

Introduction of Research Method

The importance of healthy eating in the early years, how it impacts child development and if the cost-of living crisis has affected this?

Abstract

This research project will consider the impact of healthy eating on children's growth and development and if the cost-of-living crisis has affected this. There is a vast amount of research about nutrition and healthy eating in the early years relating to child development. However, they do not review the current cost of living crisis and how this has impacted. According to (Welsh Government, 2022) substantial measures have been taken to address the rising cost of living, such as:

1. Cost-of-Living Payment.
2. Winter Fuel Payment.
3. Discretionary Assistance Fund, urgent and emergency support for those in need.

The Welsh Government state they aim to alleviate the impact of increasing costs and are committed to support citizens during this challenging time.

Research will be based upon four individual Flying Start settings within South Wales. Therefore, the data collected will be obtained from cluster sampling of 8 children per setting aged 2-3 years and inclusive of two practitioners from each region. A mixed method approach will be applied to this project, in the form of triangulation.

Questionnaires will be allocated to parents to collate quantitative data, to establish how the healthy eating plan at setting has impacted eating habits at home and if the cost-of living crisis has affected purchasing family meals. Practitioners will voluntarily take part in an interview with the researcher to gather perspectives and experiences in this subject. Prior informed consent will be requested for the children taking part in the observational study as well as parental consent. Participants will be informed that they are entitled to withdraw at any time. With assent, participating children will be given the opportunity to take part in a healthy snack time. This observation study is to obtain

children's preferences and the relatability to healthy foods they are offered at home. All data methods will be collated and analysed.

The researcher will examine ethical aspects throughout the research project from the initial planning, execution and conclusion of the data collected. The researcher will ensure the confidentiality and anonymity of all participants in line with The Data Protection Act 2018, BERA (2024) and ERIC (2019). It is also important for the researcher to consider additional factors that may arise when compiling research data, such as validity and prejudice. Therefore, it is necessary to reduce the risks where possible for participants and researcher.

Literature Review

This research project will evaluate the importance of healthy eating how it impacts child development and if the cost-of-living crisis has affected this? According to Public Health Network Cymru (No Date) consuming a healthy diet throughout your life is essential to good wellbeing and health. Children need to have a balanced diet and eat a wide variety of foods. This will provide them with all the vital nutrients needed to keep them fit and healthy. A balanced healthy diet of protein, carbohydrates, fats, vitamins, and minerals. Children require a balanced diet to grow properly, maintain health and fight illnesses. According to (Bayer 2023) children's health can be maintained and improved through a healthy balanced diet and participation in physical activities. Furthermore, this is important for their physical, emotional, and cognitive development. Healthy eating patterns and physical well-being during the first five years of life, are an essential requirement for children's health. This information is relevant to the age range in this project the researcher is gathering data for, as the child participants are aged 2-3 years. When children are physically active, they are known to perform more superior in school and have better brain function compared to children who are less physically active. Furthermore, (Rose, Gilbert, and Richards, 2015 p.47) to satisfy children's biological needs they require a healthy balanced diet. There is evidence to show that poor nutrition can affect a child's cognitive function and academic potential (Albon and Mukherji, 2008). Maslow (1954) emphasises food as a basic physiological component to be satisfied before an individual can progress, this example is used in Maslow's

hierarchy of needs. Consuming inadequate food to meet the body's energy requirements, resulting in inadequate nutrition, while malnutrition occurs due to deficiencies in specific foods or inadequate amounts of food (Shetty, 2003), (Rose, Gilbert, and Richards, 2015 p.48). (O'Connor, 2020) maintains, that as parents or practitioners, you are the most significant role models to children. With the expertise to facilitate experiences like gardening, cooking, and eating with children will encourage healthy eating habits. This will contribute to good health in childhood and healthier choices in adulthood. eating a variety of healthy foods for a lifetime, promoting physical, social, and mental well-being. Likewise, (Tassoni, 2014, p.116) believes that role modelling is a fundamental component of encouraging young children, as they echo adults and are more inclined to eat and try new things.

According to Barnados.org.uk {At what cost?}, (2022), the current cost of living crisis is negatively impacting finances to families across the UK, especially in relation to food and drink prices, which include household food cupboard essential items rising in price by 10% compared to prices in 2021. Vegetables, dairy and meat prices have seen the highest increase in cost. Evidence suggests that families are more likely living in food insecurity due to lack of finances to cover the cost of groceries. 54% of parents have been forced to reduce amounts on food spending for their families. One in five parents admit they have struggled to provide sufficient food for their family due to the cost-of-living crisis with diets being impacted negatively as families are unable to afford healthy alternatives to processed foods. These products can affect children's health negatively increasing the risks of childhood obesity. Families may find it challenging to afford nutrient-rich foods like fresh vegetables, fruits, whole grains, and lean proteins. Foods like these promote active development in health, and growth.

Action for children.org.uk (2023) also agree that the cost-of-living crisis is detrimental to families, causing them to cut their budgets, which in some cases were already small. They touch upon parents skipping meals to feed their children the very basics. Increasing numbers of families are using foodbanks in Wales.

According to Trussell Trust.org (No Date) If you require help, a local food bank can provide an emergency food parcel containing three days' nutritionally balanced food. Parcels may also include other essentials, such as toiletries. Increasing numbers of

families are using foodbanks in Wales. Many food banks will be able to provide advice during your visit to help you access other support you may be eligible for.

Food sense Wales.org.uk (2024) Eat Them to Defeat Them. Says that the Welsh Government funded programme that has been running since 2018 has been designed to ensure that all primary aged school children in Wales will benefit from this funding. The aim of the campaign is to increase the intake of vegetables children eat, by funding a programme across Wales to include all primary schools and special schools. Out of 1 million children, it will reach 275,000. Encouraging families to prepare and eat more vegetables in their meals at home. In campaign 2021 the evaluation found that 60% of children claimed they ate more vegetables as a result. Further impact from the campaign, will continue to improve children's diets now and in the future.

The National Health Service [NHS] Gold Standard Healthy Snack Award (2015) is open to Flying Start settings In Wales. The setting can achieve the award if healthy snacks and drinks are provided appropriately. Hygiene and eating environments need to be met. Accreditation of the scheme shows a dedication from the engaged setting, in turn encouraging good eating habits. It also gives children access to a variety of healthy snacks, fruits, and vegetables to eat when attending setting, which they may not otherwise be offered at home.

(Welsh Government, 2019) Healthy Weight Healthy Wales policy pledges changes by 2030 to food environments. To include community and educational settings. With an increased focus on early interventions and prevention.

Methodological Considerations

When compiling and completing research there are several methods to evaluate. It is important for the researcher to select effective methods that will assist gathering all relevant information required. According to Cohen, Manion and Morrison (2017) researchers should take a sampling approach early in the overall planning of research, to ensure that the sample accurately represents the population, including all subgroups. Ensuring a large enough sample that will achieve enough qualitative and quantitative data. It is important for the researcher to select effective methods that will assist

gathering all relevant information required. According to Cohen, Manion and Morrison (2017) researchers should take a sampling approach early in the overall planning of research, to ensure that the sample accurately represents the population, including all subgroups. Ensuring a large enough sample that will achieve enough qualitative and quantitative data to analyse. Cluster sampling will be chosen for this research project because this probability method splits a large population into smaller groups based on criterion, like location or random sample of clusters are selected for research. (Hassan, M.2022). Bernott, (2020) states that cluster sampling has major advantages that include cost, time and avoids reduced variation as the samples are selected carefully to include subgroups. For this research project participants are children aged 2-3 years old who attend Flying Start settings across South Wales. Children start attending the settings from age 2 and leave at the age of 3 years. Research is looking at children's preferences and choices at snack time, across four settings throughout South Wales. Comparing data from a wider range, consisting of eight children per setting across four regions. When the researcher selects children for the study an inclusive and multi-cultural approach will be evident, including a balanced mix of gender. Ensuring that the cluster sample is a true representation for research purposes (Newby, 2014, p.234-238). Qualitative data will be collated through observation of selected children participating in a healthy snack time within the setting. Looking at preferences, choices the children make as well as relatability to what foods are being offered in setting in comparison to at home.

According to (Nolan, and Macfarlane, and Cartmel,2013, p.89) qualitative research is usually suitable for small-scale projects, where focus is directed at the participants experiences. It is often conducted in one's natural surroundings, and it will capture the experience as it happens through words, actions, and what we see. In this case it is children within a childcare setting. (Ivesson and Sandberg,2013, p.207) believe research questions cover the direction of a study and what it is about? (Cohen and Louis, 2017).

Observations are a useful source to finding information when completing a research project, as they give insight into the here and now, what is happening in real life, real time (Rozsahegyi, 2019, p.23-33). According to Musgrave (2019) observations are a positive method to use in Early Years, as the use of observations are continuously

embedded in early years practice, and they provide substantial data that is specific and qualitative to analyse. However, (Walker and Solvason, 2014 p.81) claim that although observations give the researcher valuable understanding into the participant's world, they are not an easy method of collecting data. They need to be carefully considered both in terms of ethics and structure. The researcher needs to consider when completing observations the Hawthorne effect, this is described as a change in persona and behaviour when they are aware they are being watched (Oswald, Sherratt and Smith, 2014, p.53). It is important for the researcher to evaluate whether they are witnessing a genuine reflection when making notes due to the validity of research. The importance of observation is clear, but it can have challenges. Can we identify participants doing what is expected from the researcher and if they are changing how they do things for the wrong reasons? Researchers need to be careful to attribute intention to participants based on observed behaviour (Hammond, and Wellington, 2020 p.139). Prior to the observational process the researcher needs to decide whether they are going to be a participant or a non-participant researcher. To be actively involved as a participant researcher could present challenging factors, staying impartial without influencing the observation process. However, a non-participation researcher would remain impartial and would observe the activity from a far. (Rozsahegyi, 2019 and Walker and Solvason, 2014).

Questionnaires will be distributed to parents to gain quantitative data to establish how the healthy eating plan at setting has impacted eating habits at home, and if the cost-of living crisis has affected purchasing family meals. The questionnaire provided will contain open ended questions that allow unlimited responses that will provide more detailed and offering strong and valuable perceptions. Consequently (Newby, 2014, p. 336) believes researchers should balance closed and open questions that consider all respondents' ability to answer different question types.

Interviews will be held with practitioners from each setting across four regions. Bell and Waters (2017) believe that interviews can be invaluable as a source of information that is adaptable and characteristic. Notably, they emphasise that interviews are timely and can limit the number of participants. According to (Hammond, and Wellington, 2020 p. 110) Creating an interview needs a set of meaningful questions. careful use of language and clarity in phrasing. A structured interview is usually face to face with a structure and

a list of questions. An unstructured interview will be far less predictable and what is discussed will vary. There is no set list of questions or a specific order, but it still can be effective and productive. It is important to have a starting point and a planned key question. Social skills and the rapport the interviewer has with the interviewee is a fundamental part of the success of the interview process. Winwood (2019) believes the researcher should be an active listener and make the interviewee feel at ease and comfortable. The researcher should be aware of essential topics to prevent them from being missed or forgotten.

Bias is something the researcher needs to consider when interviewing, as influence can occur to both the interviewee and interviewer. When gathering information during the interview process the Halo effect needs to be assessed. The Halo effect is a cognitive bias that may cause the researcher to form opinions on a person, on things such as appearance, personality or class which could have a negative impact on the validity of research. (Gabrieli, *et al.* 2021, p.1-2).

Triangulation has been applied to this research project. A mixed method approach which includes different formats of qualitative and quantitative data. It combines various sources of evidence to gain a true understanding of the research topic (Roberts-Holmes, 2018). In the project the researcher will use sampling, observations, interviews, and questionnaires to collect data. These methods cover the same subject providing collective valid information that will show different views (Bell and Waters, 2017, p.140).

Ethical Considerations

During the project the researcher will need to consider ethical guidelines that will affect how participants are selected and how the research is conducted.

Ethical considerations should be taken throughout research and not something we assign only at the beginning. We should be guided by principles; it is good practice to include these in our information. (Newby, 2014 p. 90).

BERA (2024) states that researchers have a duty to respect all participants within the research project. Individuals should be treated fairly and with dignity. Participants should be free from prejudice, building a trusting relationship. This research project is based in a childcare setting therefore, the researcher needs to identify the benefits of carrying out the research and that this can be achieved within the setting's daily routine without disruption. Not all children will find participation easy, the researcher needs to consider that it could feel overwhelming, the children may feel anxious or reluctant to share information (NSPCC Learning, 2023). According to Nolan, Macfarlane, and Cartmel (2013) the researcher will need to have clear realistic expectations when working with children. It is necessary to include the children as much as possible allowing them to decision make and potentially understand the role they are playing within the activity. Voluntary written consent will need to be provided for parents and practitioners of the setting prior to the activity. All participants should have a clear understanding of what the plans will be for the observation and the reasons behind carrying out the research project. (BERA, 2024 and ERIC, 2019). UWTSD (2022) set out a code of practice that outlines expectations for students representing general ethical principles that are expected to be adhered to. UWTSD (2022) state best practice is to gain written consent prior to research. The researcher needs to ensure all participants understand the research and the expectations. If written consent is not possible due to participants being illiterate or facing language barriers, then verbal consent is acceptable if participants have received and understood the information required to give consent. A full explanation of the research needs to take place with the manager of the setting prior to selecting participants (BERA,2024 and UWTSD). Nolan, Mcfarlane and Cartmel (2013) believe it is best practice to provide an information sheet detailing the researcher's contact details, the plan going forward, reasons for it and what the researcher hopes to find. It is essential that participants are fully informed throughout the research process. (BERA 2024). The research will involve interviewing childcare practitioners at the setting, and questionnaires will be provided for parents to complete. To gain consent, initially the manager of the setting would need to be contacted. The research project will be explained thoroughly including ethical limitations and considerations. This will ensure all relevant information has been explained and the setting can decide to proceed or decline the research project. Once the manager has

authorised consent to proceed, information sheets and consent forms will be allocated to parents and practitioners. It is imperative that all participants are made aware of the right to withdraw consent at any time, without reason. Information regarding this will be outlined in the information sheet. Researchers are responsible for ensuring that children are happy to engage are respected and can participate in a safe manner. If a child does not want to participate their assent will overturn parental consent (NSPCC learning, 2023). The children taking part in the research have a right to have their voices heard, views to be considered and freedom to express their opinions. Consequently, articles twelve and thirteen of the UNCRC will be examined when completing any research (UNICEF, 2019). The children that are being observed at snack time will have the opportunity to make choices, discuss preferences and talk about food they eat at home as well as in setting. During the activity, children will be able to ask questions and investigate fruit and vegetable in their entirety before preparing in which the children will assist practitioners in washing, cutting and serving fruit and vegetables.

(BERA 2024) state researchers should take precautions to avoid identification of participants ensuring compliance of GDPR. The Data Protection Act states that all data should be accurate used fairly and kept up to date accordingly (Gov.uk, 2018). All participants have the right to anonymity and privacy throughout the research project this should be respected and adhered to (UWSTD, 2022 and ERIC, 2019). Anonymity and confidentiality will be met through explanation in the information guide and parent questionnaires will not be identifiable. The settings will be identified as 1, 2,3 and 4 ensuring that no participants can be identified during and after the research findings. All documentation will be filed in a lockable cabinet with access to researcher when necessary. BERA (2024) clearly states all data is to be securely stored. The researcher has the responsibility to ensure anonymity is respected and protected.

This project is based at childcare settings, the researcher needs to be aware of policies and procedures in place and ensure these are followed. Due to the vulnerable age group the researcher is working with a DBS check is required. This is a criminal records bureau check that enables organisations to ensure suitability when working or visiting the setting. (Gov.uk,2022). During visitation, the researcher will be always accompanied by a member of staff minimising risk. Additionally, the researcher is at a greater risk if a

child makes a disclosure, under these circumstances the researcher would need to breach confidentiality and report concerns to the safeguarding officer at the setting. If the researcher has witnessed a child protection issue within the setting child services could receive a disclosure over the phone. NSPCC Learning (2023) state that a researcher should always hold a 592774 this will enable them to act if in distress or need to make a disclosure. The researcher will make participants aware prior to research, child protection issues will expose anonymity and breach confidentiality as a result to safeguard children (BERA, 2024 and ERIC, 2019).

The University is also at risk when students take part in research projects. Researchers are representing the university when conducting research alongside other agencies, businesses, local communities, and other professionals. If a researcher were to act inappropriately or unprofessionally the university's reputation would be compromised. To reduce risk and prevent compromising eventualities from occurring the university's ethics committee are required to check and verify information provided by the researcher. (UWSTD, 2022).

Researchers should not deceive information, falsely report research, evidence, or findings to circulate or promote the research project. (BERA, 2024).

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