Ieva Pīrāga

"I think it's nice doing something I enjoy"

A case study on a community gardening programme for adults with learning disabilities
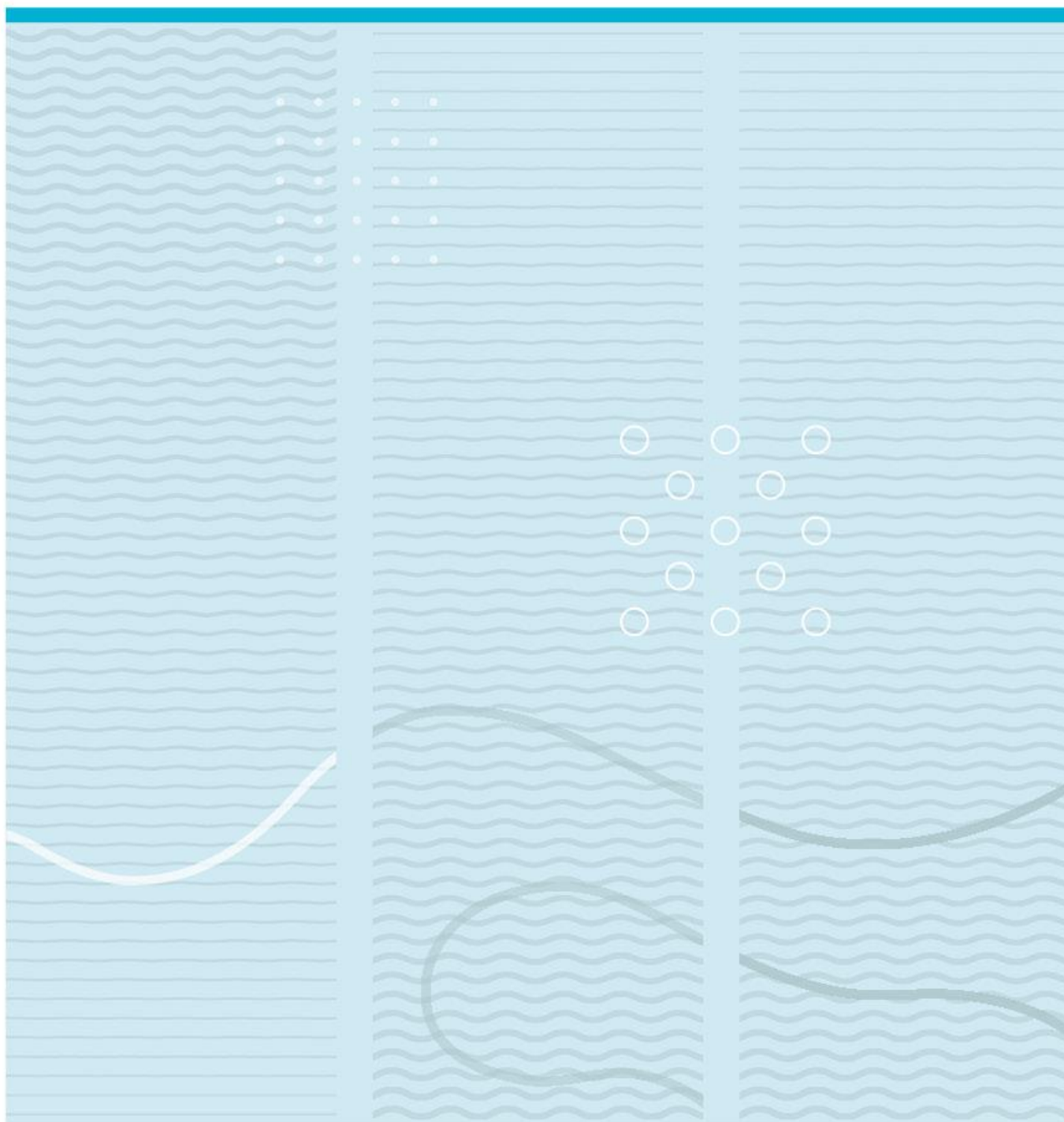
This thesis is worth 30 study points

Abstract

The relationship between direct nature engagement and the positive outcomes on public health has been widely researched in the context of community gardening. Gardening activities are considered a means of being exposed to nature through intentional, goal-oriented activities with various factors that shape the gardening experiences for the groups the programmes are designed for. The research that has employed qualitative approach on health promotion gardening programmes concerning the vulnerable population is sparse. I have attempted to contribute to a gap in the knowledge by exploring the self-reported experiences by individuals with learning disabilities who attend a horticultural day service Sunnyside Rural Trust based in the UK. The case study aimed to investigate what is the impact Sunnyside Rural Trust has on the trainees who attend the horticultural day service. The chosen qualitative inquiry explored how adults with learning disabilities are influenced by their time in the gardens, and what are the critical elements that construct their experiences. To obtain unique personal realities by the studied population, the research employed a photovoice method in which participants were invited to capture images on the site and further talk about their key experiences in semi-structured interviews and focus group discussions. The findings revealed that participants valued opportunities to work with others, were engaged in various activities with a deep understanding of safety considerations and appreciated the natural world around them. The gathered self-reported accounts of participants' key experiences were further considered to inform the practices at Sunnyside Rural Trust. The findings provided useful information that furthers the understanding on the quality of adult social care services and urban greenspace initiatives.

Contents

Foreword

In writing the master's thesis I own up to some self-interest which has developed and strengthened throughout the last few years while working for a horticultural day service Sunnyside Rural Trust. It has certainly been the main inspiration and the driving force to study human-nature relationships in the newly established Friluftsliv master's programme, and apply the obtained academic and practical knowledge further through conducting my thesis on my place of work.

I feel incredibly lucky I had an opportunity to conduct my research in Sunnyside. I would like to thank my Sunnyside family for the encouragement and the unconditional love I have received throughout these past few months. I feel it was the greatest privilege to talk to a group of trainees who wanted to share their stories with me. All my study participants valued opportunities to freely talk about the things that matter the most to them when they are at Sunnyside.

I would like to thank my supervisor Simon Kennedy Beames for being patient with me, for providing critical and valuable feedback and for the continuous encouragement throughout the last few months. I am very grateful for all the guidance Simon has provided.

And finally, I feel fortunate to have had the best support from my friends, family and other peers from my course. I would like to thank my family especially my extremely smart sisters Alise and Grieta for academic and psychological advice in conducting my research. I am thankful to my closest friends Alison, Tanya, Heidi, Emily and Jack for all the help, emotional support and willingness to read and re-read my thesis that has enabled me to arrive at writing the forewords. And lastly, I would like to thank my peers for the best two-year long master's journey together. A special thank you to Eyrun and Anna, my friends, two best study "buddies" and my "Icelandic mums" for regular zoom chats discussing our progress in writing our thesis and dreaming about the future.

United Kingdom/12th of May, 2022

Ieva Piraga

1 Introduction and background to the research

1.1 Introduction

The latest scientific report on nature and health by White and others (2019) has outlined the positive relationship between self-reported health, well-being and direct exposure to natural environments. The research by Keniger and others (2013) names gardening as one of various types of direct nature interactions where nature is omnipresent therefore representing intentional nature experiences. With this in mind, Lehberger and others (2021) have outlined the strong association between gardening and the increased time spent in an outdoor environment. The opportunities to participate in gardening reach beyond domestic gardens and include communal spaces for individual and community use through allotment and community gardens (Barthel et al., 2010; de Bell et al., 2020; Soga et al., 2017; Triguero-Mas et al., 2020) offering a different set of experiences and engagement in community run programmes.

I further turn to the collective gardening programmes that provide opportunities for human-nature encounters through various activities and interactions that take place in the garden. There is scope for gardening programmes and settings to have the potential for enhancing social, physiological and psychological benefits alongside the acquisition of technical skills in gardening (Guitart et al., 2012; Sempik et al., 2014; Spano et al., 2020). These programmes engage the general public or are tailored for certain groups in the community who are socially excluded and experience mental or health difficulties. In this regard, gardening provides a means of addressing the public health disparities by offering health promotion organized programmes (Triguero-Mas et al., 2020). Access to communal gardens is increasingly viewed as a potential local asset that promotes equal access to urban greenspaces (Public Health England, 2020). The published report by Public Health England has further outlined that it is in fact vulnerable population that encounters the greatest benefits to health when exposed to greenspaces. Conversely, gardening programmes are increasingly used to address health and social inequalities among vulnerable populations (Kingsley, Bailey, et al., 2020; Whatley et al., 2015). In this respect, tailored programmes that focus on marginalized groups, are a means to engage individuals in gardening activities and provide access to natural environments that may benefit their general welfare.

This master's thesis attempts to investigate the impact an organized gardening programme has on the people who attend the service. I now introduce a horticultural day service, an organized gardening programme based in England, which is tailored for people with learning disabilities (further referred to as trainees or service users) as my case study for this master's thesis. The main aim of the study is to open up discussions about detailed understandings of trainees' experiences at Sunnyside Rural Trust (further also referred to as Sunnyside) by employing a photovoice research method (Wang & Burris, 1997). The main research question is set to explore what is the impact Sunnyside Rural Trust has on the trainees who attend a horticultural day service? By applying a qualitative inquiry approach, the critical elements that construct the participants' perceived experiences are investigated. The chosen research method enables participation by individuals with learning disabilities combining visual and verbal means of communication where participants guide the research process by representing their perceived experiences.

1.2 Background to the research: Sunnyside Rural Trust

Sunnyside Rural Trust, as the specific case study in my research, is a charity and a social enterprise that supports learning and provides work experience for adults with learning disabilities, from the local community. Sunnyside Rural Trust, a registered charity, was established 32 years ago. The organization consists of 3 sites located northwest of London (Sunnyside Rural Trust, 2022). The service offers placements for over 150 individuals with learning disabilities who are supported by staff and volunteers. The daily attendance in each of the site facilitates placement for 15-35 individuals. All the individuals age 18 years and upwards with learning disabilities ranging from mild to moderate which include Down Syndrome, Autism, Global Developmental Delay, Fragile X and others. As a charity Sunnyside Rural Trust receives social care funding for individuals who attend the service and have been referred by family carers, schools, colleges, social workers and care homes (L. Adams, personal communication, February 10, 2022). In this respect, Sunnyside Rural Trust is as day service provider, an organized horticultural project which is tailored for the individuals with learning disabilities from local communities.

Trainees are engaged in a wide variety of horticultural activities that include sowing seeds, growing flowers and produce, harvesting as well as undertaking other garden, site maintenance tasks, animal husbandry and retail activities (e.g., cooking, baking, crafts etc.). Regular nature contact is experienced through tasks undertaken either indoors (i.e., polytunnels, greenhouses) and outdoors (i.e., allotments, orchard, woodlands). Sunnyside's teams undertake landscape gardening contracts and warden duties in the local area which provide valuable experience for the trainees to interact with, and contribute to, the local community. The overall structure of the day service is aimed at resembling a working day where trainees are working in small groups and supported by staff members.

The teams in each of the sites are dedicated to work with the trainees, to maximize their potential, striving to increase their self-esteem and well-being and bring positive changes to their everyday lives through purposeful occupational activities. Moreover, the activities undertaken offer ways to live healthier lives with sustainable practices in mind. All three sites grow produce for Sunnyside farm shops and markets and for the local community through the veg-box scheme. The full cycle from "seed to table" enables trainees to participate in activities ranging from seed sowing, plant care to harvesting, food processing and retail activities (Z. McGee, personal communication, February 10, 2022).

However, each of the sites are specialized in slightly different areas. The Hemel Hempstead site (further referred as Hemel Food Garden), which is the case study for the research, offers experience in growing annual and perennial plants for wholesale trade. The main focus throughout the year is on a yearly bedding contract in collaboration with the local council. There are other activities run throughout the year which include growing produce, beekeeping, chicken care, DIY projects and cookery. Hemel Food Garden site offers placements for 30-35 individuals on a daily basis.

Up to date, some reflections on trainees' experiences at Sunnyside Rural Trust have been gathered through across-site surveys. However, this has not been carried out on a yearly basis and the response rate has been roughly 50%. The surveys, which were filled out by the trainees themselves or with the support of a family member or team member, aimed to gather information on *what Sunnyside means to the trainees?* and comment on the organizational values in order to identify which aspects of their

participation in Sunnyside they enjoy or dislike. The results have generally been positive. Trainees who responded feel very passionate about attending the service. The main positive aspects related to the social gain of making new friends and working with others, followed by opportunities to learn new skills, be outdoors, look after animals, gardening and being part of the community. The only data available on trainees' experiences through the designed surveys provide the basis of my further interest to obtain more in-depth knowledge on individual's self-reported experiences. The organization believes the surveys are the most efficient way of gaining feedback from a large number of service users (F. Siddiqui-Charlick, personal communication, January 17, 2022). However, the obtained results and the data gathering method applied is limited in that it does not provide an accurate representation of trainees' views. It is not possible to identify if the obtained responses are those of trainees or their family or team members who filled the surveys out on behalf of the individuals. Moreover, the designed survey does not account for varying levels of trainee cognition which may suggest a low trustworthiness or validity of the obtained data. For this purpose, the master's thesis is a collection of participants experiences seeking to investigate how participants are influenced by their time at Sunnyside by combining visual and verbal means of communication.

1.3 What is a learning disability?

Several terms have been used to identify learning disability, such as intellectual disability, learning difficulty, cognitive or intellectual impairments, mental retardation. The prevalence of intellectual disability according to the latest meta-analysis estimates 0.5-1.5% of population globally (McKenzie et al., 2016).

Learning disability, according to a UK white paper, entails "a significantly reduced ability to understand new or complex information, to learn new skills (impaired intelligence), with a reduced ability to cope independently (impaired social functioning), which started before adulthood, with a lasting effect on development" (Department of Health, 2001, p. 14). Learning disability is a lifelong condition ranging from mild to profound. According to the latest data from Public Health England (Hatton et al., 2016) it was estimated that 2.16% of adult population in the UK has learning disabilities. In my research, I will use the term learning disabilities which is commonly applied in the social care sector in England (Idris et al., 2020).

People with physical and cognitive disabilities are more prone to inactive lifestyles and at greater risk of developing chronic disease having limited access and opportunities to undertake physical activity (Carroll et al., 2014; Van Schrojenstein Lantman-de Valk & Walsh, 2008). Moreover, people with learning disabilities encounter a greater degree of mental health problems than the general populations (Department of Health, 2001). However, gardening programmes can address this issue by increasing opportunities for regular nature contact with derived benefits as discussed further in the literature review section.

To understand what the impact of gardening is in general and in facilitated gardening programmes on individual's daily lives, I have further reviewed literature on community, allotment gardening and intervention programmes for a deeper understanding of the research practices. I have attempted to further the understanding on the relationships between various mechanisms that work towards improving the lives of the population and vulnerable groups who access such gardening programmes.

2 Literature Review

Is there a core, an essence to the gardening experience that touches all who participate?

Or is there a variety of different benefits to be obtained within the same context?

(Kaplan, 1973, p. 146)

The literature reviewed sets out to compile the existing research on gardening and its associated benefits to understand the impact that such nature contact, through gardening, may provide. Furthermore, I have investigated various intervention and community programmes that facilitate activities in local urban spaces for the general population and vulnerable groups in society, such as people with learning disabilities and people with mental ill health. The reviewed literature provides a means to increase understanding on the common research in the field of gardening and the relationship between gardening and its derived influences on individuals.

2.1 Gardening and the associated benefits

Nature contact has been widely mentioned in public health research and there is mounting evidence that supports the positive relationship between gardening to health and well-being (Soga et al., 2017; Spano et al., 2020). Gardening as a form of physical activity (Ainsworth et al., 2011) which varies in intensity (from low to high impact), has the potential to meet the standards for the required physical activity weekly performance for maintaining good health among adult population (Bird, 2004; Park et al., 2014, 2017). There is a wide variety of gardening activities, some of which, work towards developing muscle strength, dexterity and flexibility, or provide a full-body exercise with the most vigorous activities considered to be digging, shovelling, weeding and mowing (The National Health Service [NHS], 2021; Vaz et al., 2005).

The psychological benefits from experiencing nature through gardening has been widely researched in both private and community gardening settings outlining the increased levels of satisfaction and fascination that derives from gardening experiences (Kaplan, 1973). This is also supported by Lehberger and others (2021) who studied the positive association between garden owners and higher levels of life satisfaction and self-reported well-being. Moreover, horticultural activities can be a contributing factor to stress recovery eliciting restorative effects through active participation in gardening (Van Den Berg & Custers, 2011). Furthermore, the psychological benefits are closely

interlinked with the social dimension in the garden (Spano et al., 2020). As a communal space, gardening increases the opportunities to connect with local residents, share experiences with other gardeners which in turn reduce feelings of isolation (Kingsley et al., 2009). Additionally, as outlined in other studies, gardening contributes to the development of social capital (Kingsley et al., 2020) and social cohesion (Veen et al., 2016).

The engagement in gardening further promotes opportunities to grow and consume healthy food which is associated with healthier diets. Food growing is considered one of the most apparent and tangible benefits from direct gardening experiences. This in turn, enables acquisition of skills in growing which can be shared with other participants (Hale et al., 2011; Mmako et al., 2019; Thompson, 2018).

However beneficial, there are many factors influencing the health and well-being aspects which do not primarily derive from gardening as outlined by Soga and others (2017). Gardens provide a hub where each of the benefits may become more apparent, such as the engagement in physical activity which enhances positive outcomes on mental and physical health (Shin et al., 2018; Teychenne et al., 2008). Moreover, it may not be gardens per se, but the exposure to natural environments that have direct benefits on mental well-being, such as recovery from stress, which is supported by two main theories: Attention Restoration Theory by Kaplan (1995) and Stress Recovery Theory by Ulrich and others (1991). The stress relieving properties from contact with nature in turn may result in increased cognitive functioning (Zijlema et al., 2017). Moreover, outdoor environments are believed to facilitate social interactions which, in turn, may influence self-reported health outcomes (Maas et al., 2009).

With all this in mind, the contact with nature that can be experienced through gardening may relate to any of the positive influences mentioned above. However, the perceived benefits from gardening and participation in gardening programmes can be evaluated on both individual and collective level. Whilst some individuals may enjoy gardening as a means to connect with nature and grow your own food (Hale et al., 2011), others may be driven by opportunities to socialize (Firth et al., 2011) or equally it could be a combination of any of the factors that promote the overall welfare of the individuals who garden. The next section investigates the various types of gardening programmes where individuals engage in intervention and health promotion nature-based initiatives.

2.2 The scope of health promotion and intervention gardening programmes

Gardening programmes are usually identified with one of the following labels: *community gardens, allotment gardening, social and therapeutic horticulture* that are all associated with some degree of health, well-being and social benefits depending on the specific project and its aims. Moreover, extensive research exists on gardening as a health intervention initiative. I have further examined the difference between the types of gardening programmes with an aim to locate my proposed research within the field of collective gardening programmes.

The report by Bragg and Atkins (2016) outlines two main types of nature based programmes facilitated in the United Kingdom: nature-based interventions (green care) and health promotion nature-based projects. The former is described as "a variety of nature-based treatment interventions for individuals with a defined social or medical need" (Bragg & Atkins, 2016, p. 18) which is commonly part of a treatment or care plan. Sempik and colleagues' report further emphasizes that green care is specifically designed for vulnerable populations. The range of outcomes are dependent on the needs of an individual or group, and may also relate to social and education benefits (Sempik et al., 2010).

The feature that distinguishes intervention from other nature-based programmes is the focus on pre-defined therapeutic outcomes. One of the types of green care that specifically focuses on gardening is social and therapeutic horticulture that work towards improving health and well-being through structured horticultural activities which are delivered by professionals who offer support in both horticulture and health care sector (Sempik et al., 2010). Indeed, in the UK, social and therapeutic horticulture (STH) has become the most popular green care intervention that provides therapeutic benefits on one's health by offering social engagement and structured gardening activities (Sempik et al., 2010). The two main service user groups who attend STH programmes are people with learning disabilities and mental health disorders (Sempik et al., 2014). To sum up, green care programmes are more concerned with providing health interventions with aid from health professionals who work with the vulnerable groups in order to deliver pre-defined outcomes.

As outlined by Bragg and Atkins (2016), health promotion programmes, on the other hand, are less structured and aim to deliver diverse health promoting benefits for the general population or various groups, including vulnerable population. Such programmes may include community gardens or designed nature-based activity programmes. However, these two initiatives (green care and health promotion) are applied interchangeably due to the terminology used and the various aspects of the programme designs that may or may not belong to one of the types. Therefore, community gardening and allotment gardening may have features from both nature-based programmes depending on its design and intended outcomes (Bragg & Atkins, 2016). However, the reviewed studies (Malberg Dyg et al., 2020; Teig et al., 2009) have outlined that there is indeed a growing consensus to associate community gardening as health promotion initiatives or programmes that provide effective means of promoting health and well-being offering opportunities, such as physical activity uptake, social interactions and healthy living which relates to the public health agenda.

The types of nature-based initiatives enable to locate the chosen case study within the realm of health promotion programmes. Even though the programme is tailored for a specific group in population, i.e., people with learning disabilities, there are no direct links to its therapeutic outcomes, and the main aims are broad concerning the general welfare of individuals who access the service.

The literature on nature-based gardening programmes, which are tailored for both vulnerable and for general populations, are further reviewed to understand the types of research conducted and the specific aims for such academic publications. Furthermore, the outlined research provides a better understanding about various population groups who engage in these programmes.

2.2.1 Allotment gardening and community gardening

Organised community gardening programmes, as well as access to private plots of land in allotment gardens, provide opportunities for local populations to have regular contact with nature through gardening. Allotment and community gardening differs from domestic gardens in that the gardening activities are facilitated in a public space. In allotments, individuals are renting a plot of land which is mainly used for food production, but can also be used for growing ornamental plants (The National Allotment Society,

n.d.). Community gardens can vary from individual to collectively managed plots of land (Veen et al., 2016). According to Neo and Chua (2017) such gardens are shared and tended collectively for cultivation of produce and flowers. The authors further state that community gardens are seen as a platform for establishing and maintaining human-nature relationships and increasing social integration. However, community gardenening is a very broad concept which entails diverse organizational structures, e.g., government, non-profit organisations, public agencies, community-run groups (Drake & Lawson, 2015; Ferris et al., 2001; Sempik et al., 2010). Moreover, the gardens can be designed for different groups in the community and settings depending on the needs of the local communities e.g., for general public, schools, prisons, hospitals, vulnerable population (Pudup, 2008; Teig et al., 2009). The function for such gardens are immensly diverse too such as, strenghtening social ties with the local community (Veen et al., 2016), growing food with access to fresh produce, learning new skills, interacting with the natural environment (Mmako et al., 2019), opportunities for training and work experience (Pudup, 2008; Whatley et al., 2015), and for attending to, and transforming urban green spaces (Sempik et al., 2010).

Pudup (2008) suggested viewing community gardens as organized garden projects outlining who the garden is designed for, what the main goals of a project are and the distinct organizational structure. However, the reviewed literature is conflicting in that there is no clear distinction between community and allotment gardening and, in fact, some conducted research outside the UK has used the terms interchagebly when referring to individual and collectively managed plots of land (Genter et al., 2015; Teig et al., 2009). Nevertheless, Pudup's (2008) suggested concept on organized gardening projects refers to the diversity of the organized gardening initiatives with diverse designs and aims that provide means to interpret any gardening practice, in a shared space, as designed for a specific community. In this regard, Sunnyside Rural Trust as a horticultural day centre has similar features to an organized community gardening practice which is governed by a local authority, tailored for local individuals with learning disabilities and aims at providing structured gardening activities in the local community to promote the general welfare of the service users.

The literature on community and allotment gardening is mounting, both in terms of qualitative and quantitative studies. It has examined various factors and relationships

between gardening and perceived benefits. The research has focused on general population and specific groups in society who use and share garden spaces. From reviewed literature, it was apparent that a major focus in the conducted research in this field relates to general aspects on health and well-being. Indeed health promoting initiatives as outlined by Hale and others (2011) have been a major focus for health planners and policy makers to design natural spaces that would benefit neighborhood health. Studies have investigated the health benefits with control and intervention groups employing quantitative methods, concluding that in fact intervention groups provide better ratings for health and well-being (Soga et al., 2017; van den Berg et al., 2010; Wood et al., 2015). Similarly, other quantitative studies have used experiments to assess measures on health and well-being with a use of questionnaires and specific indicators (e.g., cortisol levels, BMI) (Van Den Berg & Custers, 2011; Zick et al., 2013).

The use of qualitative methods on investigating the links to better health and well-being are proven effective to obtain a broader view of the underlining factors through self-reported accounts. For example, the study by Kingsley and others (2009) employed interviews to investigate how community gardens enhanced perceived health and well-being benefits. The self-reported accounts provided space for participants to elaborate on various aspects that were understood as beneficial by participating in gardening programmes, such as social, personal benefits, opportunities for learning and perceived limitations to mention a few. Qualitative methods have been effective when specific groups in society are studied such as older cohorts in relation to health benefits and the research in this population has been extensive (Hawkins et al., 2013; Milligan et al., 2004). The study by Hawkins and others (2013) enabled diverse participants' views to emerge by a more general inquiry approach inviting allotment gardeners to elaborate on what is the importance of allotment gardening for the individuals. In this regard, research was more open, allowing various themes to emerge which led to the conclusion that passive and active participation were linked to overall health and well-being benefits for the studied population.

Research on health and well-being aspects has also been concerned with providing insights from vulnerable populations, people with learning disabilities and mental ill health, in particular. Nevertheless, recent publications (Malberg Dyg et al., 2020; Triguero-Mas et al., 2020) have highlighted the lack of qualitative research in

exploring how vulnerable groups may benefit from organized gardening programmes. A recent study conducted on two rooftop gardens (Triguero-Mas et al., 2020) is an example of a designed health promoting gardening project for people with mild to severe learning disabilities and mental disorders. It provided strong evidence-based data using mixed-methods, and intervention and control groups, to investigate the benefits of quality-of-life measures for the studied vulnerable population. Whilst the questionnaires evaluated the quality-of-life measures, the interviews allowed space for the individuals to articulate and respond to questions about different aspects of their gardening experiences related to quality-of-life dimensions. They concluded that for the intervention group, quality-of-life measures were linked to improved physical, emotional well-being and opportunities to socialize. The authors outlined the potential benefits of designing urban gardening programmes for individuals with learning disabilities and mental health disorders to improve their quality of life and to reduce health disparities apparent for socially excluded, vulnerable populations (Triguero-Mas et al., 2020).

Another major focus in the research on community gardening is the social dimension in the gardens. The purpose of these publications has been mainly concerned with identifying the relationship between the participation in the gardens and social inclusion. Nevertheless, this may directly overlap with those focusing on mental and physical health. Here interviews, focus groups, surveys and observations were used to investigate the social processes, social inclusion and interactions between gardeners and general public (Christensen et al., 2019; Firth et al., 2011; Teig et al., 2009).

The research on the social aspects has also considered vulnerable populations. The conducted study on a health intervention programme in a social and therapeutic gardening project (Aldridge, 2007) for people with mental health problems and physical and learning disabilities focused on identifying the aspects of social inclusion. Semi-structured interviews were an appropriate method, obtaining views from people with mental health problems or physical disabilities. However, to include the participants with learning disabilities, the authors employed a conventional method of interviews which proved limiting, so photo participation and elicitation methods were employed that enabled participation. This was found to be an effective method for the studied population. Participants were invited to photograph the aspects of the garden they enjoyed the most. Due to a range of learning disabilities and levels of communication,

the majority of participants were able to select their most important images. Some were also able to provide brief descriptive accounts. The analysis on the content of the photographs, as well as the analysed interviews, revealed that the majority of the images portrayed other people in the gardens, and the social interactions were of high significance for the participants. This method provided inclusive engagement and enabled the participants to take part and contribute to the research on social inclusion. However, the concerns on the rigor of the study were raised by using the photographic method which was prone to bias if not interpreted by participants themselves (Aldridge, 2007).

Further research tailored for vulnerable populations, individuals with mental health disorder, was conducted in community gardens (Whatley et al., 2015) that offer members structured occupational activities supported by staff and volunteers. The research investigated aspects of social inclusion. All members (including staff, participants and volunteers) were asked to share their views about a typical day at the garden. Here, an ethnography study approach, offered insights into the gardening community through observations and semi-structured interviews where three main themes on social inclusion emerged. An organized occupational garden project was seen to increase the social integration through active or passive participation in occupational activities and opportunities for learning. The garden was viewed as an inclusive community with further opportunities to impact the broader community (Whatley et al., 2015).

Community gardens have also been widely researched as platforms for education and learning. The most common links investigated between learning and participation in garden projects have been on food growing and healthy eating (Hale et al., 2011). The gardening programmes have provided platforms for individual and collective learning, not only on food growing, but broader concepts such as ecology and environmentally sustainable practices (Hale et al., 2011; Walter, 2013).

The reviewed literature is only a small compilation of the extent of gardening literature that has been concerned with investigating the experiences in the garden mainly with a specific focus on one or another factor (health, well-being, food growing, social integration etc.). In this regard, a study conducted by Ong and others (2019) has moved beyond the research that has investigated the environmental and social benefits

of gardens, with a main focus on the meaning and importance attributed to gardening spaces. By employing narrative inquiry, gardeners were asked to take photographs and reflect on the ascribed meanings relating to the content of the captured images. In this regard, such qualitative inquiry was open to any themes to arise and was guided by the participants and their personal stories. The findings obtained revealed diverse aspects of the gardens to which participants ascribed a specific meaning, ranging from an established sense of community, environmental concerns, produce growing and therapeutic aspects relating to well-being.

All of the reviewed literature on allotment and community gardening provides an insight in how a study's design and research questions shape the study outcomes. The studies on health and well-being in particular have been limited in the information they offer, mostly eliciting the beneficial aspects and/or focusing on reported change in health and well-being (Soga et al., 2017). This in turn presents only a one-sided view of the experience and supports already existing positive outcomes that have been acknowledged in previous studies. Moreover, such studies may limit the information participants share about their gardening experiences setting boundaries on what aspects of their gardening experience should be discussed. However some of the studies concerned with health and well-being and social aspects, allowed for broader perspectives to emerge mainly through employed qualitative research methods as previously reviewed (Hale et al., 2011; Kingsley et al., 2009). Nevertheless, the research on community and allotment gardening in general terms is all interlinked with the outcomes of social factors, food growing, physical activity uptake that are reported to improve health and well-being.

Whilst the empirical evidence on health and well-being is broad, a more holistic approach is needed that would account for various factors that shape the gardening experiences as perceived by the participants by applying a more open inquiry approach. A previously mentioned article by Ong and colleagues outlined that the studies that focus solely on the gardening experiences are few (2019). More in-depth research is needed that would reveal the self-reflected gardening experiences in health promotion programmes such as community and allotment gardens for marginalized groups in society and, in particular, for people with learning disabilities. The majority of research surrounding vulnerable people is focussed on specific therapeutic interventions

(Aldridge, 2007; Harris, 2017; Kam & Siu, 2010; Sempik et al., 2014). There is less reference to the effects general gardening and nature has on overall health and perceived experiences, which is the main aim of this research. Therefore, research on organized gardening programmes without a specific focus on treatment is lacking.

To further develop my master's thesis, the reviewed literature works as a basis to outline the gap in knowledge regarding gardening programmes that explore the self-reported experiences on an organized community gardening project for people with learning disabilities by employing the photovoice method. To my knowledge, the photovoice research method has not been widely used in gardening setting specifically for people with learning disabilities and only one research by Aldridge was found that investigated links between self-reported gardening experiences and social inclusion. My research is inspired by few studies conducted that used the participant's photographs (Aldridge, 2007; Ong et al., 2019) as a first phase of data collection combining alternative and conventional research methods (photovoice and interviews) to further the understanding on self-reported experiences.

However, I attempt to take it a step further to deepen the understanding by recruiting service users of a day service to inquire about their overall experiences. My thesis contributes to research on people with learning disabilities and health promotion gardening programmes on how individuals are influenced by their participation in organized garden programme combining a visual method with interviews and focus group discussions to increase the validity and credibility of the obtained findings. The research employs a more holistic and inductive approach to investigate what it is about participating in an organized gardening programme that creates meaningful experiences for the participants? In doing so, participants become the co-researchers who guide the study process by revealing their side of the story.

The research question and objectives have been informed by the reviewed literature on health promotion gardening programmes. This thesis aims to investigate how adults with learning disabilities are influenced by their time in the horticultural day service Sunnyside Rural Trust. The main research question sets out to identify *what impact Sunnyside Rural Trust has on the trainees who attend the horticultural day service?*

The broad research question enables to gather diverse perspectives on the lived experiences as perceived by the service users of Sunnyside Rural Trust. As an inductive

approach, the generated data guides the further research process where emerging themes derive from the self-reported aspects that participants find highly significant in their time at Sunnyside. Although the core aspect of operations at Sunnyside Rural Trust relates to horticultural activities, the service offers a range of other non-gardening activities that construct the everyday experiences at the day service. These are not excluded, and the research question is formulated in a manner that enables the participants to voice and decide on their most important elements, such as people, places and activities. Furthermore, the obtained findings are used to provide suggestions to the day service.

The research question is the means to further explore the relationship between human and nature interactions that takes place in the garden and what significance is ascribed to the particular aspects as reported by participants.

The proposed objectives for this qualitative inquiry are set:

1) *to obtain information on how the participants are influenced by their experiences at Sunnyside Rural Trust;*

2) *to investigate the critical elements of the participants reported experiences;*

3) *to test the research method (photovoice) as a potential means of enabling communication and generating discussions with the participants on their most important elements from attending Sunnyside Rural Trust.*

3 Methods

This chapter sets out to describe the applied philosophical paradigm and methodological approach to my research. The methods employed to gather, analyse and verify the data are further explained.

The foundation of conducted research is based on a constructivist philosophical paradigm (Denzin & Lincoln, 2018). This was proven the most appropriate philosophical framework where the employed qualitative research methods allowed for participants' interpretations of their experiences at Sunnyside Rural Trust to emerge. The ontology is that of relativist acknowledging that there are multiple realities and meanings that are locally constructed (Brinkmann & Kvale, 2018, p. 24; Denzin & Lincoln, 2018). Since these experiences are highly personal it aligns with the subjectivist epistemology which regards the knowledge of their experiences as co-constructed through social interactions (Denzin & Lincoln, 2018). The epistemological and ontological stance provided a means of improving understanding of the studied experiences with the possibility for multiple interpretations of the reality. It is through the dialogue between the informant and the researcher that the knowledge and meaning was co-constructed (Mayan, 2016, p. 25).

The on-going research process from setting the research question, choosing the philosophical and theoretical frameworks as well as choosing the most appropriate methods to collect, analyse and further interpret the research findings was concerned with self-reflexivity (Lincoln et al., 2018). I have continuously reflected upon the multiple roles I have taken as a researcher, an interviewer, a focus group facilitator and the personal standpoints including the role as an employee, that have influenced the way the knowledge has been constructed and presented (Guillemin & Gillam, 2004). At the data collection stage, the self-reflexive analysis was fundamental to detect possible pre-assumptions of shared understandings with study participants and their experiences, and critically reflect on any possible biases (Lincoln et al., 2018). I acknowledge that it was through knowing the particular context and the study participants that enabled to arrive at the most appropriate research methods that would reveal participants' reflections at a considerable depth.

Moreover, I attempted to move back and forth between being an insider and outsider throughout all stages of the research. The main advantage as an insider was considered the established trust with the study participants and the knowledge of diverse

levels of communication which allowed for free-flowing and relaxed discussions. However, it proved challenging, to interpret and represent participants' responses with an attempt to ensure a distance from the familiar setting. As an outsider, I was able to inquire about participants experiences at considerable depth that may have otherwise been taken for granted. In this regard, I asked presumably obvious questions in order to obtain a detailed accounts from the participants (Thorpe & Olive, 2016).

The study builds on the research published on gardening programmes and participants' self-reported experiences. However, the research on people with learning disabilities and gardening as an organized programme and not as an intervention is limited. Moreover, the current approach Sunnyside evaluates the success of the programme with the designed surveys is considered inappropriate for the population studied. Hence, my conducted research proposed a more interactive and inclusive approach in understanding the lived experiences of the service users. Although, the research did not focus specifically on programme evaluation, the findings could inform and improve the means of carrying out further evaluation.

3.1 Research Design

The master's thesis was conducted using participatory research approach. Since the study sample is a marginalized group of people with learning disabilities, participatory research was considered the most applicable method widely used in disability studies (McHugh, 2016; Sutton-Brown, 2014). This approach enabled participants' role as co-researchers who conducted and guided the research process as they represented and reflected upon their perceived realities. The trainees who took part were involved in all stages of the research from confirming their interest regarding the proposed research question, identifying and sharing the aspects of their lived experiences (Boland et al., 2008; Castleden & Garvin, 2008). For the purpose of master's thesis, the qualitative research methods were employed including photography documentation, semi-structured interviews and focus group discussions as part of the photovoice research method.

3.1.1 Case study

For this particular empirical inquiry, a case study was the most appropriate research design in order to study a specific horticultural day service Sunnyside Rural Trust with a focus on its service users (trainees). The chosen case was pre-determined by the principal researcher who works for the specific day centre and is familiar with the operations of the day service and the service users. In this regards it was a programme, people and place-specific case that allowed to investigate the intrinsic nature of the case under study (Stake, 1995, p. 4). To understand how participants viewed their time at Sunnyside, a case study approach was the means of exploring and explaining the causal factors that influenced participants' experiences rooted in place-specific and real-life context (Yin, 2009). In this respect, participants perceived and portrayed realities through primary data collection instrument: interviews. These allowed for detailed and descriptive analysis and findings to unfold that were guided by the research question and proposed objectives.

To achieve the validity of the gathered data, an investigator and method triangulation was undertaken (Denzin, 2009, pp. 297–313). Moreover, the closeness to the studied case by the primary researcher meant that a researcher bias was inevitable, nevertheless, this was addressed through an on-going process of self-reflexivity (Lincoln et al., 2018). Furthermore, the generated themes from the data were peer reviewed to ensure the reliability and validity of the findings (Morse, 2018).

3.2 Sampling and research setting

The research sample was selected on the basis of the research aims and the chosen data collection methods. The outlined guidelines on sampling strategies by Curtis and others (2000) and Huberman and Miles (1994) were followed. In recruiting the research sample, important aspect was the ability to comprehend the purpose of the research and communicate about the studied phenomena in order to arrive at valid and reliable findings. Employing the purposive sampling approach (Etikan et al., 2016) the participants who had the cognitive ability to verbally express their experiences and engage in discussions, were eligible to participate in the research. This corresponds to the requirements for photovoice data collection method which elicits a rich

understanding of participants lived experiences when visual and verbal communications are combined (Booth & Booth, 2003).

Adults with learning disabilities, the service users of Sunnyside Rural Trust, were invited to participate in the photovoice research project. The recruitment began two months prior to data collection stage. Two recruitment mechanisms were used to identify the candidates who were interested in the study. The study was introduced to the service users in monthly trainee meetings on 11th of January and 9th of February where a brief description of the research project and the research design was provided. The participation was voluntary and everyone interested could notify either me or other staff members. In the first recruitment stage, two trainees publicly expressed their interest to participate. Due to my familiarity with the service users, I was aware of the researcher induced bias. In order to have a minimal further influence on their voluntary decision to participate in the research, I informed other staff members about my research aims and the eligibility criteria. Employing the purposive sampling approach, staff were asked to promote the research among trainees who had the ability to verbally elaborate on the captured images and were interested in participating. 13 potential candidates were identified in the second stage of the recruitment.

The primary data collection method was piloted with two additional participants prior to data collection commenced. Following this, the procedures were amended and interview schedule modified in order to suit participant's cognitive and communication abilities. In total, 15 participants were recruited as the sample of the study. The final sample consisted of 14 participants, since one informant was absent on the day interviews took place.

The data collection stage was conducted in a timeframe of two weeks (14th-25th of March, 2022). 14 participants took part in the primary data collection stage (photo documentation and interviews) from which 13 participants also took part in the second stage of data collection- focus group discussions. One participant was absent in the focus group discussions.

3.2.1 Photovoice research method

Photovoice as a visual research method developed by Wang and Burris (1997), supports participation by people with learning disabilities. The photovoice data collection

method is commonly applied in health, education, social and disability studies (Bonati & Andriana, 2021; Cluley, 2017; Nykiforuk et al., 2011; Overmars-Marx et al., 2018; Sutton-Brown, 2014) and is widely used method for marginalized groups in society such as people with learning disabilities, homeless, youth and children to elicit valuable perspectives of their daily lives (Bonati & Andriana, 2021; Darbyshire et al., 2005; Jurkowski et al., 2009; Povee et al., 2014; Strack et al., 2004; Wang, 2006).

The use of visual methods is seen complementary to the more traditional approach in qualitative studies combining visual and verbal forms of expression (Phoenix & Rich, 2016). Moreover, Booth and Booth (2003) have outlined the benefits of using photovoice for participants with learning disabilities "by combining visual images (the photo element) with individual and group discussion (the voice element), it helps to include people who lack verbal fluency" (p. 432). Although considered an inclusive method, the mutual engagement in conversations were necessary for the employed research method in order to offer another layer of understanding and interpretation since the photograph as a stand-alone source of data would provide a very limited understanding on the individual's portrayed reality (Cluley, 2017).

Photovoice approach was proven effective to empower participants to guide the research process where they visually depicted the most important aspects of their lived experiences (e.g., activities, people, encountered challenges) and shared their portrayed realities with the researcher (Wang & Burris, 1997). Moreover, the visual material as a tangible element was used as starting point to allow the discussions between the researcher and the participant to unfold (Jurkowski & Paul-Ward, 2007; Nykiforuk et al., 2011). Previous research has outlined that individuals may encounter difficulties discussing abstract aspect of their daily lives without the aid of other materials (Cluley, 2017). Therefore, the visual materials helped to recall what caused the participant to choose to take the photo.

The photographic evidence, in combination with semi-structured interviews, allowed in-depth knowledge to be obtained on participants perceived and portrayed realities. The photo documentation and interviews as the main data collection method was conducted with each individual participant. It was found to be the most efficient way to gain a better understanding on their perceived experiences without influence from other participants. For the purpose of employing this research method, the images were

captured using Lenovo M10 touchscreen tablets provided by Sunnyside. Each participant was introduced with the study aims and given a short training session on the use of the tablets with a little practice session to ensure they were comfortable using the technology. Moreover, any ethical considerations were raised if participant wished to photograph people on the site. Each participant was invited to take a walk around Sunnyside covering all the indoor and outdoor areas with an attempt to start generating ideas and recall the places and activities that construct their experiences. After the walk, participants were given the tablet and invited to take pictures of anything that meant a lot to them (e.g., places, people, elements, activities) while at Sunnyside. I accompanied the individual participants throughout the photo documentation stage to offer my support with operating the tablets or reminding of the proposed research question. The photo documentation stage lasted between 20-25 minutes.

3.2.2 Interviews

The one-to-one semi-structured interviews were conducted on the same day after participants captured the images around the site. In total, 14 participants took part in photo documentation and interviews. To answer the research question a qualitative interviewing approach was applied to elaborate on further meanings and interpretations ascribed to their photographs.

In qualitative interviewing, the proposed interview questions and other forms of interaction with the study participants were designed to match the level of communication of the participants (Lune & Berg, 2017, p. 67). Therefore, for the conducted research I drew particular attention to designing short and clear questions and prompts in a simple language referring to specific elements or activities under study to increase participant's ability to receive and respond to the posed questions. Conducting interviews with people with learning disabilities in general pose some critical issues concerning validity and reliability of the obtained data. The methodological challenges relating to the response bias as outlined by Finlay and Lyons (2001) were considered while designing and employing the interview schedule to increase the quality of the interviews. A combination of response formats was included in the interview with open-ended question as the main mode of inquiry supported by yes/no and comparison questions.

The researcher's previous knowledge of the participants who attend the day service meant that the rapport between the inquirer and the interviewee had already been established which was deemed beneficial to improve the quality of the research. Each of the conducted interviews with the participants were flexible in that they accounted for different styles and level of communication of the participant by adjusting the language and the pace of the interview.

Although interviews elicit the authoritative power of the researcher who directs the interview process with the study subjects according to Kvale (2006) an attempt was made to blur the power dynamics in the conducted interviews by acknowledging participant's role as *the expert* of the field (Walmsley, 2004). The photographic evidence owned by participants facilitated more participant-guided interviews.

Prior to the interview, participants selected between two to three photographs that were used as prompts in the interviews. By choosing a limited number of images, the conducted interview focused on the most important aspects of their experiences as prioritized by the participants. In line with the proposed research question and the objectives that sought to investigate the personal narratives of participants, an interview guide was developed (see Annex A) as a script for the researcher following the procedural steps as outlined by Brinkmann and Kvale (2018, pp. 57–72) and Smith and Sparkes (2016).

The interviews commenced with briefing the participants about the purpose of the research, the outline of the interview procedure and their role in the interview process. Participants were reminded that the information they choose to share was not in any way prone to judgement to reduce the response bias. To start the conversation flowing, general questions were asked such as *Do you remember, how many years you have been coming to Sunnyside?* to re-assure the participants felt comfortable to engage in further discussions. Interviewees were invited to show the selected image by employing the same line of inquiry with each of the selected images. The main interview questions were set to inquire where the photo was taken, why the individual chose to take this photo and what it meant to him/her. Further prompts sought to investigate the reasons that account for their key experiences to draw out a complete picture of their self-reported narratives. Participants were asked to compare the images as an opportunity for reflection and further comments. Lastly, participants were invited to

choose a title for photographs. Once the conversations regarding the participant's presented narratives were exhausted, the final question sought to gain feedback about the photo elicitation and the interview process.

The interviews lasted between 12 to 33 minutes and took place in the summer house at the horticultural day service Sunnyside Rural Trust. The chosen interview setting provided a quiet room without any nearby distractions and ensured the privacy and confidentiality for the research participants (Perry, 2004). At the end of their participation in the one-on-one interviews, participants were thanked for taking part in the project and instructed of the further involvement in focus group discussions which took place the following week. Moreover, the study participants were reminded about their reward in the form of a scrapbook which will include the captured images and an easy-read report on the study findings which will be presented at the end of the research.

3.2.3 Focus groups

The second stage of data collection and verification involved organized focus group discussions. These took place one week after the initial one-on-one interviews. Focus groups, as a data collection method, by themselves was not considered the most appropriate approach in research with people with learning disabilities due to the reported limiting factor in obtaining detailed understanding of an individual's experiences (Jurkowski & Paul-Ward, 2007; Ottmann & Crosbie, 2013). However, it was considered important to apply a focus group approach as a second data collection stage that further opened-up discussions among the participants.

In total three focus group discussions were held: two focus groups with five participants and one focus group with three participants. The focus groups were held at the summerhouse where the interviews were conducted. Since participants were already familiar with each other, it provided a comfortable environment where they felt more relaxed in sharing their views among their peers.

Following the outlined procedures by Liamputtong (2011, pp. 71–86), a focus group schedule was prepared (see Annex B). At the start of the focus group, the group members were reminded about the purpose of the research and praised for contributing to the first stage of the research with photographic evidence and participation in interviews. Furthermore, practical considerations were discussed setting the rules to

enable a successful interaction among the group members. The focus group schedule consisted of prepared prompts to invite participants to a sharing session. The focus group schedule was flexible in that it allowed for a free-flowing discussions to emerge around the introduced topics.

The focus group discussion was conducted in two stages. In the first stage, the photographs discussed in the interviews were printed and handed out to each of the study participants. There were several aims of the sharing session. Firstly, it enabled me to carry out an individual recap (member check) in order to verify the information that was provided in the individual interviews. Each participant was invited to talk about their photos, however, only few were able to remember what they shared in the interviews. For this reason, I checked the main points of the information that unfolded in the interviews to seek the approval from the individual participants ensuring they were happy with the narratives they shared at the interviews. Secondly, photographs taken by the participants were used as prompts to elicit comments from the group members who could comment or provide additional accounts for further data generation related to their most important experiences.

In the second stage, based on the analysed interview transcripts, I shared my findings with the study participants. The participants got to learn about the main themes that were identified. The researcher and the participants had an opportunity to re-visit the discussions on their key experiences as well as to learn about the main topics that all participants elaborated on in the interviews.

Focus group discussions lasted between 35 and 55 minutes. The attempt to reduce the authoritative power of the researcher (Liamputtong, 2011, pp. 15–30) was deemed challenging because the participants discussions required to be guided by the principal researcher. Most of the participants were unable to contribute to group discussions unless directly addressed. Focus groups were the completing stage of data collection where any additional information that supported participant's detailed experiences in relation to the conducted interviews and the presented themes emerged. To conclude, the opportunity to share their captured images within the group resulted in the participants feeling empowered and highly valued.

3.3 Data Management

The raw data were obtained in the form of photographs and audio-recordings. The audio-recordings from the interviews and focus group discussions were transcribed verbatim by the principal researcher. In total, three forms of data were stored- photographs, audio-recordings and transcripts. Following the USN developed storage guidelines the obtained data was stored on USN OneDrive account on the Office365 Cloud with encrypted virtual disk.

The photographic evidence documented by the participants and the one-on-one audio-recordings and transcripts were stored in individual participant's folders on the USN cloud storage. Only two to three images which trainees shared with the principal researcher in the interviews were stored on the USN cloud storage folder, all the other photographs that were not discussed, were deleted. The obtained assent and consent forms from all the study participants were stored in a secure location at Hemel Food Garden in trainees' personal files following Sunnyside Rural Trust's Data protection guidelines.

All precautions were taken to ensure no unauthorized persons had access to the data obtained throughout the research. Any sensitive information containing personal data that unfolded during the semi-structured interviews (e.g., name), was removed from the transcribed interviews. Pseudonyms were used for all study participants.

3.4 Data Analysis

The obtained data was analysed using thematic analysis by Braun & Clarke (2006). The research applied an inductive analytic approach where the gathered data guided the further analytical process without pre-planned theoretical framework in mind. However, the interpretative nature of the analysis was tied to the researcher's epistemological and ontological assumptions, and in the conducted research connected to the constructionist paradigm as mentioned before (Denzin & Lincoln, 2018).

For a successful analysis of the data I have followed the six steps to thematic analysis as outlined by Braun and Clarke (2006). The six steps are: familiarization with data, generating codes, searching for themes, reviewing and defining themes, and producing a report. However, the analytical process was non-linear, revisiting the different phases as more patterns in the data set were identified. The interviews as the

main data set were considered a phase one in data analysis. The main data set which entailed interview recordings were transcribed verbatim with an attempt to capture all participant's spoken utterances during one-on-one interview. The familiarization with data was achieved by carrying out the transcribing myself and re-reading the interview transcripts. After re-reading 14 interview transcripts, the data extracts were highlighted identifying similar topics in obtained data. The data extracts were then entered in a separate excel spreadsheet to provide an overview and to identify recurring patterns in relation to their expressed meanings and experiences at Sunnyside Rural Trust. This worked as the basis for generating initial codes. The codes where then compared and, where similar patterns in the data extracts where identified, some of the codes were merged. For the purpose of generating the themes, the transcripts were re-read and all the developed categories were assigned to the relevant subthemes and themes identifying the prevalence of each of the subthemes in the data set. Through a continuous process of reviewing the codes, they were then clustered together with an attempt to develop the overarching themes that were apparent in the whole data set forming seven overarching themes. Venn diagrams were created to better analyse and structure the similar codes into potential subthemes and themes. The conducted investigator triangulation (Denzin, 2009, pp. 297–313) provided the means to discuss the potential themes in my analysis. The suggested seven themes were reviewed and where similar patterns were identified as a result of the employed triangulation, some themes were merged into one overarching theme. At the end there were three overarching themes that emerged and encompassed majority of the data. Each of the themes was distinct from each other presenting a different aspect of the participant's reported experiences. The themes and subthemes, and categories were named.

The second phase was the analysis of focus group data. The focus group discussions were recorded, however, only the information that provided new knowledge on participant's main experiences were transcribed. The findings from the first phase of data analysis were used to inform the next phase – focus group data collection. In this way, a hermeneutical circle was employed (Brinkmann & Kvale, 2018, p. 166) where the analysed patterns in the individual interviews were re-visited and discussed with the participants to obtain their approval and verify or modify their interpretations on self-reported experiences. The additional knowledge generated from the focus groups was

transcribed and data extracts that provided additional information from their accounts was directly added under the most relevant subthemes and categories. By re-visiting the whole data set with the supporting focus-group data, the subthemes and themes were reviewed (see Annexes C-F).

The final data analysis step was the write up of the findings which represented the main themes supported by informants' quotes for a better understanding of the participants experiences at Sunnyside. The three big themes identified from the data were: interpersonal relationships, skills and safety, and nature. These themes were peer-reviewed (Morse, 2018) and discussed with a staff member who was familiar with the case under study and could comment on the validity of the presented themes.

3.5 Data verification

In order to increase the trustworthiness of the obtained participant's reflections, various approaches that address the issues of data verification in the conducted qualitative inquiry were employed to ensure the obtained, analysed and represented data is an accurate representation of participants' views.

In order to increase the validity of the gathered data, two triangulation approaches were employed as outlined by Denzin (2009, pp. 297–313). The investigator triangulation was used when analysing the transcripts of the semi-structured interviews. A couple of pages of three transcript records were given to an impartial investigator to analyse in order to review transcripts of the raw data to minimize any possible subjective interpretations on the main data set by the principal researcher introducing an outsider's view with a different set of analytical approach to confirm the reliability. This in turn, ensured that the emerging themes were direct reflections of the raw data collected (Cohen et al., 2011). The investigator triangulation was useful to refine the initially proposed seven themes into three final themes that collated all the key information from the data transcripts. The methodological triangulation was achieved by employing different data collection methods. For this purpose, focus group discussions were employed as a form of triangulation in order to validate the participants' initial responses from the semi-structured interviews. Member checking (Morse, 2018) was used as an approach to return to the study participants to check over the main facts and themes and

assess whether the responses in the interviews were consistent with what was being discussed in the focus groups.

3.6 Ethics

The ethical considerations in research with vulnerable individuals is regarded as highly sensitive (Palmer, 2016), therefore the main procedures regarding informed consent were reviewed in detail below. The ethical approval was granted from the Norwegian Centre for Research Data (reference number 945356) and Sunnyside Rural Trust prior to the start of sample selection and data collection. The British Educational Research Association's (BERA) (2018) guidelines were followed as ethical standards that recognized the consent approval, vulnerability and safeguarding issues related to study participants.

In order to involve participants in the research process, two forms of approvals were required. An assent form was provided for the individuals with learning disabilities who expressed their interest in the research (see Annex G). The process of obtaining an assent is a common practice when involving people with learning disabilities in research (An et al., 2018). The assent form consisted of an easy-read (easy to understand language) information letter; a simplified version of the consent form. The purpose of the assent form was to inform the participants about the research aims and outcomes. An informal assessment was carried out to ensure that the participant understood the information provided regarding the research and could make an informed decision. Participants were asked to paraphrase the information in the assent form on what the project is about and what participation would involve. This procedure ensured the participant had the capacity to assent to the research project on the basis of Mental Capacity Act 2005 guidelines (Department for Constitutional Affairs, 2007). The assent form was signed by the participant at Sunnyside Rural Trust.

The consent form was provided for the families or carers of the individual participants as a means of best practice to provide information about the upcoming project and seek to obtain their consent (see Annex H). The consent form was signed by participant's family or carer.

Throughout the research process participant's capacity to understand and willingness to engage in all stages of data collection was continuously reviewed and

referred to as *process consent* (Tuffrey-Wijne et al., 2010). This ensured that the well-being of the participants took priority over the requirement to obtain valuable data for research purposes as outlined by Taua and colleagues (2014). The participation in the project was voluntary which was confirmed by the participants' signed assent form. All of the information gathered about the participant remained confidential. No identifying details which could be linked to the study participants were disclosed and were removed from the data set prior to analysis.

3.7 Limitations

The conducted research had several limitations. First, although the self-reflexivity was at the core of the research, I acknowledge that the study findings were influenced by the multiple negotiating roles I inhabited. To the participants I was a researcher and a staff member which may have had an impact on the responses given. Additionally, the conducted interviews posed some challenges regarding reliability and validity. Since the interview questions required multiple response formats from open ended-questions to yes/no and either/or questions, potential difficulties were encountered obtaining valid answers from the latter two formats (Finlay & Lyons, 2002). At certain times socially desirable responses were identified where participants answered in a way, they thought would please me. When provided with comparisons, some participants chose to answer with the most recent statement/option (Perry, 2004). This tendency was noticed and where possible, the questions were paraphrased or reversed in order to comprehend the level of participant's understanding.

Secondly, the employed photovoice method provided participants with a tangible element (photograph) that supported further discussions and participant's subjective views. However, even when photographs were used as prompts, it still required participant's understanding and interpretation on abstract topics in order to move beyond descriptive accounts on what could be observed in the photograph (Bonati & Andriana, 2021; Williamson et al., 2020). This proved challenging for some of the individuals. Moreover, when asked to select two or three images they had taken, it raised questions on how deliberate their choices were.

Thirdly, the scope of the research allowed to represent only a small proportion of trainees' experiences (14 participants) which did not fully capture the diversity of experiences of all service users who attend Sunnyside Rural Trust.

Furthermore, although photovoice is considered an inclusive research method for people with learning disabilities (Cluley, 2017), the study sample consisted of trainees who were able to verbally elaborate on their most important experiences disabling participation by service users who were non-verbal. However, with a possibility to acquire training on social studies in disability research and interviewing skills, may afford the photovoice method to be inclusive. In that respect, all trainees with different cognitive abilities could be included in the research and involved in on-to-one interviews that would be tailored for their communication needs with the aid of sign language and pictograms (Toboso-Martín & Rogero-García, 2012).

Another factor that was seen as limiting is the time-scale of the research. The primary data collection method (photovoice with the one-to-one interviews) was conducted on the same day in a spring season 2022 with the group discussions taking place a week after. There was a possibility the findings would have been different if the research was conducted in another season or perhaps conducted as a year-long study with participants capturing images throughout the year. In addition, there were other external and internal factors at play that would have influenced how participants' chose the photos or reflected on their most meaningful experiences.

The posed research question sought to invite participants to share various elements of their experiences that would reveal both positive and negative aspects. However, the participants who were asked to take photographs of elements important to them only chose to portray the positive aspects of Sunnyside. Thereby, the research question should have been addressed differently to obtain diverse positive and negative influences.

Finally, the conducted focus group discussions may have been a subject of response bias. Since the participants knew each other, the informant responses might have been influenced by other participants and the established relationships and power imbalance. Moreover, my attempt to engage in discussions only as a facilitator was not met since most of the participants required to be directly addressed in order to share their photos and stories.

Despite the outlined limitations, the conducted study provided an enriched understanding on participant's experiences at Sunnyside Rural Trust and it was found to be an effective tool for communication with participants who were interested to take part in the research and share their stories. The research offered valuable insights on how participants are influenced by being and working at Sunnyside Rural Trust.

3.8 Generalization

The findings from the conducted case study were subject to a level of generalization. Considerable part of the analysed findings were relevant and could be generalized within Sunnyside defined by Stake as *petite* generalizations (1995, p. 7) where a specific group of people share similar characteristics within a specific setting that offers horticultural activities. Nevertheless, gathered data improved understanding on how the study findings could be proven relevant to similar social and outdoor studies with a focus on organized community programmes for vulnerable populations, in particular. Stake has defined this a *grand* generalization (1995, pp. 7–8) where, for example, another community gardening programme for people with learning disabilities in the UK could make grand generalizations from this study. The research is also contributing to fields of community and allotment gardening that assess the key experiences by members of community initiatives.

The employed study sample included trainees with varying levels of communication who could articulate their experiences which ensured that the collected data would reveal rich and diverse participant's accounts. The rich descriptive account on the specific case with its defining features, on study procedures, such as data analysis, validation (data triangulation), identified limitations and the reported study findings offered possibilities for replicating the conducted research in similar fields and may further inform policy and practice (Maxwell & Chmiel, 2014). The study design could be a useful mechanism for evaluating specific programmes or specific activities for individuals with varying communication levels. To provide further understanding on generalizing findings within and beyond the context of Sunnyside Rural Trust, practical considerations are outlined in the final chapter of the research.

4 Theoretical framework

By applying inductive approach to the study and using thematic analysis by Braun and Clarke (2006) I aimed at finding the best framework that would allow for deeper interpretation of my findings. With this in mind, the theoretical framework has been driven by the data, therefore the most appropriate conceptual framework was found after data gathering stage. The main themes: interpersonal relationships, skills and safety, and nature, pointed to a notion of responsiveness. I gained deeper understanding of how individuals responded to their own needs, to others and to the environment. The attentiveness towards human and non-human encounters suggested that study participants had established a level of care.

With this in mind, I attempted to apply a conceptual framework of an ethic of care by philosopher and educator Nel Noddings which is explored in her book *The Challenge to Care in Schools* (Noddings, 1992/2005) and other publications. Noddings suggested an approach that would place an ethic of care at the centre of educational practice in schools. An ethic of care as proposed by Noddings is organized around six centres of care: care for self, caring in the inner circle, caring for strangers and distant others, care for natural world, care for human-made world and care for ideas (1992/2005). I turn to the first four centres of care which are further analysed in my research.

An ethic of care advocates for relational and inclusive approach to education. Caring is relational in that it requires two roles: the one-caring and the cared-for who both contribute to the relationship, and therefore are receptive and responsive towards each other. In this regard, it is a reciprocal relationship that defines a caring act. Nonetheless, Noddings (1992/2005) argues that the universal desire to be cared for, is contextual and relates to a particular situation in question and therefore is non-generalizable. A notion of caring is not an inherent individual characteristic or virtue as outlined by Noddings but that the nature of care is relational. Moreover, she does not suggest that the caring as a relation can be solely transferred to care for other human and non-human beings. It is a question of developing the skill and capacity to care in individuals which is learnt through interpersonal encounters responding to the needs of the individual (Noddings, 1992/2005). Caring in its moral sense is concerned with caring attitudes towards others and not solely with principles and rules (Noddings, 1984/2013). Through this caring attitude, individuals are emotionally and intellectually attentive

towards others by recognizing others' needs, listening, seeing, engaging in conversations and thinking about others and their general welfare (Noddings, 2012). As a theoretical and practical framework an ethic of care provides understanding of how study participants have established caring relations towards themselves, the close and distant others, and the natural world.

Noddings approach to ethic of care has been conceptually analysed in a context of adventure education as outlined by McKenzie and Blenkinsop (2006). Authors state that adventure outdoor programmes can work as an educational tool to enhance learning which is concerned with caring for oneself and others. In this regard, outdoor programmes provide a platform which can address Noddings' centres of care both in private (care for oneself and care for close others) and public (care for distant others and care for non-human world) domains (McKenzie & Blenkinsop, 2006, p. 96). Through adventure education, participants who were engaged in group activities and surrounded by unfamiliar natural environment were able to establish caring relations to both human and non-human world. McKenzie and Blenkinsop (2006) have analysed the first four centres of care as outlined by Noddings (1992/2005) and it is their adaptation of the framework concerning private and public spheres which will be applied in my study not only theoretically but also empirically.

In general, outdoor education could be viewed as a way of promoting moral education where the perspective of care is a central aspect of the positive encounters among participants within a group setting as outlined by Burke and colleagues (2012). They have argued that the tension between moral judgements in a particular context and the actions based on principles and rules are an apparent ethical dilemma among outdoor leaders. Such a dilemma could be interpreted through an ethic of care theoretical framework. In this regard, the outdoor leaders who uphold responsibility for the group, should base their moral decisions considering and recognizing the needs of individuals within a group setting to achieve the goals and enable skill development on both a group and individual level. Similarly, research on community sports practices for disadvantaged groups by Debognies and colleagues (2019) was concerned with emphasizing the bottom-up approach that would be driven by person-centred and relationship-oriented approaches, where practitioners are caring for the needs of individuals with a focus on developmental outcomes as proposed by the participants themselves. Furthermore, the

caring relations are defined and further developed upon a group agreement how participants would like to be cared for and also consider the care for others. Therefore, the responsibility to nurture the caring community lies on both the group leaders and the participants in the group (Burke et al., 2012).

To turn to my case study, some of the features that define adventure and outdoor education (Barton, 2006) are similar to the horticultural day centre in that the activities take place outdoors in a group setting with direct or indirect involvement from the participants to reach desired outcomes. Moreover, participants are supported by staff members who facilitate informal learning. In this respect staff members can be viewed as educators with responsibility as emphasized by Noddings (2012) to facilitate a supportive environment where caring relations could develop. However, as Noddings (1992/2005) suggests such relations are unequal in that the staff members (educators) are the ones caring. Nevertheless, the cared-for who mainly receive and accept care, are learning to care for others too. It is throughout the interaction with staff members and other individuals that further establish the caring relations (Noddings, 1992/2005).

In applying the theoretical framework for the case study, I have accounted for participants developed capacity to care from their previous encounters with family and friends. However, this aspect was not analysed in detail. The main focus of applying the framework was to identify the caring relations that were outlined by participants' self-reported experiences at Sunnyside. An ethic of care framework allowed for deeper analysis of participants' self-reported experiences and their encounters with human and non-human world. To my knowledge, the framework has not been applied in practice in a context of an organized community gardening project. To further interpret the obtained findings, I have focused on the first four centres of care: care for oneself, care for close and distant others and care for the natural world.

5 Findings

The research employed a photovoice approach with interviews as the primary data collection instrument supported by the focus group discussions as the second phase of further data collection. Throughout the conducted semi-structured interviews, my analysis outlined three main themes that were apparent in all 14 self-reported participants' accounts: interpersonal relationships, skills and safety, and nature. Table 1 represents the analysed themes, subthemes and the number of participants who discussed these particular aspects in the interviews and focus groups.

Table 1

Analysed findings

THEME	SUBTHEME	NUMBER
INTERPERSONAL RELATIONSHIPS	FRIENDSHIPS	10
	TEAMWORK	12
	COMMUNITY	7
SKILLS & SAFETY	TASKS AND/OR ACTIVITIES	13
	UNDERSTANDING THE SAFETY LIMITATIONS	12
NATURE	UNDERSTANDING OF NATURE	6
	BEING IN NATURE	13

It was beyond the scope of the thesis to fully capture the intersection between the themes since all participants' accounts related to some degree of social interaction (e.g., interpersonal relationships), engagement in an activity (e.g., skills and safety) and the context of place (e.g., nature). These themes were interlinked in a way that one theme often arose from another (see Annex I). In this regard, none of the presented themes should be understood in isolation because the informants' self-reported experiences were mainly a composition of the three. However, for the purpose of presenting my findings I have chosen to separate and analyse the three overarching themes and the subthemes that best answer the proposed research question *What is the impact Sunnyside Rural Trust has on the trainees who attend the horticultural day service?* The set research question and objectives enabled me to gain a deeper understanding on how being part of an organized gardening programme has generated experiences for the participants.

The self-reported lived experiences and the meanings attached to their interaction with people, places and activities are further analysed. This chapter sets out

to describe each of the themes and subthemes and the most prominent examples (data extracts) which are further supported with the reviewed and new literature sources that was not accounted for prior to data collection stage. Each section will finish with a deeper analysis of the findings with the aid of theoretical framework based on Noddings' ethic of care.

5.1 Interpersonal relationships

The first theme that was apparent in all 14 participants self-reported accounts on their most important experiences at Sunnyside Rural Trust were interpersonal relationships. It provided a further understanding on the complexity of social interactions that took place on a personal and community level. It further demonstrated how the reflections on individual self and the collective self constructed their being at Sunnyside. The dialogues with the trainees and further group discussions outlined four subthemes which captured the external and internal social worlds of the participants, and their encounters with one another. When at Sunnyside the trainees were able to see themselves as part of a team and understand where they fit in relation to others which is supported by Charlie's statement: "Well it makes me feel that there are other people, not just me".

5.1.1 Friendships

"They are A-okay friends" (Camila)

For most of the trainees (10 out of 14) the opportunities to see and work with their friends at Sunnyside was highly important. It showed how much of their experience was dependent upon the friends they get to interact with. For Oliver the participation in photovoice method revealed that working at Sunnyside is mainly about "strong friendships" and opportunities to "have good conversations" and shared experiences with his friends. Other trainees too valued the opportunities to socialize and work with their friends at Sunnyside. The established friendships enabled participants to share further experiences by supporting each other which was outlined in a statement by Camila who says that "friends help you with stuff". This finding is consistent with the literature on community gardens (Veen et al., 2016) where the social interaction between the participants in a gardening setting created a mutual support system that worked as a

basis for friendships among participants to establish. Besides seeing their friends, Oliver, Charlie, Amelia and Sophia also expressed the importance of making new friends which showed their desire to widen their social/friend circle. This was most explicitly explained in Amelia's statement: "That's why I like coming to Sunnyside, making new friends". The social benefits deriving from community gardens are reviewed in a research by Mmako and others (2019) who found that participants valued the opportunities to establish friendships and connect with the community. Similarly, research by Neo and Chua (2017) found that the opportunities to develop friendship was the primary aim of joining the gardening project.

5.1.2 Teamwork

Nearly all participants (12 out of 14) have expressed in one way or another that the experiences shared were related with working in a group setting. Whilst only two participants verbally expressed the notion of teamwork in their reflections, such as Charlie who referred to the importance of "teamwork" and Amelia stated that "we work as a team", the other participants referred to the importance to be supportive and gain the support from other trainees and staff members too. This is clearly illustrated by Luka who said that "helping each other" when working in a group is important because "if they get too many trays to carry of plants, I can take it over for them". In the meantime, Luka expects "everyone to help" him out too because there are jobs, he is unable to accomplish by himself. There was a sense of fairness apparent in the individuals' reflections where everyone contribute to their team to accomplish tasks or generally offer their help wherever possible. Furthermore, three participants explicitly highlighted that the staff members facilitate a supportive environment for the trainees who attend the horticultural day service because "they really make us feel happy there" (Amelia) and "you get this sense that you're cared for and that you are very well loved here" (Harry). The reciprocal relationship was an apparent feature where staff and others were described as friendly and helpful and there was a desire to return the favour with exercising such qualities by the participants too. Moreover, working as part of the team led to positive outcomes eliciting a sense of achievement and a sense of pride which was also discussed under the next theme. The following quote by Luka showed how as a result of a team effort, he felt proud of the finished bug house: "looks good, we made it good".

Figure 1

"The Buggy House" image captured and named by Luka (March, 2022)

The established relationships between participants highlighted the social aspect as one of the key elements that constructed their experiences at Sunnyside. Being able to see friends and sharing experiences through collective work created a supportive environment where mutual help was offered. The established relationships and support system among the participants in a gardening setting as outlined by Veen and colleagues (2016) strengthened the social cohesion where participants offered their support and expertise in a range of gardening activities.

This led to my next observation of the language that participants used in their self-reports. Nearly all participants' accounts (11 out of 14) to some degree described their experiences with plural first person pronouns: "we plant bulbs, cut the grass" (Sophia), "we've got a lovely pathway" (Charlotte). Consequently, it was the collective point of view that underlined their most meaningful experiences even when the informants were asked to share their personal point of view. Their experiences are derived from the social interactions with the group members which is unsurprising since all trainees who come to Sunnyside work in a group setting. Moreover, it was the collective identity of the participants reports which revealed that participants expressed a sense of belonging to Sunnyside community where, through collective effort, participants worked towards a common purpose. In this regard, it was the collective identity as outlined in other community gardening programmes (Walter, 2013; Whatley et al., 2015) that created a sense of an internal community through shared collective interactions in the gardens. Moreover, study by Ong and others (2019) on a community

garden outlined the developed sense of belonging where the support, sharing of knowledge and produce as well as the general contribution to the collective activities constructed members' experiences of belonging to the community gardens and other members. Indeed, the sense of belonging to the internal community of Sunnyside was an apparent feature in self-reported accounts.

The established friendships, mutual contribution in a group work and the sense of community at Sunnyside Rural Trust that was valued by most of the participants corresponds with the research by Kingsley and others (2020) who investigated the benefits of social interactions that takes place in a community gardening setting through Robert Putnam's (2000) concept of social capital. They found that interactions and activities in the gardens increased the social capital where people were brought together to work side by side and share their expertise. Similar findings were reported by Wood and others (2015) who outlined opportunities for the participants to interact in allotment gardening setting creating social ties with others which in turn increased one's social capital.

5.1.3 Community

The sense of community was represented in seven of participants accounts which relates to a deeper understanding of *what Sunnyside is, and what it does*. Their understanding of Sunnyside corresponds to Sunnyside's ethos offering experience to work in the community (Sunnyside Rural Trust, 2022).

Self-reports demonstrated how the outcome of the team effort extended beyond Sunnyside, benefitting and reaching the wider community which enabled locating oneself in a context of the wider social world. Six participants referred to engagement with community through selling the produce and plants in the farm shop and providing gardening services for the public.

The impact Sunnyside had on the general public was clearly demonstrated in Amelia's statement when she referred to growing plants for the council and general public: "We plant them to make them nice and pretty for people … to brighten up their day … cuz they do always say thank you for the plants". Her account on connecting Sunnyside to the local community was one out of two interviews which demonstrated a deep understanding of how Sunnyside supports and improves shared spaces in the

neighbourhood. All other informants expressed their contribution to the general public through their involvement in on-site tasks growing produce and plants for the farm shop. This coincides with literature on therapeutic gardening (Sempik et al., 2005) where clients were able to use their developed gardening skills and benefit the community. In my study a few examples were provided by study participants who talked about the wider community: delivering harvested vegetables to the shop, undertaking outside contracts, and serving customers in the farm shop, but these responses were not dominant among all study participants.

The two subthemes mentioned above (teamwork and community) were similar in that they both created a sense of community. However, the former may be defined as the inner community that consisted of the members of Sunnyside Rural Trust while the latter was the outer community that reached beyond the boundaries of the horticultural day service. As outlined earlier by Whatley and others (2015), the members of a community gardening project created networks not only within their site-specific location establishing the internal community, but they also maintained interactions with the outside community which was facilitated by weekly market stalls for the local community. With this in mind, participants were more engaged in conversations about their day-to-day tasks and interactions with friends and other members of Sunnyside, but the interactions with the general public and contribution to their local community was less apparent. Therefore, the sense of community was considerably stronger within the boundaries of Sunnyside (with the members of Sunnyside).

The reference to inner and outer communities could be interpreted through Putnam's (2000) different dimensions of social capital, such as bonding and bridging. Bonding social capital creates strong bonds within a group who shares similar interest or are in other ways homogenous, whereas bridging social capital connects the individuals with a broader social world. My findings outlined that the bonding was established through friendships and teamwork with people who attend Sunnyside with a similar purpose and perhaps similar interests; the bridging of capital was seen as connecting the participants with the general public, engaging in activities that directly benefit the local community as a whole. The participant's reports revealed that the concept of bonding was more dominant than the felt contribution and benefits to the broader community.

An ethic of care framework allows to better explore the caring relations that developed through every-day encounters with the close and distant others, where both private and public dimensions (McKenzie & Blenkinsop, 2006) in centres of care were apparent. The first two subthemes: friendships and teamwork showed how trainees position themselves in the context of the lived social world demonstrating the established care for close others. The inner community, as previously described, constitutes a part of the private sphere, where the caring relations between friends, staff and other trainees emerged. The interviews revealed that a participant was able to take on a role of, either a one-caring or a cared-for, when working with close proximity to others: helping out and receiving help, were commonly expressed utterances. In this regard, the relationships can be characterized as mutual. The commitment to maintain caring relations may relate to the fact they had attended Sunnyside for some time where they knew the setting and were familiar with staff and trainees. They knew each other well enough to be responsive to others needs. This coincides with Nodding's statement that it is through the continuity of place and people where caring relations can be facilitated and established (1992/2005).

When the participants had experienced the positive outcomes of the caring relationships, they were able to extend the caring relations to the outer community. In this regard, the subtheme community describes the caring relations that were developed with distant others, in my example, with the general public (public sphere). Noddings (1992/2005) has emphasized that the caring relations to strangers and distant others who are not in a close proximity are weaker than the caring acts within the private sphere because there is uncertainty that the caring act is complete. Although, trainees acknowledged that they grew some of the plants and produce for the farm shop, for customers, in most of informants' accounts, it was not evident how the caring act was received by the cared for. However, few participants accounts acknowledged that positive feedback was received from the general public which provided evidence that the public had received and responded to the caring motives.

To sum up, from informants accounts it is clear that Sunnyside provided a setting for the participants to come together, create social networks with like-minded people who share similar interests and personal backgrounds. It provided opportunities to become a member of both: the inner and outer communities and through collective

effort connect to and benefit the wider community. The outlined social capital theory provided a deeper understanding of the interpersonal relationships as experienced by my study participants, however, the themes demonstrated in the following sections outline that the theory is considered limiting in explaining the skills and safety, and the nature aspect of the reported experiences. Interpersonal relationships provided only one facet on individuals experiences at Sunnyside. The other facet was the skills that relate to specific tasks which is further discussed below.

5.2 Skills and Safety

The engagement in the activities (for 13 informants) and the related notion of safety (for 12 informants) was expressed in nearly all self-reported accounts which introduces the second theme of my analysed data: skills and safety. The following subthemes explain how the most meaningful experiences at Sunnyside derived from occupational engagement and how the awareness of others and oneself outlined the everyday safety aspects at Sunnyside. The skills section does, however, intersect with previous findings on interpersonal relationships. Additionally, in the following section I explore the informants' accounts on a diversity of occupational activities that relate to their technical and safety skills.

5.2.1 Tasks and/or activities

13 of the informants' experiences at Sunnyside were linked to the tasks trainees were engaged in highlighting the role an individual "plays" when being involved in group work. Most of the expressed preferences pointed to engagement in outdoor activities with only four informants referring to indoor tasks where the obtained skills related to shop experiences (e.g., customer service, barista skills, housekeeping) or craft activities. Gardening tasks were mentioned in 11 of participants accounts with reference to planting, growing, digging, harvesting which corresponds with Sunnyside's ethos and its social image as a horticultural day service (Sunnyside Rural Trust, 2022). The next popular choice was working or being around bonfires (6), woodwork (4), and animal care (3).

I encountered some difficulties in obtaining a deeper understanding on what was the significance related to their preferred task. Most of the participants referred to the tasks briefly with phrases such as "I like" and "I enjoy" and further attempts in exploring

the underlaying factors on why these occupational activities were of importance and what were the immediate and long-term outcomes were unsuccessful. Nevertheless, participants possessed a good knowledge, especially in planting, animal care, growing and waitressing. Most of the participants demonstrated a good understanding of consecutive steps they took to accomplish the task which is clearly outlined in Charlotte's statement when she recalled being involved in a planting group: "you get a tray that's got the pots in … you make sure you … put the plant in and you fold it over and put it in a thing and then when that's done, you tell the staff".

The reported Sunnyside experiences allowed the participants to outline their strengths and weaknesses. Better understanding the individual self and one's abilities and limitations was a dominant theme among eight participants. Data suggests that the positive subjective evaluation of oneself connects with the tasks they could master well eliciting feelings of pride and sense of achievement. The most evident statement was that from Oliver who called himself "an expert" and stated that the shop manager relies on his expertise being a valuable member of the shop team. Similarly, Charlotte elicited a strong sense of pride, even triumph, when referring to her efficient planting skills in comparison with that of others, stating: "oh my goodness, poor Annie [staff member], she couldn't keep up with me. I was so quick doing it, you know. I kept putting the plants in the pots and she couldn't keep up". Nevertheless, few participants talked about the challenges they encounter when accomplishing a task and the support they seek from staff members.

The obtained data demonstrated that the trainees' positive self-evaluation (e.g., feeling pleased with their work) was linked with gaining feedback and receiving praise from others in the group. My statement is supported by the research on allotment gardening (Hawkins et al., 2013) where the gardener's confidence and levels of satisfaction improved once their gardening skills were confirmed and praised by other members of the garden. Indeed, this was evident in my participants self-reports who felt a sense of confidence and achievement of their work after receiving positive feedback.

There were only four participants who talked about using their skills beyond the context of Sunnyside. Preferred tasks at Sunnyside for Oliver, Amelia, Sophia and Thomas related to existing skills they had gained from college, school or family members. Oliver told me that he learnt cookery when he went to college whilst for Thomas the most

important tasks for him at Sunnyside were those he had learnt previously: "my dad taught me how to chop things and my brother taught me how to burn things". This indicated that Thomas valued the opportunities to apply possessed skills in a different setting.

Figure 2

"Pile the wood away" image captured and named by Thomas (March, 2022)

Overall, the reviewed literature on community gardens outlined the importance to share the obtained knowledge with other participants but it did not emphasize the vocational skill transfer (more specifically, gardening skills) to other areas. The involvement in community gardening projects allowed the acquisition and sharing of skills and expertise through an informal educational process (Walter, 2013; York & Wiseman, 2012). Although sharing of skills was not a dominant theme among my informants, it could be encouraged in future practices since participants had a good understanding on their preferred tasks and how to accomplish them. Only a few gardening projects (McVey et al., 2018; Mmako et al., 2019) emphasized the notion of transferable skills mainly in relation to food growing and food processing where members were able to obtain skills in cooking which could be utilized outside the garden project setting, but there was no reference to other gardening skill transfer. It is conceivable that involvement in the horticultural day centre provides opportunities to gain transferable skills in one context which could be further applied or transferred to another environment but most of the participants did not talk or acknowledge the skill transfer related to the occupational activities.

Another thread that was evident, but was not classified as strongly dominant for five participants, was the understanding of one's physical strength. This can be

summarized with a quote by Thomas: "I can workout and working as well" which outlines that the tasks undertaken at Sunnyside facilitated a form of exercising. The participants who mentioned how woodworking and digging increased their physical strength also improved their well-being, strengthening their understanding of their physical abilities. The benefits from gardening on physical activity levels have been reported in various gardening studies (Bird, 2004; Hale et al., 2011; Spano et al., 2020). Some studies (Bird, 2004; McVey et al., 2018) talked about the physical exercise in the gardens as a secondary benefit and that in fact the social interaction and gardening were viewed as primary benefits. This was also apparent in the informants reports who elaborated on their most important experiences at Sunnyside where the opportunities for physical activity constructed only a minor part of their experiences.

The tasks and/or activities subtheme outlined above reveals that the occupational focus was not the key element of participants' experiences, however, they were happy to share and talk about the activities they enjoy the most and demonstrate how to accomplish the tasks. However, there was a lack of comprehension that would support the underlining reasons for undertaking the particular tasks. There were only a few participants who indirectly referred to transferring the skills to other environments.

5.2.2 Understanding the safety limitations

The most distinct discovery that I did not account for, was the informants self-reported experiences relating to safety measures with 12 participants demonstrating their knowledge of safety issues. The awareness of safety intersects with the previous subtheme of skill acquisition since most participants comprehended aspects of the activity including the safety considerations. The following subtheme sets out to describe the concepts of on-site safety and the individual safety-awareness.

The obtained data demonstrates that most of the informants had gained important insights on the general site rules and have developed safety skills. For example, Sophia highlighted that when she is at Sunnyside she has to think about health and safety which requires "wearing safety boots, high vis [high visibility jacket]". Other informants too demonstrated safety routines that relate to specific tasks undertaken on the site. In the interviews participants mainly elaborated upon woodwork and bonfire safety, Covid safety measures and other routine practices. For woodchopping Charlotte said you have

to "stand on one side when someone is woodchopping" and Sophia reminded that "only people who are trained can touch the chainsaw". These examples outlined the responsibility one holds to keep everybody in the group safe. In this sense the knowledge of safety matters and respecting rules enabled participants to view Sunnyside a safe environment to be in. Moreover, four informants highlighted that the presence of others and staff members was re-assuring and kept them safe. Sofia's statement outlined the importance of being around others for safety: "If I be by myself, I could hurt myself by dropping stuff on my toes … but if it's with other people, there might be first aid trainers". Similarly, Harry also relied on staff to remind him of the safety rules on site: "you've got people telling you that that's dangerous, so don't do it. So that again makes me more safe". It was apparent through most of participants' accounts that attending Sunnyside Rural Trust was associated with being safe.

Moreover, the other underlining aspect of safety measures related to the individual safety-awareness (seven out of 14 participants) and in some cases was linked with previous unfortunate experiences that worked as a reminder to some of the informants. Thomas recalled burning his hand while putting wood on the fire therefore he admitted: "I can't start the fire … I might burn myself" and left this task to the "experts". Interestingly, five participants emphasized that they would wait for a staff member to start the bonfire, because it is "too dangerous" as noted by Grace. Participants demonstrated a good understanding on the consequences or possible risks that they could encounter if they don't follow the safety rules. Luka stated that when involved in woodworking activity "you can't touch wood with nails sticking out of it, you will get the nail straight through your hand. That would be painful". Federici (2021, p. 524) has described this as an "Precaution Principle" where individual is able to analyse various factors of the activity and possible negative consequences in order to minimize risk to one's safety. In this respect, while engaged in the activity, participants carried out risk assessments identifying the potential actions that may endanger their own and others' safety.

In reviewed research on community gardening, the notion of safety and risk management is rarely mentioned. From the reviewed literature only one study briefly discussed the safety aspect in community gardening setting (Whatley et al., 2015)

emphasizing that it is a staff responsibility to ensure the safety of the participants who are engaged in occupational activities.

Since the literature on community and allotment gardening does not investigate the risk and safety aspects related to gardening activities in organized community setting, I draw on literature in outdoor adventure education that regard the safety and risk. The outdoor leaders or educators uphold the responsibility to assist participants with instructing on safety measures and managing potential risks (Barton, 2006) which was also a common thread from the participants reflections. Staff members in this manner can be viewed as outdoor leaders who are responsible for facilitating meaningful experiences with minimizing the risks to participant's health (Boyes & O'Hare, 2003). Barton states that adventurous outdoor activities provide a means of "learning the key life skill of balancing risk against opportunity" (2006, p. 13). This was also apparent in my study where participants demonstrated how they assessed risks related to specific activities. However, some of the participants also showed that the activities that were perceived as dangerous such as woodchopping and woodburning, were also enjoyable.

The literature on outdoor adventure education focuses on the importance of maintaining the equilibrium between the risk and safety for positive individual experiences to emerge. The balance is essential for the individuals engaging in challenging activities to develop their competence and increase the sense of independence (Boyes & O'Hare, 2003; Federici, 2021). Similarly, Dix and Smith (2009) outlines the importance to encourage positive risk taking for people with learning disabilities in social care services which in turn would encourage individual's learning and personal development.

Identifying the hazards that may endanger one's safety is the notion of risk management which was evident among my participants. Nevertheless, not all participants were able to manage the risk and continue engaging in activities. Some participants' understanding of minimizing the risks resulted in passive participation in activities. The reviewed literature on outdoor activities and risk emphasize the common tendency to ascribe risk with a negative connotation where Western society is generally described as overprotective and risk averse (Breivik et al., 2020; Harper, 2017; Savery et al., 2017). The self-reported accounts revealed that a further learning may be hindered for participants who predominantly associated risk with harm. This was most evident

among participants who talked about their previous unfortunate experiences and reluctancy to engage in activities where potential hazards were identified.

Participants' reports outlined that safety was viewed as a responsibility of both staff and the participants, who thought critically about the risks involved to an individual and at group level. However, few participants viewed safety mainly as a staff responsibility. The understanding of risk aversion may help to further explore the heightened tendency to view risk as harm. Risk seemed to be a central aspect of their involvement in occupational activities. Whilst it may be linked to the notion of respecting rules and respecting staff who instruct about the rules relating to specific activities, the understanding of how the risk is perceived may also relate to their awareness of limitations relating to health aspects. Previous research on the social model of disabled people by Tregaskis (2004) emphasized that an individual with physical disabilities seek to prevent any possible risks that would reduce their existing physical functioning. She further stated that "most disabled people have a well-developed instinct for self-preservation" therefore disabled people may have greater awareness of safety and risks in comparison with non-disabled individuals (Tregaskis, 2004, p. 608).

The skills section is best described by the first centre of care: care for oneself in Noddings' (1992/2005) framework. The engagement in various activities enabled participants to practice care not only for close and distant others, but also for themselves. The most apparent individual caring act was participants' acknowledgement of their abilities and limitations. It revealed what brings them joy, what they can master well and also outlined how it can improve their physical well-being. In this regard, participants were able to increase their understanding of self and their physical bodies. As they reported on their most important activities while at Sunnyside, it emphasized their interest in a particular area.

The discussed safety aspects demonstrated awareness of keeping safe when engaged in occupational tasks. Moreover, the safety aspect entailed not only care for oneself, but close others too. By demonstrating their understanding on safety, they exhibited care that is rooted in moral reasons to protect others from harm (Noddings, 2002). They were able to judge their actions morally from the point of keeping themselves and others safe. Their moral education may derive from previous encounters with close and distant others, but is certainly magnified by staff members who hold a

greater responsibility as the carers, reminding them what is safe or unsafe in a particular situation. By demonstrating concerns for one's safety and by giving reminders of the rules, staff members are able to project the caring relations to the trainees too.

To summarize, the understanding of safety aspects was an apparent trend in most of the informants' accounts recognizing and minimizing the risks involved. They demonstrated that the activities they enjoy involved adhering to the safety rules. Even though some participants talked about being involved in an activity, demonstrating the routine steps they would take, and acknowledging the safety measures, other participants seemed to talk about a passive involvement in activity with a tendency to view risk as predominantly harmful. However, it was beyond the scope of this study to identify how a good understanding on safety may be empowering or limiting for participants' further learning and development.

5.3 Nature

The final theme analysed in this section provides insightful understanding of the place nature takes in participants' (13 out of 14) experiences at Sunnyside. Participants valued opportunities to view or interact with the natural elements in the outdoor environment. Consequently, nature was an important component of their time at Sunnyside. Being actively involved in the activities outside (e.g., planting and animal care) or simply being outdoors provided opportunities to interact with nature and develop a sense of connection to the world around them. However, it was noted that whilst nature figured in the participants self-reported experiences, for most it was a combination of the social interactions and the activities that took place in Sunnyside, where encounters with nature was only one component that shaped their most meaningful experiences (see Annex I).

5.3.1 Understanding of nature

The self-reported experiences for six of the informants demonstrated a deeper understanding of natural processes and the rhythms in nature. Acknowledging the presence of natural elements, and the relationship between them elicited a sense of respect towards nature. They noticed the changes that took place in nature, weather conditions, and the seasonal aspect of gardening. Sophia talked about the seasonality

and the life cycle of plants where flowers "close in for winter, then they open again in the summer". The appreciation towards nature and the importance of its elements, e.g., trees for human existence is clearly reflected in Oliver's words: "trees as very important because they give in what we breath out- oxygen which is good for our system". Similarly, Charlie's self-report emphasized the place nature took in his time at Sunnyside, where he enjoyed viewing and appreciating the natural world around him and stated that he preferred to be working outdoors: "well, what's important is the sun is shining on the ground, the trees and the natural world". For Charlie, nature was an important element of his experience where he could remind himself he was part of the "planet Earth".

Figure 3

"The Tranquil Zone" image captured and named by Charlie (March, 2022)

The acknowledgment of ever evolving nature was an apparent feature in community gardening research by Hale and colleagues (2011) where in order to grow your own food, one has to be in sync with nature, and develop an embodied comprehension of natural processes and growing seasons. Moreover, Triguero-Mas and others (2020) found that the active involvement in gardening enabled participants to apply the knowledge of planting and growing in order to have a broader understanding of nature and seasonal aspects of growing plants.

There was no distinct division between understanding and being in nature as they were both intrinsically interwoven as outlined by the participants. However, some of the study participants referred to natural processes without a reference of 'doing' the tasks. Indeed as noted by Clayton and colleagues (2017), the experiences in nature derived from

both observing the transformative nature of the landscape and being physically involved in activities.

5.3.2 Being in nature

Benefits of being in the outdoor environment were elaborated on in 13 out of 14 trainees' accounts. Being and working in the outdoor environment, for the participants, was associated with increased well-being through psychological and sensory experiences as well as the established affection for nature. However, participants who talked about their positive experiences in the garden, did not acknowledge the notion of improved well-being.

The psychological benefits of being in nature were described as a result of working with plants (N=4), animals (N=2) and doing woodwork (N=1) or simply being in outdoor environment at Sunnyside (N=6). 12 participants revealed that being in nature whether linked to a particular task or simply experiencing nature created pleasant feelings where participants described these experiences as "happy", "relaxing", "exciting" and "peaceful". The expressed emotional benefits were also closely linked to appreciating the aesthetic elements in the garden as outlined in Anna's statement where she was asked about why she likes planting flowers? "They [plants] make me happy they do, when they start growing, they are nice and pretty like those out there". The natural elements that most of the participants elaborated upon as aesthetically pleasing were flowers which were described as "colourful", "beautiful", and "lovely". This might be explained by the fact that the majority of participants took photos of the first spring flowers on the site.

Given these findings, the positive emotional association with gardens has been reported in other community gardening research (Hale et al., 2011; Walter, 2013; York & Wiseman, 2012) where gardening activities promoted feelings of happiness and relaxation which in turn contributed to a better psychological well-being. Hawkins and others (2013) outlined two factors or states that contributed to such experiences: being in the allotments or doing gardening at the allotments that enabled participants to feel calm and relaxed. Participants of Sunnyside talked about the activities they were involved with or the surrounding natural environment that stimulated the pleasant feelings.

In terms of individual growth and development, the learning that takes place in the gardens is not purely linked to the technical skills and interpersonal skills, but also

involves the emotional and sensory learning as suggested by Walter (2013). This was also evident among the study participants who acknowledged the benefits deriving from being and working in the nature even though they did not directly talk about changes in their well-being. Being in nature and doing activities in an outdoor environment gave rise to emotional and the sensory experiences. Moreover, the participants who described their experiences with a positive connotation, may have done so as a result of the physical exercise that took place during the activities which contributed to better well-being. This has also been found in a study by York and Wiseman (2012).

The outdoor environment and its elements were also perceived by nine participants' physical senses (touch, sight, hearing, smell and taste) experiencing nature through sensing it. Through passive and active interactions participants evoked rich and multisensory experiences by "listening to the birds", "warming up by the bonfire", "smell of the flowers" which were just few of the sensory experiences discussed in the interviews. According to Clayton and colleagues (2017) the direct interaction with nature where various senses of the body are engaged shapes the individual's experiences in a more memorable and emotional way. Indeed, the study participants talked about their preferred activities where the nature encounters were perceived by seeing and working with plants, holding the chickens, or tasting the produce. Study on rooftop-gardens (Triguero-Mas et al., 2020) found that participants who engaged in gardening activities had opportunities to connect with the natural environment differently, through tactile experiences with the plants and the wildlife.

To show the different meanings and sensory experiences that were ascribed to a bonfire I have included two participants accounts. Ralph talked about bonfires and "the smell of the fire" that he particularly enjoyed in his experience, conversely, Thomas liked "the smoke coming up" because it is "like a volcano". For Thomas looking at the smoke of the bonfire reminded him of volcanos which he studied 10 years ago. In this regard, even the same activity evoked different experiences for the participants responding differently to participant's senses. For Ralph it was the sense of smell that he assigned a special meaning to while for Thomas it was the sense of sight that evoked memories.

Another significant trend that nine participants talked about was the affection for nature which related to the notion of care. Participants showed how the interpersonal qualities of the teamwork extended beyond caring for and helping others, also including

the plants and animals. This can be summarized in Amelia's statement where she talked about the importance of looking after animals and "giving them a happy life" and looking after plants by feeding and watering them. Other participants too talked about looking after plants and animals on the site.

The notion of care is reflected in a study by Bhatti and colleagues (2009), they found that looking after a garden also implies taking care of oneself and others. It is therefore a social act and because the natural environment is occupied by various human actors, the sense of care for human and natural entities is exhibited. They further stated that gardening activities provide multiple ways "to cultivate both the garden itself, the mind … and at the same time cultivate relationships with friends, family, and non-human beings" (Bhatti et al., 2009, p. 70). The notion of reciprocal relationships that are apparent in the gardens was also noted by Hale and others (2011) who emphasized that the care for oneself and care for the natural environment were intrinsically connected.

Although the understanding of nature and being in nature were commonly discussed threads from the participants, the interviews did not reveal whether the affection and appreciation of nature at Sunnyside may be linked to a broader awareness of nature conservation practices. Similarly, Mmako and colleagues (2019) emphasized that participation in community gardening project was not seen to increase the knowledge on environmentally sustainable practices as reported by participants. However, community gardens have been referred to as educational sites that offer opportunities to increase knowledge on environmental sustainability and ecology through gardening practices (Hale et al., 2011; Walter, 2013; York & Wiseman, 2012).

The caring attitude towards nature as expressed by study participants relates to the centre of care towards animals, plants and Earth (Noddings, 1992/2005). Participants reported understanding and encounters with the non-human world demonstrated their care towards natural world. Trainees exhibited respectful and compassionate attitude towards animals and plants they "look after". However, the responsiveness of animals (e.g., chickens and plants) may not be so evident in informants' accounts in comparison to that of human others. However, one example clearly provided in relation to growing is how a given attention and care for plants by "feeding and watering" allowed participants to display feelings of joy, happiness, satisfaction when they talked about the beautiful and colourful flowers they helped to grow. In this regard, plants had responded

to this caring relation by growing into "beautiful flowers". Participants expressed affection towards nature and the reported sensory and psychological benefits contributed to connecting with the world around them. The nurturing relationships extended beyond the centres of care for close and distant others to also include the natural world.

To conclude, 13 participants talked about their most meaningful experiences at Sunnyside and the benefits of encounters with natural elements. When they discussed their interaction with the natural world, they generally demonstrated the positive association and the positive feelings- a sense of happiness and relaxation. The participants' accounts that exhibited an interest in nature were mainly descriptive and the broader understanding on environment and the nature preservation was not further discussed by participants.

The three overarching themes portrayed the subjective realities of the study participants who assigned an important meaning to the social interactions, the occupational activities with a focus on the safety aspects, as well as the natural environment that shaped their experiences at Sunnyside Rural Trust. The majority of the participants, who talked about their most important aspects at Sunnyside, referred to each of these three threads that were presented in this chapter, however, it was observed that their leading joy was the established relationships. Sunnyside Rural Trust provided opportunities for participants to develop interpersonal and occupational skills in an outdoor setting. The theoretical framework which was employed for deeper understanding of the findings showed that the main centres of care for the participants were those of close others and themselves. They valued opportunities to work in a team where they felt supported and showed their caring relations towards other group members and staff. The undertaken activities related to care for oneself and close others too with an emphasis on safety considerations. Informants accounts relating to care for distant others and the natural world were less dominant, nonetheless, there were references that demonstrated that the outcomes of one's work contribute to the local community. In regards to care for natural world, participants had a deep appreciation towards nature with some outlining the importance of caring for the plants and animals too. In line with the analysed themes and subthemes in this chapter, there were four key elements that emerged. Firstly, the sense of belonging to the inner community within the

boundaries of Sunnyside was much stronger than the links to the outer community. Secondly, the engagement in occupational activities as reported by participants demonstrated an understanding on what activities are undertaken with further explanations on how the tasks are accomplished. However, the reasons why a particular task or activity is important and further opportunities to transfer the obtained skills to other environments were not demonstrated by most of the participants. Next, the majority of participants' accounts in relation to occupational activities were on understanding the on-site and individual safety. For some of the informants, a developed risk aversion was observed. While it was evident that 13 participants could demonstrate that keeping safe is of high importance when engaged in activities, it may also be seen as a limiting factor for their further learning. Lastly, the contact with nature mainly through occupational activities was valued as an aspect of informants' experiences with a focus on the psychological and sensory benefits. It was encounters with nature and its elements that participants found particularly "relaxing". Moreover, some of the participants deeply cared about the plants and the animals but did not demonstrate how this is linked to preserving the nature around them.

To conclude, the findings provided a means of creating a conversation with a small cohort of the trainees to explore their understanding and their preferences when attending Sunnyside. The conducted research proved an effective means for involving participants in the research process. They were delighted to share their views and elicited a sense of pride for being able to participate and contribute to the research. Their main joy was the opportunity to share the photographs with other participants in the focus group discussions. The desire to participate and help with the research process may be contextualized through an ethic of care framework where participants were demonstrating their caring relations by understanding my needs and desired outcomes. Moreover, the interview process was a mutual exchange of these caring relations. Allowing participants to guide the research, take photographs and engage in conversations about their key experiences was the main aim of employing the particular research method. Participants reflected upon various elements and ascribed subjective meanings of their experiences which related to their participation in Sunnyside. With reference to the current way Sunnyside has obtained views from the trainees, the analysed research themes were similar to the survey results on perceived benefits of their

participation in Sunnyside. Social interaction and working with others were valued by most of the respondents which aligns with the above findings. Nevertheless, this thesis provided opportunities to include trainees in the research process, allowing the sharing of their perceived experiences in great depth which was achieved by combining visual and verbal means of communication. In fact, there were no advocates who spoke on behalf of the trainees (as in the case of the surveys). It was the trainees who guided the research, represented their realities and the elements of their experiences they perceived as important. The richness of the elements that accounted for their experiences furthered the understanding on how Sunnyside could be improved and what aspects could be addressed in future practice.

6 Conclusion and implications

The findings of this study have led to locate the studied case within a broader context of recently published reports concerned with public health and social care policies. Furthermore, the meanings ascribed to various aspects in the gardening programme increased the understanding of potential stimulating and limiting elements for trainees' further learning and personal development. I have provided suggestions for practice deriving from the obtained findings. Lastly, I have outlined possible considerations for future research.

6.1 Implications for policy

In many ways Sunnyside Rural Trust can be considered a successful example of where adults with learning disabilities who require social care support have received the appropriate help in the local community. The study findings of the positive experiences deriving from participation in community gardening setting, may be useful for policy makers. However, the social care system in the country is experiencing crisis with the growing demand for social care services among adult population and a lack of access and funding to such services that would meet this demand. Moreover, it is projected that the adults who require social care support, including people with learning disabilities, will increase (with estimate rise by 3% between 2015 and 2040) (Wittenberg et al., 2018) which places a considerable pressure on local health and social care authorities.

The published report on social care services in the UK (Idris et al., 2020) highlighted that the existing social care system and the on-going social care reform in England is failing to understand and meet the needs of vulnerable adult population (aged 18-64), that make up the major part of the social care system, mainly focusing on the older (aged 65+) population. The report outlines that the majority of the adult population do receive community-based social care support (84%) (NHS Digital, 2020) such as access to day centres, possibilities for volunteering, training and employment, to mention just a few. However, the national target to increase the access and quality for community-based programmes as an alternative to institutional care (Houlden, 2015; NHS, 2019) has not been met (Idris et al., 2020).

My study findings pointed towards a participant's reluctance to engage in activities due to concerns relating to health and safety and the risk of being harmed.

Indeed the reviewed guidelines by Dix and Smith (2009) concerning social care system and safety aspects discussed the apparent tension between safeguarding individuals from harm and promoting a positive risk managing plans. The common societal view is that for people with disabilities, risk is predominantly associated with danger and harm where service providers seek to minimise any potential risks. The outlined report emphasizes the deriving benefits from a positive risk management for the individuals, providing a more person-centred approach that promotes their personal development and empowers individuals to make their own choices concerning their well-being (Dix & Smith, 2009).

Allotments and community gardens are defined as types of greenspaces. The organized programmes such as Sunnyside promote the access to urban greenspaces for individuals with learning and physical disabilities who are prone to inactive lifestyles and who access nature less frequently due to their health and physical disabilities, with opportunities to engage in meaningful social activities. Marginalized groups are believed to benefit the most (in terms of benefits to health) when exposed to greener environments as outlined in the latest report by Public Health England (2020). Moreover, the benefits from access to greenspaces are similar to those of gardening. The on-going rates of urbanization places a considerable pressure on urban planners and local authorities to increase the access to greenspaces in order to address the health and well-being inequalities. Therefore, community gardening spaces should be considered as local assets which derive benefits to health and well-being of the population, which in turn may result in reduced costs on health care (Public Health England, 2020).

The association between the importance of natural environments and the better health and well-being has also been emphasized in the government 25-year environment plan (Her Majesty's Government [HM Government], 2018) on environmental protection. The action plans have been designed not only for the benefits of the personal welfare from engaging with the natural environment, but it is also believed to enhance the understanding of nature protection. The reviewed academic research supports the view that community gardens can become a learning platform for environmental education and sustainability practices if incorporated in their programme designs (Kingsley et al., 2020; McVey et al., 2018; York & Wiseman, 2012).

Future policies should aim at providing access to community gardening projects that would reduce pressure on health services and provide opportunities for vulnerable populations to improve their health and well-being with regular nature contact through gardening. The benefits deriving from such organized programmes would be seen as a pathway to promote social integration, physical activity uptake and regular contact with nature in the urban greenspaces.

6.2 Implications for practice

The obtained findings from study participants on their key experiences at Sunnyside have provided useful insights that could be considered in the organization's future practices. The photovoice method provided additional means of communication towards understanding how things are perceived through their encountered experiences. It can be considered as a pathway for creating a conversation through a more deliberate individual-centric communication, for example, to depict the elements of their experience that may be perceived as limiting or enabling, with further investigation on understanding the underlining reasons. The photo elicitation could enable participants (verbal and non-verbal) to depict their areas of interest and what skills they would like to acquire in their time at Sunnyside.

To enhance a better understanding on how their involvement in activities have a wider impact on the local community, staff could be more intentional on the way feedback is provided for the trainees moving beyond reflection on their achievements on a day-to-day basis and reflecting on their long-term achievements. This in turn, would promote a better understanding on the part they play and their sense of achievement within and outside the day service.

In line with the occupational focus, it was evident that many participants were able to demonstrate a step-by-step guide on various activities with emphasis on what is the activity and how it is done. However, staff could be more deliberate in communicating and explaining why the particular task is undertaken and support the trainees in recognizing the links between the task, the reasons for doing it and the desired outcomes. This in turn, would encourage the trainees to recognize the developed skill-set through occupational activities encouraging and enabling them to recognize the transferable skill-set that could be applied to other situations where similar outcomes are required. Since

a very good knowledge was demonstrated on the "how to" aspects of the acquired skills and safety aspects, a good idea would be to encourage trainees to share their knowledge with others who may be less skilled, by becoming a mentor to them. By allowing such an approach, it would inspire others to take on more responsibility within a group.

Most of the trainees demonstrated a good understanding of safety measures, acknowledging the possible risks related to the occupational activities. However, their self-reports highlighted the possibility their involvement in activities may be limited because of the increased sense of risk aversion which in turn, could hinder further learning and personal development. Staff could be more deliberate in promoting a positive risk taking and management to encourage their participation in activities. Taking control of their own safety would increase their confidence and knowledge, and reduce their sense of risk aversion. A more positive communication could be encouraged that acknowledge possible risks with accompanied opportunities for new experiences and learning.

The reported experiences that derive from being in nature were mainly psychological and sensory. There was a certain interest in the natural world but it was mainly descriptive. As a horticultural day service with a focus on gardening and other rural activities, a continuous reflection would be the means to emphasize the existing sustainability practices and the consideration of human and nature encounters.

6.3 Suggestions for further research

Within the given time frame, the study represented a small proportion of trainees' lived experiences at Sunnyside. Moreover, the study findings in combination with the reviewed policies and recommendations for practice provided valuable insights on how the conducted research could be employed on a bigger scale including all service users at Sunnyside Rural Trust from three different sites. In doing so, an investigation and comparisons could be made on how their perceived key experiences and the aspects that constitute the experiences may differ across the three sites since each of the horticultural sites have a slightly different occupational focus. To further the understanding on what factors constitute service users' experiences at different points in time, a long-term study in the course of a year could provide a better understanding that would account for external and internal influences. Moreover, further research

could place a considerable focus on investigating the relationships between the social and physical environment to gain a better understanding on each of the critical elements that constitute the trainees' experiences.

The published report on social care services for adults has outlined the lack of publicly available empirical data that would provide evidence on the quality of the service and the outcomes of care (Idris et al., 2020). Similarly, the report on greenspaces (Public Health England, 2020) has outlined the lack of long-term evidence-based research that would promote the greenspace initiatives and planning with a focus on disadvantaged groups and outcomes on health and well-being. Hence, an extensive study on Sunnyside Rural Trust may be the means of providing valuable empirical information from the service users self-reported accounts in order to evaluate the community gardening organized programme and the influence on health and well-being.

To conclude, the findings of this study have enhanced understanding on how trainees were influenced by their time at Sunnyside Rural Trust. By using interviews and focus group discussions, it was possible to obtain detailed accounts on the people, places and activities that shape their experiences and what it means to them to attend organized community gardening programme. The three analysed themes in the findings chapter were the overarching benefits for the participants: opportunities for social interactions, engagement in diverse activities and the opportunities to interact with and be in nature. Their accounts demonstrated that there were elements of their experiences that relate to increased well-being.

The study adds to the existing literature on organized community gardening programmes for vulnerable populations with the chosen data collection method proven effective to further the understanding of their key experiences. To some degree, participants were able to evaluate their participation in the day service although this was not specifically addressed throughout the interviews. In general, the reported findings coincide with the existing literature on community and allotment gardening that have researched factors that support positive gardening experiences among general population and target groups.

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Annexes

A: Interview guide

B: Focus group guide

C: Interpersonal relationships (theme 1)

D: Skills and safety (theme 2)

E: Nature (theme 3)

F: Venn diagram (themes, subthemes and categories)

G: Assent form

H: Information letter and consent form

I: Venn diagram (intersection between the themes)

A: Interview guide

<div align="center">

Interview Guide

</div>

What I would like you to do, is go through the pictures you have taken and pick two or three you want to chat with me about. I want to find out what are your thoughts about Sunnyside. Something that you feel Sunnyside is to you. What makes Sunnyside *Sunnyside* to you?

If you have picked the pictures, let's start our chat. Please let me know if you find any of the questions hard to understand and I can change them.

1) How did you find walking around the site and taking photos?
2) Can you remember how long have you been coming to Sunnyside? How many days per week do you attend Sunnyside?
3) Can you show me the first picture you have picked?
4) Let's imagine I don't know Sunnyside, I don't know the staff nor the trainees here, and I don't know where everything is, I am just a student who is learning. And I would like to learn about what you think of your time at Sunnyside.
   Can you tell me what you can see in this photo?
5) Where on the site is this picture taken?
6) **Why did you take this picture? Why is this important to you?**
7) What exactly is it about the... (*specify here*) that's so important to you?
8) What exactly do you do when you are ...... (*specify here*)?
9) Do you prefer to do this activity on your own or together with others? (*If applicable*)
10) When you look at the picture you took, how does it make you feel?
11) When you arrive at Sunnyside, are you hoping to be involved in that sort of activity/ see your friends? (*If applicable*)

Repeat the same procedure with the 2nd and/or 3rd image.

12) Let's look at all two or three pictures you have taken, if I ask you to compare them, how do you think they differ? Are they similar, are they different?
13) Do you think you could name these pictures? How would they be called?
14) Do you have any questions to me?
15) Can I ask you, how did you find our little chat?

B: Focus group guide

Focus group guide

The focus group discussions are two-fold.

1. Stage

Thank you for joining the group discussions today. We have come together so that you would have an opportunity to share your pictures with everybody here and tell us a bit about them.

1) Would you like to show everybody the photos you have taken?
2) Could you tell us why you took these pictures? What means a lot to you when you are at Sunnyside?

2. Stage

Thank you for sharing your photos and stories with all of us. Now I would like to share with you what I found, what were the three big things you all talked about in your interviews.

1) Do you think all these elements are important to you when you are at Sunnyside?
2) Is one more important than another?

SKILLS AND SAFETY   OTHERS AND YOURSELF   NATURE

C: Interpersonal relationships (theme 1)

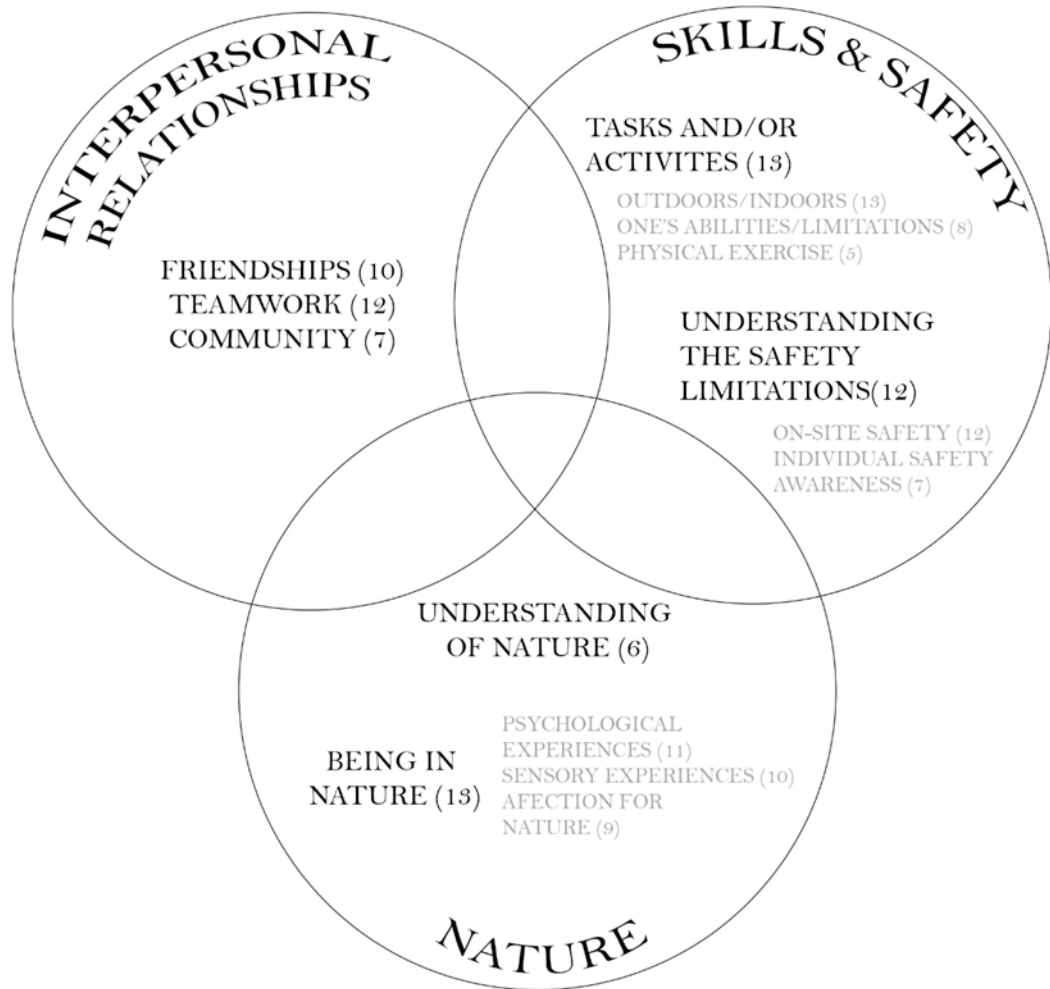| THEME	SUBTHEME	EXAMPLES	TOTAL MENTIONED
I N T E R P E R S O N A L R E L A T I O N S H I P S	FRIENDSHIPS (10)	p2: building strong friendships, making new friends; having good conversations and shared interests with friends p3: important to meet new people at sunnyside; build new relationships; social network p4: to have bonfires with her friends p5: likes meeting new people, making new friends at sunnyside p6: meeting new people, greeting the people p8: has got his friends here at sunnyside p9: enjoys sitting in the greenhouse and talking with her friends p10: all the trainees are very good friends p7: it's important to have friends at sunnyside p13: All the trainees are her friends, she gets to work with her friends	10
	TEAMWORK (12)	p1: people around the bonfire to talk to; help people to make pizzas p2: helping people throughout the task/activity p3: calls it a pleasant feeling to be around others; group interaction is important becayse he finds it fun to be with people; it's about getting on with people and socializing p4: making cards for other people at sunnyside (for birthdays); staff and friends at the bonfire make her happy p5: enjoys the teamwork, it's important that everyone is friendly and help each other out; fairness in the shop + people make her feel happy there (refers to the shop), everyone is very supportive p7: cares about other people at sunnyside; looking after other people + he is supported and being explained what to do, he feels at home in sunnyside p8: likes working with people and working with staff p9: helps out because refers to people here being nice and helpful p10: friends/ trainees helps her with stuff like pots and trays and she helps her friends too. She likes people saying thank you and please p12: staff members are there to support her if she gets stuck doing anything p13: enjoys working in a group because she gets on with everybody p14: likes to be helped by everyone when he is doing digging; also finds it very important to be helpful	12
	COMMUNITY (7)	p2: to make food for the customers,selling products for the shop, serve the customers, p3: he feels he is being part of the community whilst at sunnyside p5: likes to help out in the shop especially when it's busy; plant care is something we do at sunnyside (ethos), people say thank you for the plants we have grown p6: woodchopping is important because it helps community too, selling wood in the shop p8: plants are grown for other people e.g. to take them to Hampton Court (flower show) p14: likes harvesting the veg for the shop so people can buy them p7: sunnyside provides gardening services for people, that's part of his job and minibus logo represents it.	7

D: Skills and safety (theme 2)

THEME	SUBTHEME	CATEGORIES	EXAMPLES	TOTAL MENTIONED
S K I L L S & S A F E T Y	**TASKS AND/OR ACTIVITIES (13)**	Outdoors/indoors	p1: animal care (chicken care), pizza oven p9: animal care (chicken care), planting p5: animal care (chicken care) (EXISTING), open days, planting, bonfire, arts and crafts, shop (waitressing, barista, serving customers) p2: grass cutting , bonfire/burning, bakery (EXISTING), electric equipment maintanance, shop (waitressing, till work, serving customers, barista) p3: wood chopping, wood cutting p6: woodchopping (EXISTING), planting, grass cutting p8: woodchopping, bonfire/burning planting, sorting wood, shop (waitressing) p11: wood chopping, wood stocking, bonfire/burning (EXISTING), digging p4: planting, bonfire, arts and crafts (EXISTING) p12: planting p14: planting, digging, harvesting p13: growing, planting p7: digging, bonfire	13
		One's abilities/limitations	p2: staff member refers to him as expert in barista skills; people want to know what he can do; tasks he is good at; expert with outdoor stuff; expert with electrical appliances; learnt cookary at college p5: eager to try new things even if she is struggling; important to learn new skills that could be utilized in her future jobs (e.g. waitressing); working in the shop boosts her confidence; previous knowledge of animal care p6: eager to show what she has learnt at school; being in sunnyside will give you a job hopefully p7: "sunnyside is my job"; feels at home here; doesn't want to be a nature person p9: refers to the time she was too quick doing the plants and a staff member couldn't keep up with her. p11: he knows how to do woodchopping from before p13: she could grow veg on her own but needs help with spacing out the plants p14: he is good with cutting bamboos ("I was the expert")	8
		Physical exercise	p3: woodwork, woodchopping: he really enjoys building his muscles up, exercise, hammering. p8: woodchopping and wood cutting: he likes doing it; he's got strong muscles too. p6: woodwork: "moving stuff and it's outdoors" p11: he can "workout and work as well"; "I need to move a bit more, too much sitting down" p14: "I am very strong" (refers to lifting pallets)	5
	UNDERSTANDING THE SAFETY LIMITATIONS (12)	On-site safety	p2: use of gardening machinery- eye&ear protection p3: polytunnels- "well ventilated spaces"; "blows corona particles away"; wood cutting safety p4: staff around in case she burns herself, staff "light the fire for us" p5: "stand away when deliveries are coming"; likes to have others around for safety p6: keeping safe (wearing safety boots, high-vis, use tools correctly); "only people who are trained can touch the chainsaw"; important to have other people around for safety p7: safe environment because of the signs and people who reminds about safety, respects the rules; safety rules around bees; staff around for safety p8: "if you have a lorry coming in, stand away" p9: "come away from the fire"; "stand on one side when someone is woodchopping", keeping distance (covid rules) p10: "wearing masks" (covid rules) p11: woodchopping-"everyone stands back"; "might get hurt if you don't keep safe" p12: "safety boots" p14: can't have anyone behind you when woodchopping, other signs/rules on the site	12
		Individual safety-awareness	p4: if goes near the fire, she will burn herself p6: chainsaw noises make her scared p7: not to bend over to hurt his back; burnt himself by the fire so is scared that might happen again p8: "put a sun-cream on" p9: doesn't like getting too close to the bonfire p11: burnt his hand while putting wood on fire; leaves the bonfire starting to the experts, stands back not to get smoke in his eyes p14: not too much heavy lifting that could hurt his back, got nervous with the saw, didn't want to cut himself; doesn't like to get too close to the bonfire; can't touch wood with nails sticking out	7

E: Nature (theme 3)

THEME	SUBTHEME	CATEGORIES	EXAMPLES	TOTAL MENTIONED
N A T U R E	**UNDERSTANDING OF NATURE (6)**	Natural processes	p2: "we come here whatever the weather"; "there is nothing you can do to control the weather"; "trees are very important because they give in what we breath out- oxygen, which is good for our system".	6
			p3: "if you don't treat the weather with respect, you are likely to loose. You have to respect nature"; being part of the planet Earth	
			p6: more woodchopping in the winter; flowers are important for bees; "flowers close in for the winter and open again in the summer"	
			p12: trimming the plants back to let them grow; will do more planting when the summer comes	
			p14: "there is no honey without the bees"	
			p7: Honey, bees; being part of nature; "nature as part of our world"	
	BEING IN NATURE (13)	psychological experiences	p5: "looking after animals makes me happy"	12
			p8: "working with plants makes me focused"	
			p1: "smell of fire make me happy"	
			p3: "I feel relaxed and peaceful"; prefer outside	
			p4: "flowers make me happy"	
			p6: outdoors "make me happy"; "out in the open"; flowers "make me feel excited"	
			p7: nature- fun, space to think, calmer, being alive	
			p13: plants "make me relaxing and happy"	
			p12: working with plants- relaxing, "make me happy", enjoy	
			p10: "happy she is there with us" (refers to a dog)	
			p14: "everyone gets so relaxed"	
		sensory experiences	p11: "reminds of volcanos"; the smoke of the bonfire	10
			p1: holding the chickens, smell of the fire; to warm up; listening to the birds	
			p5: holding the chickens	
			p2: to warm up	
			p4: to warm up, "cosy"	
			p7: to warm up	
			p6: hear and see the birds	
			p4: smell of the flowers	
			p13: try the produce	
			p14: eating runner beans	
		affection for nature	p4: "flowers are pretty"	9
			p5: likes flowers, they are colourful; looking after animals, "giving them a happy life"; feed and water the plants	
			p6: likes flowers because they are beautiful	
			P7: finds flowers beautiful	
			p8: tree and beautiful flowers; nice footpath	
			p9: lovely pathway in the orchard, lovely flowers; all the plants get well watered	
			p13: likes growing plants because they are colourful; looks after plants and water them	
			p3: likes observing natural world; sun shining on the ground, the trees, the wildlife, sky, pond	
			p12: looks after plants	

F: Venn diagram (themes, subthemes and categories)

INTERPERSONAL RELATIONSHIPS

SKILLS & SAFETY

TASKS AND/OR
ACTIVITES (13)

OUTDOORS/INDOORS (13)
ONE'S ABILITIES/LIMITATIONS (8)
PHYSICAL EXERCISE (5)

FRIENDSHIPS (10)
TEAMWORK (12)
COMMUNITY (7)

UNDERSTANDING
THE SAFETY
LIMITATIONS(12)

ON-SITE SAFETY (12)
INDIVIDUAL SAFETY
AWARENESS (7)

UNDERSTANDING
OF NATURE (6)

BEING IN
NATURE (13)

PSYCHOLOGICAL
EXPERIENCES (11)
SENSORY EXPERIENCES (10)
AFECTION FOR
NATURE (9)

NATURE

G: Assent form

ASSENT FORM

ADULTS WITH LEARNING DISABILITIES' SELF-REFLECTIVE REPORT ON THEIR
KEY EXPERIENCES AT A DAY SERVICE.
CASE STUDY: SUNNYSIDE RURAL TRUST (UK)

1. I AM DOING MY SCHOOL PROJECT AND WANT TO INVOLVE YOU.

2. I AM ASKING OTHER TRAINEES TO HELP ME OUT TOO.

3. I WANT TO KNOW

   - IF YOU ARE HAPPY TO HELP OUT WITH MY SCHOOL WORK;

   - IF YOU CAN UNDERSTAND WHAT I AM ASKING YOU.

4. I WILL GIVE YOU A TABLET TO USE AND ASK YOU TO TAKE SOME PHOTOS.

5. PLEASE TAKE PHOTOS OF ANYTHING THAT **MEANS A LOT TO YOU** WHEN YOU ARE AT SUNNYSIDE.

6. I WILL COME WITH YOU JUST IN CASE YOU NEED ANY HELP TO MAKE SURE THE TABLET IS WORKING OR IF YOU WANT TO ASK ME ANYTHING.

7. I REALLY WANT TO KNOW WHAT YOU THINK OF YOUR TIME AT SUNNYSIDE.

8. THEN WE WILL COME BACK AND CHAT ABOUT THE PHOTOS YOU TOOK, CHOOSE YOUR FAVOURITE 2.

9. I WANT YOU TO KNOW THERE IS NO RIGHT OR WRONG ANSWERS. EVERYTHING YOU SAY IS IMPORTANT TO ME.

10. AFTER OUR CHAT WE MIGHT GET OTHER TRAINEES TO JOIN. WE CAN THEN SHARE THE PHOTOS WE HAVE TAKEN AND TALK ABOUT THEM ALL TOGETHER.
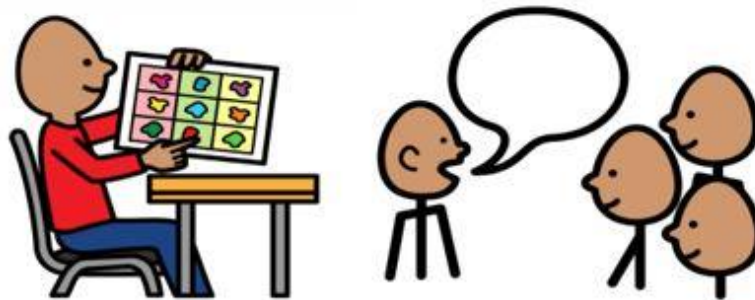
11. WHEN I DO MY SCHOOL PAPER, I WANT TO INCLUDE THE THINGS WE HAVE TALKED ABOUT.

12. I WILL HAVE LOTS OF ANSWERS FROM YOU AND OTHER TRAINEES WHO WERE HAPPY TO JOIN MY SCHOOL PROJECT.

13. I WILL USE MY MOBILE TO RECORD OUR CONVERSATIONS SO THAT I DON'T FORGET THE THINGS YOU TELL ME.

14. YOU CAN CHANGE YOUR MIND ABOUT JOINING IN WITH THE RESERCH AT ANYTIME.

15. WHEN I DO THE PAPERWORK, I WILL MAKE SURE YOUR NAME AND OTHER PRIVATE THINGS YOU TELL ME, IS NOT INCLUDED. NOBODY WILL KNOW WHAT YOU HAVE SAID APART FROM ME AND YOU.

16. PLEASE TELL ME IF YOU WANT TO SEE, CHANGE OR DELETE THE ANSWERS YOU GAVE AFTER WE HAVE FINISHED CHATTING ABOUT YOUR SELECTED PHOTOS.

17. I WILL MAKE YOU A LITTLE SCRAPBOOK AT THE END OF MY PROJECT SO THAT THE PHOTOS YOU TOOK ARE PRINTED TO TAKE HOME AND SHOW OTHERS.

18. IF YOU WANT TO HAVE THE FINAL RESULTS OF MY SCHOOL WORK, PLEASE TELL ME AND I WILL INCLUDE THIS IN YOUR SCRAPBOOK.

19. WHEN I HAVE FINISHED WITH MY PAPER, I WILL DELETE ALL THE RECORDINGS I HAVE ON MY MOBILE.
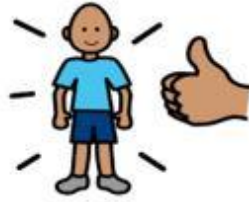
20. SOME THINGS YOU SAY MIGHT HELP TO IMPROVE YOUR EXPERIENCE AT SUNNYSIDE.

21. SO…
    - YOU **TAKE PHOTOS** OF WHAT'S IMPORTANT TO YOU AT SUNNYSIDE.
    - YOU **TALK ABOUT** THESE THINGS WITH ME AND **SHARE** WITH OTHER TRAINEES WHO ARE HELPING IN THE PROJECT TOO.
    - YOU **GET** THE PHOTOS IN **A SCRAPBOOK** AS A THANKS FROM ME TO YOU.

22. AFTER HEARING THIS, ARE YOU HAPPY TO TAKE PART IN MY PROJECT?

23. CAN I CHECK YOU HAVE UNDERSTOOD WHAT MY PROJECT IS ABOUT? AND **WHAT YOU WILL BE DOING** TO HELP ME IF YOU SAY YES?

24. IF YOU WANT TO ASK ME ANYTHING ABOUT THE PROJECT, YOU CAN CONTACT ME DIRECTLY ON 07544901586 OR SPEAK TO ME NEXT TIME YOU SEE ME.

25. I WILL GIVE YOU A LETTER OF AGREEMENT WHICH EXPLAINS THE THINGS WE TALKED ABOUT TODAY. I WOULD LIKE IF YOU CAN TAKE THIS HOME AND SHOW IT TO YOUR PARENTS/CARERS. COULD YOU ASK THEM TO SIGN THE FORM AND RETURN TO ME NEXT TIME I SEE YOU?
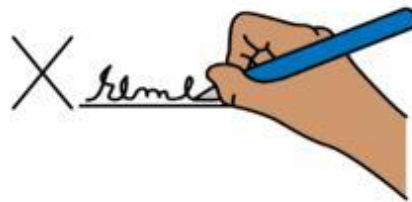
26. IF YOU ARE HAPPY TO PARTICIPATE IN MY SCHOOL PROJECT, COULD YOU SIGN THIS PAPER PLEASE?

PRINT PARTICIPANT'S NAME _____

SIGNATURE OF PARTICIPANT _____

SIGNATURE OF RESEARCHER _____

DATE _____

Information letter

Self-reflective report on key experiences of adults with learning disabilities
Case study: Sunnyside Rural Trust
.

You're receiving this information letter and consent form to confirm the trainee's agreement to participate in the case study.

The information letter is for the trainees and their parents/guardians or professionals who are responsible for the care of the individual. It explains the purpose of the project and what participation in the research will involve.

Purpose of the project
This research is being conducted as part of my Master's thesis (the Nordic Master of Outdoor Studies) at the University of South-Eastern Norway.

The purpose of the research is to investigate how adults with learning disabilities are influenced by their time in Sunnyside Rural Trust. It seeks to understand what are the most meaningful elements or activities that trainees experience in Sunnyside.

The collected data will be used for my Master's Thesis and the obtained results will be shared with Sunnyside Rural Trust and may offer suggestions to improve the service.

Who is responsible for the research project?
Ieva Piraga, the author of the Master Thesis, 2nd year student of Nordic Master of Outdoor Studies and the present employee (Project Worker) of Sunnyside Rural Trust.

Why the trainees are being asked to participate?
The trainees' participation is at the core of the research. They will guide the study process through their self-reported experiences.

Eligibility criteria requires that participants are trainees who attend Hemel Food Garden, and have understood the purpose of the research and have the cognitive ability to voice their experiences.

What does participation involve for the trainees?
   o   The study will use a qualitative research approach where trainees will capture images of their most important aspects of Sunnyside. Lenovo M10 tablets will be provided for this purpose. The evidence will then be used in one-to-one semi-structured interviews and focus group discussions between the researcher and trainees.
   o   All of the research will be conducted during participants time at Sunnyside and will take place between February and March 2022.
   o   All interviews and group discussions will be recorded and transcribed.

Participation is voluntary
Participation in the project is voluntary. If trainees choose to participate, they can withdraw from the project at any time without an explanation. There will be no negative consequences if trainees choose not to participate or later decide to withdraw. If trainees withdraw, their data will be destroyed. All obtained personal information about trainees will remain confidential. No identifying details which can be linked to the individuals will be disclosed and will be removed prior to analysis.

Personal privacy – how I will store and use their personal data
I will only use their personal data obtained from the interviews and group discussions and only for the purpose of this research. I will process their personal data confidentially and in accordance with data protection legislation (the General Data Protection Regulation and Personal Data Act).

All precautions will be taken to ensure no unauthorised persons have access to the personal data obtained.

- The interview data and analysis will be stored in files that are password protect and only accessible by me.
- In the focus group discussions trainees will share their photos and associated stories with other research participants. There may be another staff member present during the focus groups.

For the research purpose, participants names will be replaced. Pseudonyms will be used for all trainees' quotes if included in the report. Their identity will not be revealed in the research report and will not be accessible by anyone else.

What will happen to their personal data at the end of the research project?

Any personal data (the research notes, audiotapes from the interviews and group discussions) will be destroyed at the end of the research (June, 2022).

Trainees' rights

So long as trainees can be identified in the collected data, they have the right to access, change and request their personal information to be deleted.

If you have questions about the project or queries about data protection, please contact:

1) *Ieva Piraga: author of the Master's Thesis*
Contact details: ieva.piraga@gmail.com
2) *Simon Kennedy Beames: Supervisor of my Master's Thesis*
Contact details: simonbe@nih.no
3) *Lynn Adams: Supervisor at Sunnyside Rural Trust*
Contact details: lynn@sunnysideruraltrust.org.uk
4) *Paal Are Solberg: Data Protection Officer at University of South-Eastern Norway*
Contact details: Paal.A.Solberg@usn.no

Yours sincerely,

_____

Ieva Piraga

Consent form

I have received and understood information about the above research and I understand the participation is completely voluntary. I give consent on behalf of the trainee:

☐ *to participate in the research where trainees will be asked to take photos of Sunnyside, participate in semi-structured interviews and group discussions;*
☐ *to give information about themselves (background interests, self-reported experiences and captured images) to this project;*
☐ *to share their reflections with other research participants;*
☐ *for information about trainees to be published in a way that protects their identify in the research report.*

I give consent for the trainee's personal data to be processed for the research purposes until the end date of the project (June 2022) and I consent that the study outcomes may be used for improving the service.

(Signed by participant's parent/carer, date)

I: Venn diagram (intersection between the themes)

INTERPERSONAL RELATIONSHIPS

SKILLS & SAFETY

SELF-REPORTED EXPERIENCES

NATURE