Rank Tests. Analyses of children's overall diet quality score and fruit and vegetable diet quality score on an attending versus non-attending hub day were conducted using a Paired Samples T-Test. However, data for each individual diet quality category, excluding fruit and vegetable diet quality category, violated normality which is an assumption of a Paired Samples T-Test. Therefore, a non-parametric test, the Wilcoxon Signed-Rank Test, was used to analyse individual diet quality categories (excluding fruit and vegetable category). To compare children's food and drink consumption for lunch on an attending and non-attending day to the School Food Standards, the Wilcoxon Signed Rank Test was also used as these data were not normally distributed.

The results are presented by showing the total diet quality score, followed by individual diet quality scores for each category, and children's adherence along with each hub (apart from one hub where the researcher was unable to collect observational information of foods/drinks served) adherence to the School Food Standards. Finally, the results from the observations taken at each hub by the researcher are presented.

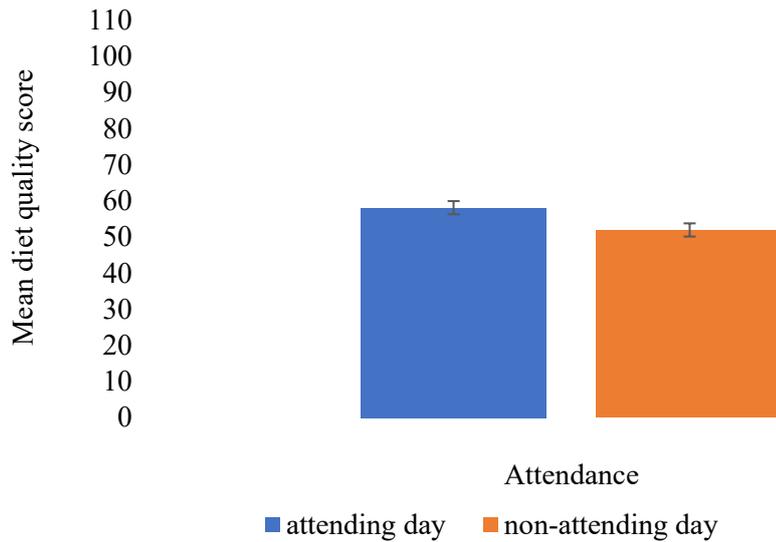


Figure 5.1. Mean diet quality score and standard errors on an attending versus a nonattending hub day.

5.4.1.1 Total Diet Quality Score.

There was a significant effect of hub attendance ($t(56) = 2.826, p = .007$) on children's diet quality score on an attending versus a non-attending day. On an attending day (mean: 57.95) (standard deviation: 12.64) children have a higher diet quality score compared to a nonattending day (mean: 51.79) (standard deviation: 15.01).

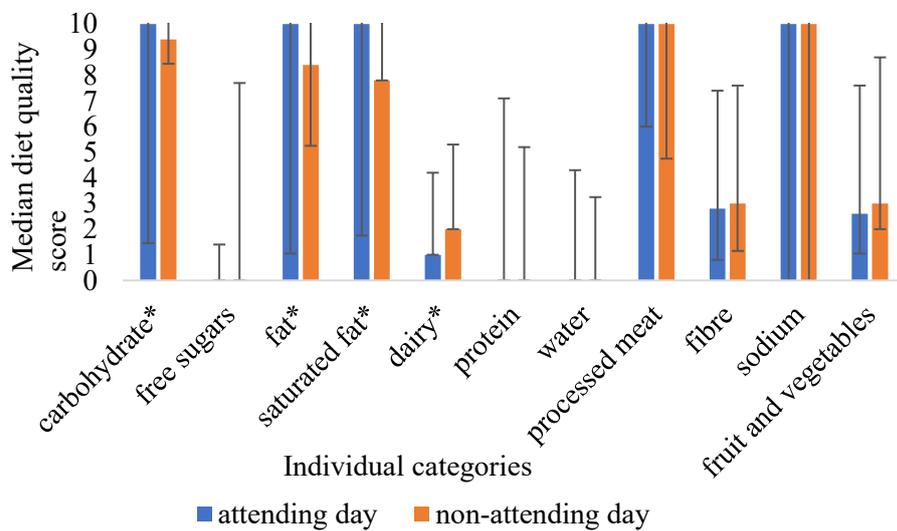


Figure 5.2. Median diet quality scores and percentiles for individual categories (significant differences are highlighted with *).

Table 5.4. The percentage of participants meeting dietary requirements on both days.

Diet quality category	Attending hub day	Non-attending hub day
Carbohydrate	71.9%	49.1%
Free sugars	8.8%	21.1%
Fat	70.2%	49.1%
Saturated fat	70.2%	38.6%
Dairy	0%	0%
Protein	5.3%	0%
Water	10.5%	10.5%
Processed meat	64.9%	61.4%
Fibre	1.8%	1.8%
Sodium	91.2%	87.8%
Fruit and vegetables	3.5%	10.5%

Table 5.4 shows a higher percentage of children meet the UK Eatwell Guidelines for sodium, processed meat, protein, saturated fat, fat and carbohydrate intake whereas a lower percentage of children meet the UK Eatwell Guidelines for fruit and vegetable and free sugar intake on an attending hub day compared to a non-attending hub day. There is no difference in the percentage of children meeting the UK Eatwell Guidelines for fibre, water and dairy intake on an attending hub day compared to a non-attending hub day.

5.4.1.2 Fruit and Vegetable Diet Quality Score

There was no significant effect of hub attendance ($t(56) = .262, p = .794$) on fruit and vegetable diet quality score.

5.4.1.3 Carbohydrate Diet Quality Score

There was a significant difference ($z = -3.148, p < .002$) between carbohydrate diet quality score on an attending versus a non-attending day. Carbohydrate diet quality scores on an attending day were higher (Mdn= 10) compared to a non-attending day (Mdn= 9.4).

5.4.1.4 Fat Diet Quality Score

There was a significant difference ($z = -3.472, p < .001$) between fat diet quality score on an attending versus a non-attending day. Fat diet quality scores on an attending day were higher (Mdn= 10) compared to a non-attending day (Mdn= 8.4).

5.4.1.5 Saturated Fat Diet Quality Score

There was a significant difference ($z = -3.670$, $p < .001$) between saturated fat diet quality score on an attending versus a non-attending day. Saturated fat scores on an attending day were higher (Mdn= 10) compared to a non-attending day (Mdn= 7.8).

5.4.1.6 Dairy Diet Quality Score

There was a significant difference ($z = -2.001$, $p < .045$) between dairy diet quality score on an attending versus a non-attending day. Dairy diet quality scores on an attending day were lower (Mdn= 1) compared to a non-attending day (Mdn= 2).

5.4.1.7 Free Sugars Diet Quality Score

There was no significant difference ($z = -2.071$, $p < 0.38$) between free sugars diet quality score on an attending versus a non-attending day.

5.4.1.8 Protein Diet Quality Score

There was no significant difference between protein diet quality score on an attending versus a non-attending day ($z = 1.057$, $p > .291$).

5.4.1.9 Water Diet Quality Score

There was no significant difference between water diet quality score on an attending versus a non-attending day ($z = -.812$, $p > .417$).

5.4.1.10 Processed Meat Diet Quality Score

There was no significant difference between processed meat diet quality score on an attending versus a non-attending day ($z = -.041$, $p > .967$).

5.4.1.11 Fibre Diet Quality Score

There was no significant difference between fibre diet quality score on an attending versus a non-attending day ($z = -.103$, $p > .918$).

5.4.1.12 Sodium Diet Quality Score

There was no significant difference between sodium diet quality score on an attending versus a non-attending day ($z = .089$, $p > .929$).

5.4.1.13 Hub Adherence to School Food Standards

Table 5.5. Checklist of daily serving recommendations to show which hubs adhered to School Food Standards.

School Food Guidelines Daily Recommendations	Hub 1	Hub 2	Hub 3	Hub 5
A. Starchy foods				
1. One or more portions of food from this group every day	✓	✓	✓	✓
B. Fruit and vegetables				
1. One or more portions of vegetables or salad as an accompaniment every day	✓	✓	✓	✓
2. One or more portions of fruit every day	✓	✓	✓	X
C. Dairy and alternatives				
1. A portion of food from this group every day	✓	X	✓	X
2. Lower fat milk must be available for drinking at least once a day	X	X	X	X
D. Protein sources				
1. A portion of food from this group every day	✓	X	✓	✓
E. Discretionary foods				
1. No snacks, except nuts, seeds, vegetables and fruit with no added salt, sugar or fat	✓	✓	✓	✓
2. No confectionery, chocolate or chocolate coated products	X	✓	✓	✓
3. Desserts, cakes and biscuits are allowed at lunchtime. They must not contain any confectionery	✓	✓	✓	✓
4. Salt must not be available to add to food after it has been cooked	✓	✓	✓	✓
5. Any condiments must be limited to sachets or portions of no more than 10 grams or one teaspoonful	✓	✓	X	X
F. Healthier drinks				
1. One of the below permitted drinks	X	✓	X	X
• Plain water (still or carbonated)				
• Lower fat milk or lactose reduced milk				
• Fruit or vegetable juice (max 150ml)				
• Plain soya, rice or oat drinks enriched with calcium; plain fermented milk (e.g., yoghurt) drinks				
• Combinations of fruit or vegetable juice with plain water (still or carbonated, with no added sugars or honey)				
• Combinations of fruit juice and lower fat milk or plain yoghurt, plain soya, rice or oat drinks				

enriched with calcium; cocoa and lower fat milk;
 flavoured lower fat milk, all with less than 5% added
 sugars or honey

- Tea, coffee, or hot chocolate. Combination drinks are limited to a portion size of 330mls. They may contain added vitamins or minerals, and no more than 150mls of fruit or vegetable juice. Fruit or vegetable juice combination drinks must be at least 45% fruit or vegetable juice

Four out of five of the hubs involved in Study 3 served food and drink on the day the researcher carried out observations. All food and drink offered to children were recorded and compared to the School Food Standards to establish whether hubs met these guidelines. As only one day of food intake at the hub was recorded, weekly recommendations were not included. Although all hubs closely adhered to the School Food Standards, hubs could improve by ensuring children have access to low fat milk throughout the day and healthier drinks.

5.4.1.14 Children’s Adherence to School Food Standards

Table 5.6. Difference score for children’s total School Food Standards score.

<i>Difference score for total School Food Standards</i>
2

Table 5.7. The percentage of children meeting each School Food Standard requirement.

	Starchy foods (total score of 1)	Fruit and vegetables (total score of 2)	Dairy and alternatives (total score of 2)	Protein sources (total score of 1)	Discretionary foods (total score of 5)	Healthier drinks (total score of 1)
Attending day	94.7%	31.6%	10.5%	91.2%	93%	38.6%
Non-attending day	73.7%	1.8%	10.5%	50.9%	59.6%	42.1%

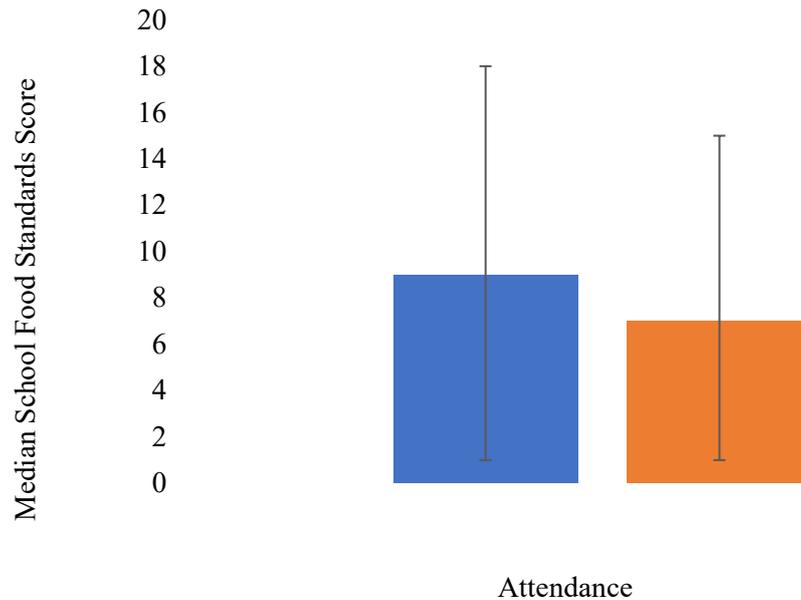


Figure 5.3. Median School Food Standards score and percentiles of the lunch meal consumed by children on an attending versus a non-attending hub day.

5.4.1.15 Total School Food Standards Score

There was a significant difference of attendance on total School Food Standards score ($z=5.721, p < .001$). Children had a higher School Food Standards score (Mdn= 9) on an attending hub day compared to a non-attending hub day (Mdn= 7).

5.4.1.16 Observations of Hubs

Table 5.8 shows the food served on the day of the researcher’s observation and Table 5.9 provides additional information on the food provision including photographic evidence collected from one day observations at the hubs. The observation schedule which includes what information was observed and collected is provided in Appendix T. Hub 1 was the only hub which did not offer any fruit and vegetables for lunch, although food and drinks served at Hub 4 were unable to be recorded as the hub did not provide food/drinks on the day of the observation. Only Hub 5 hired a chef to provide the food provision for children, while all other hubs relied on staff and volunteers to cook and serve food. All hubs had access to kitchen facilities to cook the food and all hubs, apart from Hub 4, used food provided from food charities as part of their food offer.

At each hub site, the researcher viewed the roles of each staff member and found that each hub recruited staff for varying roles. Hub 1 had an overall hub site manager, a programme manager, members of staff cooking/serving food and facilitating the following workshops: games room, media, sports, arts and crafts, cooking, studio, radio and dance or drama. Similarly, Hub 2 had

three members of staff responsible for leading the hub programme, whereas all volunteers cook/ serve the food and host the workshops which are offered to children which include: music, fashion, arts, drama, dance, media, entrepreneurship, cooking, and sports. Hub 3 involved four staff members which facilitate the children in play activities and cooking/serving food. The seven staff members at Hub 4 included one senior and one deputy member of staff and five play workers who all took on the responsibility of facilitating children with play and cooking the food provision. Hub 5 recruited a chef to supply the food provision rather than relying on volunteers. They had one staff member in charge of the building, one assistant and one member of staff sorting out the admin work involved. All volunteers involved in Hub 5 either hosted sports workshops or facilitated the children in other activities.

All of the hubs which were observed, delivered holiday provision for 5 days a week, with most hubs, apart from Hub 5, providing a full day of provision. The researcher recorded hub capacity and found there was a limit on the number of children allowed to access each hub at one time and a variation in the age ranges at each hub. Some hubs relied more heavily on volunteers, whereas other hubs relied mostly on the paid staff to operate the holiday provision. The adventure playgrounds allowed parents to access the hubs to accompany children and the staff identify their role as facilitators. Alternatively, the community centres did not have parents attending the hub (unless they volunteered to support hub delivery) and therefore relied on a larger workforce to ensure there was enough staff/volunteers to safeguard the children. Table 5.10 shows the type of hubs that were visited, the opening dates, days and times, the number of staff/volunteers required and the limits of age and hub capacity.

Table 5.8. Food and drinks offered to children for lunch at four of the hubs.

Hubs	Food served
Hub 1	Breakfast: Fruit, cereal with milk, toast, jam, butter, peanut butter, marmalade, bagels, Nutella. Lunch: Tuna pasta bake, mince, dilute juice and water available.
Hub 2	Lunch: Spinach, carrots, cabbage and roasted potatoes, water and pineapples.
Hub 3	Lunch: Cajun chicken, quorn stew, brown basmati rice, potato cheese croquettes, water, lettuce, bread, tomato, cucumber, crackers yoghurt, fruit. Dilute juice and water available. Sauce available.

Hub 5 Lunch: Lettuce and tomatoes, wedges, fish with batter crumbs, stir fry (carrots, broccoli, red peppers, courgettes, red onions and bean sprouts). Dilute juice and water available. Sauce available.

Table 5.9. Further details of the food provision at each hub.

Hub	Date of observation	Food provided and table setting	Structure of food menu	Food serving times and location	Food sources	Food photographs	Kitchen facilities, food storage and waste	Cooking and serving method
1	14/08/2019	Breakfast and lunch provided every day. Children eat together, staff do not participate.	No.	1-1:45pm Main hub space.	Eats and Felix deliver food on different days. Innocence deliver innocent smoothies occasionally.		Full kitchen facilities. Food is stored in the kitchen and leftover food is used by offering children seconds and offering food to children who were not on the food list (hub provides food for a limited number of 50 children).	Staff cook the food. Staff serve and children collect food.
2	22/08/2019	Lunch provided every day. Children eat together, staff participate on	Yes.	12:30-1:30pm. Main hub space.	Felix project delivers food on Tuesdays. Other food supplied from local supermarkets		Full kitchen facilities. Food is stored in the hub kitchen and children are offered seconds to prevent food waste. Staff and volunteers also	Volunteers cook the food. Staff serve and children collect the food.

		a separate table.			to supplement food deliveries.		consume food and children usually take any extra surplus food home to prevent waste.	
3	05/08/2019	Lunch provided on Mondays and Thursdays. Children eat together, staff do not participate.	No.	12-12:30pm. Main hub space.	Felix project delivers food on Monday and Thursday.		Full kitchen facilities. Food is stored in the kitchen of the hub and food is served throughout day in attempt to reduce waste.	Staff cook the food. Staff serve and children collect food.
4	21/08/2019	Lunch provided on Tuesdays and Thursdays. Children eat together, staff do not participate.	No.	12-1pm. Main hub space.	Local shop (usually CO-OP) used daily to collect lunch/snacks. No food/drink deliveries.	No food/drinks served on the day of observation.	Full kitchen facilities. Food is stored in the kitchen facilities and little food is wasted apart from leftovers on children's plates.	Staff cook the food. Staff serve the food and bring hot meals to children.

5	07/08/2019	Lunch provided every day. Children and staff eat together on the same table.	Yes.	12:45-1:30pm. Main hub space.	Felix delivers food on Wednesdays. Additional food bought from food suppliers.		Full kitchen facilities. Food is stored in the hub kitchen and leftovers are donated to a foodbank, frozen or taken home by families.	Chef cooks food. Chef serves the food and children collect.
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Table 5.10. Operational information on the hubs participating in Study 3.

Hub	Type of hub	Opening days	Opening times	Weeks and dates of operation	Attendance monitored and limit	Age limits	Number of staff, volunteers and children	Drop in/out service
1	Community centre.	Monday to Friday.	10-4pm.	22 nd July-23 rd August 2019 28 th October-1 st November 2019.	Attendance recorded. 80 maximum attendance 50 maximum for food provision.	8-16 years old.	11 staff members 1 volunteer 63 children.	No.
2	Community centre.	Monday to Friday.	10-5:30pm.	22 nd July-23 rd August 2019.	Attendance recorded. 190 maximum.	0-16 years old.	3 staff members, 20 volunteers, 75 children.	No.
3	Adventure playground.	Monday to Friday.	10-5pm.	22 nd July-23 rd August 2019.	Attendance recorded. No maximum number.	6-16 years old (under 6 with adult).	4 staff members, No volunteers, Approximately 40 children.	Yes.
4	Adventure playground.	Monday to Friday.	10-5pm.	22 nd July-23 rd August 2019.	Attendance recorded. 70 maximum.	6-14 years old.	7 staff members, No volunteers, Approximately 25 children	Yes.
5	Community centre.	Monday to Friday.	11:30-1:30pm.	22 nd July-23 rd August 2019.	Attendance recorded. Approximate number of 30 maximum.	5-14 years old.	4 staff members, 6 volunteers, 25 children	No.

5.5 Discussion

This study provides an insight into children's dietary intake during the school holidays. More specifically, this study reveals children's food and drink consumption on a day they attend a holiday hub compared to a non-attending day. This study compared children's overall diet quality across two 26-28 hour time periods according to the UK Eatwell Guidelines, and children's food/drink intake for lunch to view adherence to the School Food Standards. It is important to record children's food and drink consumption across an entire day as it is plausible that out-of-hubs meals may be modified as a result of children's hub attendance. In addition, recording children's food and drink intake at each mealtime will allow the lunch time meal to be viewed separately to view adherence to School Food Standards. This should be considered as the Kitchen Social programme recommends for hubs to adhere to these standards.

The results of the current study show that children have a better diet quality score on an attending hub-day compared to a non-attending hub day, highlighting that children are more likely to adhere to the UK Eatwell Guidelines when they attend the hub compared to days they do not attend. This is important as research has suggested that adherence to the UK Eatwell Guidelines can bring numerous health benefits including reduced prevalence to type 2 diabetes, improved rates of cardiovascular disease and colorectal cancer and increased life expectancy (Buttriss, 2017). This suggests that at the organisational and community level, Kitchen Social hub can have an impact on children at the individual level regarding their dietary intake.

The mean overall diet quality scores in the current study suggest that children's food/drink intake is far from the notional ideal as children do not fully adhere to the UK Eatwell Guidelines on both an attending and non-attending hub day. If children adhere to the UK Eatwell Guidelines, they receive a score of 10 in each food/drink category (which equates to a score of 110 if they meet the guidelines in each category), yet the percentages in Table 5.4 show that few children meet these guidelines. This finding supports trends from The National Diet and Nutrition Survey (NDNS) over the 9 year period between 2008-2017 which demonstrates that dietary guidelines are not universally followed (Bates et al., 2019). Similar results have also been found in other countries, for example, research focusing on Singapore children's diet quality shows that these children have a low adherence to dietary guidelines, specifically for salt intake (Brownlee et al., 2019). In addition to this, low-income populations in the UK are even less likely to adhere to nutritional guidelines compared to the general population (Nelson et al., 2007). Yet, children have a higher adherence to dietary guidelines on an attending hub day compared to a non-attending hub day, which suggests that the holiday hubs are supporting children at the individual level to more closely meet nutritional requirements.

Each category included in the diet quality scoring were analysed separately and the findings demonstrated that children had a higher diet quality score for fat intake on an attending versus a non-attending day. The median score for fat intake on an attending day was 10, which suggests that the majority of children met the UK Eatwell Guidelines fat recommendations on an attending day. In contrast, the median score of 8.4 for fat intake on a non-attending day suggests that children were not as close to meeting the fat recommendations, which is under 35% of energy, compared to an attending day. Therefore, on a non-attending hub day, children exceeded fat recommendations, which partially supports prior research suggesting that children from low-income populations are more likely to consume diets which consist of high fat and energy dense foods (Johnson et al., 2018). Energy dense meals are associated with poorer diet quality along with being positively associated with high fat intake (Murakami & Livingstone, 2016), which suggests that high intakes of fat is associated with lower diet quality (Murakami, 2018). Hence, at the community and organisational level, children attending a holiday hub is clearly beneficial for their dietary intake at the individual level by reducing their fat intake to ensure they meet daily fat recommendations.

Children had a higher diet quality score for saturated fat on an attending versus a nonattending hub day in the current study. The UK Eatwell Guide (2018) recommends a diet that is low in saturated fat for a healthy balanced diet. More specifically, no more than 11% of fat consumed should come from saturated fats. The median diet quality score for saturated fat on attending day was a score of 10 which suggests that children met the recommendations for this nutrient, compared to a score of 7.8 on a non-attending day. Therefore, children consumed less saturated fat on the day they attend the holiday hub compared to a non-attending day. The current study results partially supports the NDNS which found that adults and children's average intakes exceed the current recommendation of no more than 11% of food energy from saturated fat (Bates et al., 2019). The findings of the current study suggest that holiday hubs are a contributory factor in supporting children and young people's diet in accordance with dietary guidelines. This is important, as lower intake of saturated fat has been associated with a lower risk of mortality and cardiovascular disease (Ho et al., 2020; Hooper et al., 2020; Levy & Tedstone, 2017).

In the current study, the diet quality score for carbohydrates was higher on an attending versus a non-attending hub day. Therefore, children were closer to the Eatwell Guide recommendations of consuming 50% of energy from carbohydrates on an attending versus a non-attending hub day. The NDNS demonstrates little change overtime in the general population for carbohydrate intake, with prior NDNS surveys demonstrating that children met the recommended carbohydrate intake as a percent of food energy (Bates et al., 2019; Bates et al., 2011). Recent research has shown the importance of meeting the recommended intakes for

carbohydrate as lower levels of carbohydrate intake has been associated with greater odds of diabetes (Churuangsuk et al., 2019). Therefore, carbohydrates play an important part in a healthy, balanced diet, through the consumption of a range of foods, as described by the Eatwell Guide (Hinde, 2019).

Dairy diet quality scores were lower on an attending hub day versus a non-attending hub day in the current study. This means that children were closer to meeting the Eatwell Guidelines for recommended intake of dairy on a day they did not attend the hub compared to an attending hub day. This recommendation includes consuming 3 portions of dairy products daily. Estimates of dairy intake may be higher in the participants in the current study on non-hub days due to a higher quantity of milk and cheese consumed on a nonattending day. However, this explanation is based on the researcher observing the raw data and should be investigated further for any conclusions to be made as to why children consumed more dairy on non-attending hub days. Additionally, the hub observations identified that children were not offered low fat milk throughout the day, which could be implemented at hubs to increase children's dairy intake. Dairy products are important as they contain essential nutrients to ensure healthy growth and bone development in children (Dror & Allen, 2014; Jung et al., 2017). Dairy products contain multiple nutrients, with total and low-fat dairy consumption associated with a reduced risk of developing metabolic syndrome and a lower risk of dental caries and type 2 diabetes (Dror & Allen, 2014; Gil & Ortega, 2019). However, it is also important to note that the median diet quality scores for dairy intake suggest that few children are close to meeting the recommended 3 portions of dairy products on both an attending and non-attending day. Similar findings to the current study have also been found in prior research studies, which show a significant proportion of children in developed countries fail to consume the daily recommended intake of dairy products (Dror & Allen, 2014; Gil & Ortega, 2019; Jung et al., 2017).

Few research studies have focused on children's dairy intake to explain why children consume an insufficient amount of dairy, whereas parents have revealed strategies to increase their children's uptake of dairy products. For example, they ensure dairy products are visually appealing, available and accessible for their child to consume (Jung et al., 2017). During the school term, children's dairy intake is supported through Healthy Start vouchers which allow low-income families to access milk, fruit and vegetable (Griffith et al., 2018). Yet, children do not receive any nutritional support during the school holidays. Since intakes of dairy appear to be low on both attendance and non-attendance days, improvement in the provision of dairy items during the school summer holidays should be considered and holiday hub staff should take note of strategies to increase children's dairy intake.

The findings of the current study clearly show that hubs are effective in terms of improving children's overall diet. More specifically, children's overall diet quality score and individual diet quality scores for intakes of fat, saturated fat and carbohydrates improved on an attending hub day versus a non-attending day. On the other hand, the current study findings also show there was no difference in children's individual diet quality scores for fruit and vegetable, free sugars, protein, water, processed meat, fibre and sodium. This suggests that there are no difference in adherence to the UK Eatwell Guidelines based on hub attendance for the amount of fruit, vegetables, protein, water, processed meat, fibre and sodium consumed.

Although there is no difference in free sugar intake based on hub attendance, the median scores presented in Figure 5.2 and percentages meeting the UK Eatwell Guidelines presented in Table 5.4 suggest that children are not meeting free sugar dietary recommendations on either day, which aligns with data on the diets of the general population (Bates et al., 2019). To reduce free sugar intake, the government implemented a levy on sugar drinks and advised companies to reduce the sugar content of their food/drink products by 20% in 2015, as free sugar intake can result in poorer physical as well as oral health (Evans, 2016; Moynihan et al., 2017; Watson et al., 2017). However, as children are still not meeting free sugar recommendations, further intervention is needed to help decrease children's free sugar intake. In addition to this, the current study finding of no difference in children's fruit and vegetable intake based on hub attendance also partially goes against previous research on holiday provision. To illustrate, a study by Morgan et al. (2019) gathered survey data from children and found that on an attending hub day, children reported that they consumed more fruits and vegetables. Yet, as Morgan et al. (2019) study does not gather data on the number of fruit and vegetables children consume, it is unknown whether children were closer to meeting the recommendation of consuming 5 or more fruit and vegetables daily on an attending versus non-attending day. There are no previously published papers (known to date) which have focused on children's adherence to other nutrient groups included in the UK Eatwell Guidelines based on hub attendance, therefore there is little comparative research.

The median scores highlighted in Figure 5.2 and the percentages meeting the UK Eatwell Guidelines in Table 5.4 suggest that a high proportion of individuals are not meeting the guidelines regardless of attendance. Yet, holiday hubs could be supported in providing meals which adhere to the School Food Standards at lunch time for children to help improve their overall diet. If almost no one meets minimal category scores on either day, this suggests the problem is not specific to holiday hubs, but that there is a wider need to address the issue with children's dietary intake. Categories with the lowest diet quality scores include protein, water and free sugar intake, which helps highlight the likely need for an intervention to increase children's consumption of these nutrients. However, despite children not fully adhering to the

UK Eatwell Guidelines on either an attending and non-attending hub day, children's intake of fat, saturated fat and carbohydrates improved due to hub attendance. Therefore, fat, saturated fat and carbohydrates may have the greatest potential for improvement since holiday provision has been successful in improving these nutrients in children's diets.

The current study also focused on the lunch-time meal and compared children's food and drink intake to the School Food Standards on an attending versus a non-attending hub day. The results demonstrated that children were more likely to meet the School Food Standards on an attending day versus a non-attending hub day. This finding suggests that children's healthy eating behaviours are positively impacted by hub attendance during the school holidays, with greater adherence to School Food Standards for the lunch meal consumed on an attendance day compared to a non-attendance day. This current study finding supports prior qualitative reports by staff which state that holiday clubs adhere to school food standards (Stretesky et al., 2020; Mann et al., 2020). The existence of the School Food Standards at the policy level effects the criteria of the Kitchen Social programme at the organisational level which in turn influences the hub meals which children are offered at individual hubs at a community level. These factors clearly play a role in children's dietary intake at an individual level.

In addition to this, the researcher observed the food served at four out of five of the hubs that were visited to collect nutritional data from children for the current study. Children's median score of 9 out of 12 suggests that the majority of children's meals did not fully adhere to the School Food standards. The observational results support this finding by demonstrating that individual hubs could improve the meals served at lunch-time to ensure they more closely aligned to the School Food Standards. To illustrate, all hubs met the starchy food requirements of providing at least one portion each day. Yet only Hubs 2 and 5 adhered to the requirement of providing one portion of dairy and alternatives each day and no hubs adhered to the dairy and alternatives requirement of "lower fat milk must be available for drinking at least once a day". The SFS requirement of serving healthier drinks was only met by Hub 2. Yet Hub 2 did not provide any source of protein, therefore did not meet the protein sources requirements. All hubs, apart from Hub 5, met the fruit and vegetables requirements of providing one or more portions of fruit for lunch. In regard to confectionary foods, Hub 1 did not meet the requirement of "no confectionery, chocolate or chocolate coated products", whereas Hub 3 and 5 did not meet the requirement of "Any condiments must be limited to sachets or portions of no more than 10 grams or one teaspoonful". The current study findings are important as prior research studies on holiday provision have identified that further investigation is required on children's eating behaviours at holiday provision sites (Holley et al., 2019).

Within the socio-ecological model of health numerous factors should be considered to understand the factors that influence children's diet based on hub attendance. The food choices children make at an individual level are affected by various factors including the food they are offered and can access at the hub. At an interpersonal level, children may be influenced by their peers, hub staff and parents through social modelling. Children may imitate behaviours with regard to the food their peers, hub staff and parents consume. They may also be influenced at the interpersonal level, outside of the hub environment, by their parent's food purchases and cooking skills. At the community level, access to nutritional foods may depend upon the availability and affordability within the local area. For example, many low-income communities reside in food deserts or food swamps (described on page 42 by Bernsdorf et al., 2017, Furey et al., 2001 and Hendrickson et al., 2006). This can in turn impact upon the individual level of the food children can access. At the organisational level, the types of foods which individual hubs offer to children is influenced by the Kitchen Social programme recommending hubs to adhere to School Food Standards. Therefore, at the policy level, children's food choices at hubs may be influenced by the School Food Standards which provide clear standards about the food served in hubs. Children's dietary intake outside of the hub is also influenced by wider policies such as Sugar Tax, promotions of junk food and the inadequate social policies in place to support low-income families during the school holidays (Graham et al., 2016). These policies can influence parents' income and purchasing behaviours which in turn influences children's dietary intake at the individual level.

A limitation of the current study is that data on children's nutritional intake was collected on a weekday when they attended the hub versus a weekend day when they did not attend the hub. Previous research has suggested that there are differences in children's nutritional intake on a weekend compared to the weekday, with fat intake higher on the weekend and fruit and vegetable intake lower on the weekend (Cullen & Lara, 2002; Hart et al., 2011). However, these studies do not focus on the school holiday and results appear to be mixed, with evidence from Macdiarmid et al. (2009) finding no difference in daily, total or saturated fat intake between weekdays and weekend days during the school term or the holiday periods.

An overall limitation in the current study is that the collection of dietary data over one day only provides a snapshot of general consumption patterns, and that at least 2 consecutive days of intake has been recommended (Hoffmann et al., 2002). However, the researcher experienced significant difficulties in collecting data across the school holidays as children have sporadic attendance rates at the hubs. Not collecting data across a longer period of time, is a limitation, yet this study presents the most robust and reliable data (to date) on dietary consumption across the school holidays for disadvantaged children. This is the first study (known to date) that has focussed on the type and amount of food that children consumed across entire days during the

school summer holidays and at a holiday hub. Future studies should consider collecting dietary intake from parents, as previous research demonstrates that parents skip meals during the school holidays so that their children can eat (Kellogg's, 2015), which suggests that parents may be making nutritional sacrifices to ensure children's meals are sufficient.

CHAPTER 6: General Discussion

6.1 Introduction

This chapter will provide a succinct summary of the theoretical approach adopted throughout this thesis, an overview of the Kitchen Social programme, a summary of the aims and a discussion and synthesis of the key findings from each of the three studies included in this thesis. This chapter will conclude by discussing the implications of the research findings in terms of the limitations of the current studies, and the recommendations for future research and social policy.

6.2 Theoretical Approach

This thesis is presented within the socio-ecological model of health (SEM). This comprehensive approach acknowledges that multiple levels of influence impact our health behaviours. Those levels of influence include intrapersonal and interpersonal factors, community and organisational factors and public policies. Robson (2008) explains the levels of influence outlined in the socio-ecological model of health. To elaborate, individual characteristics that influence behaviours may include knowledge, attitudes, beliefs, and personality traits, whilst the interpersonal factors include family, friends, and peers. Community factors refer to social networks and norms which exist among individuals, groups, and organisations. Organisational factors include regulation and informal structures, which may constrain or promote certain behaviours. Finally, public policy includes the policies and laws that regulate or support healthy behaviours. Due to the complex nature of health challenges, it is important to consider the multiple factors which interplay and impact upon health behaviours (Robson, 2008).

Although other models (e.g., Bronfenbrenner's Ecological Model) were considered, after careful consideration I decided to interpret the findings of each study, and throughout this thesis, in relation to the socio-ecological model. This model provides a useful framework for achieving a better understanding of the multiple factors which interplay at the individual, interpersonal, community, organisational and public policy levels on the health-related impacts of a holiday programme. The Kitchen Social holiday programme aims to support the general mental and physical wellbeing of children and families. Therefore, this thesis focused on both children and parents' health, specifically the impact of Kitchen Social in relation to parent and children's wellbeing, children's diet and children's physical and sedentary activity levels. The aims of Kitchen Social and the findings of the studies in this thesis will be presented in relation to the socio-ecological model (see Figure 6.1).

6.3 The Kitchen Social Holiday Programme

The Kitchen Social holiday programme was launched in 2017 and initially operated across 24 out of the 32 London boroughs (Kitchen Social, 2021). Chapter 1 provided a detailed discussion about the Kitchen Social holiday programme and how it supports existing holiday provision sites (also referred to as hubs or clubs) who deliver free/low-cost activities to low-income families during the school holidays. Kitchen Social aims to tackle childhood and household food insecurity during the school holidays, alongside providing support for children's and parent's physical and mental well-being through a variety of services (e.g., debt advice, social networks) (Kitchen Social, 2016). As mentioned in Chapter 1, in addition to providing support directly to individual hubs, Kitchen Social facilitates a community of practice that enables the sharing of good practice across the Greater London Authority.

The majority of holiday programmes across the UK are generally similar in terms of their main objectives (i.e., providing free/low-cost food and activities for disadvantaged families) (Mann et al., 2021). Yet, holiday programmes may differ in terms of the implementation and operational models at the local level, with the greatest variance in the provision of food and activities. Therefore, each holiday programme may have slightly different aims and objectives and consequently vary in the delivery of health, educational and social activities. For an example, the "A Day Out, Not a Handout" summer holiday programme that was implemented across the North East aimed to address child food insecurity, emotional wellbeing and social isolation during the school holidays (Defeyter et al., 2018). In comparison, the "Food and Fun" holiday programme which was implemented across Wales aimed to prevent children going hungry, improve health and promote learning (McConnon et al., 2017). There may also be differences at the club/hub level in how programme aims, and objectives are delivered (Holley et al., 2019).

The Kitchen Social programme operates across London boroughs that have high levels of child poverty, high levels of crime, and high levels of household food insecurity, accompanied by increased food insecurity for children during the school holidays (Greater London Authority, 2019; London's Poverty Profile, 2020). London also has the highest percentages of ethnic minority groups in the UK who may be more vulnerable to poor health and increased risk of experiencing poverty (White, 2012). These are particularly important issues, and recent research has shown that the COVID-19 pandemic has disproportionately impacted the health of ethnic minority groups and those living in poverty, hence increasing existing health inequalities (Mathur et al., 2020). It is important to acknowledge individual differences in terms of health behaviours, especially in terms of cultural norms relating to food. Consequently, holiday programmes may differ according to multiple factors (i.e., the individual, interpersonal, community, organisational and policy contexts) in which they operate.

6.4 Collaborative PhD Thesis.

This thesis focused solely on the Kitchen Social holiday programme in London mainly because it was a collaboration between Kitchen Social and Northumbria University. The collaboration enabled the researcher to gain access to resources (e.g., networks, data etc.) that would not have been possible without such a collaboration (Tartari & Breschi, 2012). Kitchen Social supported this PhD through the provision of matched funding, provided by the University, and support in recruiting hubs and individuals to the programme of study and the sharing of management data. However, academic researchers have been concerned with the potential for collaborative research to reduce a researcher's autonomy (Tartari & Breschi, 2012). This includes conflicts of interest which refers to the risk of such collaborations affecting professional judgement in order to pursue secondary interests (i.e., the collaborative partners vested interests) which may increase the risk for potential bias when completing a collaborative PhD (Capps, 2016). Yet, having a collaborative relationship with industry does not mean that an individual is incapable of presenting impartial data (Capps, 2016).

Research studies have explored a number of methods to create successful collaborations between researchers and industry. Although Kitchen Social are a charity partner, rather than an industry partner, it was important to mitigate risk of potential bias. At the start of, and throughout, the research programme, the following steps were taken to reduce potential bias. Following Gaskill et al. (2003) advice on reducing bias and conflict that may be encountered in conducting a collaborative PhD, a number of early discussions were held that involved Kitchen Social staff and hub leaders and the research team. These discussions helped to identify the research questions and approaches that were deemed theoretically sound yet deliverable within communities. In addition, trusting relationships between the researcher and stakeholders at all levels are important for successful collaborative research. The investment of time to build rapport and trust was commenced prior to the collection of data and continued throughout the research process, as recommended by Gaskill et al. (2003). To create trusting relationships, the researcher built a rapport with the Kitchen Social staff and hub staff by regularly attending the Kitchen Social Forum meetings during which research studies were discussed with all organisations supported by, and lending support to, Kitchen Social. This co-production and sharing of expertise and knowledge is, in my opinion, a significant strength of this thesis.

6.5 Summary of the Objectives and Aims of this Thesis.

The main aims of this thesis were to research the efficacy of the "Kitchen Social" holiday programme in terms of its operational model, parents and child attendee's overall wellbeing, and child attendee's physical and sedentary activity levels, and dietary intake.

In Chapter 1 of this thesis, the literature review showed that there are very few published papers on the topic of holiday programmes that offer free/low-cost food and activities for disadvantaged children. The qualitative papers on this topic suggest that the school holidays pose many challenges, including financial, social and emotional challenges for children and parents (Campbell et al., 2015; Graham et al., 2016; Long et al., 2021; Mann et al., 2020; Stewart et al., 2018; Shinwell et al., 2021; Stretesky et al., 2020, a; Stretesky et al., 2020, b). Importantly, many families may be unable to afford the costs of providing food, childcare and enriching activities during the school holidays (Brazendale et al., 2017; Campbell et al., , 2015; Gill & Sharma, 2004; Holley & Mason, 2019). This could negatively impact upon children's health related behaviours including their diet and physical activity levels (Brazendale et al., 2017; Gill & Sharma, 2004; Mann et al., 2020). A report commissioned by the DfE reviewed a number of third sector reports which demonstrated numerous potential benefits of holiday programmes at the individual, interpersonal and community level (e.g., increased access to nutritional meals, enriching activities and forming new/ improving existing relationships, increased community networks); alongside potential challenges (e.g., low staff levels, low funding, reliance on volunteers, lack of staff training and planning time) involved in the operation of provision at the community, organisational and policy level (Evans, 2020).

The few published research studies focusing on the impact of holiday programmes upon service user wellbeing suggest that holiday programmes improve children's and parents' wellbeing (Long et al., 2021; Morgan et al., 2019, a; Stretesky et al., 2020). This is important because a recent study found that children who were unable to attend a holiday programme self-reported feeling lonely, having poor mental wellbeing and experiencing hunger during the school holidays (Morgan et al., 2019, b). Mental wellbeing is described in Chapter 1 as an individual's experience of their life as well as a comparison of life circumstances with social norms and values. An individual's subjective experiences includes their overall sense of wellbeing, life satisfaction and general happiness. Rather than just the absence of mental illness, mental wellbeing involves aspects of life circumstances which includes social relationships, health, education, work, surrounding environments and housing (World Health Organization, 2012). Therefore, holiday programmes are important as they may improve service user's mental wellbeing by providing opportunities to socialise, participate in physical activities and consume nutritious foods (Long et al., 2021; Morgan et al., 2019, a; Stretesky et al., 2020).

To address the current gaps in the literature on holiday programmes, this thesis focused on researching the operation and impact of Kitchen Social, which is one of the largest holiday programmes delivered in England (described in more detail on page 204), in relation to parent and children's wellbeing, children's physical and sedentary activity levels and children's dietary intake. The operational characteristics of a holiday programme refer to the types of

activities and food, and the length and number of hours the programme offers (Shinwell et al., 2021). The operational characteristics (i.e., opening days, times and weeks) of the hubs involved in this thesis are presented in Chapters 3, 4 and 5.

In order to address the overall aims and objectives of this thesis, a mixed methods research design was used. The mixed methods design involved a sequential approach which firstly focused on an initial qualitative study to establish the focus of two following quantitative studies. Hence, the first aim of Study 1 was to explore the views of children, parents, staff and senior stakeholders on the operation of the Kitchen Social holiday programme. This study provided in-depth data pertaining to the operation and delivery models of holiday hubs under the Kitchen Social Programme. An important first step, as little is known regarding the operation of a holiday programme since this is still a relatively new topic (Holley & Mason, 2019). The second aim of Study 1 was to explore participants views about the impact of holiday hubs on the wellbeing of service users. To explore the views of key stakeholders, both users (children and parents), deliverers (staff and volunteers) and senior stakeholders (Kitchen Social staff, funders and food charity organisations) were collected from across a range of settings (i.e., churches, schools and community centres) in a number of London boroughs.

The main objective of Study 1 was to explore stakeholders' views regarding the operation of holiday hubs and explore their views on whether holiday hubs had a positive impact upon service user wellbeing. The research questions of Study 1 include: Do senior stakeholders (i.e., programme co-ordinators, funders and food charity organisations) and do key stakeholders (children, parents and staff) have similar views on the operation of the Kitchen Social programme? Do all stakeholders view the Kitchen Social holiday programme as an effective intervention for improving service user's (parents and children's) wellbeing? To address these questions, Study 1 included Kitchen Social programme co-ordinators, funders and senior representatives from food charities, and staff, parents and children. Including a wide range of stakeholders was deemed critical as different stakeholders may have different experiences and views of the programme in terms of operational characteristics and perceived impact.

As previously mentioned, the socio-ecological model of health provides a useful framework for interpreting the multiple factors involved in each study of this thesis. The socioecological model of health identifies that there are various levels of influence which interplay and impact on health-related outcomes such as physical and mental wellbeing. The themes and sub-themes identified in Study 1 show that the Kitchen Social programme has a number of positive impacts upon parent and child wellbeing due to various factors of influence at the individual level (e.g., children's access to physical and creative activities, and nutritious food, and parental access to childcare and support services), at the interpersonal level (i.e., children's relationships with

peers and staff, and parents' relationships with other adults accessing the hubs), at the community level (e.g., a network of holiday hubs and support organisations), at the organisational level (e.g., the Kitchen Social programme supports hubs in terms of governance, quality assurance and service provision), and the policy level (e.g., policies regarding safeguarding, childcare, physical activity guidelines and School Food Standards). The literature review, along with the key findings from Study 1, suggest that children access healthy and nutritious foods, remain active and reduce sedentary behaviours when they attend the Kitchen Social holiday programme in comparison to when children do not attend. The findings from Study 1 informed the aims and objectives of the subsequent studies. Study 2 focused on establishing whether the Kitchen Social holiday programme influenced children's physical and sedentary activity levels and Study 3 investigated whether the holiday programme influenced children's dietary behaviours.

Firstly, Study 2 aimed to investigate the number and type of physical and sedentary activities, and the amount of time children spend participating in physical and sedentary activities, across 3 days during the school summer holidays compared to their usual activity levels across 3 days during the school term. Originally, the study design had also incorporated the gathering of data across 3 days during the school summer holidays while children were not attending holiday club. However, due to logistical problems, it was not possible to compare holiday hub days to non-holiday hub days during the school holidays as due to high demand, the hubs that participated in Study 2 operated Monday to Friday across the entire school holiday (see Table 4.5 for hub operating times). Therefore, it would only have been possible to gather weekend data of a non-attending day. This would have been problematic as prior research studies demonstrate that there are weekend versus weekday differences in children's activity levels, with children tending to be less physically active and spend more time in sedentary activity across the weekend versus weekdays (Kallio et al., 2020). However, despite this weakness in the design, it felt important to collect data across these two time contexts (school and holiday hub). To date, no prior studies, have viewed children's physical and sedentary activity levels during the school summer holidays when children access a holiday programme compared to the school term. This is important because prior studies have suggested physical activity levels during the summer holidays are typically lower than the school term (Mann et al., 2020), although time spent in physical activity at school during the school term has been found to be typically low (Daly-Smith et al., 2021). A study by Morgan et al. (2019) found children's physical activity levels increase on a holiday club attending day versus a non-attending day but did not consider sedentary behaviours; an important factor due to the negative impact of spending a long amount of time in sedentary activities on an individual's health (Chief Medical Officers, 2019).

A further aim of Study 2 was to investigate children's adherence to daily physical activity (PA) guidelines during the school summer holidays versus the school term. Little is known regarding children's adherence to daily PA guidelines according to school versus holiday programme attendance. This is important to investigate because schools are required to ensure children adhere to these guidelines by providing at least 30 minutes of physical activity during school time (Childhood Obesity Plan, 2016), yet prior studies suggest children's PA at school are typically low and physical activity lessons often result in children failing to meet the recommended guidelines (Bailey et al., 2012; Daly-Smith et al., 2021; Grao-Cruces et al., 2020; Mooses et al., 2017). Achieving daily physical activity guidelines can positively impact upon health (Chief Medical Officers, 2018), and the Kitchen Social programme recommends that hubs provide one hour of daily physical activity to help children achieve this.

The final aim of Study 2 was to compare children's energy expenditure during the summer holidays compared to the school term overall across 3 days. Energy expenditure refers to the number of calories expended from participating in activities. Children can expend more or less energy depending upon their age, weight and the activity type (Butte et al., 2018). This is important because it establishes whether the physical activities children participate in are health-enhancing and make a difference to physical health (Ainsworth et al., 2018). For example, participation in physical activities with a lower energy cost may result in children not expending enough energy compared to their energy intake which could result in weight gain. One of the few studies which investigated children's energy expenditure during the school term versus school holidays found no difference in energy expenditure (Zinkel et al., 2012). Although this study was carried out in USA, and to my knowledge, no studies to date have viewed children's energy expenditure during the school term versus the summer holidays when children attend a holiday programme in the UK.

To summarise, the overall objectives of Study 2 were to assess children's energy expenditure, adherence to daily physical activity guidelines and the number and time spent in physical and sedentary activities during the school summer holidays compared to the school term. The following research questions were addressed: Does children's participation in physical activities in terms of the number of physical activities, and time spent engaged in physical activities differ when attending the Kitchen Social programme versus school term time? Does the number of children meeting daily physical activity guidelines differ when attending the Kitchen Social programme versus school term time? Does the amount of energy children expend differ when attending the Kitchen Social programme versus school term time? Does children's participation in sedentary activities in terms of the number of sedentary activities, and time spent engaged in sedentary activities differ when attending the Kitchen Social programme versus school term time?

Finally, the objective of Study 3 was to examine whether holiday hub attendance influences children's diet quality, and adherence to School Food Standards compared to nonattendance. Study 3 of this thesis firstly aimed to investigate whether hub attendance influenced children's diet quality. Diet quality refers to scores or indices which are used to assess how well an individual's diet agrees with a predetermined ideal diet (Hodge & Bassett, 2016), in this case the UK Eatwell Guide (2018). A high diet quality is important because it can positively impact upon physical health (Dalwood et al., 2020). Therefore, to address the research question regarding whether children's dietary intake improved according to hub attendance, a new measure was developed to analyse the data collected in Study 3. Currently there is no validated diet quality index based upon the recommended dietary guidelines (the Eatwell Guide) for the UK population. The development of a diet quality measure is important as it enables researchers to compare dietary data to recommended dietary intake for individuals living in the UK. This measure will be useful for future studies in assessing children's overall diet quality across different contexts (e.g., school, home etc) and across time (the rationale for this is further discussed in Chapter 2). This novel diet quality index that was created as part of this programme of research was based upon a prior scale developed by Brownlee et al., (2019). However, Brownlee et al's study was conducted in Singapore, and the dietary guidelines in Singapore differ to the dietary guidelines for children in the UK. Prior research (e.g., Morgan et al., 2019) and the findings in Study 1 suggest that children's overall dietary intake improves due to holiday hub attendance. Yet, no known studies have gathered detailed dietary data to investigate children's diets across an entire day based on hub attendance. Therefore, considering the gaps in the literature and Study 1 findings, it was important to assess children's diet quality across an entire day.

Secondly, Study 3 also aimed to investigate whether children's food and drink intake met School Food Standards based on hub attendance. Comparing children's food/drink intake for lunch, which is the main meal provided to children at the holiday hubs, to the School Food Standards is important as the Kitchen Social programme recommends for hubs to adhere to these guidelines. Prior research studies suggest that an increasing number of holiday programmes are required to meet the School Food Standards (Stretesky et al., 2020), yet no research studies have researched whether children's dietary intake meets the School Food Standards, or whether hubs provide meals which adhere to these standards. This study addressed the following research questions; (1) Does children's overall diet quality differ according to hub attendance? (2) Does children's lunch time meal adhere to School Food Standards according to hub attendance?

6.6 Summary of the Findings of this Thesis.

6.6.1 Discussion of Study 1.

Thematic analysis was used to analyse the data collected in Study 1, allowing the researcher to identify the themes across data sets (Braun & Clarke, 2006; 2013). An inductive approach to thematic analysis was used as the researcher intended to gain a more enriched understanding of the Kitchen Social holiday programme, since this is still a relatively new topic being researched. Each stakeholder group was viewed separately to ensure their views were sufficiently represented in the study, and to enable the researcher to compare across groups.

Firstly, as discussed in Chapter 1, the findings from the children's focus groups, lend support to the limited number of published papers that have collected data on children's views of attending a holiday programme (Graham et al., 2016; Morgan et al., 2019; Shinwell et al., 2021; Stretesky et al., 2020). These findings suggest that at the individual level, children benefit from attending the Kitchen Social holiday programme as they are provided with opportunities to socialise, access a safe environment, access physical and entertaining activities, and that attending the programme has an overall positive influence on their wellbeing. Children reported that they were served a wide variety of nutritious foods at the holiday hubs and this supported good dietary behaviours. Children also recognised the importance of the hubs in providing support for their parents during the school holidays. Children were aware that by attending the hub, their parents had free time for completing tasks they may have struggled to do with their children present (e.g., going to work), which supports the findings from a prior qualitative study which investigated children's views of holiday clubs/hubs (Shinwell et al., 2021). Children also identified that their parents receive support from the holiday hubs through the provision of free/low-cost food and activities. Yet, children also recognised a number of improvements that could be made to the operation of the holiday hub they attend. At the community level, children suggested that hubs could increase the choice of activities on offer, hubs could provide a larger space for attendees to eat their lunch or alternatively hubs could limit the number of children attending each hub.

The parental interviews found that parents considered the free/low-cost childcare provided by hubs to be of significant benefit. This finding was unsurprising as prior research has shown that there is a lack of available and affordable childcare in the UK (e.g., Cottell et al., 2019). Parents also reported a number of other benefits of holiday hubs at both the individual and interpersonal level. Parents report their children benefit from attending the holiday hub as they gain new experiences, learn new skills, participate in enriching and physical activities and have the opportunity to socialise. Parents also report some hubs allow parents to attend and participate in the activities alongside their children which has allowed some parents to learn new skills and socialise. These benefits which parents and children gain from attending the

holiday hub have a positive impact upon their wellbeing (Graham et al., 2016; Holley & Mason, 2019; Long et al., 2021; Stretesky et al., 2020). Parents also discussed the importance of hubs providing their children with a safe place to play, a theme also identified by children in Study 1; and prior studies (Graham et al., 2016; Shinwell et al., 2021; Stretesky et al., 2020). Having a safe place for children to play was important for many parents because they were concerned of the knife crime and gangs prevalent throughout London. This may be more relevant to a London context, due to the high rates of knife crime in London (as discussed in Chapter 1 and page 18).

At the individual level, parents also refer to the increase in financial strain that they experience during the school holidays and how holiday hubs helped to alleviate this strain through the provision of free/low-cost food and activities for their children. Particularly when discussing the food their children receive at the holiday hubs, parents spoke positively about the nutritious food provided at hubs. Parents discussed how this food provision helped to alleviate household finances and household food insecurity. At the community level, parents discussed the accessibility of the holiday hub locations. Parents stated that the holiday hubs are either close to where attendees live or close to transport links for those who do not reside in the area. Parents also discussed the various marketing methods that the holiday hubs use to inform parents/carers and children about the programme, including word of mouth, and leaflets provided at community centres and schools. Parents stated they prefer to be informed via word of mouth because this method is more personal. Parents also suggested increasing the number of holiday hubs available across London at the organisational level as this would allow more children to attend whose parents are also struggling financially and emotionally during the school holidays. Yet, they also recognise this is dependent upon funding.

The findings from the staff interviews also demonstrate that staff recognise the scale of the need for holiday hubs across London boroughs and staff reported that recently this need has increased, accompanied by an increase in uptake. At an individual level, the staff discussed their views regarding the positive impacts of the holiday hubs in terms of reducing parental expenditure during the school holidays. To illustrate, the staff discussed that parents appear to spend less money on food, activities and childcare for their children as they can access this for free/at a low-cost when their children attend the Kitchen Social programme. Staff also identified a number of benefits of the Kitchen Social holiday programme for children that included access to healthy foods at the hubs, improved eating behaviour at home, engagement in 'new' experiences, learning cooking skills, increased social interactions, and an increase in physical activity. These findings add to and lend further support to prior studies (Graham et al., 2016; Holley et al., 2019; Morgan et al., 2019; Shinwell et al., 2021; Stretesky et al., 2020). Mirroring the findings from children's focus groups and parents' interviews, staff also

discussed how the hubs provide a safe environment for children to play and socialise during the school holidays.

Regarding the operational factors of holiday hubs, at the community level, staff view the hubs as being convenient, accessible and providing a quality experience, within a semi-structured environment, for families in the local community. The holiday hubs are embedded and supported by community members who volunteer their time at the hubs, and other organisations (e.g., FareShare), who donate surplus food. At the organisational level, the Kitchen Social programme works in partnership with a number of existing community organisations. Therefore, the staff view their relationships with the children and parents within their community as an important factor in the successful operation of the programme. For example, hub workers who live within a community have an enhanced relationship with the children and families from the same community, who access the hub as they have often already formed a relationship with them outside of the hub. At the organisational level, the hub staff also appreciate the assistance from the Kitchen Social staff. This is viewed as being essential, as the Kitchen Social staff provide the hub staff with additional funding for activity materials, additional opportunities such as links to food charity organisations and additional support such as answering any other enquiries (staff 3: “*and she's always there if you need anything*”).

It is also important to note, the hub staff identify that each hub differs in terms of community assets and need, hence each hub differs at the community level across a number of operational factors. For example, individual hubs have different delivery times/days, different types of food and activities offered, and staff voice that ‘one size does not fit all’. At a community level, hubs may also be able to access different resources depending upon the assets of their community. For example, staff mention access to sports facilities from partnerships within their community that allow hubs to host a range of physical activities. Similarly, hubs often rely on community members to volunteer their time to support the hub staff. Therefore, each hub site may slightly differ in terms of the needs, assets and services offered to service users. This flexibility in local delivery is seen as essential in meeting the needs of individuals within the local community.

Senior stakeholders also thought that the holiday programme was beneficial at the individual level by improving children and parents’ overall wellbeing through positive experiences, free/low-cost food, childcare, entertainment, learning and social opportunities and the provision of a safe and accessible environment during the school holidays. Senior stakeholders discussed a number of organisational factors including essential resources and support that Kitchen Social and other key organisations (e.g., FareShare and The Felix Project) provide to hubs. However, despite the Kitchen Social programme offering training for staff at individual hubs, senior stakeholders identified that this training needs to be further improved. They suggested that

Kitchen Social could provide tailored training on healthy eating and cooking skills for staff and volunteers. This would ensure staff are confident in portraying the ‘correct’ nutritional messages to service users and to ensure such messaging reaches parents in order to extend and embed the reach of the Kitchen Social programme into the home environment. The reach of the programme also needs to improve at the organisational level through increasing the number of hubs operating across London. Senior stakeholders also recognise that hubs, in their current format, are not sustainable. At the policy level, hubs require additional and long-term funding to ensure the delivery of a consistent, long-term, high quality holiday programme.

Despite the operational differences across the hubs in the Kitchen Social programme, data analysis also showed a number of key themes. To summarise, the key similarities and differences amongst the findings from each stakeholder group will be highlighted. Senior stakeholder themes discussed the need for the Kitchen Social programme due to high poverty rates and holiday hunger in London, whereas the other stakeholder groups gave little acknowledgement to these wider issues across London. Staff and senior stakeholders were the only stakeholder groups that identified factors at the community and organisational levels in terms of effective programme delivery. They referred to community assets (e.g., sourcing sports halls to support physical activity provision) and benefits from their involvement in Kitchen Social (e.g., resources, funding and support). Staff and senior stakeholders were the only stakeholder groups who identified the importance of hubs in preventing children displaying anti-social behaviour at the individual level and experiencing knife or gang related crimes in London at the community level though providing a safe space. The staff themes specifically focused on the interpersonal level of the importance of their relationships with the children and families to ensure they have a positive experience at the hub. Children were the only group to comment on the interpersonal level of other children misbehaving at the hub and having a negative impact on their experience at the individual level when these children were not managed appropriately by staff. Children also focused on the importance of increasing the range of activities on offer, and increasing the range of food choices, whereas parents, staff and senior stakeholders recognised that the Kitchen Social programme should be expanded at an organisational level to reach a wider audience.

Despite some differences, there were considerable similarities across each stakeholder group. All stakeholder groups identified the importance of the hubs at the individual level for helping to alleviate children’s boredom, providing children with the opportunity to learn, be physically active, socialise, be creative and consume nutritious foods. All stakeholder groups also identified the importance of a safe environment at the community level. This allows children and young people to socialise safely and parents to access affordable physical activities, nutritious foods and childcare at the individual level. Yet, stakeholders also emphasised the

importance of ensuring the Kitchen Social holiday programme is open access at both an organisational and community level. Each stakeholder group identified the importance of hubs for children's and parents' wellbeing.

6.6.2 Discussion of Study 2.

In Study 2, data on children's physical and sedentary activities were collected using the Youth Physical Activity Questionnaire (YPAQ). This tool was selected as it has been shown to have good validity and reliability and it is a suitable tool for use during the school holidays and the school term (Brooke et al., 2014; Corder et al., 2009; Helmerhorst et al., 2012; Klitsie et al., 2013; McCorie et al., 2017). The Youth Compendium of Physical Activities was also used to categorise data for the analysis to determine the amount of energy children expended during the school holidays versus school term (details on the data scoring are provided in Chapter 4). Study 2 found that children participated in a greater number of physical activities and for a longer amount of time during the school summer holidays compared to during the school term. This finding supports Grao-Cruces et al. (2020), who carried out a systematic review focusing on children's physical activity at school and found that children spent little time in physical activity. On the other hand, the findings from Study 2 contradict a prior research study which demonstrated that children's physical activity levels during the school summer holidays are typically low (Mann et al., 2020). Yet, Mann et al. (2020) study does not consider children's physical activity levels during the school holidays when they attend a holiday hub. At the organisational level, the findings from Study 2 suggest that access to the Kitchen Social holiday programme enables children to increase their physical activity level at the individual level compared to their usual activity patterns during the school term.

Despite spending an increased amount of time participating in physical activities at holiday hub compared to school, there was no significant difference in the number of children adhering to physical activity guidelines. In addition to this, there was also no significant difference in the amount of energy children expended during the school summer holidays versus the school term. Children expended additional energy through participation in other activities during the school term and therefore the additional time that children spent in physical activities made no difference to the number of calories they burnt. Studies in USA suggest that children's low levels of physical activity during the school summer holidays put children at risk of weight gain and have an adverse impact upon their health and wellbeing (Brazendale et al., 2017). Yet, Study 2 demonstrated that children expend the same amount of energy during the school summer holidays as the school term when they attend a holiday hub. A prior research study also suggests that children's activity levels during the school summer holidays without hub access are lower (Morgan et al., 2019). This suggests that hubs may help to prevent children

from gaining weight and promote positive healthy behaviours during the school summer holidays.

The same children were tested in both contexts, although different factors may influence children's participation in physical and sedentary activities at the individual level. Studies in Chapter 1 found that at the interpersonal level, parents influence children's activity levels. Children are more likely to spend time physically active if their parents support and encourage them to do so (Wilk et al., 2018). Likewise, the findings from Study 1 suggest that at the community and organisational level, the neighbourhood in which children live may influence an individual's engagement by the availability of affordable and safe spaces to take part in physical activities (Brockman, et al., 2009; Eyre et al., 2014).

Study 2 found that children spent less time participating in sedentary activities during the school summer holidays compared to during the school term. This may be explained at the organisational level by the increased time children are required to spend in classroom-based activities at school during the school term. Classroom based activities are recognised as being problematic in supporting children to be physically active, due to the sedentary nature of lessons (Daly-Smith et al., 2021; Grao-Cruces et al., 2020; Martin, & Murtagh, 2015; Mooses et al., 2017; Taylor et al., 2017). An increasing number of research studies have therefore focused on helping policymakers to recognise the benefits of engaging children in physically active lessons to increase physical activity and reduce sedentary time (Daly-Smith et al., 2018; Norris et al., 2020).

6.6.3 Discussion of Study 3.

The rationale, objectives and aims for Study 3 are further discussed in Chapter 5. Briefly, to collect dietary data for Study 3, children's retrospective recall of the food and drink they consumed during the prior 26-28 hours was collected. The Young Persons Food Atlas was used alongside the 26-28 hour recall method to gather children's portion size estimates. These methods used in Study 3 to collect dietary data were advantageous as they allowed the researcher to gather more detailed dietary data compared to other studies which have focused on the food/drink children consume at holiday hubs/clubs (e.g., Defeyter et al., 2018). To assess the food/drink children consumed across an entire day, data were analysed according to the UK Eatwell Guidelines and the School Food Standards. A novel diet quality index was developed to analyse children's dietary data according to the Eatwell Guidelines. Another novel scoring system was also created to analyse data at lunch time according to the School Food Standards because the Kitchen Social programme recommends for individual hubs to adhere to these standards. The novel diet quality index according to the UK Eatwell Guidelines is beneficial because these guidelines are recommended in the UK to help individuals to follow

a healthy diet. Therefore, this measure will also be useful for other researchers to assess whether an individual follows a healthy diet. In addition to this, assessing the food/drink children consumed at lunch time according to the School Food Standards was important because this is the meal provided by the hubs.

The results showed that on an attending hub day, children had a significantly higher diet quality score compared to a non-attending hub day. This shows that children were significantly less likely to meet the UK Eatwell Guidelines during the school summer holidays when they did not attend the Kitchen Social holiday programme. This finding from Study 3 suggests that, at an organisational level, the provision of nutritious food at hubs enables child attendees to consume a healthier diet at the individual level on attending hub days. When the data were analysed according to each individual diet quality group included in the overall diet quality index, the findings demonstrated that children were less likely to meet the Eatwell Guidelines for fat, saturated fat and carbohydrate intake on a nonattending versus an attending hub day. Therefore, Study 3 findings lend support to prior studies (that found that children consume a larger quantity of healthy foods on a day they attend the holiday programme (Defeyter et al., 2019)). The findings from Study 3 show that children's adherence to dairy recommendations improved on a non-attending hub day compared to an attending hub day. Yet, on both days, the median scores suggested that children's dairy intake were low. However, as no prior research studies has investigated children's dairy consumption when they attend a holiday hub or during the school summer holidays, there is no comparative research. Regardless, the low consumption of dairy products is concerning as dairy products have been found to be beneficial in terms of protecting against the most prevalent chronic diseases such as type 2 diabetes and metabolic syndrome (Gil & Ortega, 2019; Mäkinen et al., 2016).

Nevertheless, there may be different methods and strategies that hubs could use to improve dairy intake. For instance, hubs could work with trained dietitians to plan menus to address children's low dairy intake. At the community level, hubs could create an environment where the consumption of dairy foods with meals or as a snack is a regular practice as this has been found to be effective for increasing uptake (Hendrie et al., 2012). The observations in Study 3 demonstrate that only some hubs offer children breakfast alongside lunch at the hubs. Additionally, no hubs offered children milk throughout the day. Therefore, offering milk throughout the day and breakfast, specifically cereal with milk and yoghurts may be a good method to increase children's dairy intake.

The results of Study 3 found there were no significant differences according to hub attendance for the following diet quality categories: free sugar, water, processed meat, protein, fibre, sodium and fruit and vegetable intake. This suggests that holiday hubs have no significant

influence in terms of these nutrient's children consume. The findings in Study 3 do not support a prior research study which found that children report reduced consumption of sugary snacks and drinks on attending hub days compared to non-attending days (Morgan et al., 2019). The findings in Study 3 showed no difference in children's fruit and vegetable intake according to hub attendance. These findings also fail to replicate Morgan et al's (2019) finding that children report consuming more fruit and vegetables on an attending compared to a non-attending hub day. However, Morgan et al. (2019) study findings were based on children's interpretation of whether they consumed "more" fruit, vegetables and sugary foods/drinks, rather than gathering information on the actual foods/drink's children consumed. Similarly, the findings in Study 3 showed no difference in children's water intake according to hub attendance. Thus, failing to replicate prior findings from an evaluation of a holiday programme in the North East which found that children consume more water on an attending versus a non-attending hub day (Defeyter et al., 2018).

Therefore, to date, the research findings on children's food/drink intake at the hubs are rather mixed. Despite these null findings, children's overall diet quality scores and individual diet quality scores for fat, saturated fat and carbohydrate intake improved based on hub attendance suggesting that holiday hub attendance has a positive impact upon children's dietary intake. In addition to researching overall daily dietary intake, data for the lunchtime meal were analysed separately. The analysis showed that children were closer to meeting the School Food Standards for their lunch-time meal on an attending versus a non-attending hub day. Therefore, children's dietary intake at the individual level is influenced by the policy level of the SFS and the organisational level of Kitchen Social recommending hubs to meet these standards. However, observations of the food/drink provided at each hub involved in Study 3 showed the hubs did not fully comply with the School Food Standards. Therefore, hub staff could be provided with additional training to ensure that the food they provide fully complies to SFS. The findings from staff interviews in Study 1 also revealed that at the community level there are unhealthy food shops close to the hub that children occasionally accessed at lunch time on an attending hub day. Nevertheless, despite the food the hubs provide and the food that children consume at the hubs at lunch time not fully adhering to the SFS, they are closer to meeting these standards on an attending hub day, which suggests the holiday hubs are positively impacting upon their dietary intake.

6.6.4 Summary of the Findings in Relation to the Socio-ecological Model of Health.

The socio-ecological model of health provides a good framework to account for and explain the findings in each study in this thesis. See Figure 6.1 below for the socio-ecological model of health according to the Kitchen Social holiday programme.

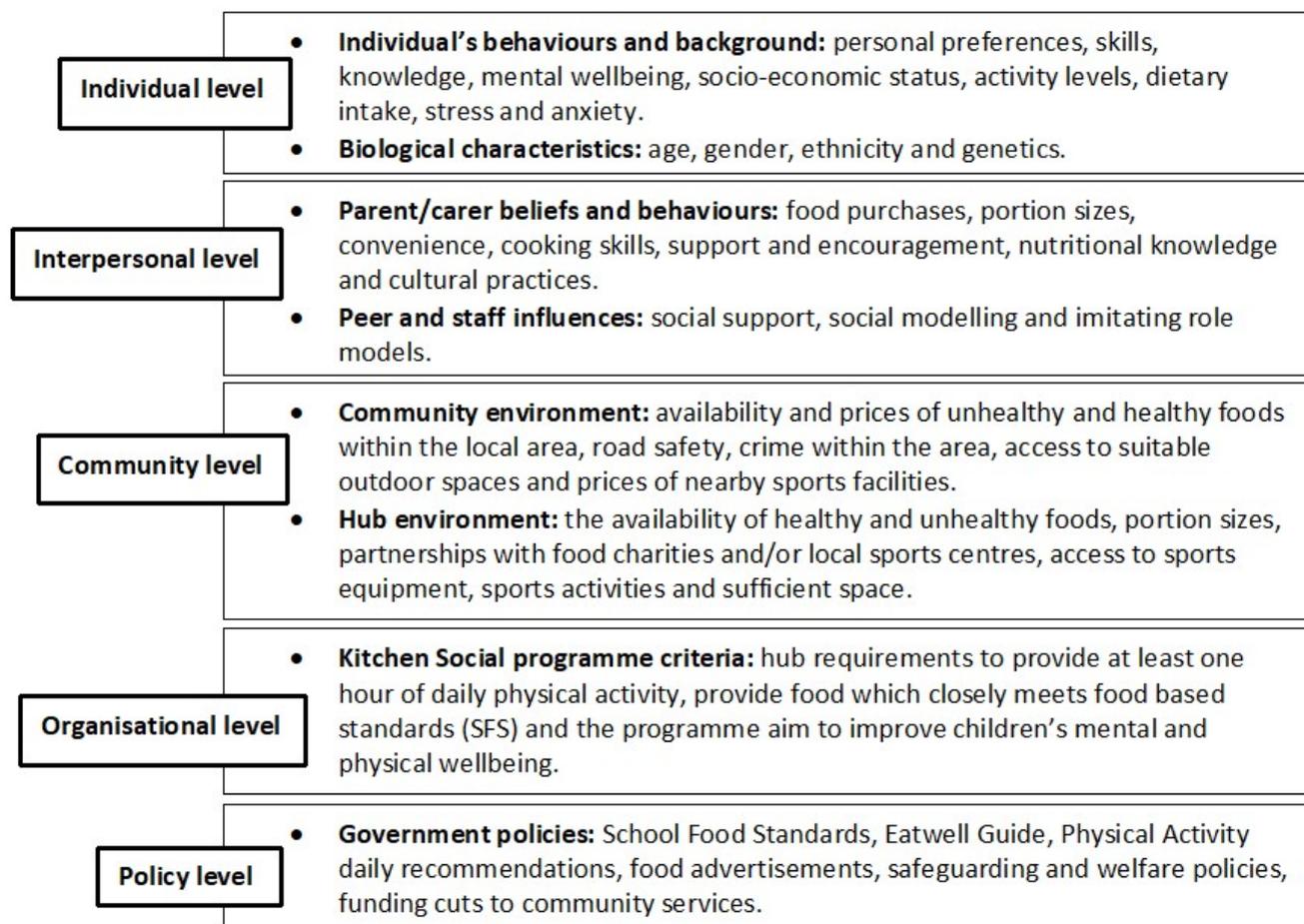


Figure 6.1. Socio-ecological model of health based on the Kitchen Social programme aims and findings of this thesis.

The socio-ecological model of health suggests that different factors influence the wellbeing of service users which are identified in Study 1. To illustrate, at an individual level, children's engagement in a range of enjoyable activities (including physical, creative and educational activities) and the provision of nutritious food influences their physical and mental wellbeing. Likewise, at the individual level for parents, holiday hubs ease the financial pressures through the provision of free or low-cost childcare and food, resulting in improved parental mental wellbeing. At the interpersonal level, children's and parent's relationships with peers and staff at the hub are important and positively impact their mental wellbeing by providing social support. At the community level, there are community networks which are involved in Kitchen Social including support from volunteers, staff and other organisations that provide food and activities. This brings communities together creating strong community spirit and resilience. This in turn leads to positive impacts upon children and parent's wellbeing at the individual level by giving them increased access to resources (i.e., food and activities) and social support. At the organisational level, Kitchen Social requires the individual hubs in their holiday programme to meet certain criteria. This involves providing free/low-cost nutritious foods and

activities, including at least 1 hour of daily physical activity. To ensure that the hubs are safe, providing physical activities and nutritious foods, the Kitchen Social programme is influenced by welfare policies, safeguarding policies, physical activity guidelines and School Food Standards at the policy level. Having a safe environment, physical activities and nutritious foods to access for free/low-cost in turn positively influences parents and children at the individual level.

In relation to the socio-ecological model, Study 2 shows that multiple levels of influence can impact upon children's physical and sedentary behaviours at the individual level including the wider range of physical activities offered at the hubs. At an interpersonal level, children's physical and sedentary behaviours may be influenced by holiday hub staff and peers attending the hub and their parents. For example, staffs interpersonal influence on children's physical and sedentary behaviours at an individual level may depend upon whether staff have the necessary skills and experience to host a range of enjoyable physical activities for children to participate in. At the community level, factors including access to a sufficient space and training to enable staff to provide various physically active opportunities to children can influence children's behaviours at an individual level. At an organisational level, Kitchen Social provides funding and support to allow holiday hubs to provide a range of physical activities for child attendees to access which in turn can influence children's behaviours at the individual level. Hub staff may also be influenced to motivate children to be physical activity at the organisational level as the Kitchen Social programme recommends for hubs to provide at least one hour of physical activity per day. The Kitchen Social programme may be influenced by the existence of daily physical activity guidelines at the policy level to help children adhere to these guidelines. The socio-ecological model of health provides a good model to interpret the results of Study

Children's dietary habits and behaviours are influenced by the range of nutritious foods/drinks they can access. Children's individual level of their dietary intake may be influenced by both staff and peers at the interpersonal level through social modelling. Children may view the foods other children consume and imitate this behaviour. Outside of the hub environment, children's dietary intake at the individual level may be impacted by the interpersonal level of their parent's food purchases and cooking skills at home. At the community level, influences on children's diets include access to food in the community and at the hub. Hub relationships with food organisations, where they are able to leverage additional nutritional food resources within the community, may enable hubs to have access to a wider range of nutritious, culturally appropriate foods. However, outside of the hub, children may have increased access to unhealthy foods and decreased access to unhealthy foods due to many low-income communities residing in food deserts or food swamps. At the organisational level, Kitchen Social funding may enable hubs to afford nutritional foods which may impact children's dietary

intake at the individual level. Children's dietary intake at the individual level is also influenced by policies. The School Food Standards influences the food that hubs are able to serve, as the Kitchen Social programme recommends hubs to provide food that adheres to these nutritional standards. The existence of government policy including poor welfare support, low pay and zero-hour contracts may prevent families in being able to afford nutritious food at the interpersonal level. In turn, this can negatively impact upon children's diets at the individual level when they do not attend the hub. The findings from Study 3 show that hubs clearly have a positive impact upon children's overall dietary intake.

6.7 Limitations and Future Research

Despite this thesis providing a significant, novel contribution to knowledge regarding the operation of the Kitchen Social Holiday Programme, and the influence and associations between holiday hub attendance and specific outcomes, the studies in this thesis are not without their limitations.

This thesis used a non-probability sampling strategy, as it was not ethically plausible to randomly assign children to attend the holiday programme, or not, throughout the school holidays. The fact that children were not randomly allocated to an intervention and control condition may have led to self-selection bias. Hence the findings may be the result of some unknown factor (s). Although selection bias could not be overcome in this thesis, the researcher attempted to minimize the potential effects of selection bias by gathering a representative sample of the population being studied. However, despite the researcher's efforts, due to recruitment issues in Study 2, the researcher was unable to gather a representative study sample in this study. Study 2 provided a new and valuable insight into the influence of a holiday programme on children's physical and sedentary activity levels, yet this study solely focused on secondary school aged children. Unfortunately, despite multiple attempts to recruit primary school aged children the researcher was unable to obtain a large enough sample of primary school children to conduct any meaningful statistical analysis. In addition, the researcher was unable to obtain a control group of children for Study 2. Even though, a repeated measures design was used to compare children's activity levels when they attended a holiday hub versus school term time and to minimise individual differences, the fact that children self-selected to attend holiday hubs is still problematic. An experimental design incorporating an untreated control group, in which children were randomly allocated to condition, would have allowed the researcher to compare data across two conditions and across school versus school holiday. This would have enabled the research to determine cause and effect of the intervention. However, the use of quasi-experimental designs is quite common in researching real-world interventions (Chesham et al., 2018; Leatherdale, 2019).

Following a recent decision by the Department for Education (DfE) to provide £220M of funding to all 151 Higher Tier Local Authorities in England to deliver a Holiday Activities and Food programme to disadvantaged children in receipt of free school meals (Department for Education, 2020, a), there are now opportunities to conduct large scale studies. Such research will be able to identify different models of delivery and to compare the effects of different models on a range of health and educational outcomes. In addition, future studies could explore how national policy is implemented at the local level through the use of Normalisation Process Theory (Mackenzie et al., 2018). This theory has been used nationally and internationally to address the factors needed for successful implementation of complex interventions (Murray et al., 2010), and it has been used to inform policymakers in Scotland on the implementation of universal free school meals (Chambers et al., 2020).

Study 1 of this thesis also identifies not just the importance of the food and physical activities, but also the learning opportunities children are provided with. However, these activities are not necessarily solely focused on academic learning. For example, stakeholders identified both children and parents learn new skills at the holiday hubs, such as cooking and nutritional knowledge. This suggests that families gain knowledge and learn new skills, that may have a long-term, positive impact upon these families. Future research could investigate this further by focusing solely on the learning element at hubs and establish specifically what skills children/parents gain and how/if these skills are used and whether new learning drives behaviour change.

Study 1 also identified the social environment which both children and parents experience at the holiday hubs, which lends support to the findings of previous studies (Graham et al., 2016; Long et al, 2021; Stretesky et al., 2020). Importantly, the findings from Study 1 suggest that the holiday hubs reduced social isolation for families and provided them with a place to go to meet new people and meet up with existing friends within the community. This is clearly an important contributory factor, amongst others, to improving wellbeing during the school holidays (Long et al., 2021). Yet, no studies have measured whether there is an association between socialisation at holiday hubs/clubs and children's wellbeing. Therefore, future research could focus on what elements (socialisation, food provision etc.) of holiday hub programmes are associated with children's wellbeing.

6.8 Policy Implications

Holiday programmes have been increasing in recent years (Mann et al., 2017) and significant government funding for free holiday programmes for low-income children has recently been provided in Wales, Scotland and England (Department for Education, 2020, a; Mackley & Long, 2018). To elaborate, in November 2020, the DfE agreed to provide up to £220 million

for local authorities across England to provide a free holiday programme in 2021 (Department for Education, 2020, a). Local authorities had the option of either coordinating the holiday programme themselves or working with other organisations to coordinate the holiday programme on their behalf. The Holiday Activity and Food (HAF) programme aims to provide healthy food and enriching activities for children in every local authority in England. Therefore, the study findings in this thesis are beneficial as they provide a well-timed insight into a holiday programme for those implementing and delivering the government-funded holiday programme across England. This section will discuss the policy implications based on the data collected across the three studies in this thesis and will be discussed in further detail in this section.

The findings of this thesis show the importance of providing adequate training to holiday hub staff. Study 1 identified that Kitchen Social provides hub staff with training and handbooks on delivering holiday provision, managing volunteers and cooking meals which adhere to SFS. Yet, further practical training and information could support hub staff in ensuring they are better equipped to hire and train staff sufficiently to deliver high quality provision. Clearly, the training needs of hubs are complex and local authorities should monitor this to ensure they are receiving the support required to achieve the programme outcomes.

The findings of this thesis also show the importance of providing the necessary support and resources for a holiday programme to successfully operate. At the organisational level, Kitchen Social provide funding for food, cooking equipment and activity materials as well as general support to hub staff (quote from staff 3: *“and she's always there if you need anything”*). Kitchen Social also provide additional opportunities for resources by putting hubs in contact with food charities to leverage free food and other organisations to leverage additional resources, which is also encouraged by the Department for Education in their Holiday Activities and Food programme (Department for Education, 2020, a). For example, senior stakeholders discussed restaurant chefs who provided their skills and time volunteering at hubs. At the community level, Study 1 shows the need for local flexibility at the club level to meet the needs of each community across London. This is based on community assets and dependent upon the resources the hub can access. Some hubs may have access to facilities such as a kitchen to cook the food and a sports hall for activities whereas some hubs may rely upon external support. For example, one staff member referred to a sports centre nearby allowing them to access their facilities. Ensuring hubs have access to sufficient resources and support is important because this helps hubs to deliver healthy food and enriching, physical activities to meet the Kitchen Programme aims (stated on page 204). Local authorities should adopt an asset-based approach to the Holiday Food and Activities programme across England to ensure

this programme is embedded within communities by supporting local charities and organisations already working in these communities.

The government is requesting for local authorities to ensure the holiday programme is available for all children eligible for free school meals in the area. Yet, children who are not eligible for free school meals are required to pay to attend the holiday programme. However, data collected in this thesis and research presented in the literature review (e.g., see Stretesky et al., 2020) suggests that open access provision prevents the stigmatisation of holiday programmes.

Therefore, if holiday hubs/clubs focus solely on children in receipt of free school meals, this could prevent children from accessing this service. More importantly, Study 1 in this thesis and the literature review also suggests that it is not necessarily just children who receive free school meal provision who need extra support during the school holidays due to the impacts of paying the extra costs of childcare and activity provision (Machin, 2016). There are families who are just above the threshold of being eligible for free school meals, who are equally at risk of holiday hunger during the school holidays, which can cause parental stress and reduce wellbeing (Stretesky et al., 2020). Local authorities should offer the free holiday programme as an open-access offer, situated mainly in areas of deprivation which will increase the likelihood of low-income families attending, while reducing the likelihood of stigmatising these hubs/clubs (Stretesky et al., 2020).

The literature reviewed in Chapter 1 (e.g., see Jenkins et al., 2021, and Reeves & Loopstra, 2020) discussed how the current social security system and low wage economy is not fit for purpose. A decline in the welfare state, and low minimum wage, has been accompanied by an increase in the number of food aid charities such as food banks, holiday clubs/hubs, and free school meal vouchers to replace the inadequate support the state is providing low-income families. Holiday hubs/clubs started out as a means of addressing holiday hunger, yet they quickly evolved at grass root level to address health and wellbeing (Stretesky et al., 2020). However, providing a holiday programme as a means of reducing holiday hunger removes the focus from addressing the structural causes of holiday hunger. Free foods/drinks should not replace the ability for families to be able to purchase their own foods/drinks. Allowing families access to the monetary resources to purchase their own foods/drinks provides them with free will, choice and control over the food/drinks they consume. Therefore, these hubs should not be viewed as a long-term solution for holiday hunger by the government. Instead, the offer of a free holiday programme should be viewed in terms of the potential these sites have to increase children's activity levels and improve nutritional intake during the school summer holidays, which is a period of time which typically involves poor nutritional intake, low physical activity and high sedentary behaviours for children (Brazendale et al., 2017; Mann et al., 2020).

6.9 Conclusion

The school holidays, specifically the school summer holidays, provide numerous challenges for low-income parents, as they are required to replace the Free School Meal provision that their children can access during the school term (Gill & Sharma, 2004). Yet, even low-income parents who are not in receipt of Free School Meal provision may struggle during the school holidays as they are required to provide childcare and enriching activities for their children (Machin, 2016). This presents financial challenges for families due to the high costs of childcare and activity provision (Cottell et al., 2019; Gill & Sharma, 2004).

The findings in this thesis suggest that the hubs offer numerous benefits to children and families during the school holidays by providing socialisation, physical and creative activities, a safe environment, low-cost/free childcare and nutritious food which in turn can positively impact upon the wellbeing of children and parents. The Kitchen Social programme provides important support and resources (i.e., providing funding and links to food charity organisation for hubs to leverage free food and training) for individual hubs to operate, yet each hub operates flexibly to meet the needs of their community (i.e., flexible offer of the types of food, activities and community assets such as access to cooking facilities on site and sports facilities). Hubs appear to support children's participation in physical activity, although without an appropriate control group, this finding relies upon prior research to support this claim (Morgan et al., 2019). Children's diet quality improved based on hub attendance during the school holidays as they adhered more closely to the UK Eatwell Guidelines across the entire day and the School Food Standards for the lunch meal on an attending hub day versus a non-attending day. Yet hubs could still improve their food/drink offer as children did not meet the UK Eatwell Guidelines for some groups included in the diet quality scoring, including fruit and vegetable intake. Additionally, no hubs provided lunch time meals which fully adhered to the School Food Standards. This suggests that the hubs require further support to provide nutritional meals to children, as reported by senior stakeholders in Study 1.

Finally, the government announcement that the DfE has invested £220M of funding into the Holiday Food and Activities to all 151 local authorities across England means that holiday hub/club sites can be increased to reach more low-income families. This will provide holiday hubs with sustainability through secure funding for 2021, yet there is still uncertainty as to whether the government will continue to fund this in following years, and this will not solve the underlying causes of holiday hunger which holiday programmes aim to address.

APPENDICES

Appendix Ai: Information for Delivery Partners for Study 1

Project Title: An Evaluation of 'Kitchen Social' in Terms of the Health and Wellbeing Impacts on individuals and communities.

Researcher: Eilish Crilley (eilish2.crilley@northumbria.ac.uk)

What is this project all about?

During the summer holidays, parents whose children normally have a free school meal during term have to provide additional meals for their children, as a result, this leaves families with less money. Holiday hubs have been set up to support children and families during this period, although little research has been done to find out the impacts and effective practice of running a holiday hub. Research has suggested that holiday hubs may allow children to remain active and engaged within their communities throughout the summer holidays as children's physical activity has been found to decrease during the summer holidays without any provision (Graham et al, 2016; McConnon et al, 2017). The two aims of this study are to a) measure children's physical activity at holiday hub and b) investigate senior stakeholders and key stakeholders; children's, parents/carers and staff/volunteers' views and perceptions of the holiday hubs.

What will I be asked to do?

You will be asked to give consent for the research to take place in your holiday hubs by signing the required consent form. You will be asked to facilitate with the recruitment of participants by circulating information verbally or through the information forms provided on the research and making them aware of the days the researcher is visiting your hub to conduct this research.

When will the research take place?

The research will take place during summer 2018 holidays.

What will happen to the information provided from this research?

Any information collected during the research project will be stored in accordance with the Data Protection Act and will only be used for the purpose of this project. All information will be anonymised, and holiday hubs and participants will be coded with unique participant numbers.

Hard copies of physical activity questionnaires will be stored in a locked cabinet in a secure office within Northumbria University and will only be accessed by the researcher working on this project. Any interview or focus group recordings will be password protected and then saved onto a password protected file in the university.

This information may be used in publications and presentations about the project but none of the participants or hubs will be identified individually in any reports or presentations.

How can I find out more?

For more information, please contact Eilish Crilley at eilish2.crilley@northumbria.ac.uk

Appendix Aii: Delivery Partner Consent Form for Study 1

Project Title: An Evaluation of the “Kitchen Social” Holiday Hub Programme in Terms of the Health and Wellbeing Impacts on individuals and communities.

Name of Delivery Partner Organisation (please give details of your holiday hubs):	
Please confirm that you agree with the following by ticking the box next to each statement and providing your signature below:	
I have read and fully understood all the information provided about the research project.	
I understand that if I would like further information about the project, I should contact Eilish Crilley.	
I understand that a researcher (Eilish Crilley) will assist with the collection of data	
I provide consent for holiday hubs within my organisation to participate in this research project by assisting in recruiting staff, parents/carers and children for interviews, focus groups and questionnaire’s.	
I provide consent for all interviews and focus groups to be recorded.	
I understand that data collected might be used in presentations and publications about the project, but information collected will be anonymised and will be stored securely and will only be accessed by the researcher.	

Name:

Signed:

Date:

Role within holiday hub:

Researcher’s Signature:

Date:

Appendix Bi: Parent/Carer Information Form for Child for Study 1

How can I be sure this project is okay for my child to take part in?

The Faculty of Health and Life Sciences Ethics Committee at Northumbria University have approved this project (who you can contact via email if you have any concerns regarding this research: nick.neave@northumbria.ac.uk). Your child's holiday hub organiser has also said that it's okay for this project to take place at their venue.

Eilish Crilley, who will work with your child, has an up to date enhanced check from the Disclosure and Barring Service, which your child's holiday hub organiser can check at any time.

If you have any questions about the project, please get in touch: eilish2.crilley@northumbria.ac.uk or leave your name and contact number at your child's holiday hub and I will contact you to allow you to ask any questions.



How can I be sure this project is okay for my child to take part in?

The Faculty of Health and Life Sciences Ethics Committee at Northumbria University have approved this project (who you can contact via email if you have any concerns regarding this research: nick.neave@northumbria.ac.uk). Your child's holiday hub organiser has also said that it is okay for this project to take place at their venue.

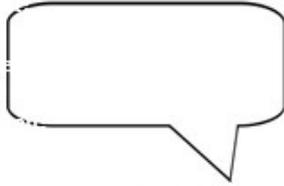
Eilish Crilley, who will work with your child, has an up to date enhanced check from the Disclosure and Barring Service, which your child's holiday hub organiser can check at any time.

If you have any questions about the project, please get in touch: eilish2.crilley@northumbria.ac.uk or leave your name and contact number at your child's holiday hub and I will contact you to allow you to ask any questions.



Holiday Hub Project





What is this project all about?

I am interested in the holiday hub your child has attended over the summer holidays where they have done some activities and had their lunch.

I would really like to find out what children think about the holiday hubs and what physical activities they have done at the hub. To find this out I am looking for children to fill out a child friendly physical activity questionnaire and take part in a focus group.

What will my child be asked to do?

Your child will be asked to complete a questionnaire on the physical activity they have taken part in at the hub, and they will also be invited to take part in a focus group. The focus groups involve sitting with a group of children from their holiday hub and talking about the hub. This will be led by the researcher, Eilish Crilley, who will ask the children questions like “What kinds of activities have you done at the holiday hub?”. This will be arranged so that there is minimal impact on your child’s day.

Focus groups will be audio recorded, so that I can take them away and type up everything that is said so I have an accurate record of children’s views. The questionnaires will be locked in a cabinet and focus group recordings will be saved on a password protected computer in a locked office at Northumbria University. No one else other than the researcher will be able to access them.

What if I say my child can take part but then they change their mind?

In my experience, children enjoy taking part in filling out the questionnaire and joining in the focus groups as it gives them the chance to tell me what activities they have been doing. If your child decides at any point that they do not want to fill in their questionnaire or take part in the focus group anymore, your child can tell the researcher and your child can then leave the focus group or stop filling out the questionnaire and carry on with their day. They have up to a month after participating to do this.

Appendix Bii: Parent/Carer Consent for Child for Study 1

Dear Parent/Carer,

I am writing to let you know about some research that is taking place at the holiday hub your child is attending this summer. The aim of the project is to find out what physical activities children do over the school holidays at the holiday hub and to find out what their views are of the holiday hub that they attend. If you give consent for your child to do so, I will ask children to fill out a physical activity questionnaire and invite them to take part in a focus group with other children to discuss this. This research will be commencing from the 23rd July onwards. Please find attached some information about the project for your consideration. If you are happy for your child to take part in this project, please complete the form below.

Kind regards,

Eilish Crilley

Child's first name: _____ Child's surname: _____

Date of Birth: _____ Age: _____

Gender: _____ Holiday club name: _____

Consent form

Please confirm that you agree with the following statements by ticking the box next to each one:

I understand the information provided about the project	
I have had an opportunity to ask questions and discuss this study and I have received satisfactory answers.	
I understand that children's voices will be recorded during discussions so that key themes from the discussions can be picked out by the researcher. Personal information will never be associated with the recordings.	
I understand that information collected from the recordings and the questionnaire's might be used in presentations and publications about the project, but the actual recordings and questionnaire's will be stored securely and will only be accessed by the researcher.	
I understand that my child is free to withdraw from the study at any time prior to publication, without having to give a reason for withdrawing, and without prejudice.	
I also consent to the retention of this data under the condition that any subsequent use also be restricted to research projects that have gained ethical approval from Northumbria University.	
I agree for my child to take part in this study.	

*Please circle the relevant statement below:

I would like my child to take part in this project.

I *would / would not like to receive a summary of the project findings. If you would like to receive a summary, this will be sent to your child's holiday hub in an envelope addressed to you for your child to bring home.

Name: _____

Signed: _____

Date: _____

Appendix Ci: Children's Information and Consent Form for Study 1

I would like to find out what physical activity you do at the holiday hub. I would also like you to tell me about the other activities you do at the holiday hub and what you eat, drink, think and feel about the holiday hub.



If you would like to help me with this, you will be asked to take part in a group discussion and complete a physical activity questionnaire. I will take the physical activity questionnaires and read them to find out what activities you do and how much you do them at the hub. I will record our discussion and listen to the recording to find out what you think about the hub. This will help me to understand more about children's physical activity and the difference that the holiday hub has made to you and your family. Your completed physical activity questionnaires and recordings will be locked away and only I will be able to read or listen to them. Your name will also be completely removed, and I will give you a secret number so no one will ever know the information you gave me.

Also, if you are asked any questions you don't want to answer that is fine. If you decide you want to take part, but then you change your mind, you can stop taking part at any time because it's up to you whether you do it or not.



Would you like to take part in this project? (Circle yes or no)

Yes No



Please give me some information if you said **yes** to take part.

My first name is... 	My last name is... 
---	--

Sign here

Appendix Cii: Children's Interview Schedule for Study 1

Why did you decide to come to the holiday hub?

What do you do at the holiday hub?

Could you tell me more about what activities you do at the hub?

Who decides what activities you do at the hub; do you get to pick?

What do you think about the activities at the holiday hub? Do you enjoy the activities you do at the hub? Have you learnt anything from attending the hubs?

What is your favourite activity that you do at the hub?

What food and drinks do you have at the holiday hub?

Who decides what food and drink you have at the hub, can you pick?

Do you enjoy the food and drinks served at the holiday hub?

What is your favourite food and drink at the holiday hub? Do you enjoy getting to eat and drink at the holiday hub, if so, what do you enjoy about it?

Overall, what do you like best about coming to the holiday hub?

If you had to tell another child about the holiday hub who had never been before, what would you tell them?

How does the holiday hub make you feel?

How would you feel if you did not have the holiday hub to attend during the summer?

Have you made any new friends from attending the holiday hub?

Do you see any friends you already had more during the holidays from attending the holiday hub?

Is the holiday hub easy for you to get to? Do you enjoy having the holiday hub here or do you think it should be at a different place? If so, why do you like having hub here? If not, where and why?

Do your parents have the opportunity to attend the holiday hub? If yes, why do they come along and what do they do at the hub? If no, would you like it if they were able to come along?

What do your family think about the holiday hub? Do you think the holiday hub makes any difference to your family in the holidays? If so, why and how?

What activities would you do if you did not come to the holiday hub? Are these activities different to what you do at the holiday hub, if so, how?

What kind of food would you eat if you did not attend the holiday hub? Is this food any different to what you have at the holiday hub, if so, how? Do you eat any new or different food at the hubs?

What is your favourite meal at home and what kinds of meals do you eat most at home? Do you eat three meals a day at home (breakfast, dinner and tea)?

What kinds of meals do you eat most at the holiday hub?

What do you not enjoy about the holiday hub? If anything, what do you think would prevent you from coming along to the hub?

What improvements could be made to the holiday hub to make the hub even better?

Would you make any changes to the meals or activities at the holiday hub? If so, what and why?

Is there anything else you would like to mention which we have not covered?

Appendix Ciii: Children's Debrief Form for Study 1

The chat we had and the physical activity questionnaire that you filled out has helped me to learn about children's views and the physical activities they do at the holiday hubs.



All the things you shared during the discussion and in the questionnaire are really important. I will tell people what children at your holiday hub and other holiday hubs in London said about their holiday hub and what physical activities they did at the hubs.



I recorded our voices during the discussion and afterwards I will listen to the recordings and write it all down. I will make sure that I don't write your name next to what you said, so no one will know it's you. I will also make sure that I used your secret number so no one will know it's you who completed the physical activity questionnaire. I will lock away the recordings and questionnaires so only I can listen to them and read them.



When I've finished finding out about holiday hubs in London, I will let your holiday hub know all the things I have found out. I will be using the things you told me and the information you gave me in your questionnaire to talk about it to lots of people. I will never put your name on any of this information.

Don't forget, if you have any questions about the project, you can ask your holiday hub leader and they will pass the question on to me. I will be sending a summary of all the things I found out to your holiday hub!

Thanks for all your help with this important project. You did a great job!



Appendix Di: Parent, Staff/Volunteer and Senior Stakeholder Information Form for Study 1

What will happen to the information collected during this project?

All information collected during this project is in accordance with the Data Protection Act and will only be used as described in this leaflet. No names will be on the information collected and unique participant numbers will be used instead.

All the information will be used as an evaluation of the Kitchen Social programme and as part of a PhD thesis. The information might also be used in publications and presentations about the project, but you will never be identified individually in any reports or presentations.



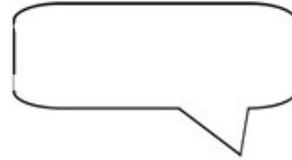
How can I be sure this project is okay for me to take part in?

The Faculty of Health and Life Sciences Ethics Committee at Northumbria University have approved this project. Holiday hub organisers have also said that it is okay for this project to take place at their venue. If you have any concerns, please contact the Chair of this Committee, Dr. Nick Neave via email: nick.neave@northumbria.ac.uk.

The researcher Eilish Crilley has an up to date enhanced check from the Disclosure and Barring Service, which your holiday hub organiser can check at any time.

If you have any questions about the project, please get in touch: eilish2.crilley@northumbria.ac.uk.

Interview Information



What is this project all about?

Your community centre or school has been running a holiday hub where children have done some activities and had some food.

I would really like to find out what you think about the holiday hub. I would like to find out a bit more about your holiday hub and whether you think it has improved the summer holidays in any way or whether it can be made any better.

What will I be asked to do?

The researcher Eilish Crilley will visit your holiday hub venue to carry out the interviews during the summer holidays to have a chat about the holiday hub. If you would like to take part in an interview, this will last for approximately 15-20 minutes.

Interviews will be audio recorded, but this is nothing to worry about. I record them so I can take them away and type up everything that is said so I have got an accurate record of your views. The recordings will be saved on to a password protected computer in a locked office at Northumbria University and no one else apart from the researcher will be able to access them.

What if I want to take part but then I change my mind?

If you decide at any point that you do not want to take part in the interview anymore, this is absolutely fine; you can tell the researcher and I will stop the interview. Alternatively, if for any reason you decide later on that you want to withdraw from the research you can get in touch with the researcher eilish2.crilley@northumbria.ac.uk up to a month after you have had your interview.

Appendix Dii: Senior Stakeholder Telephone Information Form for Study 1

What will happen to the information collected during this project?

All information collected during this project is in accordance with the Data Protection Act and will only be used as described in this leaflet. No names will be on the information collected and unique participant numbers will be used instead.

All the information will be used as an evaluation of the Kitchen Social programme and as part of a PhD thesis. The information might also be used in publications and presentations about the project but you will never be identified individually in any reports or presentations.

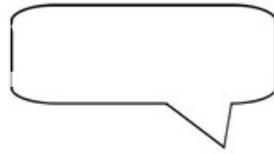


How can I be sure this project is okay for me to take part in?

The Faculty of Health and Life Sciences Ethics Committee at Northumbria University have approved this project. Holiday hub organisers have also said that it's okay for this project to take place at their venue. If you have any concerns please contact the Chair of this Committee, Dr. Nick Neave via email: nick.neave@northumbria.ac.uk.

If you have any questions about the project, please get in touch: eilish2.crilley@northumbria.ac.uk.

Interview Information



What's this project all about?

Kitchen Social has supported community centres and schools to run a holiday hub where children have done some activities and had some food.

I would really like to find out what you think about the holiday hubs. I would like to find out a bit more about your involvement and views on the holiday hubs and whether you think it has improved the summer holidays in any way or whether it can be made any better.

What will I be asked to do?

The researcher Eilish Crilley will conduct a telephone interview with you on whatever date and time is most convenient for you to have a chat about the holiday hub. If you would like to take part in an interview, this will last for approximately 15-20 minutes.

Interviews will be audio recorded, but this is nothing to worry about. I record them so I can take them away and type up everything that is said so I have got an accurate record of your views. The recordings will be saved on to a password protected computer in a locked office at Northumbria University and no one else apart from the researcher will be able to access them.

What if I want to take part but then I change my mind?

If you decide at any point that you don't want to take part in the interview any more, this is absolutely fine; you can tell the researcher and I will stop the interview. Alternatively, if for any reason you decide later on that you want to withdraw from the research you can get in touch with the researcher elish2.crilley@northumbria.ac.uk up to a month after you have had your interview.

Appendix Diii: Parent and Staff/Volunteer Consent Form for Study 1

Fill this form in if **YOU** want to take part in the research at holiday hub.

Please confirm that you agree with the following sentences by providing your signature below:
I have fully understood all the information provided about the project.
I have had an opportunity to ask questions and discuss this study and I have received satisfactory answers.
I give my consent for the interview to be recorded and I understand that my personal information will never be associated with the recording(s).
I understand that if I would like further information about the project, I should contact Eilish Crilley.
I understand that I am free to withdraw my participation from the project at any time prior to publication, without having to give a reason and without prejudice.
I understand that information collected from the recordings might be used in presentations and publications, but the actual recordings will be stored securely and will only be accessed by the researcher.
I also consent to the retention of this data under the condition that any subsequent use also be restricted to research projects that have gained ethical approval from Northumbria University.
I give my consent to take part in this research project.
Signature of Participant:.....
NAME IN BLOCK LETTERS:
Date:
Signature of researcher..... Date.....

Fill this form in if **YOU** want to take part in the research at holiday hub.

Your Personal Details		
Title: e.g., Mrs, Mr, Ms etc.	Surname: Please write your last name.	Forenames: Please write your first name.
Age:	Date of Birth:	Gender: (circle the correct answer) Male Female Nonbinary gender
Ethnicity: Please tick the ethnic background that best describes you:		
Asian/ Asian British: <input type="checkbox"/> Indian <input type="checkbox"/> Pakistani <input type="checkbox"/> Bangladeshi <input type="checkbox"/> Chinese <input type="checkbox"/> Any other background: (please write)		Black / African / Caribbean / Black British <input type="checkbox"/> African <input type="checkbox"/> Caribbean <input type="checkbox"/> Any other background: (please write)
Mixed / multiple ethnic groups: <input type="checkbox"/> White and Black Caribbean <input type="checkbox"/> White and Black African <input type="checkbox"/> White and Asian <input type="checkbox"/> Any other background: (please write)		White: <input type="checkbox"/> English/Welsh/Scottish/Northern Irish/British <input type="checkbox"/> Irish <input type="checkbox"/> Gypsy or Irish traveller <input type="checkbox"/> Any other background: (please write)



Appendix Ei: Parent Interview Schedule for Study 1

Checklist questions (recorded answers).
Do you know how many days/times and weeks the hub runs for?
How many days does your child attend?
Do you/could you attend the holiday hub? How often, if you do attend?

Parent/carer interview questions.

So now I would like to go into more detail and find out a bit about you and your thoughts on the hub. How did you find out about the hubs and why did you and your child decide to attend the holiday hub?

How was it advertised/how would you have preferred it to have been advertised?

What holiday periods does the hub run during? Should the hub run during other holiday periods and why?

Are there any barriers for yourself, your child or anyone you may know for attending the holiday hub which may prevent attendance and if so what are these barriers?

Is the location easily accessible? If no, what other location is more suited? Is this the best venue? Why/ what venue is preferred?

If you get to attend the hub with your child, what activities do you take part in at the holiday hub?

Could you tell me a bit about the activities that your child does at the holiday hub? *Who chooses the activities? Who should choose activities?*

Do you think they could have done any other activities at the hub? and if yes, what activities and why do you think these would be beneficial?

What activities would you and your child do during the holidays if they did not attend the holiday hub and are the activities at the holiday hub different to what they would do if they did not attend? If so, can you give any example to demonstrate how and explain why?

What do you think about the activities at the hub? Do you think the activities at the hub have made a difference to your holidays? If so, how?

Do you think the activities bring any benefits to yourself or your child during the holidays? If so, what benefits?

What food is being served at the holiday hub and what do you think about this food?

Who chooses food served? Who should choose? Hot or cold food? Preferred food?

What food do you and your child/children usually consume at home and does this change in the holidays in any way and are the food and drinks served at the hub any different to what you would serve at home, if so how and why?

Has the food served at the holiday hub made a difference to your holidays? If so, how?

Overall, has the the holiday hub made a difference to you and your child/children's summer holiday?

What does your child gain from attending the holiday hub?

What do you gain from the holiday hub being available?

Can you think of any other benefits that you and your child gain from attending the holiday hub?

How do you think the hub is viewed within the community? Positively or negatively and why? If negative, do you think anything could be done to change this?

What do you think are the benefits to the community having the holiday hub available?

How would your summer be different without the holiday hub, thinking back to previous years? Why would it be different if the holiday hub was not available?

If you had to think of the challenges that yourself or other parents who attend the club may have faced last summer or a summer when they did not have a hub to attend, what are these challenges and how does this compare to this summer when they have a holiday hub to attend? Has the hub helped remove any of these challenges experienced by yourself or other families in previous summer holidays?

Could any changes be made to the food, activities or running of the holiday hub?

Can you think of anything else which could be done to improve the holiday hub? What future developments could be made?

Is there anything else you would like to mention which we have not covered?

Appendix Eii: Staff/Volunteer Interview Schedule for Study 1

Checklist questions (recorded answers).
How many days does your holiday hub run for?
How many weeks does the hub run for?
What times does the hub run for?
Capacity limit of people accessing the hub?
How many days do you attend?
Do you know who set up the hub initially?

Staff and Volunteer interview questions.

So now I would like to go into more detail and find out a bit about you and your thoughts on the hub. Can you tell me how you became involved in the holiday hub and what your main roles and responsibilities are at the hub?

What training is required to work/volunteer at the holiday hub, if any and do you think any/any other training should be provided, if so, what?

Is food hygiene training required if you are involved with the food element and are you involved in the food?

Why did the hubs initially become set up and do you think there is a need for holiday hubs? What other issues is the hub trying to address, if any?

Did the hub run last year? Have any changes been made to the holiday hub since then? If so, what and why?

Why did your hub choose to run during this holiday period, and does it run during any others and why?

Could you tell me a bit about what you think the community needs are in terms of what you think the families hope to get out of attending the holiday hub?

How is the hub viewed in the community? Do you think it is viewed positively or negatively and why? If negative, do you think anything can be done to change this and if positively, why?

Does your hub target a specific group of people within the community and if so, what target group was this and did it reach the intended target group within the community? If not, why not?

Do you live within this community where the holiday hub is located and if so/if not do you think that this helps/ would help you engage any differently with families and why?

Do you think there are any/ has previously been any barriers for attending holiday hubs for families and if so, what and how could these/ have these been overcome?

Do you think the location of the hub is suitable and accessible for children and their parents/carers?

Tell me a bit about what you think the reasons are for the children and their parents/carers attending the hub?

If any, what activities are offered to parents/carers and why did your hub decide to involve parents? Should they be involved?

Do parents/carers choose any of the activities? Should why/ why do they?

What activities are offered to children at your holiday hub? Why were these activities chosen for children and parents (if any)?

Do children choose any of the activities? Should they/ why do they?

Do you think the activities have made a difference to children and their parents/carers over the holiday and if so, how?

Do you think there are any other activities your hub could implement? If so, what activities could your hub implement and why would they be beneficial?

What do you think children and their parents/carers gain from the activities at the holiday hub?

Do you think staff/ volunteers gain anything from the hub and if yes, what?

What do you think the benefits are of the holiday hubs being available for children and parents/carers?

What food/drink is served at your hub and what do you think of the food served?

Do you know who plans menus and where the food is stored (if yes, who and where?) and cooked (cooked in kitchen facilities or brought by external source? What works best?)

Is there any food waste and if so, what is done with this?

Do children self-serve the food or do staff serve the food? What works best?

Do you think hot, cold or both meal types are most preferred or beneficial to serve and what meal type does your hub serve? What works best?

Do you think the food has made a difference to children and their parents/carers over the holiday and if so, how? Do you think the food is an important element of the hub and do you think families would face any challenges without this in the holidays and if yes, what challenges?

Do parents/carers or children have any input into what food is served? Should they/ why do they?

Do families ever take any food home? If yes, how is it determined who receives the food and why was the decision made to do this? Do you think it is/ would be beneficial to provide families with food to take home and why?

Overall, what difference has the hub made to the children and their parents/carers and how?

Do you think the hub is successful and why?

Are there any improvements and future developments which could be made to the hub?

Is there anything else you would like to mention which we have not covered?

Appendix Eiii: Senior Stakeholder Interview Schedule for Study 1

What is your main responsibility within the Kitchen Social programme and why did you decide to become involved in the running of the holiday hubs?

Why do you think there is a need for holiday hubs? What issues are the holiday hubs hoping to address?

Do you think the implementation of the hubs helped alleviate these issues in any way, if at all?

If yes, how?

What was the intention of running the hubs in terms of what you hoped children and parents/carers would gain from this service?

What are the criteria for recruiting hubs and how are they selected to participate in the Kitchen Social programme?

How many holiday hubs are you currently overseeing?

How many more hubs do you envisage taking on to join the Kitchen Social programme?

Is any support offered to the individual hubs by the Kitchen Social programme? *If so, what?*

Do you think any more support should be offered? *If so, what?*

Do the staff and volunteers working at the hubs have to undergo any training when they become involved in the Kitchen Social programme? *If so, what?*

What is your holiday hub delivery model and why did you decide on this holiday hub delivery model?

What is the target audience for the holiday hubs?

How do you advertise your holiday hub programme to ensure that you target the audience that you want?

What methods do you think are most successful for recruiting children and parents initially and what is effective in ensuring a good return rate of these children and parents/carers?

Do you think there are any barriers for children and parents/carers accessing the holiday hubs?

What do you think the benefits are to children attending the holiday hubs?

What do you think the benefits are to parents/carers and their families of the children attending the holiday hubs?

What are the wider benefits of the holiday hubs being available, both short and long term?

What impacts do you think the holiday hubs have on the wider community that you have not already mentioned?

Do you think the holiday hubs have achieved what was expected of them so far? *If yes, how? If not, why?*

Has there been any unexpected outcomes from the implementation and running of the holiday hubs?

Have you seen any improvements in the holiday hubs since the programme was initially implemented? *If so, what?*

Do the hubs supply the food or is an external source used and what method do you think works best?

How is the food and activity provision funded and is this funding sustainable?

Who do you think the responsibility of funding should be down to?

Overall, do you think the holiday hubs are sustainable? *If yes, how? If no, why and how can they be sustainable?*

What do you see as the main barriers for holiday hubs to progress further?

What do you think is most critical for successful holiday hub development?

Are there any changes you would make to how the holiday hubs are currently running and how do you see the holiday hubs progressing in the future?

Is there anything else you would like to mention that we have not covered?

Appendix Eiv: Parent, Staff/Volunteer and Senior Stakeholder Debrief Form for

Study 1

Participant Number:

Dear Participant,

I would like to take this opportunity to thank you for taking part in research that was recently conducted at your holiday hub. Your contribution is invaluable in helping me to understand whether holiday hub programmes can help to improve children and their families' holidays.

The 'Kitchen Social' programme is a holiday project aimed at children in London. This research is part of a PhD project and an evaluation of the impact of the programme on children and their families.

The information provided will be written up towards a PhD thesis and an evaluation of the 'Kitchen Social' programme. The overall findings might also be shared with others through presentations and publications relating to the research. However, your individual information will not be identifiable through these research summaries.

If for any reason you would like to withdraw your contribution to this research, please contact Eilish Crilley via email [eilish2.crilley@northumbria.ac.uk] within one month, quoting the participant number given above. Furthermore, if you have any concerns or complaints about the way in which this research has been conducted you can contact the Chair of the School Ethics Committee, Dr. Nick Neave via email nick.neave@northumbria.ac.uk.

Many thanks again for your help with this project.

Best wishes,

Eilish Crilley.

PhD research student.

Appendix Fi: Example of Children's Focus Group Script from Study 1

Interviewer: okie doke right we will pop them there so we can hear everyone so firstly why did you's decide to come to holiday club, why did you's decide to come in the school holidays?

Participant: well I had to socialise

Interviewer: mhm

Participant: because I was playing fortnite way too much so

Interviewer: mhm

Participant: my mum sent me to my godfather, and he told me to come here

Interviewer: mhm

Participant: and then erm since I have come here I have been having fun and I have been socialising a lot

Interviewer: that's really good and what about you?

Participant: erm I come here because I have come here lots of times and I find it really fun

Interviewer: mhm

Participant: and so I told my mum I really like it here and then she let me come

Interviewer: aw that's good what about you?

Participant: erm so one day erm like this was when I was 6

Interviewer: ahuh

Participant: erm my friend told me that when you are 8 you can come here so when I was 8 I tried it out and I really really liked this so my mum decided to come here and I've been coming too

Interviewer: that's really good what about you?

Participant: well I just liked it here and it just was really fun and has so many games to play

Interviewer: mhm

Participant: that's why I like to come here a lot

Interviewer: cool, so that leads onto my next question what do you do when you come here, so tell me a bit about what you get up to?

Participant: so I play badminton mostly because that's my favourite sport here

Interviewer: mhm

Participant: and sometimes we play time bomb and dodgeball

Interviewer: cool, what else?

Participants: we like sometimes when we have free time we go in the erm sports hall we do basketball erm like if you want you can do hula hooping you can play football

Interviewer: mhm

Participant: you can- you can do sprinting

Interviewer: that sounds good, what else?

Participant: erm so like in the evenings we we play erm like erm dodgeball but sometimes we ask them to do roller skating and they say yes but normally when we have free time we play like football and badminton and we can do whatever we want

Interviewer: aw that's cool, in the evenings? how long do you come here for?

Participant: erm until 5:30

Interviewer: aw that's good, so it starts at 10 and you's are here until about 5:30?

Participant: it starts at 9

Interviewer: it starts at 9?

Participant: it starts it starts at 9 so it's 8 hours and a half

Interviewer: aw wow that's cool, what about you?

Participant: well I like all the sports here and when I first came

Interviewer: ahuh

Participant: erm the I like the sports really a lot

Interviewer: ahuh

Participant: and I made friends and it was really nice because they were all welcoming

Interviewer: ahuh

Participant: and really and it's really good

Interviewer: that's really good, so who decides what activities do you do, do you come and you get to pick or do they say this is what we are doing today?

Participant: sometimes they say this is what we are doing but sometimes they ask

Participant: yeah

Participant: can we do this can we do that

Interviewer: yeah?

Participant: yeah so sometimes the teachers just say like what do you want to do and then sometimes they say yes or no

Interviewer: mhm that's good so you get some choice in it?

Participant: yeah

Interviewer: yeah ok that's good, and what do you think about the activities do you enjoy the activities you do?

Participant: yes

Participant: yes I do

Interviewer: do you enjoy them?

Participant: yeah

Interviewer: yeah, so have you learnt anything from coming along to the holiday club?

Participant: yeah

Participant: yeah

Interviewer: yeah?

Participant: yeah

Participant: friendship how to work together

Interviewer: mhm

Participant: like teamwork

Participant: help each other out teamwork

Interviewer: mhm

Participant: how to not play so much like be more like talkative

Interviewer: mhm

Participant: get more friends

Interviewer: great, what about you?

Participant: erm it's really fun that's all I say

Interviewer: ahuh

Participant: it's really it's really fun

Interviewer: have you learnt anything do you think?

Participant: yeah

Participant: not to watch games too much

Interviewer: mhm

Participant: erm don't stay in stay inside a lot

Interviewer: ahuh

Participant: er and try to talk more

Interviewer: yeah I mean today it sounded like you were doing a bit of learning with the healthy eating and what not?

Participant: yeah

Interviewer: that's good do you do a lot of that?

Participant: yeah

Participant: yeah sometimes we do like drawing and art work

Participant: because we go to the party room and do all that

Interviewer: aw right

Participant: and and when and sometimes when we come in here for lunch we make like omelettes and other things

Participant: yeah

Interviewer: aw wow

Participant: we can create some stuff

Interviewer: so you get food and can do some making as well do you?

Participant: yeah

Participant: yeah

Interviewer: so what food do you get?

Participant: well some- well erm

Participant: sometimes we get hot dog sometimes we got rice

Participant: mash

Participant: we got soup for the first time

Participant: erm well like sometimes they have like sausage and mash potato

Participant: yeah

Participant: yeah and today we are having peri peri

Participant: peri peri Chicken

Interviewer: ahuh

Participant: and mash

Interviewer: oh that sounds nice what about your snacks do you get snacks every day like I saw this morning?

Participant: yeah

Participant: yeah

Interviewer: and what-what are the snacks that you usually get?

Participant: we normally sometimes buy it after or like sometime in the day

Interviewer: mhm

Participant: because we use the vending machines

Participant: yeah yeah

Interviewer: aw right so you buy your own?

Participant: yeah

Participant: yeah

Interviewer: as well as what you get given here?

Participant: yeah

Participant: yeah like you can buy bottles of water you can buy like fizzy drinks

Participant: juice

Participant: juice you can buy

Participant: crisps you can buy chocolate you can buy haribo

Participant: sweets you can buy sweets

Interviewer: what about the stuff that they give you what snacks do you usually have that they provide?

Participant: erm we don't normally get snacks when only just get lunch

Interviewer: right

Participant: no but sometimes we get snacks like raisins and

Participant: oh yeah

Participant: yeah

Interviewer: aw right was the fruit nice today?

Participant: yeah

Participant: yeah

Interviewer: was there anything that you haven't tried before or was it all stuff that you have had?

Participant: know everything-everything I had

Participant: I had two that I haven't tried

Interviewer: oh right what was it?

Participant: the pineapple and the watermelon

Interviewer: and did you like it?

*nods

Interviewer: that's good what about you?

Participant: you've never tried watermelon?

Participant: no i've ate every single fruit here

Interviewer: yeah?

Participant: yeah

Interviewer: what about the meals have you tried any new meals that you have not had before?

Participant: erm no I don't think so

Participant: no

Interviewer: no? Do you like all the food that you have?

Participant: yeah

Participant: yeah

Interviewer: What about activities, what is your favourite activity?

Participant: badminton

Participant: dodgeball

Participant: yeah dodgeball

Participant: dodgeball

Interviewer: dodgeball?

Participant: yeah

Participant: dodgeball

Interviewer: and what's your favourite food that you have had here?

Participant: aw it's my first day to actually have it the food because when I came here we got a lunch

Participant: it's his first day having food provided so he hasn't had it before

Interviewer: aw right right, what about you what's your favourite food?

Participant: er that sausage and mash

Participant: yeah sausage and mash

Participant: no one day we had erm like like bacon sausages

Participant: we've never had bacon and sausages?

Participant: yeah remember?

Participant: I don't remember

Participant: is it the sausage with er bacon going around-around it?

Participant: no I'm thinking-

Participant: that's pigs in blankets?

Participant: yeah

Participant: it was with the halal meat remember?

Participant: all of the meat is halal

Interviewer: aw that's good what-what about- is the food that you have at holiday club any different to what you have at home?

Participant: yes

Participant: yes

Interviewer: how?

Participant: because like

Participant: because most of the time my dad just cooks like rice and chapati and stuff

Interviewer: mhm what about you?

Participant: yeah erm like it similar but it's not the same because at home we normally have like rice and chicken macaroni cheese but here we have like-

Participant: macaroni cheese yummy

Participant: and here we have like different types of chicken like peri peri chicken, plain chicken, spicy chicken- not spicy chicken

Interviewer: mhm

Participant: so they have like different varieties of food

Interviewer: aw that's good so there is a wide range?

Participant: erm my my mum or godfather are healthy families so like we would have erm peas, fish er sometimes like broccoli or something

Interviewer: mhm

Participant: that's very healthy or greens or fish fingers or something

Interviewer: so do you think it is not healthy the food that you have at the club?

Participant: no no some of the times it is healthy

Interviewer: mhm but do you think it could be healthier?

Participant: yeah

Interviewer: yeah

Participant: I haven't I haven't tried it before I think it's healthy

Participant: yeah

Interviewer: how could it be made healthier? are you happy with the food?

Participant: well use more vegetables

Participant: yeah use more vegetables

Participant: because when they do like the chicken and stuff there is not a lot of vegetables like mixed with it

Interviewer: yeah?

Participant: so they should put a little bit more with it

Participant: so my dad uses a lot of vegetables with my dinners

Interviewer: yeah mhm

Participant: I don't really like vegetables

Interviewer: yeah? So do you have more vegetables at club then you do at home or?

Participant: yeah

Participant: yeah

Interviewer: yeah?

Participant: yeah

Interviewer: and what do you like best about coming to the club?

Participant: the games

Participant: yeah

Interviewer: the games?

Participant: the games and the lunch

Interviewer: what about you?

Participant: the games the same the same

Participant: the games and the lunch

Participant: no sometimes I'm like I get really excited because like there might be people that I have seen before

Interviewer: ahuh

Participant: there might be people that I've never seen before

Interviewer: mhm

Participant: so I get excited as well

Interviewer: to see loads of new people and people that you have met before?

Participant: mhm

Interviewer: that's good and how do you feel when you come to holiday club?

Participant: erm excited

Participant: well I feel like joyous like because I get to meet like new friends and sometimes I meet my old friends that I know before

Interviewer: mhm what about you?

Participant: well I did come well I came here with erm my friend

Interviewer: ahuh

Participant: erm he I think he enjoyed the first day was Monday yeah and my my I have been here before

Interviewer: ahuh

Participant: but like it was a long time ago

Interviewer: yeah

Participant: so I don't remember everything but let's say yesterday was my first day

Interviewer: ahuh

Participant: but I've been here before

Interviewer: yeah and how would you feel if you didn't have holiday club to attend in the summer?

Participant: bored

Participant: well bored yeah

Participant: bored yeah bored

Interviewer: yeah?

Participant: because I am going on holiday in like 2 weeks

Interviewer: ahuh

Participant: no my mum my mum would like yell at me and stuff because I am playing on my game too much

Interviewer: ahuh

Participant: she wants me to just get out and socialise

Interviewer: yeah

Participant: and and she doesn't trust the streets around these she trusts

Participant: yeah because my dad always tells me to keep away from strangers

Interviewer: yeah

Participant: and my mum is always like keep away from the older high school boys because you never know what they could be doing

Interviewer: yeah that is good advice, and what-what activities would you do if you didn't come to holiday club in the summer so if this wasn't here what would you be doing?

Participant: volleyball at the beach

Participant: yeah I I would do like football in the park and that

Participant: I would play volleyball

Participant: some days I might play on my PlayStation some days I will go to like the beach

Interviewer: yeah?

Participant: I will go to the park

Interviewer: mhm

Participant: some days I might go to the water park some days I might go swimming

Interviewer: mhm

Participant: yeah yeah

Interviewer: what about you what would you do if you weren't here?

Participant: I would just like go to the park and play with (says friends name) or something

Interviewer: ahuh

Participant: also I would just play

Interviewer: and you said you have made friends have you all made new friends from coming?

Participant: yeah

Participant: yeah

Participant: mhm

Interviewer: yeah? What about friends you already know did anyone know anyone here already?

Participant: yeah

Participant: yeah

Interviewer: yeah do you think you got to see them a bit more in the summer do you think from coming here?

Participant: yeah

Participant: yeah

Interviewer: yeah?

Participant: a little bit more but not not so much

Interviewer: do they live near you?

Participant: yeah

Interviewer: yeah? and erm and if you had to tell another child who doesn't come to holiday club about the club what would you say about it to someone who has never been? What would you tell them?

Participant: I would say that it is fun it is enthusiastic like it inspires people

Interviewer: mhm

Participant: to run around more you get to

Participant: socialise

Participant: yes socialise

Interviewer: mhm what would you say?

Participant: er I say I just mostly play with the sports er sports play sports or make friends or

Interviewer: mhm

Participant: talk

Interviewer: yeah

Participant: I would say that you can play you can play any of your favourite sport when it comes to like basketball if you like basketball

Interviewer: mhm

Participant: like sometimes we do rugby tag rugby

Participant: oh yeah

Interviewer: aw right

Participant: yeah

Interviewer: and had you played that before you came here?

Participant: yeah

Participant: yeah

Interviewer: yeah so you already knew how to play that? Have you learnt any new games?

Participant: erm no

Participant: erm no

Interviewer: no?

Participant: badminton

Participant: yeah badminton

Participant: timewall erm what's it called timewall?

Participant: timebomb

Interviewer: aww yeah

Participant: time bomb is new to me because I've never played it before

Interviewer: aw that's good and do you know how to play it now?

Participant: yeah rollerskating

Participant: rollerskating yeah yeah

Participant: roller skates and I've never done roller skating

Interviewer: aw you do rollerskating here?

Participant: I've done ice skating I've done ice skating

Participant: yeah yeah we do rollerskating

Interviewer: aw that's cool

Participant: yeah

Interviewer: that's different and erm is it easy for you to get to the holiday club?

Participant: yeah

Participant: yeah

Participant: I drive here

Participant: well basically I live in (says place)

Interviewer: so it's in a good place do you think?

Participant: cause I get up at 4:30 and then I have to go to my dad's work place then I eat my breakfast and then I come here

Interviewer: amazing and do your parents ever come along or do they just drop you off?

Participant: drop me off

Participant: drop me off they are not allowed to be they are not allowed to come

Participant: yeah

Interviewer: would you like it if your parents did have the chance to come?

Participant: yeah

Participant: hmm maybe

Participant: a bit a bit

Interviewer: maybe?

Participant: there's nothing for them to really do except for talk

Participant: yeah yeah

Participant: and watch us and watch us that's it

Interviewer: yeah

Participant: but now that we are at here they can do like their work they can do what they need to do

Interviewer: yeah

Participant: well basically just inspire your parents to do more sporty stuff

Participant: yeah yeah

Interviewer: yeah? That's a good point and erm do so your parents just drop you off here-

Participant: yeah

Interviewer: and do you think it makes a difference to their summer from having you here?

Participant: yeah

Participant: yeah

Interviewer: do you think it helps your families out?

Participant: yeah because they have like more time to like clean and cook and get ready without us like

Participant: yeah

Participant: saying erm hurry up

Participant: can I go on the PlayStation

Participant: can I do this can I do that

Interviewer: yeah ahuh

Participant: it just makes them it just makes them like

Participant: it gets on their nerves

Participant: yeah

Interviewer: yeah ahuh

Participant: because like every single day I am like dad can I go on the computer dad can I go on the computer

Interviewer: yeah

Participant: can I go on the PlayStation every single day

Interviewer: so what what's your favourite meal at home and then what is your favourite meal here that you have had?

Participant: erm rice and peas and curry and macaroni cheese

Interviewer: at home?

Participant: well the one that I'm having right now chapati with fried potatoes and cooking bacon

Participant: fritters erm erm some curry (inaudible) some (inaudible) some Korean peas what's the other one called no one knows no one knows

(pause while thinking)

Interviewer: you are just going to have to have a think of this I don't think you are going to remember it...

Participant: (inaudible) swordfish!

Interviewer: oo well done and what about you?

Participant: everything that my mum cooks

Interviewer: everything? you don't have a favourite?

Participant: and then in here I like the sausage and mash that is my favourite meal

Interviewer: in here what is your favourite meal?

Participant: sausage and mash

Participant: probably today's meal probably

Interviewer: what is today's meal?

Participant: peri peri- peri peri chicken with mash

Interviewer: oo what about you?

Participant: I don't know

Interviewer: you don't know?

Participant: you haven't eaten here

Interviewer: aww you haven't eaten here right well is there anything now that you's don't enjoy about holiday club?

Participant: no

Participant: no

Participant: no

Interviewer: anything which might prevent you from coming?

Participant: no

Participant: no

Participant: no

Interviewer: no?

Participant: probably it's probably when like my friend keeps (inaudible) and then he annoys other people

Interviewer: yeah

Participant: (says name) I have to stop him from annoying other people

Interviewer: yeah

Participant: and then he and then he starts getting annoyed on me and then yeah that's (says name)

Interviewer: yeah

Participant: no not really but like my friend (says name) because we have been-we have known each other from like young

Interviewer: yeah

Participant: it's like when I-when he ever annoys me I know when to stop like he knows when to stop

Interviewer: yeah

Participant: because he knows me we have known each other for so long

Interviewer: yeah

Participant: what so you have been to the same school

Participant: no different school

Participant: oh

Participant: but it's close schools but we have known each other since like we were born

Interviewer: yeah so is there anything that you could do to the club to make it even better?

Participant: no

Participant: no

Interviewer: any improvements you can think of?

Participant: no it's already good so

Interviewer: yeah?

Participant: there's no improvements

Interviewer: so you wouldn't make any changes to any activities?

Participants: no

Interviewer: is there anything that I haven't covered that you's want to say about the club?

Participant: no

Participant: no

Interviewer: no?

Participant: well i've got one thing to like they can improve this place have more games to play

Interviewer: more games yeah?

Participant: because we play like sleeping Lions we also watch movies

Participant: yeah we watch movies

Participant: yeah yeah yeah

Interviewer: aw that's cool

Participant: but I don't come on Friday so I don't do it

Participant: I don't-I don't come on Friday's cause

Interviewer: why don't you come on Friday's?

Participant: it's because no people just don't behave on a Friday when it comes to the movie

Interviewer: and does that stop you from coming?

Participant: yeah

Participant: no it's because they can't control themselves

Participant: because we've been running around all day we can't-we can't stop ourselves from being too excited by watching the movie like some sometimes people will be like falling asleep tired and everything but

Participant: some people are just too energetic

Interviewer: is that why you don't come to the Friday you's aren't that bothered about watching the movies?

Participant: well my dad keeps on saying it's a special day Friday so then I don't come on Friday

Participant: (inaudible) on Friday I just lie in bed

Participant: on the last week I will come on a Friday

Interviewer: is that what you do at home?

Participant: yeah

Interviewer: so is there anything else you want to say?

Participant: no no

Appendix Fii: Example of Staff/Volunteer Interview Script from Study 1

Interviewer: there we go ok so how many days does the club actually run for?

Participant: 4 days a week Monday to Thursday

Interviewer: great and how many days do you attend?

Participant: everyday

Interviewer: all four?

Participant: yeah

Interviewer: amazing and erm what time is it running?

Participant: from 9:30 till 3

Interviewer: great and erm who initially set up the club- how did the club start running?

Participant: I believe it was set up by (names hub leaders) who are (names hub) erm employees

Interviewer: mhm

Participant: so they've been running it for approximately 10 to 11 years

Interviewer: great

Participant: right but I came on board about 3 years now

Interviewer: mhm

Participant: I've been doing it and it's been fine

Interviewer: great and why have you kept volunteering?

Participant: well I mean it's nice to give back and because I live within the area I know a lot of children and then my granddaughter wanted to come here and she wanted to take me along with her so I thought ok if i'm here she'll come so you know that's most of the reason but you know I'm local I wasn't working at the time

Interviewer: mhm

Participant: I'm still not working at the moment so

Interviewer: mhm

Participant: I just thought that I would come and help out however I can

Interviewer: aw that's great and erm what are your main responsibilities when you come in and volunteer here?

Participant: well I do all the registration so like the parents all need to come in fill in a registration form

Interviewer: ahuh

Participant: and a code of conduct form for their children and it's £15 per child per week

Interviewer: mhm

Participant: so I'll be in charge of registering the children in and out

Interviewer: yeah

Participant: and collecting the fund's for attendance and for the trips and so forth

Interviewer: yeah great and what trips do they go on?

Participant: erm they've got several trips that are organised so far last week they had go karting

Interviewer: ahuh

Participant: tomorrow they'll have flip out

Interviewer: ahuh

Participant: and then Thursday they have LaserJet- laser tag

Interviewer: ahuh

Participant: something like that and then they have got one going to a beach and one going somewhere (opens book to read trip information)

Interviewer: aw wow

Participant: okay so erm we did go karting the other day

Interviewer: ahuh

Participant: so we've got flip out and outdoor laser tag, one to the cinema and one to a leisure park, liquid leisure, and then erm the beach we have already been to that one so we're going to replace that with something else and then they will do go-karting another day again

Interviewer: aw amazing

Participant: yeah

Interviewer: that's so interesting and what training is required for you in terms of volunteering do you have to take part in any training or anything like that?

Participant: no there's a training day every year so we go through like safeguarding as children how to take care of them, if children come and make a complaint so we are told like who to take them to, where to take them, there's a form that you complete you know if there's an accident or if there's any concerns or so forth then you take them to the office and either (names hub leaders) will inform the parents regarding to the situation or whatever but that's about it yeah

Interviewer: great and do you need any form of DBS to volunteer?

Participant: no no

Interviewer: no?

Participant: no

Interviewer: and what about food hygiene training are you involved in any aspects of the food?

Participant: well there's a lady here that cooks for the children

Interviewer: ahuh

Participant: and erm I believe that she has her food hygiene certificate and catering and so forth so she cooks every day and she's supposed to do the children a healthy meal everyday

Interviewer: yeah

Participant: and so they have that and then maybe fruits

Interviewer: great erm and do you know why the hubs initially became set up so why do you think there is a need for this holiday club?

Participant: well to be quite honest there's very little in the area for children so it's nice like especially in the summer holidays like when parents are going to work or even if they are not you know just a bit of recreation for the children

Interviewer: yeah

Participant: instead of just being at home or just playing outside or whatever

Interviewer: ahuh

Participant: if they come in here there are several workshops they can get involved in so there's something for everyone so I think it's a really good idea

Interviewer: absolutely and erm have there been- you said you have been volunteering for about 3 years here?

Participant: yeah

Interviewer: have there been any changes to the club since you first started volunteering?

Participant: there hasn't been changes as such but there's been improvements you know like

Interviewer: ahuh

Participant: you see like different things included new rules- you have to tighten up the rules depending on the numbers and so forth but

Interviewer: ahuh

Participant: I think it fills really well

Interviewer: great and erm does the does the hub run in any other holidays or is it just the summer school holidays?

Participant: it just runs in summer we had a erm a hair thing for one of the half terms it was just for the week and it was for like the girls above 10 so they teach them about their hair but it's generally summer

Interviewer: yeah and why did you decide to run it in this holiday do you think it should be on in any of the other holidays or what are your thoughts?

Participant: I think summer is good right

Interviewer: ahuh

Participant: because the only thing with half term is different schools have half term at different times

Interviewer: yeah

Participant: so sometimes once it may be good for one school it's not good for another school so

Interviewer: ahuh

Participant: at least with the summer holidays you know for the full of August they are going to be off school so

Interviewer: yeah

Participant: it's easier to gear it towards that holiday

Interviewer: absolutely and erm what do you think the community needs are in terms of what the families are hoping to get out of the club?

Participant: say that again

Interviewer: so what do you think the families are hoping to get out of this hub?

Participant: well I mean hopefully they'll enjoy the things that children interact in or the things that the children learn I mean obviously some people just push them here for relief

Interviewer: yeah

Participant: and a bit of freedom for themselves but I mean either or either way I mean some parents go to work some don't but then like even if you want to go shopping or you want to go there because you know like if you've got a young child say between 10 and 11 and you want to go shopping

Interviewer: yeah

Participant: and he doesn't want to go it could be a nightmare

Interviewer: mhm

Participant: because he's going to moan and he's going to this and you know what I mean so it means they can come here there are several different choices in recreation they can have and then by 3 o'clock they go

Interviewer: yeah absolutely

Participant: so it's not bad so I think that the parents are happy that there's somewhere for them to go

Interviewer: yeah

Participant: rather than just sitting at home every day

Interviewer: absolutely yeah and erm how do you think the clubs viewed in the community so do you think it's viewed positively, negatively what's your views?

Participant: I think it has a very positive start because many of the local people you know come and ask about it, how's it going do you have any more spaces because as time goes on like every day people come and ask are there any more spaces can they bring their children and whatever so I think it has a very positive outlook and although we can only take children from 8 right many people come even like the children of five or six or seven

Interviewer: yeah

Participant: but obviously we're not allowed to take them at what age but if they were they would have been here so

Interviewer: yeah

Participant: I think the parents are impressed with what happens here

Interviewer: and what do the children go up to so 8 to?

Participant: well we've got 14, we've got age 14 so when it gets to that age after that comes down to whether they want to come but

Interviewer: yeah

Participant: you know we could take 14 15

Interviewer: yeah and is there a limit on how many children come?

Participant: we would get towards 100 this year

Interviewer: wow

Participant: and I think we are very close to it

Interviewer: wow that is amazing

Participant: yeah we are very close to it because we've got nearly 90 of the big children and then we've got toddlers but I mean the toddlers are children of the staff and volunteers

Interviewer: aw right

Participant: so they're not really there not part of- obviously they're part of because they have to be counted for lunch and so forth

Interviewer: yeah

Participant: but for the big children we've got about 90 (inaudible)

Interviewers: wow and why did you's decide to set up that facility for staff and volunteers in terms of the erm having the toddlers here?

Participant: why did we decide to open that facility?

Interviewer: yeah

Participant: well basically if you think about it if you want to volunteer and you've got a small child

Interviewer: ahuh

Participant: unless you've got somewhere to take the child you can't volunteer

Interviewer: mhm

Participant: so while the parents on the premises the children will be upstairs

Interviewer: oh that's great

Participant: that's it so what helps everyone out, so the children get something to do

Interviewer: yeah

Participant: and the parents may be downstairs doing a workshop just like erm one of the ladies I think you interviewed her, her daughter's in the creche

Interviewer: aw right

Participant: erm what's her name (says name)

Interviewer: yeah yeah

Participant: yeah so her daughters in the creche and she does hair and beauty, while she does her workshop she knows her daughters safely upstairs and she also has another daughter who attends but she's not in today

Interviewer: yeah

Participant: but you know she's 11 so you know what I mean so at least you can come along you can volunteer, your children are on the premises when you are ready to leave they are already here so

Interviewer: absolutely great and erm can you tell me a bit about the community in terms of do you think you have targeted are specific group or is it anyone can come?

Participant: anyone everyone's welcome

Interviewer: yeah?

Participant: yeah we've got a variety of families do you know what I mean we've got erm we haven't got Asian children as such but we have Somalian children

Interviewer: ahuh

Participant: we have English born children, we have Caribbean mix we have African, all Nations

Interviewer: yeah

Participant: yeah so anyone as long as they fall within the age bracket they are welcome

Interviewer: great and do you think there is any barriers for families accessing the clubs so anything that might prevent them from coming along?

Participant: no no because many people have approached me and they seem to be happy with what they have heard and I have given them the documentation and many of them they have just taken that away well most of them I've just completed it on the premises to be quite honest

Interviewer: yeah

Participant: or you know what I mean I seem to be happy with what we are offering so I don't think there is any barriers that would stop anyone from coming if they wanted to

Interviewer: great and what about the location itself do you think it's good having it at this Community Centre?

Participant: yeah

Interviewer: yeah?

Participant: because it's kind of Central because like erm this housing estate is called (names hub) so it goes that way

Interviewer: yeah

Participant: it goes like to the top of this road it goes that way and it goes around us as well

Interviewer: yeah

Participant: so it's quite easily for everyone who lives around here to get to it

Interviewer: yeah

Participant: and those who don't live around here which I'd be surprised it still easy because the bus runs to there anyway

Interviewer: yeah

Participant: so we get people from locals and we get people even from actually a bit further out but they still make it

Interviewer: yeah and do you live within this community

Participant: pardon?

Interviewer: do you live with in this community?

Participant: yeah

Interviewer: yeah?

Participant: yeah

Interviewer: and do you think that helps in terms of engaging with the children the fact that you live in the community?

Participant: this is it right because a lot of the children are children of children who my children grow up with

Interviewer: yeah

Participant: so do you know what I mean

Interviewer: yeah

Participant: so like my children are like how old are my children like between 35 and 38

Interviewer: mhm

Participant: so a lot of these children right so he grew up with my children

Interviewer: aww

Participant: so he's about 40

Interviewer: ahuh

Participant: so like his children will be here and things like that

Interviewer: yeah

Participant: that's it so that's what I get out of it like a lot of the children because they rebuilt this estate

Interviewer: yeah

Participant: because erm they rebuilt it like about 12 years ago so because they were built it and people have moved to different places a lot of people you don't see them that often but with coming in here like he's come to use the gym

Interviewer: yeah

Participant: right but other than that I have only seen him maybe on the street.

Interviewer: yeah

Participant: right but when you come here in the summer you see everyone comes in you see their children come in and so forth

Interviewer: yeah

Participant: and it just you know re- engages you with the local people that

Interviewer: yeah

Participant: you know but sometimes you don't know where they live

Interviewer: yeah

Participant: so

Interviewer: and do you think gets certain families attending here the fact that you're here and they know who you are?

Participant: oh yeah oh yeah because people come in and they said oh I came to just see you because so and so said that you were here or whatever

Interviewer: yeah

Participant: you know something or they will say oh somebody told me that their child comes here so can mine do you know what I mean so by word of mouth

Interviewer: yeah

Participant: all about who you know so someone will say oh you know so and so is doing it or whatever and then they'll come

Interviewer: yeah

Participant: and they will bring their children or their grandchildren or whatever

Interviewer: yeah that's really interesting

Participant: so I think it's quite good

Interviewer: yeah absolutely and erm what do you think the main reasons are for the children and the parents erm accessing this holiday club?

Participant: well I mean for freedom, entertainment and Recreation

Interviewer: mhm

Participant: because I mean can you imagine in this kind of weather if there is nowhere for children to go they will be inside and with all due respect with what goes on outside now you can't just send your children off to the park or wherever because at least here they know it's a safe environment because once we let them in we don't allow them out right so they are here from 9:30 or whatever time they get here they have to be here between 9:30 and 10

Interviewer: yeah

Participant: so they are here until 3 o'clock so after that obviously their parents will have arranged whether they go home or go to someone's house where are going to collect them so at least they know that between those hours they are in here and they can rely on them being safe unless there is an accident or whatever in which time we would call them and let them know

Interviewer: yeah absolutely and erm do their parents just drop them off and then go or are the parents able to stay and join in the activities how does that work?

Participant: erm well they drop them off they are not really because the children are not that small so they don't need to stick around with them most of the children are running ahead of their parents they don't even say goodbye

Interviewer: yeah

Participant: so they enjoy coming here the children enjoy coming here it's not a thing where by you have to talk them in to coming you'll more have to talk them into leaving for they never want to leave

Interviewer: yeah

Participant: and then on Friday- Thursday's they will say please can we come tomorrow and I'll say well we are not here tomorrow

Interviewer: yeah

Participant: so the children do enjoy themselves and the parents don't even- just like if they are on their way to work or whatever they can just drop them off

Interviewer: mhm

Participant: and I'll sign them in and they go in

Interviewer: yeah great and do you think it could be beneficial to allow families to get involved or do you think it works with just having all children here what's your thoughts?

Participant: it's good with the children I think it's fine with the children but I mean if there's something that the families the families can offer then obviously you know it can be looked into because to me anything that is going to help the children and help the programme

Interviewer: yeah

Participant: you know will always be a plus I think

Interviewer: absolutely and what do you think the children gain from coming along and taking part in the activities what benefits do you think they got from coming?

Participant: well a lot of things they gain confidence right like for instance last week as I said they went go karting right

Interviewer: yeah yeah

Participant: and the group of girls that went there they have never done go-karting before

Interviewer: yeah

Participant: but at least now they can drive

Interviewer: absolutely

Participant: it teaches them- they learn different things on a daily basis

Interviewer: absolutely and do you think the parents gain anything from having the holiday clubs available?

Participant: well I think they gain a lot because this this one is inexpensive I mean it's £15 a week right and going back like 15 years I remember paying £15 a day

Interviewer: wow

Participant: for my daughter to go to play centre because it was £75 a week so you know what I mean that has to be a plus in my opinion

Interviewer: absolutely

Participant: that's it

Interviewer: so inexpensive childcare I suppose?

Participant: yeah this is it and then at least the children aren't just sitting down and they're bored there's so many different activities they can participate in so I think it's I think it's good

Interviewer: absolutely and do you think there's any wider benefits in the community of having this available this holiday clubs provision?

Participant: well at least they are out of trouble you know what I mean they can't be accused of anything

Interviewer: yeah

Participant: because at least when they are in here they are monitored and whatever so it means if anything is happening outside these children won't be involved, other children may be involved but at least with these ones we know where they are

Interviewer: yeah

Participant: up until 3 so

Interviewer: absolutely

Participant: I think it's a plus for the community because if you've got children like 12 + in this kind of weather if they said could we play outside you can't really say no but then

Interviewer: yeah

Participant: how far are you going to let them go and how long are they going to be outside and then you don't want people knocking at your door and saying oh your son was involved in this your daughter was- so for me it is just better that they come here and do something then after 3 o' clock you know what I mean it is your responsibility that's it

Interviewer: yeah ahuh and do you think if they weren't here that's what they would be doing what do you think the children and families would end up doing if this wasn't available for them in the holidays?

Participant: they wouldn't really have a choice they would have to go outside and play go to the park nothing nothing because I mean at the end of the day it depends on what the parents have to do so if the parents have to go to work dependent on age they might be at home or they would have to ask someone to look after them and that's going to be something else because nowadays people don't really want to do you a favour for nothing

Interviewer: mhm

Participant: so you know what I mean I think it's better that they come here because as I said even going to the park right well if I had one I've only got one around here so she's not going to the park

Interviewer: ahuh

Participant: but you know what I mean I will now if I have children I would be apprehensive of sending them outside because you hear all these stories you know what I mean but one goes missing and this happens and

Interviewer: ahuh

Participant: you know what I mean to me

Interviewer: yeah

Participant: it's unbearable so I just think it's better that you send them somewhere like this you know where they are during the day and then the afternoon when you have to take up your responsibilities such as after school you just get on with it because basically it's like the school day

Interviewer: yeah

Participant: it just starts a bit later but you know what I mean

Interviewer: yeah

Participant: once the- by 3-3.30 they're on their way and you have to decide what you're going to do at that point

Interviewer: yeah absolutely

Participant: I think we've greatly helped out to be honest with you

Interviewer: ahuh so do you think it's that safety aspect?

Participant: yeah

Interviewer: that's quite important?

Participant: yeah

Interviewer: yeah

Participant: I think that's the important part of it

Interviewer: yeah and can you tell me a bit about the food and drinks that are served, what food do the children have access to at the club?

Participant: well the food is supposed to be healthy eating so they usually have something like they may have pasta, macaroni cheese like today they had jacket potatoes with either cheese or baked beans and a side salad they have had like erm chicken and wraps and things like that like one day they had curry chicken and curry vegetables so it's always something healthy but you know a hot meal

Interviewer: absolutely

Participant: yeah

Interviewer: and do you think it's best having it hot or do you think sometimes cold food should be served what's your faults on that?

Participant: we're only fortunate to have decent weather now last year-

Interviewer: yeah

Participant: -it was cold and it was raining

Interviewer: ahuh

Participant: right and I think that when they get a hot meal in the middle of the day I think it just keeps that adrenaline going

Interviewer: yeah

Participant: because you see the children because if you just give them like sandwiches or whatever you know what I mean it becomes mundane after a couple of days eating the same thing but at least here they get to taste a different meal and it's a hot meal

Interviewer: yeah

Participant: and then they are welcome to bring whatever snacks they want or whatever so

Interviewer: absolutely

Participant: it's ok

Interviewer: yeah and erm do the children serve their own food or does someone serve it to them?

Participant: no no the cook serves it when she cooks and she serves them and then there's two of the volunteers will take the plates into the children into the (inaudible)

Interviewer: and do you think that method works best?

Participant: yeah because last year it was a thing that the children were collecting the plates and to me they might drop it

Interviewer: yeah

Participant: do you know what I mean so I prefer but they are seated and the plates are brought to them and then there's no problem

Interviewer: mhm absolutely and have you's got kitchen facilities and places to store the food here?

Participant: yeah

Interviewer: yeah?

Participant: yeah

Interviewer: that's good and what what happens if there is any food waste what happens with that at the end if there is any leftover food?

Participant: erm there has never been

Interviewer: never?

(laughs)

Participant: there has never been

Interviewer: always gone?

Participant: so that's no problem no problem they are human and they are dustbins all in one

Interviewer: yeah

Participant: there is never never any- I mean at times some people say they didn't get any or that they didn't get enough but there's never any leftover

Interviewer: and erm do you think the food and the activities has made a difference to the children and family's holidays?

Participant: I think they have I think they have and what I like about it is that over the years the things change so you don't just have the same workshops every year

Interviewer: mhm

Participant: you have different ones like they have music they have dance one year they had sewing right (inaudible) they have all different activities you know what I mean so

Interviewer: ahuh

Participant: you don't need to get hold of it you know you are doing like hair they learn to do nails, eyelashes all different things

Interviewer: aw wow

Participant: yeah and then there's this lady that comes and they make t-shirts and they make hats you know like they decorate baseball caps

Interviewer: yeah

Participant: they make t-shirts and things like that

Interviewer: aw wow so they are actually learning things from the activities?

Participant: it's nice so that's it and one year they had this lady that used to make you know those jewellery with the beads and that that they sell

Interviewer: yeah

Participant: yeah

Interviewer: wow that's amazing

Participant: so you know they've had all different workshops yeah you know what I mean it just depends who's available at the time

Interviewer: absolutely yeah

Participant: yeah but I think it's nice because you know they always have a variety of things to do it's never just come in and play a board game or whatever I mean the boys play football and play all different things

Interviewer: yeah

Participant: yeah so

Interviewer: that's great and what about the food element do you think the food- having the food available at the club makes a difference to the holidays?

Participant: I think it's a good idea because you know sometimes you may not have things at home or a child may come and not have anything to eat at least you know at lunchtime they will get something to eat

Interviewer: yeah

Participant: so I think that that's a good thing about it at least there's something on offer

Interviewer: mhm

Participant: but as we've said if your children have special needs, dietary needs or so forth or if you think that they are fussy eaters you can send them with a packed lunch something that you know that they will eat

Interviewer: mhm yeah

Participant: so that works for everyone

Interviewer: absolutely and erm overall do you think the hub has been successful and can you think of any improvements or developments that could be made for the future?

Participant: I think it's successful, what I think, what I would have suggested is that it extends to 4 o'clock but it depends on the staff that we have

Interviewer: yeah

Participant: and the reason why I would extend it to 4 is for (inaudible) that erm as I say some parents are at work and I think that 3 is kind of in the middle of the afternoon

Interviewer: yeah

Participant: I think that 3 o'clock is in the middle of the afternoon so I think more 4

Interviewer: yeah

Participant: they could make their own way home at 4 it's more like the afternoon but that's about it but I think that the way it's run what they do here and whatever I think it's really good

Interviewer: great and is there anything else that you would like to say or have I covered at all?

Participant: no I think you've covered it all

Interviewer: covered it all?

Participant: yeah

Interviewer: great thank you so much

Appendix Fiii: Example of Parent/Carer Interview Script from Study 1

Interviewer: so how many weeks does this holiday club run for?

Participant: erm about 6 weeks up to 6 weeks

Interviewer: yeah? And how many what days does it run on

Participant: erm we've got activity for Monday

Interviewer: mhm

Participant: Tuesdays

Interviewer: mhm

Participant: Wednesdays

Interviewer: mhm

Participant: Thursdays and Fridays

Interviewer: aw great

Participant: so at different centres

Interviewer: aww right right and what times does it operate what times does it run?

Participant: erm like here this particular hour start from between 10 till 10-11

Interviewer: ahuh

Participant: till half 1 because we definitely have lunch after every activity

Interviewer: aw great

Participant: yeah

Interviewer: that's great

Participant: and the Tuesday one start from 9:30, 9:30-10 until about half 1 as well

Interviewer: aw good and how many days do your children attend it?

Participant: everyday

Interviewer: great

Participant: they come in every day

Interviewer: fab and erm what are your thoughts on the hub so how did you find out about it and why did your children decide to come along?

Participant: ok I found out about the hub from (names another support service) because erm they were erm a food bank as well

Interviewer: mhm

Participant: so I found out about them from (names another support service)

Interviewer: mhm

Participant: there's a group I go to it runs during term time no it runs in the holiday as well but more term time and I found out about it from them

Interviewer: great

Participant: so I decided to come into the erm hub and see how it goes and it's really been amazing coming to the hub

Interviewer: great that's good and erm what holiday periods does it run in, is it just this one? does it run in the Easter?

Participant: yeah it runs like Easter the past Easter so every holiday they have got an activity they put something

Interviewer: great and do you think it's useful running in the Easter holidays as well as the summer?

Participant: yeah

Interviewer: yeah?

Participant: very useful

Interviewer: ahuh?

Participant: yeah because whatever you do with children it has got to be consistent

Interviewer: mhm

Participant: if you are not consistent with children kind of a routine thing and you break it off they become a problem

Interviewer: yeah

Participant: so once you're consistent they are not all and if it's a holiday

Interviewer: mhm

Participant: I still have something to keep me busy because they easily get bored

Interviewer: yeah absolutely

Participant: and certainly with the issues of living in a very small flat

Interviewer: mhm

Participant: an overcrowded environment not enough room to run around to play

Interviewer: mhm

Participant: because if they don't run around and burn their energy they become bored stressed out

Interviewer: mhm

Participant: and you know passed onto you as a mum and gets you stressed out as well so things like these are very good for them

Interviewer: that's great and do you think this helps alleviate some of the stress by letting the kids run about?

Participant: a lot not just for the kids for their mum as well

Interviewer: great

Participant: they come to socialise

Interviewer: mhm

Participant: with all the kids from different backgrounds

Interviewer: yeah

Participant: you the mum as well get to socialise and in this holiday club they have activities for the children and the parents or you get involved in the activities your children are doing

Interviewer: aw wow that's great

Participant: it's not just like going to the park and you sit down and your children are running around

Interviewer: yeah

Participant: or some other club that you go to you sit down and the kids can play you get involved to know what they are doing

Interviewer: aw that's great

Participant: if they are doing crafts you get involved no matter how little the child is you get involved

Interviewer: mhm that's amazing and do you think it is beneficial that the parent gets that involvement as well?

Participant: yeah very beneficial because some of the activities you can take it home and do it

Interviewer: mhm

Participant: like the one we went to on Tuesday organised by the hub as well they came up with erm they call it Queen activity but in something it's called breaking the code

Interviewer: mhm

Participant: so they come up with different alphabets and put some spaces between so the child looks at the alphabet and look at what it represents up there and write it down and at the end of the day they are forming their own words like stop listen look

Interviewer: yeah

Participant: and they use it to teach them about the erm road safety signs

Interviewer: aw wow so it's very very helpful that's great so do you think they learn from doing that activities here?

Participant: yes they do they learn from different activities

Interviewer: so you have mentioned a few of them but what different activities can the kids get involved with when they come here and their parents?

Participant: yeah craft, face painting, henna doing, activity for one to play for the little ones as well, singing and clay modelling

Interviewer: mhm

Participant: so you get involved as well?

Interviewer: yeah absolutely

Participant: that's it and erm from the hub as well they have got the opportunity to visit the House of Parliament

Interviewer: aw wow

Participant: and they've had the opportunity to visit the Tower of London

Interviewer: that's amazing

Participant: so when they have visited there they see a lot of things especially with the House of Parliament they are like ooo when there's like (inaudible) when we go home

Interviewer: yeah

Participant: they remember I've been there I've been there which is a great thing

Interviewer: absolutely

Participant: ordinarily you as a parent might not want to do it when you think of the circumstances financially and every other thing

Interviewer: mhm

Participant: but they put it together to say not just coming in to play let's go out let the kids know there are places like this that exist

Interviewer: mhm

Participant: and what's happening in there that is where they make the laws

Interviewer: yeah ahuh

Participant: now when they went to erm the Tower of London on Monday they were very happy

Interviewer: mhm

Participant: they had the opportunity to see the Crown Jewels

Interviewer: aw

Participant: they had the opportunity to sit down and watch a briefing about the coronation of the Queen

Interviewer: mhm

Participant: and they saw the robe she wore when she was being crowned they saw the Crown and everything so

Interviewer: aw wow that's amazing

Participant: it's a great opportunity they got through here

Interviewer: yeah

Participant: so if the hub wasn't having such an activity they wouldn't go there

Interviewer: mhm

Participant: and they wouldn't be here today to play

Interviewer: yeah

Participant: so they look forward to coming here to play

Interviewer: absolutely

Participant: and wherever they have their centre they look forward to going

Interviewer: ahuh definitely that's great and what about the location of the hub itself so you said it's at different ones?

Participant: yeah

Interviewer: and erm why is that for do you think that is good having it at different places or do you think it should just be at one what's your thoughts?

Participant: erm I think having it at different places is good in the sense that it makes different people at different centre's that they have it

Interviewer: mhm

Participant: that the community around benefit that they have got here people around here knows they have got in (says place) and (says place) people around them there's something going on

Interviewer: mhm

Participant: they have got in (says place) in (says area) so people around there know

Interviewer: mhm

Participant: so when you come here and you know all the fun activities and it's beneficial to me and my child

Interviewer: mhm

Participant: you want to go to wherever they are having the next activity

Interviewer: absolutely yeah

Participant: so that is it

Interviewer: that's great that's really interesting and (interruption) and do you think they're accessible so is there anything which might prevent you from coming along to the clubs?

Participant: erm basically sometimes it's walkable it depends on transport as well you have to get transport to get here because you have got little ones that might get tired walking

Interviewer: yeah absolutely yeah so maybe having ones nearer to where you live would be most suitable?

Participant: yeah

Interviewer: yeah

Participant: well even though that when you have one nearer to where you live like I live in (says place) where there's one nearer to me

Interviewer: yeah

Participant: it might not be running today and the kids want to go out

Interviewer: yeah

Participant: they want to have something doing

Interviewer: absolutely

Participant: and they remind you of oh the club I went to last time and I had this this this that that that

Interviewer: mhm

Participant: you want to make an effort to take them there because you know they will enjoy it

Interviewer: yeah definitely

Participant: and at the end of the day they are going to get a healthy lunch as well

Interviewer: absolutely, so what food do they actually have when they come to the club?

Participant: erm depending on what they have like when we went on Wednesday we had erm pasta and erm the spaghetti bolognese on Tuesday

Interviewer: mhm

Participant: when we went to the Tower of London they had a packed lunch sandwich

Interviewer: mhm

Participant: with a banana with water with a snack bag

Interviewer: mhm

Participant: so they've got something to eat after for lunch

Interviewer: yeah mhm

Participant: and they have fruit as well here and they have fruit to take home

Interviewer: yeah absolutely that's amazing

Participant: so they are well looked after

Interviewer: yeah definitely

Participant: (says hub leader name) is trying she is looking after them a lot

Interviewer: aww and what do you think about the food?

Participant: it's ok

Interviewer: yeah?

Participant: she's trying it could be better but it's ok

Interviewer: mhm?

Participant: I'm sure when she gets more funding she could do more

Interviewer: yeah and what could be changed?

Participant: because she's really trying her hardest

Interviewer: and what could be better about the food element?

Participant: she tries to provide the vegetarian and the non-vegetarian food

Interviewer: yeah

Participant: and she has more than enough for everybody

Interviewer: mhm

Participant: but I think when she gets more she might want to do more that's what I think

Interviewer: yeah

Participant: but she's trying because and sometimes she's got like the 60 families to feed

Interviewer: wow

Participant: yeah on Tuesday we were like 60 something and she has to feed everyone to make sure everyone gets something to eat so she's really good

Interviewer: that's great or what kinds of foods does she cook?

Participant: different kinds of food rice and peas rice and curry erm with veg lots of vegetables

Interviewer: mhm

Participant: pasta erm jacket potato and tuna and sweetcorn

Interviewer: mhm

Participant: so she ensures it's healthy and (inaudible) in the activities as well like the one they had in (says place) there's someone that came from (says place) to teach healthy eating

Interviewer: yeah

Participant: so the kids get involved in cooking and know what healthy eating is all about

Interviewer: aw that's great

Participant: and after cooking they eat what they have made and we parents also join in

Interviewer: aw that's great and is there any benefits to doing that do you think with the whole cooking element and getting the kids joined in?

Participant: yeah lots of benefits

Interviewer: mhm?

Participant: they get to know the different fruits and veg

Interviewer: mhm

Participant: and they get to know all this is helpful to me it's healthy when I eat it it's good for me

Interviewer: yeah

Participant: so when you prepare it at home they remember oh I heard something about it not just in school but now in the holiday club so you are kind of consistent because in the school they have their meals

Interviewer: yeah

Participant: they have their veg and during the holidays something is happening here so it is consistent you are not stopping them

Interviewer: absolutely

Participant: and it's beneficial to the kids and you as well you are keeping them healthy and fit

Interviewer: mhm and have they tried any new foods or new activities from coming to the club?

Participant: yeah yeah like my little girl she wouldn't eat lots of erm mince meat

Interviewer: mhm

Participant: or curries with the veggies she doesn't really like them

Interviewer: mhm

Participant: but from the holiday activities she's been coming to she's been trying them and she's eating erm erm

Interviewer: aw that's great

Participant: erm I from the vegetables I got from here as well I try to make some for her

Interviewer: yeah

Participant: yesterday and they had it and they liked it

Interviewer: aw that's great

Participant: I made curry yesterday and they liked it

Interviewer: aw that's really good

Participant: with lots of broccoli and lots of onions and-

Interviewer: that's great

Participant: -carrots they liked it so that is something that I saw here that they tried it

Interviewer: mhm

Participant: they give it a go she liked it

Interviewer: mhm

Participant: and I tried to repeat it at home

Interviewer: that's amazing

Participant: you understand like the activities we also do as well we try to repeat some at home

Interviewer: yeah

Participant: so it's helpful

Interviewer: yeah absolutely it's giving you then ideas to implement at home?

Participant: yeah

Interviewer: and do you think the food makes a difference to your summer holiday so is it beneficial having the food on here do you think?

Participant: yeah instead of you thinking oh I'm going out pack getting my packed lunch what should I have today

Interviewer: yeah

Participant: I don't know maybe I might repeat everything for them at home

Interviewer: yeah

Participant: but you you hope like oh they are going to go somewhere

Interviewer: mhm

Participant: not just a play they are going to have lunch and something different everyday

Interviewer: yeah

Participant: so which is good

Interviewer: mhm

Participant: they would have played they would have been exhausted instead of being home and being grumpy they have had their tummy full again and happy and they can walk home happily

Interviewer: absolutely yeah and do you think the activities have made a difference to your holidays as well having them on?

Participant: yeah a lot

Interviewer: yeah?

Participant: a lot

Interviewer: that's great

Participant: it keeps their memory going as well from school

Interviewer: aw yeah?

Participant: because after all school is closed I don't do my readings anymore I don't do anything anymore especially for the early years

Interviewer: yeah

Participant: because they do lots of arts and crafts in school

Interviewer: mhm

Participant: just to keep them going to develop their skills as well now they come to holiday club and they still have that consistency it keeps them erm at the level

Interviewer: yeah

Participant: so when they go back to school they don't forget it's going to the park to play is also good it's helpful but to still have that bit of education going on as well

Interviewer: yeah

Participant: the children can still go to the park and play they still have that continuation

Interviewer: absolutely and why do you think that is a really important to keep education going on the holidays as well?

Participant: because when they go back to school they don't forget

Interviewer: yeah mhm

Participant: their memories are fresh about things

Interviewer: yeah

Participant: it might not be everything but it refreshes their memory ongoing for school

Interviewer: yeah

Participant: the brain the reading part of the brain is not sleeping

Interviewer: mhm yeah absolutely

Participant: because if it's not important I don't think the- the library will have the reading challenge

Interviewer: yeah

Participant: so they have the reading challenge they come here to do the art and crafts it's still ongoing

Interviewer: aw that's good that's really good and erm who chooses the activities and the food do the children get a choice in what they take part in and what they eat?

Participant: they've got different activity tables set up

Interviewer: aw right

Participant: so erm they try as much as they can the parents and we that our volunteers

Interviewer: yeah

Participant: try as much as we can to make sure they take part in each table

Interviewer: yeah?

Participant: because at the end of the day whatever they have done they have to take home are they really proud of whatever they have done

Interviewer: yeah

Participant: so they want to have make sure they go to other tables and have something to take home

Interviewer: yeah absolutely

Participant: to look onto to have pictures of (inaudible) and things we did at home as well

Interviewer: yeah definitely that's really good and erm erm oh yeah and how is it viewed in the community so do you think it brings any wider community benefits it it erm viewed positively in the community or negatively what's your thoughts on that?

Participant: very positive

Interviewer: yeah?

Participant: because erm mum's and parents around who know about it know there is somewhere to go

Interviewer: yeah

Participant: the kids will definitely meet friends make friends

Interviewer: mhm

Participant: listen to stories and you have somewhere to chat which another adult has a mum as well

Interviewer: yeah

Participant: and you know maybe sometimes find that oh there's some similarities amongst your kids

Interviewer: yeah

Participant: or sometimes have a chat with Mum that can you know help something out

Interviewer: mhm

Participant: like when you've been stressed because (inaudible) can make you stressed

Interviewer: yeah

Participant: but when you have an an adult conversation with someone your stress will be lifted

Interviewer: that's great

Participant: so it's really beneficial that's amazing so it gives you that adult conversation by coming here

Participant: yeah

Interviewer: and getting to meet I suppose the other parents who come along that's great and is there any sort-if the club wasn't running in the summer holidays do you think you or other parents there might be certain challenges that you might face?

Participant: yeah the only thing you have to do is just go to the park

Interviewer: mhm

Participant: and come home

Interviewer: mhm

Participant: and the kids might not have enough from going to the park they run around fine it's good it's healthy for them and when they're back home they're tired so that's routine of going to school coming home they know everything in school

Interviewer: yeah

Participant: they might be missing that part because you might not have all the materials they need to do the arts and crafts in your house

Interviewer: yeah mhm

Participant: and they get more fun when they have children of their age doing it kind of peers doing it amongst their peers they do their best

Interviewer: yeah absolutely

Participant: so you might have a little time to do it like I have three to look after you might have a little time to do it, one, two, three but when you're somewhere like this or you know they're in different tables definitely go to the tables and you will be with them all

Interviewer: yeah

Participant: you will try your best to be around them all

Interviewer: absolutely

Participant: so you push yourself for them

Interviewer: mhm

Participant: and also it keeps them away from the streets don't get me wrong for some people it's good for them to be in the street but sometimes I think when they are among their parents like this they learn more and they learn faster

Interviewer: yeah mhm

Participant: like I said I don't give them my phone's

Interviewer: yeah

Participant: because I want to know what they are listening to they are still very young I want to know what they are watching so we do everything together even when they want to have screen time for like 20 minutes a day I will be there with them to know what they are watching

Interviewer: definitely

Participant: so when they are here they gain more here because if they go to the park they run around they play their tired you are coming back in the kitchen cooking and they are right in front of the screen

Interviewer: yeah definitely

Participant: or if you don't go to the park they have got the computer, their iPad whatever and they are right in front of the screen so

Interviewer: mhm

Participant: coming to the holiday club to kind of encourage and keep the family bonding going

Interviewer: absolutely

Participant: the family bonding the family unit going

Interviewer: mhm

Participant: you are involved in what they are doing

Interviewer: yeah absolutely that's really good and do you think any changes could be made so could anything be done to improve the club to make it any better?

Participant: erm to me maybe more erm erm like for the little ones although we have got toys for the little ones to play

Interviewer: mhm yeah

Participant: but maybe more for them could be ok if she gets support to have more toys

Interviewer: yeah

Participant: more sensory toys as well for the little ones would be helpful

Interviewer: yeah absolutely

Participant: would be helpful

Interviewer: and what age range is it that can come here?

Participant: from 0 to 12 13 14 15 yeah

Interviewer: aw that's great

Participant: yeah because if I have a 14 year old

Interviewer: yeah

Participant: or a 13 year old that has nowhere to go and I'm coming here I wouldn't leave them at home I was bring them in

Interviewer: no absolutely yeah

Participant: and it's helping the younger one to what they are doing

Interviewer: that's really good so its flexible

Participant: and I will find out if there is anything he can help to like just watch the children as well

Interviewer: yeah

Participant: support those who are doing the art and craft so you can get your children involved as well

Interviewer: yeah absolutely

Participant: like when we went to the Houses of Parliament we got some 14-15 year olds that were there as well

Interviewer: ahuh

Participant: with their parents which was good

Interviewer: aw that's really good and is there anything that you would like to say that I have maybe missed or have I covered everything?

Participant: erm not really we have covered everything

Interviewer: covered everything?

Participant: yeah she is doing really great bringing this to the community is really helpful

Interviewer: absolutely

Participant: so whatever support the hub could get would be very good

Interviewer: absolutely

Participant: would be very good

Interviewer: definitely

Participant: because she's not just erm bringing this up she is making sure that every family that comes in is doing ok and that they are happy and she also look at your friends when you come in how are you today how are you doing how are the kids she tends to know what you are going through

Interviewer: aw that's really interesting

Participant: like when we come here erm erm on a Wednesday there was a guy that was helping the mum's lift the buggies up so things like that

Interviewer: yeah

Participant: when we have activities like this we wish we could get one or two males that would be around to also help (names another support service) with buggies it's a useful thing as well

Interviewer: that's really good

Participant: so anything that would help us keep it going is very important very very important

Interviewer: yeah that's amazing so she sort of cares and I suppose listens to the wellbeing of the parents

Participant: yeah she does

Interviewer: as well and kids coming in as well?

Participant: yeah she go around and have chats with the little ones as well which is good

Interviewer: that's amazing yeah absolutely

Participant: very good during Christmas the little holiday she also tries to get something

Interviewer: aw that's good

Participant: happening for the kids as well and she gets a party for them so

Interviewer: aw that's great

Participant: and bring some people together so she doesn't just leave you to be on your own

Interviewer: yeah

Participant: it's consistent

Interviewer: absolutely

Participant: which is very helpful

Interviewer: it is, well thank you so much for taking the time and coming to talk to me

Appendix Fiv: Example of Senior Stakeholder Interview Script from Study 1

Interviewer: so firstly, how did you find out about the Kitchen Social programme?

Participant: erm it was really erm from one of the I think it was the CEO erm or one of the coordinators who actually contacted (names food company)

Interviewer: ahuh

Participant: erm they understood that we were a catering business erm and obviously being quite a big catering business erm I think they thought there may be some benefit of partnering with us

Interviewer: mhm

Participant: so they actually contacted us in the first instance just to see what erm holiday provision work we have done before

Interviewer: mhm

Participant: erm and what we can potentially erm provide to them and how we can work as a partnership so they they initially contacted us and then from there we we built a bit of a relationship

Interviewer: great and have you done much previously in terms of holiday provision work?

Participant: Kitchen Social was actually the first erm I think non-voluntary organisation that we decided to work with erm based on obviously seeing things in the news and seeing the impact that hungry children had

Interviewer: ahuh

Participant: erm we wanted to get involved but we weren't sure how and actually when Kitchen Social came in contact with us that's when we began the journey of holiday provision and since then it's it's spread supporting other charities and organisations nationally as well

Interviewer: great and why when I suppose you initially received news about the Kitchen Social programme why did you decide to go ahead and collaborate, and I suppose help out with the holiday provision? What was your reasons?

Participant: I think our main reasons were they were already well established in that you know they already work across I think over 3-over 33 different boroughs in London so they are already well established they have got a good model in place erm but also they were having such a big impact and we wanted to be a part of that journey that they were on

Interviewer: mhm

Participant: erm and I think it was- it was really important that we saw the pattern that came from the people that actually made it all happen erm but also going and understanding the different Kitchen Social hubs were all about and each one is completely different

Interviewer: mhm

Participant: erm but the whole basis for what they do erm and the whole foundation for what they do is the same you know they just want children to be fed and have somewhere safe to go in the holidays

Interviewer: mhm yeah

Participant: so that's really why we we joined on they were big they were well established erm and they contacted us and it just seemed like a really good way to start getting involved in these projects

Interviewer: mhm yeah great and why do you think there is a need for the Kitchen Social programme and I suppose programme's like it so what issues do you think that Kitchen Social is hoping to address?

Participant: erm I think predominantly and first and foremost it should be hunger

Interviewer: mhm

Participant: that's addressed because we know that over 3 million children go hungry across the UK in the school holidays and the school holidays equate to 170 days a year so it's a long period of time that children mainly primary school but also as it you know they get older as well they all go hungry so I think the first thing is hunger

Interviewer: mhm

Participant: erm but sorry what was the question just remind me again?
(laughs)

Interviewer: what issues do you think the Kitchen Social programme is hoping to address?

Participant: yes ok so yeah hunger but also erm social deprivation and isolation so I think a lot of erm communities- particularly in London but all over the UK may seem quite isolated in the holidays because of religious or cultural differences or erm they may not have a have a specific place that they can go

Interviewer: mhm

Participant: particularly children especially if there parents are working or there parents don't have very much money there's not very much for children to do in the holidays so again a big issue is just incorporating children erm and parents into a community and getting them to do enrichment activities I think that's been established as being really really important as well as the food and I think it always comes food first

Interviewer: mhm

Participant: but I think then after that you know individual activities to actually allow children to socially integrate with each other

Interviewer: mhm

Participant: carry out physical activity but also erm the ideal holiday club in my opinion would be to feed them a healthy meal, to give them enrichment activities but also to invite parents in and create more of a community and parents to actually learn skills erm in terms of cooking and how they can eat healthily on a budget and how they can work with erm other organisations or you know be involved with other organisations to make more of a community feel so it actually has a sustainable impact

Interviewer: yeah

Participant: erm as opposed to us just feeding them a meal and sending them on their way I think there's a much bigger problem erm that I think it's just social to address because you see the meals that are served but also you see that they have activities

Interviewer: mhm yeah

Participant: erm you know in the space of 10am or in the morning until 2pm or 3pm in the afternoon so you take quite a big chunk of that day for those kids but if they invite families as well like some of the hubs do like some of them don't

Interviewer: mhm

Participant: I think that's when it is going to have the most impact if that answers your questions

Interviewer: yeah absolutely that was really good thank you and I suppose you mentioned a few times about feeding the children and erm the kids that the main impact of the meal erm did you as a company hear about- I mean it's been termed a lot holiday hunger- is that something you had heard a lot about before your involvement in the KS programme or is that something that KS brought awareness about?

Participant: erm I think we were aware of it

Interviewer: mhm

Participant: as a business but we weren't actively involved in it

Interviewer: mhm

Participant: so all of us as a nutrition team were aware of what was going on and over the past year that's become a lot more evident through you know news articles and erm the government actually actively having to do something

Interviewer: yeah

Participant: so it has become a lot more public in the public eye but erm certainly since we began our partnership with KS we almost understood the largeness of the situation through seeing how spread across London it was it wasn't just in two or three boroughs it was across over 33 boroughs

Interviewer: yeah

Participant: erm so we understood from that erm actually you know there's pockets of deprivation everywhere

Interviewer: mhm

Participant: and erm we understood yeah the largeness of it through KS but since then and since developing other relationships we've we've seen that it's actually a national problem and London is just the start really

Interviewer: yeah absolutely and erm you mentioned before about kind of the parent involvement and how erm all the cooking skills and what not and some hubs have the parents come and some don't- do you think having the parents access the service as well is really important or do you think it doesn't really make a difference whether the parents attend- what's your thoughts on that element?

Participant: erm my personal opinion and from what I have seen is that it's so important that parents are involved in these clubs I think erm I think if we provide activities for parents to be involved with and actually build relationships with other parents and other members of the community that's where sustainable changes are going to be made because actually what children eat and erm where there eating habits stem from is from early childhood and what happens in the home

Interviewer: mhm

Participant: so if we just feed children a healthy meal or we feed them a healthy meal at school for instance in the term time as well and then we send them on their way but then their parents don't know how to cook or they buy you know very very cheap confectionary products because they don't know what's healthy that's cheap

Interviewer: mhm

Participant: then actually the problem will continue erm for a long time and erm so I think teaching parents to eat healthily on a budget is paramount

Interviewer: mhm

Participant: in order to actually change a community and and cause sustainable change in these kids lives because it's only one meal in that whole day that we'll be serving those kids erm so if we can almost have an impact on the parents who are then going to feed them those other two meals that day that in my opinion is going to make the biggest difference erm that that we'll see

Interviewer: ahuh

Participant: as opposed to- otherwise I think these hubs will just have to continue and there will have to be more and more and more and more organisations and charities will have to get involved

Interviewer: mhm

Participant: because erm because the scope of the problem is only going to get bigger if erm if parents and people grow up not knowing how to cook not knowing how to use food and also I think there is a lot of social deprivation out there and a lot of people feel like you can only eat healthily if you have to you know buy an avocado and have quinoa everyday and actually it's it's so not like that but the education elements just not there so erm personally what I wanted to be more involved with with KS was actually doing a trainer trainer approach

Interviewer: mhm

Participant: erm for these clubs to actually teach the cooks and volunteers erm how to cook healthy dishes from scratch on a budget but also to provide resources and almost do sessions with the parents to then send them off to make these recipes at home

Interviewer: mhm

Participant: so erm that for me is paramount yeah like the kids 100% we need to reach the kids and feed the kids erm then actually getting the parents to come in and and work with us and interact with us and yeah by all means have a meal as well

Interviewer: mhm

Participant: erm but actually go away with with skills that are actually going to help them and not patronise them as well that's really important not to patronise parents but actually just to say erm you know we are here to help we would love to erm teach you some new skills that we think would be really helpful for you in the home and

Interviewer: mhm

Participant: almost understand them from there perspective and see what erm facilities they have at home you know they may only have a microwave

Interviewer: yeah

Participant: so understanding how can we teach you to cook something healthy even just using a microwave

Interviewer: mhm

Participant: just things like that being adaptable and being flexible but I definitely think parents is the way like the whole community the whole family working together is the way forward

Interviewer: yeah fab and how do you think the implementation of the hubs has helped alleviate the issues in anyway so you discussed I suppose in terms of social isolation and hunger I suppose in terms of those topics how do you think the hubs have assisted in that?

Participant: erm I think they've been I think they've been fairly good I think erm you know there hasn't been a huge focus on erm just parent sessions I think there is a predominant focus on the children and actually that's a draw for parents to you know bring their kids and a lot of parents will just bring their children drop them off and come and pick them up

Interviewer: mhm

Participant: and I think for a lot of parents that is still something that is erm attractive just because you know it's free and it is accessible and it's local so a lot of these KS hubs will erm plant themselves somewhere in the middle of a community you know say a adventure playground for instance or a community centre or a church and then you know parents will be able to walk there erm as opposed to having to get a you know coach or a bus or something that is going to almost prevent them from coming so I think accessibility wise they are very good

Interviewer: mhm

Participant: erm I don't know marketing wise how much marketing there is out there for KS I haven't seen much but maybe erm maybe there is I just may not erm I may have missed it

Interviewer: mhm

Participant: erm but certainly you know there are small numbers and regular numbers of families that do attend the hubs that i've been in

Interviewer: mhm

Participant: and then sometimes I do think the numbers could be bigger and we could have more of an impact erm so perhaps maybe the marketing needs to be improved but generally I think they do plot themselves quite well

Interviewer: yeah

Participant: erm across different communities yeah

Interviewer: mhm great and erm what do you think the intention of running the hubs was in terms of what KS wanted the children and parents to get out of it so what do you think they hoped that it would achieve in terms of the children and parents over the summer?

Participant: erm I think it was-

Interviewer: or over the other holidays as well in that sense I suppose

Participant: yeah erm I think it was always to have somewhere safe

Interviewer: mhm

Participant: erm for kids to go I think it was also erm to have some element of food available that is free erm it almost prevents erm the children from being out on the streets certainly when I was in (names hub) erm I think it's in Islington area erm and one of the main things that they said was we just want to get kids off the street and erm somewhere safe where they can you know have fun and erm be in a community environment but not you know not have children like little children just roaming around with nothing to do because that's where crime sets in and that's where you know kids get in with the wrong crowds and they get bored so you know they may do something that they wouldn't naturally do otherwise

Interviewer: mhm

Participant: erm so I think food is a big element but also erm what I have seen is definitely getting the kids somewhere safe and allowing the parents also to drop them off and and have a bit of time to do whatever else they need to do in the holidays

Interviewer: mhm

Participant: erm I think the main yeah definitely the main thing for KS I think is probably food

Interviewer: mhm

Participant: and preventing this erm social isolation and to bring communities together but also to perhaps to help with some skills for kids so some KS clubs i've seen have been really good in giving lots of enrichment activities erm to children so then teaching them how to cook and I have seen some hubs that have been a lot better than others for that

Interviewer: yeah

Participant: erm and then others which will be like you know an adventure playground setting where the kids are just constantly playing then they'll they'll be called in to have some lunch

Interviewer: mhm

Participant: erm but there'll be no other structure to that 4-5 hour session so it just depends on the kitchen, hub and gaging what that community wants erm and yeah that for me has been a real eye opener but I think food, enrichment activities and somewhere safe is probably what KS were looking to achieve

Interviewer: yeah and do you think it- it differs like depending on the community that the hub is actually in whether it matters in terms of how structured it is and erm how much food and cooking they actually implement into their setting?

Participant: I think so I think so what I've seen is so yeah i've mentioned an adventure playground that I went to

Interviewer: mhm

Participant: and that had a lot of children with special needs in it so of course they didn't really have much structure they didn't want the kids to feel like they were in school

Interviewer: yes

Participant: so they wanted them to just play and erm use all this excess energy that they've pent up since being at home

Interviewer: mhm

Participant: erm and give them a meal but of course the meal erm what I noticed is the meals weren't as well prepared they weren't as thought out they just wanted the kids to eat because

they had these special needs and they weren't always sure how to erm how to almost control that

Interviewer: yeah

Participant: so they just wanted the kids to have some food of some kind so the food tends to be a bit unhealthy as healthier than it would be than in other hubs that are a bit more proactive and have more of a structure to them

Interviewer: ahuh

Participant: where they actually had specific cooking sessions and the kids almost ate what they then had cooked

Interviewer: mhm

Participant: which I think sustainably was probably a lot more well well a good use of time as opposed to this but it just depends I think you know these kids had a lot of special needs so you couldn't have got them all sat down in one room

Interviewer: yeah

Participant: listening to you it just would have never worked

Interviewer: mhm

Participant: erm so these hubs have to take that into account and I think there half way there with even just providing a place for these kids to come and for parents to trust these volunteers enough to leave their kids with them for half a day

Interviewer: yeah

Participant: erm so they've come a long way but I think they still have a long way to go erm but I have seen across the estate a massive difference in erm like I said structure, facilities, food, resources erm you never know what you are going to get until you kind of turn up erm so we we've all as a team had to be extremely flexible with that

Interviewer: mhm

Participant: and erm using (names hub) as another example of being such a good KS hub in that you know they are well planned out they have activities planned out thought out they have food cooking from scratch

Interviewer: mhm

Participant: they have got the kids in the kitchen being hands on and then eating what they have made

Interviewer: yeah

Participant: most days and actually taking these kids away as well

Interviewer: yeah

Participant: and giving them insight into other areas outside of their local community so that's been really really good to observe but not ever KS hub is like that

Interviewer: mhm

Participant: and it's just so different across the different boroughs it's just very hard to erm almost compare them

Interviewer: yeah mhm

Participant: if that makes sense

Interviewer: yeah they are all so different

Participant: yes yeah

Interviewer: that's really interesting about the trips element and taking them out the community do you think that's quite important to have that in the programme as well?

Participant: I think if it's feasible

Interviewer: mhm

Participant: I think the first thing we need to focus on is still making sure they get that meal

Interviewer: yeah

Participant: so none of the funding should go towards erm anything outside of that until they have got that healthy meal inside of them erm but once almost the core foundations of that hub are in place

Interviewer: yeah

Participant: erm and I think once we get that consistent then we can almost look at you know we have got enrichment activities going on within this community we have got them within this centre what else can we do to expand

Interviewer: mhm

Participant: erm the knowledge and the understanding of the world to these children and these families you know is there a way we can we can get a mini bus and take them out into the woods or take them out into the suburbs I think that will be amazing but to start with we just have to get this foundation erm

Interviewer: mhm

Participant: of you know just a good solid healthy cooked meal erm where parents are getting involved the kids are getting involved and people are just almost understanding food in its basic elements again erm because I think another problem with with social deprivation is a lot

of the idea is oh you can't get healthy food that is cheap erm and a lot of families don't don't know how to cook anymore and they will rely on you know ready meals and processed meals and things that they think their kids will eat but how are we ever going to turn this culture around if we don't start getting kids cooking again in schools and seeing food in it's basic elements as opposed to just in a packet that they just chuck in the oven or the microwave

Interviewer: yeah

Participant: erm so I think there's there's so much work to do in that respect and I think convenience foods has a lot to answer to for in that respect

Interviewer: yeah

Participant: I think a lot of people who you know are a lot more educated and who have very very busy jobs that's where the convenience sector should sit but unfortunately, it's now merged into a lot of these families that don't actually know how to cook anymore so they almost have to go to that erm convenience highly processed high fat high salt ready meal for their children for their kids erm you know or grab a 12 erm 12 pack of crisps because they know their kids will eat that

Interviewer: yeah

Participant: and it's cheap so and I think we have got a lot to answer for and manufacturers do as well but I think yeah I think the enrichment activities outside of communities would be amazing

Interviewer: mhm

Participant: and again (names hub) do that really well so if you want to touch base with them that would be great erm

Interviewer: yeah I have been to that club I went to that one a few times in the summer when I was doing my testing

Participant: yeah

Interviewer: erm it was a really interesting club and as you say it is so interesting how all of them differ in terms of even what they are as I say when I went out in the summer some of them were community centres

Participant: mhm

Interviewer: but then alternatively i've went to a church which actually had to have their food brought into the setting

Participant: mhm

Interviewer: as opposed to actually being able to cook it there so it is such -a wide range

Participant: yeah it's very difficult isn't it

Interviewer: mhm

Participant: and I think yeah I think they almost have to be very flexible depending on the demographic depending on the erm level of interest depending on the area that they are in

Interviewer: yeah

Participant: erm and I think yeah I definitely think with holiday provision a one size won't ever fit all

Interviewer: ahuh

Participant: erm but I think like i've said the most important thing for me is seeing these cooks and volunteers if they are you know going to kindly give up their time erm to support these functions they need to have a certain level of competence when it comes to what they actually feed the kids because if we are just going to feed the kids something that's you know high fat or you know something that they just know know they are going to eat

Interviewer: mhm

Participant: because it's something they recognise erm that's all well and good yes they will get something in their bellies that day but actually you are almost continuing the problem

Interviewer: mhm

Participant: with what we see with childhood obesity with erm tooth decay with the lack of education around food

Interviewer: mhm

Participant: erm and i'm sure you know about this all anyway but the huge epidemic of problems like co-morbidity is associated with being obese being overweight and it's it's uncontrollable and if we are going to be supporting something as important as this we need to also have a education piece to it

Interviewer: mhm

Participant: so the meal comes first but who cooks that meal are they competent do they know what they are doing are they educating the kids whilst they are doing it are they inviting the parents to see how they are doing it

Interviewer: mhm

Participant: and things like that need need to be brought in I think to KS a bit more

Interviewer: yeah

Participant: erm I've not seen that so far erm some of them

Interviewer: so just developing it really and adding on those extra elements?

Participant: yeah definitely

Interviewer: is a definitely probably a challenge in some of the clubs compared to how developed some of them are as opposed to some of the other ones that you go into

Participant: yes yeah

Interviewer: erm so I have saw one (names food company) demonstration but it was last year and it was a very long time ago so what do you do when you go into the hub i'm presuming it changes as you said dependant on what hub but what is kind of a general I suppose what you's do when you go in?

Participant: erm so yeah what we do what we normally do is offer like interactive food workshop

Interviewer: mhm

Participant: erm where we basically got what we call beyond the (names food company) kitchen it basically it's an education programme that aligns to the school curriculum so we drag and drop that into schools during term time depending on what the schools would like and you know what there objective and priorities are for their children so we drag and drop that programme in there so what we do as well with the holiday provision hubs is almost understand you know what is it that that hub would like

Interviewer: mhm

Participant: you know what is it that they think would really benefit the children and then we would bring one of those workshops to that that hub so what we do is you know just bring a number of different ingredients and depending on what the workshops is so for an example a global flavours taste the world workshop we've done before in one of the hubs where we brought lots of different wraps we made lots of different erm like sauces and mixes from around the world so say we made like a mexican kind of tomatoey chilli mix we made a greek kind of yoghurt mix and something else and then we laid out all the different types of fruits and vegetables and beans and pulses and then the children can almost make their own wrap but we talk to them about foods from around the world having different tastes you know talking about our taste buds changing all the time so

Interviewer: mhm

Participant: generally the workshops differ slightly depending on what the hubs want but

Interviewer: mhm

Participant: they all have a food element where we bring ingredients with us and we engage the children actively doing tasting and getting them to to taste something at the end of the session

Interviewer: mhm

Participant: but also there's a theory component where we want to obviously educate the children a little bit more and talk to them about the importance of food groups you know why

we don't have so much of these high fat you know high sugar high salt foods all the time and why we need to think about what we are eating and how that is going to help our bodies erm we always try and incorporate those but what we have found with the holiday hubs is obviously you know in schools it's a lot more disciplined

Interviewer: mhm

Participant: erm and there's a structure and the teachers there and you know they can tell the kids to be quiet if they need to

Interviewer: yeah

Participant: whereas at the holiday hubs it's a holiday so we don't want the kids to feel like their at school

Interviewer: mhm

Participant: erm so we we interact even more with the kids then and make it more fun and make it more about them and what they want to get out of the session so

Interviewer: mhm

Participant: that's generally how it tends to follow we may do one or two sessions one after the other seeing a maximum of 30 children at a time erm but what i've been speaking to a lot of the nutritionist about recently going into 2019 is you know engaging with families now is what we want to be doing so although it's great having the kids and doing all this we don't always know if that actually goes in and you know if they actually go home and tell their parents what they have learnt or you know almost pass that information on to the parents who may have even less knowledge than them about something

Interviewer: yeah

Participant: erm so what we want to do is get families in really erm and yeah based on everything i've said previously just engaging with parents is so important and making them feel part of something bigger and but also not patronising them because a lot of them might you know may well feel who's this person trying to tell me what to do

Interviewer: yeah

Participant: we don't want them to ever feel like that we want them to feel empowered by making better choices and helping their kids grow healthier

Interviewer: yeah

Participant: erm so that's kind of my personal but also what I think (names food company) want to achieve we just want to have more of a longstanding impact erm supporting and I think that's why i've always tried to go down the route of train the trainer for KS to actually have you know maybe even 15-20 minutes of the training time if they bring all the cooks and volunteers together at any one point I would love a spot in that place to just give them all my information give them resources and

Interviewer: aw that's really interesting

Participant: allow them to yeah then almost consistently be able to put the same message out to families

Interviewer: ahuh

Participant: as opposed to just dropping in on one or two different hubs and

Interviewer: yeah

Participant: delivering these workshops although that's well and good I don't think that's personally sustainable

Interviewer: yeah ahuh

Participant: erm because I I mean I live in the Midlands so for me to travel down two or three times a week to London to just do one or two workshops it's not sustainable it just can't happen every holidays so

Interviewer: yeah

Participant: for me actually doing a bigger training session erm and then almost sending those cooks and volunteers off with the same consistent message to then spread that out across the hubs I think that's more sustainable and hopefully that will empower them to have the knowledge to pass that on to families that they then deal with in the clubs

Interviewer: yeah absolutely

Participant: but that's my long term vision, one day

Interviewer: that's really interesting, do you get much interest from the staff when you do the workshops do they express much interest or is it very much you on your own doing-

Participant: erm it's varied to be honest

Interviewer: yeah?

Participant: so again in (names hub) they have been actively involved

Interviewer: yeah

Participant: erm in other hubs they sometimes leave you to it and say if you need anything give us a shout

Interviewer: ahuh

Participant: they've always been very like helpful

Interviewer: yeah

Participant: but erm it it yeah it completely varies

Interviewer: yeah

Participant: yes completely yeah

Interviewer: fab and i've just got a few questions which are usually more directed towards the KS coordinators but you might have some inkling about some of them and it's just more how you think they actually select these hubs to join the KS programme so why these hubs all of the hubs are so varied why do you think KS pick these hubs or the hubs choose to get in touch with KS to become involved in the programme?

Participant: hmm I presume it might be to do with the amount of children registered for universal free school meals

Interviewer: mhm

Participant: and maybe the erm level of deprivation in those areas there may be a cry out for something erm I think as well it might be to do with erm the number of volunteers on the ground who are actually willing to make it happen

Interviewer: yeah

Participant: because it's all well and good having a vision but if there's no one there to make that come to life then nothing is going to happen so erm I think there obviously needs to be a certain number of people interested and who are willing to give up their time erm for then KS to obviously land in that area

Interviewer: mhm

Participant: erm I think that's probably all I can think of at the moment

Interviewer: mhm

Participant: erm yeah and that's worth probably seeing yeah

Interviewer: yeah fab and do you know how many holiday hubs the KS hub is currently overseeing and how many they plan on taking on in the long run?

Participant: erm I think I have mentioned it a few times but I mean I think it's 33 boroughs that they are in

Interviewer: yeah

Participant: I think they are continually looking to expand

Interviewer: ahuh

Participant: erm so I think yeah they are looking to expand over 45 or that might be on the website or something like that

Interviewer: mhm

Participant: erm for yeah I don't have the exact number

Interviewer: yeah yeah

Participant: in my head sorry

Interviewer: no that's fine and erm what do you think- you mentioned the FSM do you think they are mainly targeted they are getting to reach these target audiences?

Participant: erm

Interviewer: I suppose from the hubs you have been into you will only have the experience of from what you have, what do you think?

Participant: yeah I think erm I think that's what would make the most sense

Interviewer: mhm

Participant: in terms of these are the children that would definitely- are way more likely not to be having three meals a day

Interviewer: yeah

Participant: when they are in the school holidays because they rely on that meal at school

Interviewer: yeah

Participant: so that would make the most sense for KS hubs to almost target those children and those families

Interviewer: mhm

Participant: erm but I think the problem also erm gets slightly worse I think as as kids become teenagers because when you are small you are more likely to be explorative with food and actually want to try different things and it's been shown that actually smaller children primary school children actually do eat more fruit and vegetables than teenagers do

Interviewer: yeah

Participant: so erm I think the problem is still very much erm in higher year groups as well but I think the level of engagement is probably going to be more with erm younger children and families erm because I think there maybe some stigma attached to needing a meal when you're slightly older

Interviewer: mhm

Participant: erm so I think that's why such good hubs like (names hub) will almost engage with the families and get the teenagers in

Interviewer: yeah

Participant: through erm selling the it's you know a fun day with lots of activities and then the meals almost a bonus even though the meal is obviously the centre of what KS do and should be doing I think erm selling selling an event by doing something exciting brings in those children who would see a bit of a stigma attached

Interviewer: yeah

Participant: erm

Interviewer: mhm

Participant: if that makes sense

Interviewer: yeah

Participant: but I think it would make sense to target the universal frees

Interviewer: yeah

Participant: to start with

Interviewer: absolutely

Participant: yeah

Interviewer: and do you think there is any barriers so anything that might prevent the children or the parents actually accessing these hubs?

Participant: erm I think initially it might just be parents worried about erm the stigma attached

Interviewer: yeah

Participant: erm so again I think the way the hubs is marketed is very very important erm so there's as an example there's a lot of work going on in Stoke on Trent at the moment and the way they market the hubs is fully around enrichment activities

Interviewer: mhm

Participant: and there's barely anything on there about the food

Interviewer: yeah

Participant: and then the food is obviously served but it's almost seen as a bonus

Interviewer: yeah

Participant: so families will flock there because they will think it's something fun there for the kids it's something for them to do it's free erm it's local and you know they may get some food

they may not but they get there and of course there is a meal for them there as well so erm I think there might be some stigma just attached to people actually asking for some help and being shown to be vulnerable

Interviewer: mhm

Participant: erm I think as well there may be especially in London lots of different demographics lots of different cultures, religions and actually bringing communities together sometimes can be difficult

Interviewer: mhm

Participant: so if there is a local community full of different you know religious beliefs and things it might be more difficult for one group of you know one population group to come with you know if there's that

Interviewer: yeah

Participant: do you know what I mean

Interviewer: mhm

Participant: it's quite hard to explain but

Interviewer: yeah yeah

Participant: I think sometimes they are quite isolated communities even if they are in the same community

Interviewer: mhm

Participant: I think it can clash sometimes and erm that might be a barrier

Interviewer: yeah absolutely

Participant: erm I think they are probably the two biggest things

Interviewer: yeah definitely and I feel like you have already answered this question just from talking but erm is there any others that you might be able to think of in terms of the benefits that the children or the parents or even wider benefits to the community I suppose from these hubs being available?

Participant: yeah I think erm I think yeah going back to bringing communities together

Interviewer: mhm

Participant: empowering communities through new skills but also empowering communities through their vulnerability so you know yes it is very difficult and it shouldn't ever be the case in the UK now

Interviewer: mhm

Participant: kids can't be fed in the holidays but unfortunately a lot of parents are strained with money and it's very very difficult but a lot of people find themselves in that area so erm

Interviewer: mhm

Participant: the fact that KS something like KS is available is very good erm there's a lot more work still to do

Interviewer: mhm

Participant: cause erm I think yeah in terms of just having somewhere like that is really really good so I think it empowers communities erm of course the benefit is is to feed the children as long as that is a healthy offer if it's not then I think we are almost shooting ourselves in the food and making the problem worse

Interviewer: yeah absolutely

Participant: erm erm and yeah I think erm a safe place is very very so again using Stoke on Trent as an example

Interviewer: mhm

Participant: erm just after Christmas obviously throughout Christmas there is a lot of things going on in churches and community events anyway but then between Christmas and New Year and just after New Year that's when the levels of safeguarding go up massively because obviously families have no money left after Christmas

Interviewer: mhm

Participant: it's January it's cold the level of erm you know social issues within housing goes up goes up a lot worse so you know people are drinking people have no money

Interviewer: mhm

Participant: people are stressed financially so the level of safeguarding goes up massively so actually for hubs to be open in that time for those children to go

Interviewer: yeah

Participant: is really really important above and beyond the food

Interviewer: mhm

Participant: I think in a lot of areas it's really important that the kids have somewhere safe

Interviewer: yeah that's a really good point and do you think there is anything that erm they have achieved that you didn't really expect to come out of it or anything that from yourself going into the clubs that you thought oh I didn't really expect that or anything in that sense or has it ran how you envisaged it going?

Participant: erm yeah so it wasn't run how I envisaged it I thought it would be run more consistent and there would be more of a structure to every KS hub

Interviewer: ahuh

Participant: being under that sort of kind of KS name I thought

Interviewer: yeah

Participant: you know as as you do from like a business point of view

Interviewer: yeah

Participant: if anything has (names food company) name on it it tends to be consistent

Interviewer: yeah

Participant: so you know what I deliver in a school representing (names food company) in one school is going to be the same as what my colleague will do down South

Interviewer: yeah

Participant: like it's just (names food company) so that's how we should be consistent, so I think that's how I expected

Interviewer: mhm

Participant: from KS erm but that's not what I what I saw

Interviewer: yeah

Participant: or experienced at all it was extremely different

Interviewer: mhm

Participant: erm from you know the food offer all the way through to what the enrichment activities were all the way through to the facilities were so that was my experiences so after the first few visits erm I would almost you know do calls with all the team and just say this is how KS run this is how actually to be honest all holiday provision hubs run

Interviewer: mhm

Participant: because you know that's just what they have got to do I presume from from the flexibility side erm so yeah basically expect the unexpected

Interviewer: yeah

Participant: is what I would say erm and what i've learnt

Interviewer: mhm

Participant: from being in those hubs

Interviewer: absolutely and how do you think I mean you mentioned again before about the food needing to and some clubs needing to be upstaged in terms of healthier options, how do you think going forward the hubs need to improve and I suppose going forward how they need to expand them and what's your thoughts in that element?

Participant: erm I think it's difficult because you know obviously a lot of these clubs will be supplied by different suppliers for food so you know some some will be supplied by Tesco some will be supplied by erm all these other you know community functions that will hand out excess food so based on that I think what needs to be improved it does need to be more consistent I think we almost need to have like a KS smart food guide or something along those lines where they have a set of guidelines the cooks or volunteers that cook have a set of guidelines that they need to almost follow

Interviewer: mhm

Participant: for an example something very loose like erm you know you need to have you know a wholegrain carbohydrate as part of that meal

Interviewer: yeah

Participant: you need to have a protein as part of that meal whether it be beans or pulses

Interviewer: yeah

Participant: or a chicken or fish

Interviewer: yeah so like a guideline behind it?

Participant: exactly so I think rather than giving them specific recipes they need to follow

Interviewer: mhm

Participant: I think if they have a set of guidelines and then almost erm a way of making that happen so erm you know you can make a recipe out of you know a very composite meal out of beans, you know tinned chickpeas, tinned tomatoes, onion, garlic, and wholegrain rice and actually that so I don't almost giving them guidelines and giving them different options of what they can use depending on that supply of food gives them that week because it may well vary massively so (names hub) again using them as an example you know may well get one kilos of like lemons one week and then they will get a kilo of cucumber the next as their vegetable or fruit option so it completely varies so almost having you know loose guidelines but also making sure they stick to those guidelines

Interviewer: yeah

Participant: and then they can almost work around that erm to be more consistent and also almost be quite firm with saying what the kids shouldn't be eating erm and I know that's quite hard

Interviewer: mhm

Participant: because a lot of kids may well be very fussy and they may not eat a huge amount of different variety but I think like i've said before we're just making a problem worse by feeding them crap

Interviewer: yeah mhm

Participant: in the holidays erm and it's it's not enough to just feed their bellies you have to give them something nutritious erm

Interviewer: yeah

Participant: so yeah that's what I'd say

Interviewer: absolutely

Participant: to improve it just give it more consistency and more support for the for the staff and volunteers and actually empowering them to have new skills and

Interviewer: mhm

Participant: you know not just accept that a ready meal is what mum gives them at home so this is sufficient for the holiday club I think

Interviewer: I just want to finish off by talking about the sustainability and the funding element of the hubs

Participant: mhm

Interviewer: so do you think the funding is sustainable and who do you think the responsibility should be down to?

Participant: oh erm

Interviewer: tricky question

Participant: yeah so do I think it is sustainable erm yes if I think we get full government backing in the next couple of years

Interviewer: mhm

Participant: I think the government are obviously trialling erm holiday provision different initiatives across the country at the moment

Interviewer: yeah

Participant: obviously they are giving this 9 million pound fund to 9 different authorities to see how this would work

Interviewer: yeah

Participant: erm and again it's very much trial and error at the moment but I think if their trials show that obviously this does have a significant impact on kids when they go back into school after the summer

Interviewer: mhm

Participant: erm they will have no choice but to fund more so I think basically it's based on the results of you know what big organisations like KS do

Interviewer: ahuh

Participant: erm I think it needs to be continually evidenced and it needs to it needs to almost be in so much black and white that the government can't not respond to it

Interviewer: mhm

Participant: erm so I think if KS and all these other local authorities evidence everything very well and the results are as we would expect them to be i.e., kids are really helped and families are really helped through this initiative

Interviewer: yeah

Participant: then I think the funding will be sustainable

Interviewer: mhm

Participant: erm what was the second part of the question who's going to fund it?

Interviewer: yeah who do you think the responsibility should be down to- mixed or one certain aspect?

Participant: erm I think for long term long standing change and to almost I don't think this problem will ever be fully eliminated but for us to significantly reduce

Interviewer: yeah

Participant: the scope of the problem the government have to be behind it and the government have to be providing a set amount of funding to every single local authority

Interviewer: yeah

Participant: across the country to enable them to then provide holiday provision programme that is suitable for that area so like i've said before I don't think one size fits all I think that KS will have to adapt very differently in different boroughs as opposed to a area in Staffordshire like the kids are different the demographics are different

Interviewer: yeah

Participant: the religions are different so one size will definitely not fit all but I think if the government can provide a set amount of money

Interviewer: ahuh

Participant: that's to every single local authority to do what they will with that money solely for holiday provision purposes but then what they think is appropriate for that area that's going to be what I believe is the most sustainable approach

Interviewer: yeah

Participant: and who should be funding it is the government

Interviewer: yeah

Participant: definitely top down

Interviewer: do you think even if the government do get involved and this funding goes ahead and carries on do you think that corporate companies should still have an involvement in investing in these hubs and helping out or do you think it should solely just be the government's responsibility in that sense?

Participant: erm I would be disappointed if big corporate companies didn't feel a responsibility to help when they have got so much money erm so that's why I have pushed for (names food company) to be more involved because I believe we do have a moral and a corporate responsibility to support

Interviewer: yeah

Participant: which we now do and i'm really proud of the work we do erm but I definitely think erm yeah it should be it should be something that all companies do take into account but I think first and foremost it is the government's responsibility and I think we shouldn't be we shouldn't be in this problem and the government should have acted sooner

Interviewer: absolutely

Participant: and we shouldn't have to be trialling all of this you know does it actually help like of course it helps you can see the impact it actually has just by going to a club erm so I almost get quite cross about it because I think you see the ample problem that we have

Interviewer: yeah

Participant: and it's just constant we have to evaluate it for two or three years before anything is actually officially done it just seems like wasting time to be honest when you could just put a pot of money across and make a real difference to people's lives so yeah that's where I stand on it

Interviewer: fab well that is all my questions thank you so much for taking the time you have given me loads, do you have anything do add?

Participant: oh good, no

Appendix Gi: Coding Discrepancies from Children’s Focus Groups in Study 1

Children’s Quotes	Coder 1	Coder 2	Resolution
<p>“and so I told my mum I really like it here and then she let me come”</p> <p>“so when I was 8 I tried it out and I really really liked this so my mum decided to come here and I've been coming to”</p>	Uncoded	Theme 1a	Coder 1 agreed with Coder 2, quotes should be coded at Theme 1a.
<p>“and sometimes we play time bomb and dodgeball”</p>	Uncoded	Theme 1b	Coder 1 agreed with Coder 2, quote should be coded at Theme 1b.
<p>“and so I told my mum I really like it here and then she let me come”</p>	Theme 1a	Theme 1c	Coder 2 agreed with Coder 1, quote should be coded at Theme 1a.
<p>“my mum sent me to my Godfather and he told me to come here”</p>	Theme 1a	Theme 2b	Agree with Coder 2 that this also fits in Theme

Appendix Gii: Coding Discrepancies from Parent's Interviews in Study 1

Parents quotes	Coder 1	Coder 2	Resolution
<p>“I: great and do you think it's useful running in the Easter holidays as well as the summer? P: yeah I: yeah? P: very useful”</p>	Theme 1a	Uncoded	Coder 2 agreed with Coder 1 that these should be coded in Theme 1a.
<p>“P: and you know passed onto you as a mum and gets you stressed out as well so things like these are very good for them I: that's great and do you think this helps alleviate some of the stress by letting the kids run about? P: a lot not just for the kids for their mum as well”</p>	Theme 1c	Uncoded	Coder 2 agreed with Coder 1 that these should be coded in Theme 1c.
<p>“you sit down and the kids can play you get involved to know what they are doing”</p>	Theme 3c	Theme 3a	Coder 1 agreed with Coder 2 that this also fits in Theme 3a.
<p>“P: yeah because whatever you do with children it has got to be consistent I: mhm P: if you are not consistent with children kind of a routine thing and</p>	Theme 3c	Uncoded	Coder 2 agreed with Coder 1 that this should be coded at Theme 3c.

you break it off they

become a problem

**I: yeah P: so once you're
consistent they are not all
and if it's a holiday”**

**“P: they come to socialise I:
mhm**

**P: with all the kids from
different backgrounds I:
yeah P: you the Mum as
well get to socialise and in
this holiday club they have
activities for the children
and the parents or you get
involved in the activities
your children are doing”**

Appendix Giii: Coding Discrepancies from Senior Stakeholder's Interviews in Study 1

Senior Stakeholder	Coder 1	Coder 2	Resolutions
Quotes			
“yeah erm I think it was always to have somewhere safe”	Theme 1a	Uncoded	Coder 2 agreed with Coder 1, these should be coded at Theme 1a.
“it almost prevents erm the children from being out on the streets certainly when I was in (names hub) erm I think it's in Islington area erm and one of the main things that they said was we just want to get kids off the street and erm somewhere safe where they can you know have fun and erm be in a community environment but not you know not have children like little children just roaming around with nothing to do because that's where crime sets in and that's where you know kids get in with the wrong crowds and they get bored so you know they may do something that			

**they wouldn't
naturally do
otherwise”**

**“what I have seen is
definitely getting the
kids somewhere safe”**

**“erm for kids to go I
think it was also erm
to have some element
of food available that is
free”**

Theme 1b

Uncoded

Coder 2 agreed with
Coder 1 these quotes
should be coded at
Theme 1b.

**“erm so I think food
is a big element
allowing the parents
also to drop them off
and and have a bit of
time to do whatever
else they need to do in
the holidays”**

**“P: erm I think the
main yeah definitely
the main thing for KS
I think is probably
food”**

Appendix Giv: Coding Discrepancies from Staff Interviews in Study 1

Staff quotes	Coder 1	Coder 2	Resolutions
<p>“well at least they are out of trouble you know what I mean they can't be accused of anything</p> <p>because at least when they are in here they are monitored and whatever so it means if anything is happening outside these children won't be involved, other children may be involved but at least with these ones we know where they are”</p>	Uncoded	Theme 2b	Coder 1 agreed with Coder 2 that this fits in Theme 2b.
<p>“and then at least the children aren't just sitting down and they're bored there's so many different activities they can participate in so I think it's I think it's good”</p>	Theme 5b	Theme 5a	Coder 2 agreed with Coder 1 that this fits better in Theme
<p>“well a lot of things they gain confidence right”</p>	Theme 5c	Uncoded	Coder 2 agreed with Coder 1 that this should be coded at Theme 5c.

Appendix H: Delivery Partner Information and Consent Form for Study 2

Information for Delivery Partners

Project Title: An Investigation of the 'Kitchen Social' Holiday Hub Programme, funded by the Mayor of London's Fund, in terms of impact on diet, physical activity and wellbeing for individuals and communities.

Researcher: Eilish Crilley (eilish2.crilley@northumbria.ac.uk)

What is this project all about?

During the summer holidays, parents whose children normally have a free school meal during term have to provide additional meals for their children, as a result, this leaves families with less money. Holiday hubs have been set up to support children and families during this period, although little research has been done to find out the impacts of running a holiday hub. Research has suggested that holiday hubs may allow children to remain active and engaged within their communities throughout the summer holidays as children's physical activity has been found to decrease during the summer holidays without any provision (Graham et al, 2016; McConnon et al, 2017).

The aim of this study is to measure children's physical activity during school term and during the school summer holidays.

What will I be asked to do?

You will be asked to give consent for the research to take place in your school and your school holiday hubs by signing the required consent form. You will be asked to facilitate with the recruitment of participants by circulating information verbally or through the information forms provided on the research and making them aware of the days the researcher is visiting your school to conduct this research. You will also then facilitate with gathering parental consent from parent/carers who are interested in their child participating in this research study.

When will the research take place?

The research will take place during summer 2019 holidays.

What will happen to the information provided from this research?

Any information collected during the research project will be stored in accordance with the Data Protection Act and will only be used for the purpose of this project. All information will be anonymised and schools and participants will be coded with unique participant numbers. Hard copies of physical activity questionnaires will be stored in a locked cabinet in a secure office within Northumbria University and will only be accessed by the researcher working on this project. This information may be used in publications and presentations about the project but none of the participants or hubs will be identified individually in any reports or presentations.

How can I find out more?

For more information please contact Eilish Crilley at eilish2.crilley@northumbria.ac.uk

Delivery Partner Consent Form

Project Title: An Investigation of the 'Kitchen Social' Holiday Hub Programme, funded by the Mayor of London's Fund, in terms of impact on diet, physical activity and wellbeing for individuals and communities.

Name of School (please give details of your school holiday hubs):	
Please confirm that you agree with the following by ticking the box next to each statement and providing your signature below:	
I have read and fully understood all the information provided about the research project.	<input type="checkbox"/>
I understand that if I would like further information about the project I should contact Eilish Crilley.	<input type="checkbox"/>
I understand that a researcher (Eilish Crilley) will assist with the collection of data	<input type="checkbox"/>
I provide consent for my school and school holiday hub to participate in this research project by assisting in recruiting and gaining consent from parents/carers for their children to complete a physical activity questionnaire three times.	<input type="checkbox"/>
I provide consent for information to be recorded and photographs to be taken of the food and drink served, activities running and the environment at the school and school holiday hub.	<input type="checkbox"/>
I understand that data collected might be used in presentations and publications about the project but information collected will be anonymised and will be stored securely and will only be accessed by the researcher.	<input type="checkbox"/>

Name:

Signed:

Date:

Role within holiday hub:

Researcher's Signature:

Date:

Appendix II: Parent Information Form for Child for Study 2

What will happen to the information collected during this project?

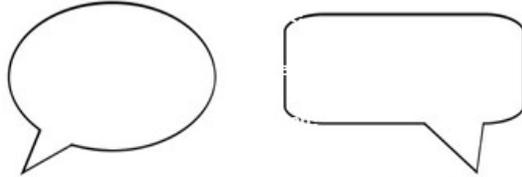
All information collected during this project will be stored in a locked office at Northumbria University in accordance with the Data Protection Act and will only be used for the project described in this leaflet. Children's names will not be on the information collected; unique participant numbers will be used instead. Information will be summarised and the data will be kept until September 2021 and used as part of an overall evaluation and for a PhD thesis. The information will only be accessed by the researcher and might be used in publications and presentations about the project but your child will never be identified individually in any reports or presentations. The legal basis for this research processing is necessary for the performance of a task carried out in the public interest.



How can I be sure this project is okay for my child to take part in?

The Faculty of Health and Life Sciences Ethics Committee at Northumbria University have approved this project (who you can contact via email if you have any concerns regarding this research: nick.neave@northumbria.ac.uk). This research is funded by Kitchen Social and your child's teacher has also said that it's okay for this project to take place at their venue. Eilish Crilley, who will work with your child, has an up to date enhanced check from the Disclosure and Barring Service, which your child's teacher can check at any time. If you have any questions about the project, please get in touch: eilish2.crilley@northumbria.ac.uk or leave your name and contact number at your child's school and I will contact you to allow you to ask any questions.

Holiday Hub Project



What's this project all about?

I am interested in the school that your child attends and the holiday hub that they are running during the summer holidays where they will do some activities and have their lunch.

I would really like to find out what physical activities they have done during the school term and what physical activities they do during the summer holidays at the hub. To find this out I am looking for children to fill out two child friendly physical activity questionnaires.

What will my child be asked to do?

Your child will be asked to complete a questionnaire on the physical activity they have taken part in during the school term. Your child will be asked to complete another questionnaire on the physical activity they have taken part in at the holiday hub the school is running during the summer holidays. The researcher and your child's teacher will assist your child with this. This will be arranged so that there is minimal impact on your child's day. Demographic data (including age, gender, date of birth, height and weight will also be gathered from your child). The records of your child's intake will be locked in a cabinet in a locked office at Northumbria University. No one else other than the researcher will be able to access them. If you have any concerns regarding data protection you may contact Duncan James the Data Protection Officer: dp.officer@northumbria.ac.uk. Your rights under GDPR include a right of access to a copy of the information comprised in your personal data, a right in certain circumstances to have inaccurate personal data rectified and a right to object to decisions being taken by automated means.

What if I say my child can take part but then they change their mind?

In my experience, children enjoy taking part in filling out the questionnaire as it gives them the chance to tell me what activities they've been doing. But, if your child decides at any point that they don't want to fill in their questionnaire any more, your child can tell the researcher and your child can then stop filling out the questionnaire and carry on with their day. They have up to a month after participating to do this.

Appendix Iii: Parent Consent Form for Child for Study 2

Parent/Carer Consent for Child

Dear Parent/Carer,

I am writing to let you know about some research that is taking place at your child's school and at the holiday hub at the school that your child may be attending this summer. The aim of the project is to find out what physical activities children do during the school term and over the school holidays at the holiday hub. If you give consent for your child to do so, I will ask your child to fill out one physical activity questionnaire at school during the school term and one during the summer holidays at the school holiday hub. This research will be commencing from July onwards. Please find attached some information about the project for your consideration. If you are happy for your child to take part in this project, please complete the form below.

Kind regards,

Eilish Crilley

Child's first name: _____ Child's surname: _____

Date of Birth: _____ Age: _____

Gender: _____ School name: _____

Please confirm that you agree with the following statements by ticking the box next to each one:

I understand the information provided about the project.	
I have had an opportunity to ask questions and discuss this study and I have received satisfactory answers.	
I understand that my child will fit out two physical activity questionnaires and the researcher will also gather height and weight measurements.	
I understand that information collected from the questionnaire might be used in presentations and publications about the project but the actual questionnaire will be stored securely and will only be accessed by the researcher.	
I understand that my child is free to withdraw from the study at any time prior to publication, without having to give a reason for withdrawing, and without prejudice.	
I also consent to the retention of this data under the condition that any subsequent use also be restricted to research projects that have gained ethical approval from Northumbria University.	
I agree for my child to take part in this study.	

*Please circle the relevant statement below:

I **would** like my child to take part in this project.

I ***would / would not** like to receive a summary of the project findings.

If you would like to receive a summary, this will be sent to your child's school in an envelope addressed to you for your child to bring home.

Name: _____

Signed: _____

Date: _____

Appendix J: Child Information and Consent Form for Study 2

I would like to find out what physical activity you do at school and during the summer holidays.



If you would like to help me with this, you will be asked to complete two physical activity questionnaires. I will take the physical activity questionnaires and read them to find out what activities you do and how much you do them during the school term and summer holiday. This will help me to understand more about children's physical activity and the difference that the holiday hub has made to you and your family. Your completed physical activity questionnaires will be locked away and only I will be able to read them. Your name will also be completely removed and I will give you a secret number so no one will ever know the information you gave me.



Also, if you are asked any questions you don't want to answer that is fine. If you decide you want to take part, but then you change your mind, you can stop taking part at any time because it's up to you whether you do it or not.

Would you like to take part in this project?
(Circle yes or no)



Yes

No

Please give me some information if you said **yes** to take part.

My first name is... 	My last name is... 
---	--

Sign here

Weight: **Amended Physical Activity Questionnaire**

I am interested in what activities **you** did during the **last 3 days**. There are no right and wrong answers – **this is not a test**. Please answer all questions as honestly and accurately as you can. Please **complete every line** in the questionnaire.

Please fill in the details **below**.

Write your name:

Write your age:

Write your birthday:

School name:

Completion date:

Circle/tick what one applies to you below:

I am a girl

boy

non-binary gender/ prefer not to say

Circle the days of the week that you did these activities:

Monday Tuesday Wednesday Thursday Friday Saturday Sunday

Please **turn over** the page.

Blank page.
Please **turn over** the page.

Which of the following **activities** during the **last 3 days**?

How did you travel TO school during the last 3 days ? You may have travelled by more than one way.		How long did you travel for yesterday?	How long did you travel for two days ago?	How long did you travel for three days ago?
EXAMPLE: cycling to school	No <input checked="" type="radio"/> Yes	15 minutes	20 minutes	10 minutes
EXAMPLE: tube to school	No <input checked="" type="radio"/> Yes	10 minutes	5 minutes	20 minutes
Travel by car / bus / tube to school	No <input type="radio"/> Yes <input type="radio"/>			
Walking to school	No <input type="radio"/> Yes <input type="radio"/>			
Cycling to school	No <input type="radio"/> Yes <input type="radio"/>			
How did you travel FROM school during the last 3 days ?		How long did you travel for yesterday?	How long did you travel for two days ago?	How long did you travel for three days ago?
Travel by car / bus / tube to school	No <input type="radio"/> Yes <input type="radio"/>			
Walking to school	No <input type="radio"/> Yes <input type="radio"/>			
Cycling to school	No <input type="radio"/> Yes <input type="radio"/>			

Please **turn over** the page.

Which of the following **PHYSICAL activities** during the **last 3 days?**

Did you do the following activities during the last 3 days?		How long did you take part in this activity YESTERDAY AT school?	How long did you take part in this activity YESTERDAY when you were NOT at school?	How long did you take part in this activity TWO DAYS AGO AT school?	How long did you take part in this activity TWO DAYS AGO when you were NOT at school?	How long did you take part in this activity THREE DAYS AGO AT school?	How long did you take part in this activity THREE DAYS AGO when you were NOT at school?
EXAMPLE: Bike riding	No <input type="radio"/> Yes <input checked="" type="radio"/>	20 minutes	15 minutes	5 minutes	0 minutes	10 minutes	30 minutes
Bike riding (not school travel)	No <input type="radio"/> Yes <input type="radio"/>						
Aerobics	No <input type="radio"/> Yes <input type="radio"/>						
Baseball/ dodgeball/rounders	No <input type="radio"/> Yes <input type="radio"/>						
Basketball/volleyball	No <input type="radio"/> Yes <input type="radio"/>						
Catch/throw ball	No <input type="radio"/> Yes <input type="radio"/>						
Netball	No <input type="radio"/> Yes <input type="radio"/>						
Dancing	No <input type="radio"/> Yes <input type="radio"/>						
Football	No <input type="radio"/> Yes <input type="radio"/>						
Gymnastics	No <input type="radio"/> Yes <input type="radio"/>						
Hockey (field or ice)	No <input type="radio"/> Yes <input type="radio"/>						
Martial arts/boxing	No <input type="radio"/> Yes <input type="radio"/>						
Cricket	No <input type="radio"/> Yes <input type="radio"/>						

Please **turn over** the page.

Which of the following **PHYSICAL activities** during the **last 3 days?**

Did you do the following activities during the last 3 days?		How long did you take part in this activity YESTERDAY AT school?	How long did you take part in this activity YESTERDAY when you were NOT at school?	How long did you take part in this activity TWO DAYS AGO AT school?	How long did you take part in this activity TWO DAYS AGO when you were NOT at school?	How long did you take part in this activity THREE DAYS AGO AT school?	How long did you take part in this activity THREE DAYS AGO when you were NOT at school?
Rugby	No Yes						
Tennis/badminton/squash/ other racquet sport	No Yes						
Jogging	No Yes						
Running	No Yes						
Swimming	No Yes						
Tag/chase/IT	No Yes						
Trampolining	No Yes						
Bowling	No Yes						
Playing on park equipment	No Yes						
Rollerblading/rollerskating	No Yes						
Ice-skating	No Yes						
Skateboarding	No Yes						
Skipping/Skipping rope	No Yes						
Scooter	No Yes						
Walking the dog	No Yes						

Walk for exercise/hiking	No	Yes						
OTHER please state:	No	Yes						

Please **turn over** the page.

Which of the following **activities** did you do during the **last 3 days**?

Did you do the following activities during the last 3 days ?	No	Yes	How long did you take part in this activity YESTERDAY AT school?	How long did you take part in this activity YESTERDAY when you were NOT at school?	How long did you take part in this activity TWO DAYS AGO AT school?	How long did you take part in this activity TWO DAYS AGO when you were NOT at school?	How long did you take part in this activity THREE DAYS AGO AT school?	How long did you take part in this activity THREE DAYS AGO when you were NOT at school?
EXAMPLE: Watching TV/videos	No	<input checked="" type="radio"/> Yes	30 minutes	0	10 minutes	5 minutes	15 minutes	20 minutes
Art & craft (e.g. pottery, sewing, drawing, painting)	No	Yes						
Gardening activities	No	Yes						
Playing musical instrument	No	Yes						
Classroom-based tasks	No	Yes						
Doing household chores	No	Yes						
Play indoors with toys or pets	No	Yes						
Playing board games/puzzles/cards	No	Yes						
Sitting talking/singing	No	Yes						
Reading	No	Yes						
Listen to music	No	Yes						
Playing computer games (e.g. PlayStation/Gameboy/Xbox)	No	Yes						

Please **turn over** the page.

Which of the following **activities** did you do during the **last 3 days**?

Did you do the following activities during the last 3 days ?		How long did you take part in this activity YESTERDAY AT school ?	How long did you take part in this activity YESTERDAY when you were NOT at school ?	How long did you take part in this activity TWO DAYS AGO AT school ?	How long did you take part in this activity TWO DAYS AGO when you were NOT at school ?	How long did you take part in this activity THREE DAYS AGO AT school ?	How long did you take part in this activity THREE DAYS AGO when you were NOT at school ?
Talk/text or play games on mobile phone/tablet/iPad	No Yes						
Using computer/internet	No Yes						
Watching TV/videos	No Yes						
OTHER (please state):	No Yes						

Please **turn over** the page.

Weight: **Amended Physical Activity Questionnaire**

I am interested in what activities **you** did during the **last 3 days**. There are no right and wrong answers – **this is not a test**. Please answer all questions as honestly and accurately as you can. Please **complete every line** in the questionnaire.

Please fill in the details **below**.

Write your name:

Write your age:

Write your birthday:

Hub name:

Completion date:

Circle/tick what one applies to you below:

I am a girl

boy

non-binary gender/ prefer not to say

Circle the days of the week that you did these activities:
Monday Tuesday Wednesday Thursday Friday Saturday Sunday

Please **turn over** the page.

Blank page.
Please **turn over** the page.

Which of the following **activities** did you do during the **last 3 days**?

How did you travel TO the holiday hub during the last 3 days ? You may have travelled by more than one way.	No	Yes	How long did you travel for yesterday?	How long did you travel for two days ago?	How long did you travel for three days ago?
EXAMPLE: cycling to holiday hub	No	Yes	15 minutes	10 minutes	15 minutes
EXAMPLE: tube to holiday hub	No	Yes	10 minutes	15 minutes	10 minutes
Travel by car / bus / tube to holiday hub	No	Yes			
Walking to holiday hub	No	Yes			
Cycling to holiday hub	No	Yes			
How did you travel FROM the holiday hub during the last 3 days ?	No	Yes	How long did you travel for yesterday?	How long did you travel for two days ago?	How long did you travel for three days ago?
Travel by car / bus / tube to holiday hub	No	Yes			
Walking to holiday hub	No	Yes			
Cycling to holiday hub	No	Yes			

Please **turn over** the page.

Which of the following **PHYSICAL activities** did you **do the last 3 days?**

Did you do the following activities the last 3 days?		How long did you take part in this activity YESTERDAY AT the holiday hub?	How long did you take part in this activity YESTERDAY when you were NOT at the holiday hub?	How long did you take part in this activity TWO DAYS AGO AT the holiday hub?	How long did you take part in this activity TWO DAYS AGO when you were NOT at the holiday hub?	How long did you take part in this activity THREE DAYS AGO AT the holiday hub?	How long did you take part in this activity THREE DAYS AGO when you were NOT at the holiday hub?
EXAMPLE: Bike riding	No <input type="radio"/> Yes <input checked="" type="radio"/>	20 minutes	15 minutes	10 minutes	5 minutes	30 minutes	0
Bike riding (not holiday hub travel)	No Yes						
Aerobics	No Yes						
Baseball/ dodgeball/rounders	No Yes						
Basketball/volleyball	No Yes						
Catch/throw ball	No Yes						
Netball	No Yes						
Dancing	No Yes						
Football	No Yes						
Gymnastics	No Yes						
Hockey (field or ice)	No Yes						
Martial arts/boxing	No Yes						
Cricket	No Yes						
Rugby	No Yes						

Please **turn over** the page.

Which of the following **PHYSICAL activities** did you **do the last 3 days?**

Did you do the following activities the last 3 days?	No Yes	How long did you take part in this activity YESTERDAY AT the holiday hub?	How long did you take part in this activity YESTERDAY when you were NOT at the holiday hub?	How long did you take part in this activity TWO DAYS AGO AT the holiday hub?	How long did you take part in this activity TWO DAYS AGO when you were NOT at the holiday hub?	How long did you take part in this activity THREE DAYS AGO AT the holiday hub?	How long did you take part in this activity THREE DAYS AGO when you were NOT at the holiday hub?
Tennis/badminton/squash/other racquet sport	No Yes						
Jogging	No Yes						
Running	No Yes						
Swimming	No Yes						
Tag/chase/IT	No Yes						
Trampolining	No Yes						
Bowling	No Yes						
Playing on park equipment	No Yes						
Rollerblading/rollerskating	No Yes						
Ice-skating	No Yes						
Skateboarding	No Yes						

Skipping/Skipping rope	No Yes						
Scooter	No Yes						
Walking the dog	No Yes						
Walk for exercise/hiking	No Yes						
OTHER please state:	No Yes						

Please **turn over** the page.

Which of the following **activities** did you do during the **last 3 days**?

Did you do the following activities during the last 3 days ?		How long did you take part in this activity YESTERDAY AT the holiday hub?	How long did you take part in this activity YESTERDAY when you were NOT at the holiday hub?	How long did you take part in this activity TWO DAYS AGO AT the holiday hub?	How long did you take part in this activity TWO DAYS AGO when you were NOT at the holiday hub?	How long did you take part in this activity THREE DAYS AGO AT the holiday hub?	How long did you take part in this activity THREE DAYS AGO when you were NOT at the holiday hub?
EXAMPLE: Watching TV/videos	No <input type="checkbox"/> Yes <input checked="" type="checkbox"/>	30 minutes	0	10 minutes	5 minutes	15 minutes	20 minutes
Art & craft (e.g. pottery, sewing, drawing, painting)	No <input type="checkbox"/> Yes <input type="checkbox"/>						
Gardening activities	No <input type="checkbox"/> Yes <input type="checkbox"/>						
Playing musical instrument	No <input type="checkbox"/> Yes <input type="checkbox"/>						
Classroom-based tasks	No <input type="checkbox"/> Yes <input type="checkbox"/>						
Doing household chores	No <input type="checkbox"/> Yes <input type="checkbox"/>						
Play indoors with toys or pets	No <input type="checkbox"/> Yes <input type="checkbox"/>						
Playing board games/puzzles/cards	No <input type="checkbox"/> Yes <input type="checkbox"/>						
Sitting talking/singing	No <input type="checkbox"/> Yes <input type="checkbox"/>						
Reading	No <input type="checkbox"/> Yes <input type="checkbox"/>						
Listen to music	No <input type="checkbox"/> Yes <input type="checkbox"/>						
Playing computer games (e.g. PlayStation/Gameboy/Xbox)	No <input type="checkbox"/> Yes <input type="checkbox"/>						

Please **turn over** the page.

Which of the following **activities** did you do during the **last 3 days?**

Did you do the following activities during the last 3 days?		How long did you take part in this activity YESTERDAY AT the holiday hub?	How long did you take part in this activity YESTERDAY when you were NOT at the holiday hub?	How long did you take part in this activity TWO DAYS AGO AT the holiday hub?	How long did you take part in this activity TWO DAYS AGO when you were NOT at the holiday hub?	How long did you take part in this activity THREE DAYS AGO AT the holiday hub?	How long did you take part in this activity THREE DAYS AGO when you were NOT at the holiday hub?
Talk/text or play games on mobile phone/tablet/iPad	No Yes						
Using computer/internet	No Yes						
Watching TV/videos	No Yes						
OTHER (please state):	No Yes						

Appendix L: Children's Debrief Form for Study 2

The physical activity questionnaires that you filled out has helped me to learn about the physical activities that you do during the school term and summer holidays.



All the things you shared in the questionnaire are really important. I will tell people what physical activities children at your school and other schools in London take part in.

I will make sure that I used your secret number so no one will know it's you who completed the physical activity questionnaires. I will lock away the questionnaires so only I can read them.



When I've finished finding out about schools in London I will let your school know all the things I have found out. I will be using the information you gave me in your questionnaires to talk about it to lots of people. I will never put your name on any of this information.

Don't forget, if you have any questions about the project you can ask your teacher and they will pass the question on to me. I will be sending a summary of all the things I found out to your school!

Thanks for all your help with this important project. You did a great job!

Thank you!



Appendix M: Researcher Observations for Study 2

Date:

Start and end time:

Holiday hub name:

Number of staff:

Staff roles:

Number of volunteers:

Number of children in attendance:

Child/Staff ratio:

What times are activities running?

How long do activities last?

Where do they take place?

Who organises these activities?

Is there any free play or structured activities?

Do all children take part in the same activities and do they have a choice?

Appendix N: Delivery Partner Information and Consent Form for Study 3

Information for Delivery Partners

Project Title: An Investigation of the 'Kitchen Social' Holiday Hub Programme, funded by the Mayor of London's Fund, in terms of impact on diet, physical activity and wellbeing for individuals and communities.

Researcher: Eilish Crilley (eilish2.crilley@northumbria.ac.uk)

What is this project all about?

During the school holidays, parents whose children normally have a free school meal during term have to provide additional meals for their children, as a result, this leaves families with less money. Holiday hubs have been set up to support children and families during this period, although little research has been done to find out the impacts of running a holiday hub. Research suggests that low-income families face challenges providing nutritious meals in the summer holidays (Gill & Sharma, 2004). Therefore, the aim of this study is to measure children's food and drink recall during the school holidays.

What will I be asked to do?

You will be asked to give consent for the research to take place in your holiday hubs by signing the required consent form. You will be asked to facilitate with the recruitment of participants by circulating information through the information forms provided on the research and making them aware of the days the researcher is visiting your hub to conduct this research. By doing this, you will also help gather consent from parent/carers who would be interesting in their child participating in this research study.

When will the research take place?

The research will take place during the 2019 school holidays.

What will happen to the information provided from this research?

Any information collected during the research project will be stored in accordance with the Data Protection Act and will only be used for the purpose of this project. All information will be anonymised and holiday hubs and participants will be coded with unique participant numbers.

Hard copies of food and drink recall records will be stored in a locked cabinet in a secure office within Northumbria University and will only be accessed by the researcher working on this project.

This information may be used in publications and presentations about the project but none of the participants or hubs will be identified individually in any reports or presentations.

How can I find out more?

For more information please contact Eilish Crilley at eilish2.crilley@northumbria.ac.uk

Delivery Partner Consent Form

Project Title: An Investigation of the 'Kitchen Social' Holiday Hub Programme, funded by the Mayor of London's Fund, in terms of impact on diet, physical activity and wellbeing for individuals and communities.

Name of Delivery Partner Organisation (please give details of your holiday hubs):	
Please confirm that you agree with the following by ticking the box next to each statement and providing your signature below:	
I have read and fully understood all the information provided about the research project.	<input type="checkbox"/>
I understand that if I would like further information about the project I should contact Eilish Crilley.	<input type="checkbox"/>
I understand that a researcher (Eilish Crilley) will assist with the collection of data	<input type="checkbox"/>
I provide consent for holiday hubs within my organisation to participate in this research project by assisting in recruiting and gaining consent from parents/carers for their children to recall their food and drink intake.	<input type="checkbox"/>
I provide consent for information to be recorded and photographs to be taken of the food and drink served, activities running and the environment at the hub.	<input type="checkbox"/>
I understand that data collected might be used in presentations and publications about the project but information collected will be anonymised and will be stored securely and will only be accessed by the researcher.	<input type="checkbox"/>

Name:

Signed:

Date:

Role within holiday hub:

Researcher's Signature:

Date:

Appendix Oi: Parent Information Form for Child for Study 3

What will happen to the information collected during this project?

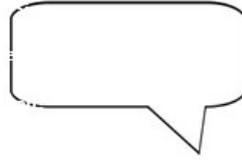
All information collected during this project will be stored in accordance with the Data Protection Act and will only be used for the project described in this leaflet. **Children's names will not be on the information collected**; unique participant numbers will be used instead. All the information will be summarised and the data will be kept until September 2021 and used as part of an overall evaluation and for a PhD thesis. The information might also be used in publications and presentations about the project but your child will never be identified individually in any reports or presentations. The legal basis for this research processing is necessary for the performance of a task carried out in the public interest.



How can I be sure this project is okay for my child to take part in?

The Faculty of Health and Life Sciences Ethics Committee at Northumbria University have approved this project (who you can contact via email if you have any concerns regarding this research: nick.neave@northumbria.ac.uk). This research is funded by Kitchen Social and your child's holiday hub organiser has also said that it's okay for this project to take place at their venue. Eilish Crilley, who will work with your child, has an up to date enhanced check from the Disclosure and Barring Service, which your child's holiday hub organiser can check at any time. If you have any questions about the project, please get in touch: eilish2.crilley@northumbria.ac.uk or leave your name and contact number at your child's holiday hub and I will contact you to allow you to ask any questions.

Holiday Hub Project



What's this project all about?

I am interested in the holiday hub your child has attended over the school holidays where they have done some activities and had their lunch.

I would really like to find out what food and drink children consume during the school holidays at the hub and at home. To find this out I am looking for children to recall their food intake on two separate occasions when they attend the hub. The researcher Eilish Crilley will support children in doing this.

What will my child be asked to do?

Your child will be asked to recall their food and drink intake that they consumed during the previous day at the hubs on two separate days. This will require the researcher to record their food and drink consumption from the previous day. Children will be asked to recall their intake twice on two separate days. This will be arranged so that there is minimal impact on your child's day and the researcher Eilish Crilley will be present to support your child with this activity. Demographic data (including age, gender and date of birth) will also be gathered from you. The records of your child's intake will be locked in a cabinet in a locked office at Northumbria University. No one else other than the researcher will be able to access them. If you have any concerns regarding data protection you may contact Duncan James the Data Protection Officer: dp.officer@northumbria.ac.uk. Your rights under GDPR include a right of access to a copy of the information comprised in your personal data, a right in certain circumstances to have inaccurate personal data rectified and a right to object to decisions being taken by automated means.

What if I say my child can take part but then they change their mind?

In my experience, children enjoy taking part in recalling their food and drink intake as it gives them the chance to talk about what foods and drinks they enjoy. But, if your child decides at any point that they don't want to recall their food and drink intake any more, your child can tell the researcher and your child can then stop and carry on with their day. They have up to a month after participating to do this.

Appendix Oii: Parent/Carer Consent for Child for Study 3

Dear Parent/Carer,

I am writing to let you know about some research that is taking place at the holiday hub your child is attending this summer. The aim of the project is to find out what children eat and drink over the school holidays. If you give consent for your child to do so, I will ask your child to recall their food and drink intake from the previous day on two separate occasions when they attend the hub. This research will be commencing from the July onwards. Please find attached some information about the project for your consideration. If you are happy for your child to take part in this project, please complete the form below.

Kind regards,

Eilish Crilley

Child's first name: _____ Child's surname: _____

Date of Birth: _____ Age: _____

Gender: _____ Holiday hub name: _____

Please confirm that you agree with the following statements by ticking the box next to each one:

I understand the information provided about the project.	
I have had an opportunity to ask questions and discuss this study and I have received satisfactory answers.	
I understand that information collected might be used in presentations and publications about the project but the actual recall information will be stored securely and will only be accessed by the researcher.	
I understand that my child is free to withdraw from the study at any time prior to publication, without having to give a reason for withdrawing, and without prejudice.	
I also consent to the retention of this data under the condition that any subsequent use also be restricted to research projects that have gained ethical approval from Northumbria University.	
I agree for my child to take part in this study.	

*Please circle the relevant statement below- I

would like my child to take part in this project.

I ***would / would not** like to receive a summary of the project findings. If you would like to receive a summary, this will be sent to your child's holiday hub in an envelope addressed to you for your child to bring home.

Name: _____

Signed: _____

Date: _____ Dear

Parent/Carer,

I am writing to let you know about some research that is taking place at the holiday hub your child is attending this October school holidays. The aim of the project is to find out what children eat and drink over the school holidays. If you give consent for your child to do so, I will ask your child to recall their food and drink intake from the previous day on two separate occasions when they attend the hub during the October holidays. Please find attached some information about the project for your consideration. If you are happy for your child to take part in this project, please complete the form below.

Kind regards, Eilish Crilley.

Child's first name: _____ Child's surname: _____

Date of Birth: _____ Age: _____

Gender: _____ Holiday hub name: _____

Please confirm that you agree with the following statements by ticking the box next to each one:

I understand the information provided about the project.	
I have had an opportunity to ask questions and discuss this study and I have received satisfactory answers.	
I understand that information collected might be used in presentations and publications about the project but the actual recall information will be stored securely and will only be accessed by the researcher.	
I understand that my child is free to withdraw from the study at any time prior to publication, without having to give a reason for withdrawing, and without prejudice.	
I also consent to the retention of this data under the condition that any subsequent use also be restricted to research projects that have gained ethical approval from Northumbria University.	
I agree for my child to take part in this study.	

*Please circle the relevant statement below

I **would** like my child to take part in this project.

I ***would / would not** like to receive a summary of the project findings.

If you would like to receive a summary, this will be sent to your child's holiday hub in an envelope addressed to you for your child to bring home.

Name: _____

Signed: _____

Date: _____

Appendix P: Children's Information and Consent Form for Study 3

I would like to find out what children eat and drink during the school holidays at home and at the holiday hub.



If you would like to help me with this, you will be asked to recall your

food and drink intake from the previous day twice. I will record this to find out what food and drink and how much you have consumed at home and at the hub during the school holidays. This will help me to understand more about children's food and drink consumption and the difference that the holiday hub has made to you and your family. This recording of your food and drink recall will be locked away and only I will be able to read them. Your name will also be completely removed and I will give you a secret number so no one will ever know the information you gave me.



Also, if you decide you want to take part, but then you change your mind, you can stop taking part at any time because it's up to you whether you do it or not.

Would you like to take part in this project? (Circle yes or no)

Yes

No



Please give me some information if you said **yes** to take part.

<p>My first name is...</p> 	<p>My last name is...</p> 
---	--

Sign here

Appendix Q: Form to Record Children’s Food and Drink Recall for Study 3

Today’s date: Date of food intake: Time of recall: Circle: Holiday club day/ Non-Holiday club day Participant Number:

Approximate time of eating	Meal type: Early morning Breakfast Mid-morning snack Midday/Dinner Mid afternoon snack Evening meal Late evening/ Supper/ Before bed	Place consumed food (e.g., home)	Description of food/drink: Type of food and drink e.g. orange juice, chocolate, orange squash	Quantity or amount eaten e.g. 6 tablespoons, 1 cup, 1 slice, etc.	Food portion served code	Food leftover code	Brand name of food and drink	Cooking method: Addition of ingredients during preparation and cooking: e.g., sugar / oil

Additional Questions:

Was this your usual daily intake? Circle: *YES / NO*

If no, why? What was different?

Did you take any nutritional supplements? Circle: *YES / NO*

Appendix R: Children's Debrief Form for Study 3

Your food and drink recall has helped me to learn about what food and drink children consume during the school holidays at home and at the holiday hub.



All the things you shared are really important. I will tell people what children at your holiday hub and other holiday hubs in London eat and drink during the school holidays.

I will make sure that I used your secret number so no one will know it's your food and drink recall. I will lock away this information so that only I can read them.



When I've finished finding out about what children eat and drink during the school holidays in London I will let your holiday hub know all the things I have found out. I will be using the information you gave me to talk about it to lots of people. I will never put your name on any of this information.

Don't forget, if you have any questions about the project you can ask your holiday hub leader and they will pass the question on to me. I will be sending a summary of all the things I found out to your holiday hub!

Thanks for all your help with this important project. You did a great job!

Thank you!



Appendix S: Example Page from the Food Atlas



Puff1.JPG



Puff2.JPG



Puff3.JPG



Puff4.JPG



Puff5.JPG



Puff6.JPG



Puff7.JPG

Appendix Example Page from the Food Atlas continued



Puff08.JPG



Puff09.JPG



Puff18.JPG



Puff11.JPG



Puff12.JPG



Puff13.JPG



Puff14.JPG

Appendix T: Researcher Observations for Study 3

Date:

Start and end time:

Holiday hub name:

Number of staff:

Staff roles:

Number of volunteers:

Number of children in attendance:

Child/Staff ratio:

Is both breakfast and lunch served?

Who chooses menu and where does the food come from?

Where is breakfast/lunch served?

What time is breakfast/lunch served?

What food and drink is served for breakfast/lunch?

Delivery model for food for breakfast/lunch?

Food consumption location for breakfast/lunch?

Hub layout and facilities for breakfast/lunch?

Who served food for breakfast/lunch? Are children self-served or do staff-serve for breakfast/lunch?

Who and where is food cooked for breakfast/lunch?

Who collects food and drink at the end for breakfast/lunch?

Where is food/drink consumed? How long for lunch/breakfast?

Is there any food waste for breakfast/lunch?

Who delivers food for breakfast/lunch?

When is food delivered for breakfast/lunch?

Where is food stored for breakfast/lunch?

How long do children consume breakfast/lunch for?

Do children assist in any way with breakfast/lunch?

Do children eat together and do staff join in for breakfast/lunch?

Do children use cutlery or hands to eat?

Photographs of food

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