From Soil to Society

A qualitative study on the role of allotment gardens in sharing knowledge and identity building



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Abstract

This qualitative research is about the role of allotment gardens in providing opportunities for sharing knowledge and identity building from a sociological and intangible cultural heritage perspective. Twenty allotment gardeners of two allotment garden complexes in Rotterdam have been interviewed to research this topic. Community building happens at the allotment gardeners is strong. This research showed that the social cohesion between the allotment gardeners is strong. This research showed that the respondents actively share knowledge with each other and that having an allotment garden to use the learned knowledge makes it able to embody the knowledge. This helps to actively safeguard knowledge. Furthermore, allotment gardens provide the opportunity for the respondents to keep in touch with their roots and to enjoy the freedom of having an outdoor area. This is a form of identity building that is facilitated.

Ethical statement

This study is approved by the Ethical Review Board of the Faculty of Social and Behavioural Sciences of Utrecht University under number 24-1768.

Introduction

Allotment gardens are under pressure in the Netherlands. The need for housing is high and cities are deciding which spaces can be sacrificed for building new houses. In the city of Rotterdam multiple allotment garden complexes are already closed and more are on the list to be closed to repurpose the area for building houses (Visscher, 2023). This is a paradoxical situation since allotment gardens fulfil two important functions. Allotment gardens contribute to green in the cities and they have a social role for city residents with an allotment garden.

Firstly, there is a need for urban greening in the Netherlands (Havermans, 2024). The majority of people in Dutch cities live in places that do not have enough green surrounding them (Natuur & Milieu, 2022). Allotment gardens could have a role in the rise of green areas in cities. How to make cities more sustainable and greener is an ongoing topic for the Dutch government (Veerkamp et al., 2023). Allotment gardens have the potential to be a part of the solution to green cities. Allotment gardens are parcels of land where people can rent a small part, a plot, to use it for gardening (Acton, 2011). These gardens can vary in size and purpose. They can be used for growing vegetables and fruits, but they can also be used as a more aesthetic garden. Some allotment gardens even allow people to build a small house on the plot where they are allowed to live for a part of the year.

Allotment gardens are often established in build-up areas or at the edge of urban areas. Therefore, allotment gardens can be beneficial for urban greening purposes. Green areas have multiple benefits to help against the consequences of climate change. Green areas in cities can help with water drainage to prevent flooding (Cameron et al., 2012) and in warm periods is the temperature in green spots in cities significantly lower than in paved parts (Li & Wang. 2021).

Secondly, allotment gardens could be beneficial for the social issues that people face in the Netherlands. People connect with like-minded people and do not often encounter people outside of their echo chambers (Kettle, 2014). Allotment gardens are known to be places where communities can be built and where there is social cohesion between the gardeners (Glover, 2004), therefore allotment gardens could be a place of bringing people closer to each other (Jennings & Bamkole, 2019, Veen et al., 2016). The motivations for renting an allotment plot can vary from person to person. The research of Acton (2011) shows that the allotment gardeners mainly spoke about allotment gardening as a hobby with positive health and social benefits, rather than having the plot for its functional aspect of growing food is there a social factor to allotment gardening. Allotment gardens are social places where the contact with others might be as important as the gardening itself for some gardeners. Allotment gardens can be a place for people to share knowledge, plants and practices and it is a place for community building (Glover, 2004). For people of minority groups, it can be especially helpful to have a place to connect with other people, while also being able to grow plants and foods connected to their culture (Acton, 2011). The personal identity of people can be seen through how they use their allotment gardens. Their identity can be reflected by the plants they have, the way that they use their garden, how they design their garden, and how they value their garden.

In the Netherlands, most allotment gardens are ran by associations. These associations can influence the social activities and bonds between the gardens by organizing events, having a public canteen or by letting people do supportive work for the association. Besides the benefits of encountering other gardeners, research shows that people that are active in gardening and especially allotment gardening experience lower stress levels, have a better physical heath, and a better overall well-being (De Vries et al., 2013).

Allotment gardening is considered intangible cultural heritage, because of these social aspects and the expressions of the gardeners. Allotment gardening fits the definition of intangible cultural heritage that UNESCO stated in their 2003 convention. According to UNESCO intangible cultural heritage means "the practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artefacts and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognize as part of their cultural heritage. This intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity" (The 2003 Convention for the Safeguarding of the Intangible Cultural Heritage, 2003, p.5).

In this research, I will look at allotment gardening from an intangible cultural heritage and sociological perspective. I have chosen this lens to have a deeper understanding of the different aspects of intangible heritage that are present in the social and ecological nature of allotment gardening. Other researchers already focused on the role of allotment gardening in urban greening, therefore I will be focusing on social aspects of allotment gardening (Cameron et al., 2012; Hanson et al., 2021; Jennings & Bamkole., 2019). Social cohesion that exists at allotment gardens seems to be the vocal point in existing literature on allotment gardening next to the ecological benefits of allotment gardens and urban greenery. There has been research into how people use their allotment gardens and what their motivations are (Veen et al. 2016). These studies are mostly quantitative, focus on large respondent groups, and focus on gaining a lot of superficial information on the ecological or social factor of allotment gardening (Da Silva et al., 2016; Haase & Gaeva, 2023; Veen et al., 2016). This leaves a gap concerning the deeper understanding of the individual feelings and experiences of allotment gardeners, while the individual feelings and experiences of allotment can give us a new perspective on allotment gardening Especially, the experiences of sharing knowledge and the importance of allotment gardening for identity building are overlooked. These aspects are important to research, especially for the purpose of safeguarding knowledge for the future. Knowledge can be safeguarded passively in a book or on the internet. However, it is important that people also know how to act with this knowledge, how to use it. The importance of allotment gardens can be that they are a place where this knowledge is being kept alive. They can provide an opportunity for allotment gardeners to embody the knowledge (Tanaka, 2011). Keeping knowledge of nature alive is important to make sure that nature is seen as valuable and necessary.

Therefore, the focus of this research will be on the personal experiences of allotment gardeners with these aspects to get a deeper understanding of the individual feelings and experiences of the allotment gardeners. Hereby, I will focus on the experiences of sharing knowledge between gardeners, but also looking into how people obtained their knowledge. Furthermore, I will be looking into the individual stories that can give an insight into what the importance of allotment gardening is to practitioners of urban gardening

To research these aspects of allotment gardening is it important to gain knowledge of the social factors of allotment gardening. The descriptive research question of this research therefore will be: "What does prior research state on the motivations and consequences of allotment gardening for individuals and society?"

The knowledge found with this descriptive question can be used in the further research of the exploratory question that reads: "What role do allotment gardens play in providing opportunities for sharing knowledge and identity building?".

The results that follow this question will be brought together to provide more insight for the policy question that reads:

"How can allotment gardens play a role for society in safeguarding and sharing knowledge of nature?".

The remaining part of this thesis is structured as follows. The following theory section gives a summary of the relevant existing literature. The methodology will be described after that. Then the qualitative results will be discussed. The section after will be the conclusion and discussion. This thesis will be concluded with a policy advice.

Theory

In this chapter, I will provide an overview of existing literature on allotment gardens, urban greening, and social cohesion. The structure of this chapter will be to first explain the history and context of allotment gardens. Then the motivations for allotment gardens will be discussed on a societal and individual level. The consequences and benefits of allotment gardens on societal and individual level will follow that. The theory chapter will conclude with an overview of the theory, the research gaps, and the relevance of the theory in relation to the research questions.

Allotment Gardens

To start this section, I will discuss the historical background of allotment gardening. This will give the contextual background to understand the rest of the theories.

Allotment gardens consist of small plots on a bigger piece of land that are rented or owned by people (Acton, 2011). There are two types of allotment gardens in the Netherlands. Firstly, there are utility gardens. These are gardens where the focus is on growing vegetables, fruits, and growing crops. These gardens often only have a tiny shed on the plot to safely store tools. Secondly, there are residential gardens. These are the gardens where this research is focused on. These are allotments with a bigger house on the plot, where it is allowed to have a kitchen, bathroom, and bedroom.

In the Netherlands, the allotment gardens are often placed on grounds of the municipality. There are often allotment associations that control and manage the piece of land. These associations consist of volunteer positions that are filled by the allotment gardeners (Glover, 2004). The purpose of these associations is to facilitate cooperation between the municipality and the allotment gardeners to ensure that the rules established by the municipality are followed (Gemeente Rotterdam, n.d.).

The first allotment garden in the Netherlands was established in 1838 in Franeker by Maatschappij tot nut voor 't algemeen (Lenshoek & Bond van Volkstuinders, 2009). The initial purpose of the allotments was that they provided a place for the working-class people that came to the cities during the industrial revolution so that they would have a place for growing foods, since they started to live in houses without gardens at that time (Acton, 2011).

The purpose of allotment gardens changed over time. People have become less dependent on growing their own food and rely more on supermarkets nowadays. Therefore. the purpose of growing foods slowly changed into a more recreational purpose. People use allotment gardens for a much broader purpose nowadays, which can range from gardening to having a social place to invite friends and family.

In the recent years allotment gardens have faced an increasing threat of closure. Data of the Centraal Bureau voor de Statistiek (2023) shows that the number of hectares of allotment gardens is decreasing each year. One of the reasons for this decrease is that municipalities prefer to use the land for other purposes, such as residential development. This is part of the paradoxical situation where allotment gardens are the centrepiece because the waiting lists to get an allotment are very long (EenVandaag, 2022). Having an allotment is popular and many city residents would like to have one. Another paradoxical situation is that cities struggle with the lack of green in the cities and allotment gardens are often part of the green spaces in cities. Removing allotment gardens would on the one hand help with the housing crisis, but it would mean that urban green would disappear.

Societal motivations for allotment gardens

As stated before, allotment gardens were initially established for food security for the working-class people. The social unrest and poverty in the period of the industrial revolutions motivated the establishment of allotment gardens. The social problems that we deal with have changed, but social problems can still be motivators for establishing and upkeeping allotment gardens. Municipalities deal with the challenges of climate change, risks of flooding and extreme heat in summers (Ministerie van Infrastuctuur en Waterstaat, 2023). These factors are motivators of municipalities to investigate possible solutions. Urban green spaces are important to mitigate these risks in cities. Kwartnik-Pruc & Droj (2023) show how allotment gardens could fulfil the role of urban green spaces. Allotment gardens can help with water draining, cooling the area, and mitigating co2-emmissions (Cameron et al., 2012; Li & Wang, 2021). Therefore, these environmental challenges could motivate municipalities to invest in urban green spaces, and more specifically allotment gardens.

Furthermore, a motivation for municipalities to facilitate allotment gardens could be the ongoing segregation and polarisation in society. A motivation for allotment gardening could be encouraging the community building that happens on allotment gardens to strengthen the connections between people (Glover, 2004). Building connections between people on allotment gardens could be seen as building social capital. Putnam's (2000) theory states that connections between individuals are built on the norms of reciprocity and trustworthiness that arise from them. These connections can build a social network. The chances are higher that there will be a community feeling between the gardeners, when there are stronger social networks on an allotment complex.

Allotment gardens facilitate community building and social cohesion by connection people, sharing interest, and trading plants, skills and knowledge (Veen et al., 2016). The importance of exchanging knowledge and skills is that it helps safeguarding allotment gardening practices. The knowledge that allotment gardeners have is embodied knowledge. This means that they can use their knowledge without having to think about it. They just know how to do things (Tanaka, 2011). Sharing knowledge ensures that this embodied knowledge will be kept alive and will not be lost in time. Especially knowledge on gardening is often shared verbally from person to person and can get lost if people stop talking about it.

Another social motivation is that the overall well-being of people is higher of people who are engaged in allotment gardening (Genter et al., 2015). People with an allotment garden are more positive about their mental health, and overall have a better physical health. This shows in research on how often allotment gardeners visit the doctors in comparison to the general population (Genter et al., 2015).

Personal motivations for allotment gardening

Research of Da Silva et al. (2016) shows that the motivations for getting an allotment garden differ from person to person. To look further into the motives for people to get an allotment garden I will divide the motivations into three categories: the functional aspects, recreational aspects, and social aspects.

Firstly, the functional aspects will be touched on. Functional aspects are using the allotment for growing foods and health purposes. Growing foods and having access to fresh and often cheaper food is a motivation for some people to have an allotment (Lee & Matarrita-Cascante, 2019). This was the original purpose of allotment gardening after all (Acton, 2011). Other functional motivations can be the health benefits, including better physical and mental health (Lee & Matarrita-Cascante, 2019). The research of Da Silva et al. (2016) showed that their applicants who were less favoured (unemployed, unskilled workers,

applicants with no formal profession, and applicants with larger families) mentioned as clear main motivation food security as reason for having their allotment garden. Food security was also mentioned by applicants from intermediate and upper professions. However, it was not the main reason for this group. The applicants from intermediate and upper professions mentioned to be motivated by health concerns, environmental concerns, recreation, and education purposes.

Recreational motivations are enjoying gardening as a leisure activity and spending free time in a fulfilling way (Da Silva et al., 2016). Research of Veen et al., (2016) shows that people can be motivated to get an allotment garden by their personal interest into gardening, growing plants and harvesting. Being outdoors can be a motivation for people to get an allotment garden, especially for people who live in cities without a garden by their house (Poniży et al., 2021). Having an allotment garden gives people the freedom to be outdoors whenever they prefer to be, and to have a certain freedom in designing and maintaining the garden as they prefer (Lee & Matarrita-Cascante, 2019). This autonomy to use your own outdoor space as you like is something that people who live in an apartment in the city, who can only go outside to public parks, do not experience. This autonomy can play an important part in identity building as well. There are practices connected to cultures that are forbidden in public spaces. For example, in parks it is often not allowed to have an open fire, while for some people cooking outside on an open fire and eating with their family can be a way to connect with their cultural background and traditional practices, and these are things that people can do on their allotment garden.

Lastly people can be motivated by the social environment that exists at allotment gardens. Being able to connect with other people and to be part of a community can be a motivation for individuals to get an allotment garden (Veen et al., 2016). Glover (2004) shows that the social cohesion is high on allotment gardens. That allotment gardens are a place to connect with other people can be a motivation for some people to get an allotment garden. Especially for people in cities who live secluded from others it can help to get into contact with other people. Furthermore, allotment gardens can be a place where people can show their own identity (Da Silva et al., 2016). Especially for migrants this can be a way to stay in touch with their roots. Research by Acton (2011) showed that people use their garden for growing food of their cultural cuisine, which is not sold in the place where they moved to. The article of White (2011) supports this importance of having a place to grow your own foods. White (2011) shows that through farming black women activists can stay in touch with their cultural identity. Apart from staying in touch with their identity it also gives them agency and self-

determination, while creating a community as well. This agency can be reflected in having the ability to provide food, that is important to them, that the supermarkets do not provide. Hereby, they are using old African American farming traditions to challenge the barriers to accessing healthy food that are class and racial based (White, 2011). However, this act of sharing embodied knowledge and keeping in touch with your identity is not only for migrants. This connection with food and nature can be seen in the act of learning about gardening, making jams from fruits, or learning how to conserve vegetables, which is common in many cultures. This shows that the social aspects are connected to the functional aspects of allotment gardening.

Societal consequences of allotment gardens

The environmental, health, recreational and social motivations of allotment gardening could have multiple consequences. Allotment gardens as urban greening can be an outcome for the climate risks municipalities deal with. Gardens and green spaces in cities can have a significant positive impact on water drainage in cities (Cameron et al., 2012). Most cities consist of paved ground which can cause issues with water drainage. This, together with higher water levels in rivers and canals due to meltwater from glaciers, increases the risk of cities in the Netherlands flooding (Ministerie van Infrastuctuur en Waterstaat, 2023). Cameron et al. (2012) found that having more green areas in cities could decrease the risk of flooding.

Furthermore, research by Li and Wang (2021) shows that urban greening can have a positive effect on decreasing the heat in the city. Paved areas in cities can be up to 10 degrees Celsius warmer than green areas in cities. The overall temperature of the world is increasing and especially in the summer this can cause periods of extreme heat, which are more intense in cities. Allotment gardens could play a role in the decrease of extreme heat (Kwartnik-Pruc & Droj, 2023).

Having access to green can have a positive impact on people's overall wellbeing (Genter et al., 2015). The recreational function of urban gardening in the form of allotment gardening can help with the mental wellbeing of people as well as their physical health. The societal benefits for this are that people who have an allotment garden have a better overall health and visit doctors less often (Van den Berg et al., 2010). Providing access to the allotment gardens for people without a garden, could help people in the surrounding area of an allotment garden as well.

The benefits of allotment gardens are positive for the social aspects of society in addition to climate factors and health benefits. Research shows that being active in an allotment garden can cause more social cohesion in the neighbourhood (Veen et al., 2016). Allotment gardens are often places where people from all kinds of backgrounds encounter each other (Jennings & Bamkole., 2019). On society level this could play a positive role in the integration process of migrants, and it can help to connect people that would not usually meet each other (Gijsberts & Dagevos, 2007). Glover (2004) shows that allotment gardens can fulfil a role in community building for the surrounding neighbourhoods, since the gardens provide the possibility for residents to be more active in connecting the neighbourhood. An example for developing connections with the neighbourhood residents is organizing activities in the canteen of the allotment garden complex or giving schools the opportunity to teach their students knowledge of nature in an allotment garden.

Personal consequences of allotment gardening

Having access to green in the city not only has societal consequences but has individual consequences as well. As mentioned before allotment gardens are places where social cohesion forms and where community building takes place. This community feeling that is built could play a role in people helping each other, people sharing knowledge and skills, and people meeting people from different backgrounds and upbringings. Glover (2004) describes that community forms on allotment gardens and that even friendships that exceed that gardening season occur. Furthermore, Glover (2004) shows that the community is even more important than the gardening part for some allotment gardeners. The social capital as described by Putnam (2000) forms organically on allotment gardens, since the social interactions on allotment gardens take place in a casual atmosphere where people share a passion. Kettle (2014) shows that all sorts of people have allotment gardens, who meet with each other regardless of their background, age, or social status.

Research by Haase & Gaeva (2023) shows that the gardeners who use their land for growing food believe that their own grown foods are of higher quality than those in the supermarket and that they taste better. Acton (2011) describes how growing food can have a deeper meaning to people than just food security. Acton (2011) shows that food can be a way for people to connect with their cultural background by growing foods that are specific for their cultural cuisine, that might not be sold in the place where they live. Research by Da Silva et al. (2016) shows that migrants' adaptation to a new country or place can be supported

by allotment gardens. Allotment gardens can play a role in providing a space where people can share their cultural identity and preserve their cultural identity, which is connected to growing food as well (White, 2011).

Gardeners share their foods with other people (Haase & Gaeva, 2023). The act of sharing food can bring people in contact with other cultures. Furthermore, the act of sharing can interest people in sharing knowledge of the plants that they grow, or even trading plants and helping each other with gardening. Allotment gardens are places where people are open to help each other and to share their skills and knowledge with others. Poniży et al. (2021) show that there are multiple ways for gardeners to acquire the knowledge of gardening. Some people have learned it from family members and have grown up learning the knowledge and skills, this is a form of generational transmission. Other forms of acquiring knowledge were learning from other gardeners and learning from books, tv or the internet.

Research of Genter et al. (2015) shows that people who are active in an allotment garden have an overall better physical and mental well-being. Their study shows that allotment gardening can be used as therapeutic practice as well. A study on people with or without an allotment garden showed that the people with an allotment garden had significantly less health issues than their direct neighbours without a garden (Van den Berg et al., 2010). Furthermore, people that are active in gardening and especially community gardening experience lower stress levels, better physical heath, and a better overall well-being (De Vries et al., 2013).

Expectations

The descriptive research question "What does prior research state on the motivations and consequences of allotment gardening for individuals and society?" has been answered in the theory. The social benefits are community building, being able to encounter all kinds of people, a way to help people integrate, a high level of social cohesion, and sharing knowledge and skills.

Furthermore, there are climate and health benefits of allotment gardening. The existing research mostly focuses on the broader view. The personal views and experiences of people that have an allotment garden are barely covered in studies on allotment gardening. The aspect of sharing knowledge and building identity is often overlooked or is minimal in these studies. While looking into the background and importance of sharing knowledge, and identity building on allotment gardens could bring a new and interesting perspective on the importance of allotment gardening and the role that allotment gardens could play in

safeguarding knowledge. Therefore, the focus of this thesis is on how allotment gardeners perceive, experience, and value sharing knowledge and having an allotment garden in their life to express their identity.

The expectations that I have for this research based on the theory are that allotment gardeners value their garden as an important part of their life to express and be themselves. I expect that sharing knowledge is something that happens at the allotment gardens, but that I might happen organically, since the knowledge is embodied, and that therefore the allotment gardeners might not think that it is special. But I expect that when they will dive deeper into the background of the social connections that they have that they might feel the value more. Furthermore, I expect that for some allotment gardeners the garden can be a place to express themselves and to stay connected to their roots and identity by using their garden for growing certain plants.

More generally, I expect that the motivations to get an allotment garden might differ from food security, having an outdoor space, social contacts, and loving gardening to having a recreational space to relax. It is expected that some will be more focused on having an outdoor space with the autonomy to upkeep and use it in their preferred way, while for other people the social contact might be more important.

Methods

Research strategy

Qualitative research methods will be used to study my research question: "What role do allotment gardens play in providing opportunities for sharing knowledge and identity building?". I chose this type of research because the focus of my thesis is to better understand the experiences of allotment gardeners. Qualitative methods are appropriate for researching experiences because there is room to delve deeper into the mechanisms and into trying to understand the respondent (Bryman, 2016). In my qualitative research, I will conduct semi-structured interviews. Therefore, I will be using an interview guide to interview allotment gardeners

Operationalisation of concepts

The concepts that I want to include in the interview guide are based on the theory. My goal is to focus on the social aspects of allotment gardening. This will include the contacts that they have, the importance of the social aspects, the cultural significance, and the act of sharing knowledge and skills. I will be looking into the decision to get a garden, their background, and upbringing concerning being outdoors, and the purpose of their garden as well. The complete interview guide can be found in appendix 1.

For the interviews themselves, I want to leave respondents free to choose a time and place where they feel comfortable. If a person is interviewed in a self-selected and familiar environment, it is more likely that they will then be able to talk about the topic at ease (Bryman, 2016). I decided to conduct my interviews in Dutch to make the respondents most at ease, since that is their native language.

Research Setting

For this research I will focus on allotment gardens in Rotterdam. There are 45 allotment garden complexes in Rotterdam that have in total 5.262 plots. 44 of these complexes have an association that manages the complex. About 80% of the gardens are residential gardens. All the land of the allotment gardens belongs to the municipality (Hoppesteyn, 2021). The Monitor Volkstuinen 2021 shows the increasing popularity of allotment gardening. In 2016 there were approximately 200 people on the waiting lists, while in 2020 there were approximately 1500 people on the waiting lists for an allotment garden (Hoppesteyn, 2021).

Although the popularity of allotment gardens increased, the amount of allotment gardens decreased, from 5313 in 2016 to 5262 in 2020. This decrease follows in line with the trend of the years before (Hoppesteyn, 2021).

89% of the allotment gardeners with an allotment garden in Rotterdam were living in Rotterdam in 2021. 48% of the allotment gardeners in Rotterdam were between the ages of 45 to 64 years old. The second largest age group was 65 to 79 years old with 25%. This shows that allotment gardening is more popular in older age groups, however it can be seen in the differences between 2016 and 2021 that the age group of 25 to 35 is slowly becoming bigger. I chose two allotment gardens in Rotterdam to find people willing to be interviewed. Both complexes have an association of volunteers that manage the complex. The complexes have residential gardens, where people are allowed to stay overnight from the first of April to the first of November. One of these complexes is on the north side of Rotterdam. This is Volkstuinvereniging Streven Naar Verbetering (SNV), this complex is established in 1938 and contains 240 allotments. The other complex where I interviewed people was De Wielewaal, which is on the southern part of Rotterdam. This complex has 128 allotments and is established in 1962. The complexes were alike in their characteristics, with a multicultural group of gardeners, a canteen and mandatory common work.

Respondents

I interviewed twenty people in total for this research. All my respondents were living in Rotterdam. Two of my respondents had a garden at home and the other 18 did not. The ages ranged from 28 to 81. The backgrounds of my respondents were Dutch, Moroccan, Surinamese and Polish. I have interviewed nine women and eleven men. A more in-depth description of the respondents can be found in appendix 2.

Data collection

I let the respondents choose how they would like to be interviewed. I have interviewed fifteen people at their allotment garden, three of the interviews were by telephone and two were via Teams. Bryman (2016) shows that online interviews are valid, since the online component does not interfere with the content of the interview. The online interviews were all one-on-one. At the allotment gardens I had four one-on-two interviews in addition to the one-on-one interviews, since that was what the respondents preferred. The interviews were on average about 50 minutes long.

Coding

I decided to code my interviews based on similar broader themes that came up in the interviews and to divide those into little subcategories. For example, the theme sharing knowledge, which is split into how they learned about gardening, from whom they learned, if they would like to pass on their own knowledge, and if knowledge is shared on the complex. The full codebook of my research with an explanation of all the codes will be included as appendix 3.

Ethics

The respondents all participated in this study on a voluntary basis and were free to quit at any time. Prior to the interview, respondents were fully informed of the purpose and topic of the study (Bryman, 2016). In addition, respondents were free not to answer questions or to stop the interview if they did not feel comfortable. To ensure the privacy of the respondents, they will be kept completely anonymous. Respondents will not be mentioned by name for privacy reasons but will be discussed as respondent 1 (R1), respondent 2 (R2), and so on. All the respondents gave verbal consent to record them and to use the recording to transcribe the interviews. The recordings are deleted once they are transcribed.

Results

Within my interviews I mainly focused on the social aspects of allotment gardening and especially on how knowledge was shared and how people form and express their identity at allotment gardens. The structure of the results will be that I will discuss the experiences of people with sharing knowledge first. After that I will discuss the experiences with identity building. Lastly, I will discuss the other aspects that came forward in the interviews. I will be reflecting on the personal views and experiences, but I will discuss how the respondents viewed the importance of allotment gardening for society as well.

Sharing knowledge

In this part I will be focussing on the different types of knowledge sharing that my respondents told me about. All respondents had experiences with sharing knowledge concerning allotment gardening and nature.

Generational sharing

The first type of knowledge sharing was generational sharing. The definition of generational sharing that I use is if my respondents learned things from their parents, grandparents or other older family members. Sixteen of my respondents told me that their interest and knowledge of gardening started with their parents. I could see a difference in how the knowledge was shared by parents in different upbringings. Four respondents said that they were forced to help in the garden at home, while the others were motivated to help if they were interested. The four respondents who were obligated to help with gardening all told me that they did lose their interest in gardening because of this forced nature to help.

Most respondents grew up with a garden at home, but three respondents (R14, R17, R18) grew up in the city, where their parents had an allotment garden. Respondent 18 told that not only his parents had an allotment garden, but that his grandparents and even great-grandparents had allotment gardens at the same complex where he and his son have their gardens now. The family factor is especially visible in this case. This respondent told me that he learned gardening from his family and that he still uses the knowledge and skills that he was taught as a child.

The people that had parents with an allotment garden told me that they really enjoyed their time at the allotment garden in their childhood and that they were brought up with green

in a more playful environment. They also viewed the social component of gardening to be more important.

Younger generation

I asked my respondents on their view of the importance of sharing knowledge with children. The respondents with children all told me that they found it very important to teach their children about the joy of being outside, and how to act with plants and animals. However, they also said that not every child is interested and that that should be respected as well.

A common thought on the knowledge of greenery by children nowadays was that the respondents felt like children, especially in cities, do not know how plants are cared for, where their foods come from and how their foods grow.

"Although I see that these days those children are not learning about those kinds of things (how to care for plants) at school. [...] while I think that that (knowledge) should be preserved". (Respondent 5).

The respondents with and without children both told me that they found it important that children learn where their foods come from and that they learn how to care for nature. At one of the complexes that I visited a garden was occupied by a school, where they teach the children to care for plants and teach the children how their foods grow. This initiative was seen as very positive by the respondents of that allotment garden complex.

The importance of having a place to teach children this knowledge is so that they can bring the theoretical knowledge that they learn into the reality. People learn by doing and having a space to practice this makes that the shared knowledge can be embodied. This is the biggest difference between just sharing knowledge and learning how to use the knowledge.

The four respondents that grew up in the city told me that they did not grow up in a household where having green around or where being busy with gardening was normal. They found other ways to collect their knowledge of gardening. YouTube is a good tool for learning to garden according to these respondents and they said that they obtain knowledge by having contact with other gardeners.

Social aspects of sharing knowledge

Allotment gardens are social communities, where besides sharing information with family, information is shared with other gardeners. Most of my respondents said that they had social contact on the allotment garden, whether it be with befriended gardeners, or just small talk over the fence, or in the canteen. There was a variety in how the respondents engaged in the social life at the gardens. Nine of the respondents told me that they only had superficial contact with others, while eleven of my respondents told me that they made friends with other gardeners.

Even with the differences in social contact, all respondents told me that the conversations that they have with other gardeners are mainly about the gardens, but they do also have general conversations on what is going on in their lives. In these conversations about their gardens often information is shared, examples that the respondents gave of these conversation topics were how to deal with snails in the garden, which plants grow best in which spots, when to prune plants.

"I have some hydrangeas and I wanted to just put them in the ground but then the neighbour said: "You must not do that. You should not place them in direct sunlight the whole day." Those are the moments that you think: "It is good that I asked this"". (Respondent 13).

Not only does the social contact help with getting tips on how to care for your plants. It can be a way to get in contact with new plants as well. Some of my respondents told me that they draw inspiration from the other gardens, and plant new, for them to thus far unknown, plants.

Sharing materials and services

Additionality to sharing knowledge, materials are shared. On both complexes it is common for people to share cuttings. One complex had even organised moments for people to come together to share these cuttings. This is a moment to get in contact with other people and to share knowledge about the plants as well.

The act of sharing things is very prevalent at the complexes. One complex had an app with multiple chatgroups where people could ask for gardening tips, where people could trade or gift away the things that they did not use anymore, and there was a space for asking for help. However, helping is already embedded in the nature of allotment gardening. An elderly respondent told me that he had some medical issues and that his garden neighbour saw him struggling with mowing grass and that the neighbour asked to help him.

"The grass needed to be mowed and then I had a day when it was not going well. I took the lawnmower [...] and a little later my neighbour was at the fence, and he said: "You cannot do it today, can you? Let me." and then he mowed my grass." (Respondent 1).

This is just one of the examples that I heard. Helping with tasks or in case of emergencies seems to be the norm at these complexes.

Contact with other cultures

My respondents told me that they encounter people that they normally would not come across in their home environment. My respondents of both complexes described that every aspect of society was represented at the allotment garden. This means that there are people with all kinds of educational backgrounds, people who are part of the lgbtqia+ community, and with different cultural backgrounds.

Especially the contact between people with different cultural backgrounds came forward in the interviews. At one complex the canteen was used for people to celebrate Eid al-Fitr. The Turkish community is big at this complex and in my interviews, it was mentioned that they wanted to share their culture with the other people. A Dutch elderly couple at this allotment garden complex told me that they went to the canteen and that they enjoyed learning more about the culture of their Turkish neighbours at the garden

"They did Eid al-Fitr for us (the other gardeners) and they came to us like: 'Come, come eat. They were really hospitable and nice and also the young people. They were really nice." (Respondent 19).

Furthermore, four of my respondents told me that people often invite others to eat together, or that meals get shared after meeting each other. According to my respondents the initiative of sharing food mostly comes from the allotment gardeners with a non-Dutch cultural background. Sharing food can be a way to interchange cultures and to connect with other people.

Identity building

In touch with cultural background

This cultural identity that is embedded in sharing food can be found in other aspects of allotment gardening as well. Having the autonomy to choose how to use outdoor space gives people the chance to grow plants that they have a connection with. In my respondent group I found that this connection can have a cultural motivation. I spoke with two Surinamese women. They both separately told me that they used their garden to grow plants that reminded them of Suriname. One of the women grew up on a farm in Suriname and missed being outside a lot when she moved to the Netherlands. That was the reason for her to get an allotment garden. While the other Surinamese woman that I spoke to mentioned that she mainly missed the Surinamese vegetables. She told me that some are hard to find in the stores in the Netherlands and if she could even find them, they are of lower quality. Therefore, she was very passionate about growing her own food and this respondent told me:

"Last year I went back to Suriname after nine years. I got seeds there and I sowed them at home." (Respondent 7).

A Polish woman had a similar experience with a connection to her roots through food. In her case the connection to her background was made through growing cuttings of the tomato plants that her parents grew in Poland.

These examples show that it is possible to connect with your own background through gardening and that the importance of gardening is more than just being outside. There is a personal value connected to the allotment garden through the acts of keeping parts of your being alive, and to keep in touch with your home grounds. These stories of my respondents were in line with the article of White (2011), that talked about being in in touch with your culture through food.

Having autonomy

Besides having a place to get in contact with your own background allotment gardens are unique in the autonomy that you can have on your outdoor space in a city. Respondent two told me that his motivation for getting an allotment garden was that he missed having freedom to do what he wanted outdoors, since he could be outside in public spaces only where some things are forbidden to do, for example barbecuing. He found the autonomy to do what he would like at the allotment garden, of course there are still rules. However, a lot more is possible on an allotment. Allotment gardens are often used to invite friends and family, to have a green and safe space for your children to grow up, and to have autonomy to design a garden to your personal style. Another respondent told me that she liked to have this freedom at the allotment. She used this freedom to make her garden into a fairy garden. She always loved fairies but could never integrate them in her daily life. Having autonomy can bring people a sense of freedom, ownership and peace.

Other aspects of allotment gardening

In addition to the questions on sharing knowledge and identity building I asked my respondents about the other aspects that I found in my theory to get a more complete view of the role of their allotment garden in their life. I will shortly describe my findings on these topics.

Motivations

The motivations of my respondents differed from person to person, but most respondents said that a combination of factors made that they wanted an allotment garden. These factors were having an outdoor space to use for your own purpose, being active with gardening and growing plants, having a place to relax and find peace, and being in social contact with other people.

A big difference that I found within my respondent group was their view on growing foods. About half of my respondents did grow foods and found that an important factor of allotment gardening, looking back into the original purpose of allotment gardening as well. While the other half of my respondents used their garden for more recreational purposes and did not think that growing foods was a must to have an allotment garden.

Social contacts

The type of contact that the respondents had with other allotment gardeners differed from barely any contact, superficial contact, to friendships.

The contacts that the respondents had at the allotment gardens were seen as positive for most of the respondents. At both complexes they told me that there was a culture of looking out for each other, that the norm is to greet each other, and that it is common to have small talk over the fences, and to invite people for a drink or a talk if you click with someone.

Another way of how the allotment gardeners, who are not elderly, meet is by doing common work. This common work is obligatory to do about 4 times a year to upkeep the general area of the complexes. This work was seen by some of the respondents as a burden. However, these same respondents told me that they started to enjoy it when they were doing it, since it sparked contacts with people that they did not know before.

"That is a moment where you meet. That you forcefully sit down next to each other to work and then you also talk about your work or your garden [...] and that is also kind of a nice way to get to know people you wouldn't normally get to know." (Respondent 11).

Although the social side of allotment gardening is prevalent, there are clear boundaries at the allotment gardens. If you are not invited in someone's allotment, you will not enter. This makes that there is a form of social control as well. People keep an eye on each other's properties and if someone enters that does not usually belong there, they will check it out to prevent burglary. This show the community feeling that has been built at the complexes, which lays in line with the article of Glover (2004) that stated that community building happens at allotment gardens.

Not everything is positive at the allotment gardens. All the respondents made in some form the comparison of allotment gardens to society. They stated that it is a small version of society and that some irritations or discussions are inevitable. However, they did feel like the overall feeling at the allotment gardens was positive and good.

Furthermore, the respondents told me that their allotment was important for their physical and mental health. Being outside and being active helped how they were feeling. This fits with the article on the health benefits of allotment gardening of Genter et al. (2015), that I mentioned. Three respondents said that especially in the period of covid having their allotment garden was lifesaving for them.

Societal importance

The respondents talked to me about their opinions on the importance of allotment gardening for society. An aspect that came forward here was the ecological nature of allotment gardening. Six respondents talked about the allotment garden being a lot cooler in the summer than their house in the city, without me asking about it yet. The other respondents supported this statement. This fits the theory of Li & Wang (2021) that found that allotment gardens can be an outcome for the overheating of cities.

The ecological part was not the only importance for society that was mentioned. The social aspects of allotment gardening were seen as important as well. The community building that happens at the allotment gardens was valued highly, but the respondents talked about a broader social function of the allotment garden. Both complexes that I researched were open as public parks for people to take a stroll. To encourage people to do this and to make it attractive there are new rules in place that the fence or hedge surrounding their allotments should be below eye-level. At one of the complexes, they opened the canteen for people in the neighbourhood to have a space to meet and to come together as well.

Conclusion

The theme of this research emerged because of the growing threat of closure of allotment gardens. The goal of this research was to delve deeper into the role of allotment gardens, especially on the aspects of sharing knowledge and identity building from a sociological and intangible heritage perspective. To formulate an answer on my research question: "What role do allotment gardens play in providing opportunities for sharing knowledge and identity building?", I will start with discussing the descriptive research question. After that I will discuss and reflect on the role that allotment gardens play in providing opportunities, firstly for sharing knowledge and secondly for identity building. I will conclude with a discussion on this research and the potential limitations of this research.

Importance of allotment gardens

The descriptive research question to provide more insight into the existing knowledge of allotment gardens within the academic field was: "What does prior research state on the motivations and consequences of allotment gardening for individuals and society?".

I found in the existing literature that the societal motivations and consequences for allotment gardening were the ecological components as allotment gardens play a role in decreasing the heat in cities, in draining water in heavy rain periods, and in mitigating co2emmissions (Cameron et al., 2012; Kwartnik-Pruc & Droi, 2023; Li & Wang, 2021). The social components for society were the high levels of social cohesion and community building that are present at allotment gardens and that this helps that strengthen connections between people, also for people that would not usually meet (Glover, 2004). Lastly, the positive effects of allotment gardening on the health of allotment gardeners in comparison to the general population. Allotment gardeners visit the doctor's less often, are more physically active and have a better mental health (Genter et al., 2015).

The personal motivations and consequences for allotment gardeners were focused on three different aspects. The functional aspects of growing foods in their garden (Veen et al., 2016) and being active for your physical and mental health (Genter et al., 2015). The recreational aspect of being outside with the freedom to do with your garden what you want (Lee & Matarrita-Cascante, 2019). Lastly, the social aspects were being active in the association, having superficial talks, connecting with other people, helping other people, and sharing knowledge, materials and plants (Acton, 2011).

Role of sharing knowledge and identity building

The exploratory question of this research was: "What role do allotment gardens play in providing opportunities for sharing knowledge and identity building?". To answer this question, I will separate the role of sharing knowledge and the role of identity building.

Sharing knowledge

Firstly, I will share my conclusion on the role of sharing knowledge. Allotment gardens are great places to share knowledge with other people. The social atmosphere in combination with the association life makes that people come in contact with each other and where there is contact, there is a form of sharing things with others. There were multiple types of knowledge sharing that I found through my respondents. There is generational sharing, which is how most my respondents learned about nature and gardening by their parents and in some cases even their grandparents. Not only the practical knowledge was shared but the joy of being outside and being active with gardening was shared. The sharing of knowledge to the younger generations is seen as important by my respondents. A lack of knowledge and the skills that they need for that can be achieved by having a garden available for schools to teach children these things.

The importance of sharing and learning knowledge at the allotment garden is the availability to have a garden to use the knowledge on and to practice the skills on. Being able to work with the new knowledge provides the opportunity to really embody the knowledge, instead of just hearing it and remembering it (Tanaka, 2011).

Identity building

Allotment gardens provide opportunities for identity building. The autonomy that people have over a plot of land gives them the freedom to use it in their preferred way. This brings opportunities for allotment gardeners to design their garden in a way that fits with their personal life and needs. Furthermore, this freedom brings opportunities for allotment gardens to reconnect with their roots through gardening. This is important for allotment gardeners to stay in contact with their cultural background by growing plants that are connected to their culture (White, 2011).

Discussion

There are some potential limitations to this study. The qualitative nature of this research makes that there is a possibility for misinterpretations in the interpretation of the interviews, especially since I had to translate the interviews from Dutch to English. I tried to stay as close as possible to what people told me to minimise the likelihood of errors. Another limitation of this research is that it is focused on two allotment garden complexes in Rotterdam. Therefore, the results of this research cannot be generalised. However, this research does bring a new perspective into the academic field of allotment garden by focussing on sharing knowledge and identity building from a sociological and intangible cultural heritage lens. For further research, I would recommend speaking with people from other allotment gardens to see if they experience similar things. Furthermore, I would recommend a longitudinal study with participant observation. It would be interesting to research the experiences of allotment gardeners by deep diving into their world to better understand how knowledge is shared among the allotment gardeners, and how the differences of each garden tell something about their owner and their identity. Additionally, a longitudinal study would provide the opportunity to see someone's space change and to see someone's identity being built.

Policy advice

In this last chapter I will answer the policy research question: "How can allotment gardens play a role for society in safeguarding and sharing knowledge of nature?". Firstly, I will state the policy issue that is present. Then I will give my policy recommendations for municipalities to integrate allotment gardens more into the neighbourhood

Policy issue

As stated earlier in this research, allotment gardens are under threat of closure (Visscher, 2023). Municipalities of Dutch cities face a dilemma between using their territory to build houses to deal with the housing crisis or to keep green space in cities that already lack green space. The Centraal Bureau voor de Statistiek (2023) showed that the amount of allotment gardens in the Netherlands is decreasing each year, when the need for allotment gardens increases each year (EenVandaag, 2022). The need for allotment gardens was visible in my interviews as well. The respondents that got their garden in the last five years told me that they had been on waiting lists for a few weeks to a year, before they could buy an allotment.

Policy recommendation

Municipalities seem to overlook the importance of allotment gardens. This brings me to my policy recommendation. My first recommendation would be to inform municipalities better on the function and importance of allotment gardens for the gardeners, but also for society. This could have different forms, depending on the preferences of the allotment garden complexes and the municipalities. Chairmen of allotment gardens complexes could invite city council members to the complex to provide them with information and a physical look into the allotment gardens, or chairmen of allotment garden complexes could inform the city council via a letter to the municipality, or they could ask to be invited to speak to the city council on their view of allotment gardens. Another form of informing municipalities could be to enlist a national organisation that multiple complexes are connected to. This organisation could create a general information source on allotment gardening in the form of a webpage or a folder that could be used to inform municipalities.

Information that should be included to inform municipalities is information on the benefits of allotment gardening for society. Hereby focusing on the ecological, health and social benefits of allotment gardening.

To increase the importance of allotment gardens for society could be looked at the role of allotment gardens for the neighbourhood. Since this could be beneficial for the need to preserve allotment gardens. The role for allotment gardens in the neighbourhood could be to open the complex as a public park, to invite people from the neighbourhood into the canteen, and to use the canteen for activities for the neighbourhood as well.

Lastly, an important factor of allotment gardens is the fact that allotment gardens play a role in safeguarding knowledge on nature and sharing knowledge of nature. Allotment gardeners have the opportunity to embody this knowledge, which is an important part of safeguarding knowledge. Embodied knowledge is important, since the knowledge is being kept alive and since people learn how to use the learned knowledge (Tanaka, 2011). Therefore, I would recommend investigating the opportunities for teaching children knowledge of nature at allotment gardens. School gardens can spark interest in nature and can teach children how to use their knowledge of nature (Kong & Chen, 2024). The knowledge of nature can be kept alive for the next generations by providing schools an allotment to use as a school garden.

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Appendices

Appendix 1: Interview guide

I used a Dutch interview guide since my interviews were conducted in Dutch. However, I will share both the Dutch version and the English translated version of my interview guide.

Interview guide

Persoonlijke informatie

- Hoe zou u uw dagelijks leven omschrijven?
- Wat is uw woonsituatie?
- Hoe heeft u leren tuinieren?
- Waar is deze passie van u begonnen?
- Bent u opgegroeid tussen het groen?
- Hoe omschrijft u het hebben van een volkstuin?
- Hoe vaak bent u bij de volkstuin?

Motivaties

- Waarom heeft u een volkstuin?
- Wat is de voornaamste reden dat u een volkstuin heeft?
- Waarom heeft u dit volkstuincomplex gekozen?
- Wat vindt u fijn aan volkstuinieren?
- Wat vindt u van composteren & bestrijdingsmiddelen?

Waarde van volkstuinieren

- Wat betekent het hebben van een volkstuin voor u?
- Welk gevoel krijgt u als u in uw volkstuin bent?
- Wat zou u doen als u geen volkstuin kon hebben?
- Wat is het belang van een volkstuinieren voor u?

- Wat is uw mening over het belang van een volkstuinieren voor de samenleving in het algemeen?

Hoe zij hun tuin gebruiken

- Wat is het doel van uw tuin?

- Hoe gebruikt u uw tuin?
- Welke soorten planten heeft u?
- Hoe kiest u de planten die u gebruikt in uw tuin?
- Gebruikt u uw tuin nog voor andere dingen dan tuinieren?

Opvattingen over anderen

- Wat vindt u van de andere volkstuinders?
- Wat vindt u van hun tuinen?
- Heeft u soms last van andere volkstuinders?
- Wat vindt u van de gezamenlijke tuindiensten?

Sociale aspecten

- In hoeverre heeft u contact met andere volkstuinders?
- In hoeverre is volkstuinieren een sociale bezigheid?
- Welke soort contacten heeft u gelegd met de andere volkstuinders?
- Kunt u het belang van de sociale aspecten van het volkstuinieren voor mij beschrijven?
- Hoe heeft het volkstuinieren u meer in contact gebracht met mensen uit andere groepen van de samenleving dan uw eigen groep?

- In welk opzicht heeft het volkstuinieren u meer in contact gebracht met mensen uit andere groepen van de samenleving dan uw eigen groep?

- Wordt er onderling geholpen bij het tuinieren?
- Hoe belangrijk is het verenigingsleven voor u?
- Zijn er aspecten aan volkstuinieren die u niet had verwacht voordat u uw tuintje kreeg?

Doorgeven van vaardigheden en kennis

- Waar heeft u leren tuinieren?
- Van wie heeft u leren tuinieren?
- Op welke manieren zou u uw vaardigheden en kennis over tuinieren willen delen?
- Van wie zou u meer willen leren over tuinieren?
- In welke mate heeft u dingen geleerd van andere volkstuinders?
- In hoeverre heeft u dingen van andere volkstuinen overgenomen in je eigen tuin?
- In hoeverre vindt u het belangrijk dat kennis over tuinieren wordt doorgegeven?
 - Kunt u me hier een voorbeeld van geven?

- Kunt u me hier iets meer over vertellen?

English version of the interview guide

Personal Information

- How would you describe your daily life?
- What is your living situation?
- How did you learn to garden?
- Where did this passion of yours begin?
- Did you grow up surrounded by greenery?
- How would you describe having an allotment garden?
- How often are you at the allotment?

Motivations

- Why do you have an allotment garden?
- What is the main reason you have an allotment?
- Why did you choose this allotment complex?
- What do you like about allotment gardening?
- How do you feel about composting & pesticides?

Value of allotment gardening

- What does having an allotment mean to you?
- What feeling do you get when you are in your allotment?
- What would you do if you could not have an allotment?
- What is the importance of allotment gardening to you?
- What is your opinion about the importance of an allotment garden to society in general?

How they use their garden

- What is the purpose of your garden?
- How do you use your garden?
- What types of plants do you have?
- How do you choose the plants you use in your garden?
- Do you use your garden for things other than gardening?

Views of others

- What do you think of other allotment holders?
- What do you think of their gardens?
- Are you sometimes bothered by other allotment holders?
- How do you feel about communal work to upkeep the common area?

Social aspects

- To what extent do you have contact with other allotment gardeners?
- To what extent is allotment gardening a social activity?
- What kind of contacts have you made with the other allotment gardeners?
- Can you describe the importance of the social aspects of allotment gardening to me?
- How has allotment gardening increased your contact with people from groups of society other than your own?
- In what ways has allotment gardening made you more in touch with people from groups of society other than your own?
- Is there mutual help with gardening?
- How important is allotment gardening to you?
- Are there aspects of allotment gardening that you did not expect before you got your little garden?

Passing on skills and knowledge

- Where did you learn to garden?
- From whom did you learn to garden?
- In what ways would you like to share your skills and knowledge about gardening?
- Who would you like to learn more about gardening from?
- To what extent have you learned things from other allotment gardeners?
- To what extent have you adopted things from other allotments in your own garden?
- Do you find it important that knowledge on gardening is passed on?
 - Can you give me an example of this?
 - Can you tell me a little more about this?

Appendix 2: Respondents

Respondent	Age	Gender	Children	Backgroun	Garden since	How often
				d		at garden
R1	71	Man	Yes	Dutch	1973	2/3 days Winter
						7 Summer
R2	28	Man	No	Dutch	2021	2 or 3 days
R3	38	Man	Yes	Dutch	2017	3 or 4 days
R4	61	Women	Yes	Dutch	2018	6 or 7 days
R5	55	Man	No	Dutch	2009	Every day
R6	65	Women	Yes	Surinamese	2021	Good weather
R7	63	Women	Yes	Surinamese	1999	Every day
R8	44	Man	No	Dutch	2023 (but	4 days or 5 days
					had another	
					5 years	
					before)	
R9	46	Woman	No	Polish	2023	4 days or 5 days
R10	60	Woman	Yes	Dutch	2009	3 or 4 days
R11	40	Man	Yes	Moroccan	2020	3 or 4 days
R12	49	Woman	Yes	Dutch	2018	3 or 4 days
R13	41	Man	No	Dutch	2023	Every day
R14	38	Man	No	Dutch	2022	6 or 7 days
R15	38	Woman	No	Polish	2022	6 or 7 days
R16	52	Man	Yes	Dutch	2013	2 days
R17	63	Man	Yes	Dutch	1981	2 or 3 days
R18	65	Man	Yes	Dutch	1978	2 or 3 days
R19	78	Woman	No	Dutch	1984	Everyday
R20	81	Man	No	Dutch	1984	Everyday

Appendix 3: Codebook

Codes & Subcodes	Description of codes
Identity building	How the respondents express themselves
Importance society	The views of respondents on the importance of allotment gardens
	for society
Ecology	Ecological importance
Open gardens	Importance of having gardens visible
Motives	What motivates people to get an allotment garden
Complex	Why they choose the specific complex
Contact with AG	How did they come in contact with allotment gardening
Feeling	Which feeling they experience when being at the garden
Freedom	Feeling freedom
Relaxing	Feeling relaxed
Health	Health motivations
Interest in AG	What made them interested in allotment gardening
Why plot	Why do they have an allotment garden?
Passing on	
knowledge & skills	
Generational	If they learned their knowledge and skills from family
Other cultures	How the contact with people of other cultures is
Sharing	How they share knowledge
knowledge	
Sharing things	If people share materials or plants
Younger	If they find it important that the younger generation learns about
generation	gardening
Personal	
- vi 501101	

Age	The age of the gardener	
Children	If they have (grand)kids	
Complex	Why did they choose the complex of their garden?	
Garden at home	Their living situation and if they have green space at home	
Often in garden	How often they are at their garden	
Owners	Do they share their garden or is it individual?	
Upbringing	How they grew up	
Social aspects		
Association	How they experience being a part for an association	
Canteen	If they use the canteen and in which ways	
Common work	The experiences with common work on the complex	
Waiting list	On being waitlisted	
Importance	How do they view social contact on the complex	
contacts		
Social control	Do they experience social control on the complex	
Multiple groups	If they have contact with different groups in society	
Negative contacts	If they have irritations or problems with other people	
Positive contacts	Positive contacts that they have	
Helping	If people help each other	
Type of contact	Which types of contacts do they have	
Usage of garden	How they use their garden	
Plants	Which plants do they have, and why	
Flowers	Growing flowers	
Growing foods	Growing vegetables and fruit	
Recreation	Using the garden for recreating	
Being outside	Having a place to be outside	
Friends &	Having a place to meet with friends & family	
Family		
Relaxing	Having a place to relax	

Appendix 4: Information letter

Informatiebrief onderzoek volkstuinen

De betekenis van het hebben van een volkstuin

Introductie

In deze brief willen we u vragen of u bereid bent deel te nemen aan ons wetenschappelijk onderzoek voor een masterscriptie van een student Sociologie van de Universiteit Utrecht. Het onderzoek vindt plaats op een door u gekozen locatie of online. Dit onderzoek is getoetst en goedgekeurd door de Facultaire Ethische Toetsingscommissie (FETC) van de Faculteit Sociale Wetenschappen van de Universiteit Utrecht en voldoet aan de ethische richtlijnen.

Meedoen is vrijwillig en u kunt te allen tijde stoppen zonder dat u hiervoor een reden hoeft op te geven. Voordat u beslist of u wilt meedoen aan dit onderzoek, willen we u hieronder informeren over wat het onderzoek precies inhoudt en welke vragen u kunt verwachten.

Lees deze informatie rustig door en neem gerust contact op via het emailadres onderaan dit brief als u vragen heeft.

Uitvoering van het onderzoek

U wordt eenmalig geïnterviewd en dit zal ongeveer 45 minuten duren. In verband met de verwerking van de antwoorden zal de onderzoeker vragen of het gesprek opgenomen zou mogen worden via een geluidsopname. Hierbij kunt u ten alle tijden zeggen dat u dit niet wilt. Dan zullen er handmatig aantekeningen worden gemaakt.

Achtergrond onderzoek

Het onderzoek gaat over de persoonlijke ervaringen rondom volkstuinieren. U kunt vragen verwachten over waarom het hebben van een volkstuin voor u belangrijk is, hoe u in aanraking bent gekomen met tuinieren en wat het hebben van een volkstuin voor u betekent.

Vertrouwelijkheid verwerking gegevens

Uw persoonsgegevens, zoals uw naam, uw adres en andere persoonlijke informatie, zullen niet worden uitgeschreven in de tekstuele verwerking van de antwoorden. Nadat de geluidsopname is uitgeschreven zal deze opname niet meer worden gebruikt en zal deze worden verwijderd. De uitgeschreven interviews zullen alleen geanonimiseerd gebruikt worden voor wetenschappelijk onderzoek. U heeft ten alle tijden de mogelijkheid om aan te geven dat de door u gegeven informatie verwijderd moet worden, dit zal dan gedaan worden.

Vrijwilligheid deelname

Deelname aan dit onderzoek is vrijwillig. U kunt op elk gewenst moment, zonder opgave van reden en zonder voor u nadelige gevolgen, stoppen met het onderzoek.

Als u na het lezen van deze informatie besluit tot deelname gaat u akkoord door middel van het geven van mondelinge toestemming of door het tekenen van het toestemmingsformulier.

Voor vragen kunt u mailen naar: <u>t.i.meulemans@students.uu.nl</u>

Vriendelijke groet, Tessel Meulemans

Appendix 5: Informed consent form

Toestemmingsverklaring onderzoek volkstuinen

Titel onderzoek: De betekenis van het hebben van een volkstuin - 2024

Naam onderzoeker: Tessel Meulemans

Hierbij verklaar ik de informatiebrief met betrekking tot onderzoek *De betekenis van het hebben van een volkstuin* gelezen te hebben. Ook kon ik vragen stellen. Mijn vragen zijn goed genoeg beantwoord. Ik had genoeg tijd om te beslissen of ik meedoe. Ik weet dat meedoen vrijwillig. Ook weet ik dat ik op ieder moment kan beslissen om toch niet mee te doen met het onderzoek en kan stoppen. Ik hoef dan niet te zeggen waarom ik wil stoppen.

Datum ondertekening voor

- Naam participant
- Handtekening participant > 16 jaar