

**Family education "MeTURA-Back to the Roots", therapeutic family gardening and therapeutic family cooking for independent life of adult family members with intellectual disabilities**



**SYNTHESIS REPORT**

**Activity O5, A study of obstacles and potentials of the family lifelong learning unit which uses therapeutic family gardening as an andragogical method for an effective learning opportunity for families with adult family members with intellectual disabilities**

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## 1 INTRODUCTION

Funded under the Erasmus+ program, Key Action 2 (KA2), the “MeTURA - Back to the Roots” project aims to improve lives of adults with intellectual disabilities (often referred to as ‘learning disabilities’ in the UK) by encouraging family gardening and cooking as a therapeutic way of supporting ongoing lifelong learning (LL) and promoting the independence of adult family members with intellectual disabilities (AFMID). Lifelong learning refers to all the purposeful learning activities undertaken on an ongoing basis throughout a person's life, with the aim of improving knowledge, skills and competencies.

The MeTura project will last for 35 months and is being run in cooperation between non-profit organizations from Slovenia, UK, Croatia and Italy. The participating organizations are: Education Centre Geoss (Slovenia), Zveza Sožitje (Slovenia), Danilo Dolci (Italy), UOSIKAZU (Croatia) and Thrive (United Kingdom).

MeTURA will enable partner organizations to expand their offer of lifelong learning opportunities for vulnerable adult learners. The project aims to develop toolkits and resources to enable educators and families to make the most of the lifelong learning opportunities that therapeutic gardening and cooking can provide. It will provide insights into how adults with learning disabilities and their families can best be supported to acquire the skills, knowledge and confidence to cook and garden together at home, as well as insights into the other therapeutic benefits of these activities.

Through preliminary preparatory studies, project the MeTura partners discovered that the majority of adult persons with intellectual disabilities live at home with their families and that each family would benefit from a personalized process of lifelong learning, adapted to their own individual needs. The initial phase of the project looked to gather information about the requirements and preferences of educators and adults with intellectual disabilities and their families, the availability of educational opportunities and their attitudes and interest in cooking and gardening

As part of the initial phase of the MeTURA project, study 04 aimed to investigate the potential benefits of therapeutic gardening for adults with Learning disabilities (LD) and their families. This included investigating whether families with adult members with LD were aware of, or involved in gardening as a therapeutic activity and particularly in combination with cooking; what they perceive that

the financial, economic, educational and social benefits of these kind of activities might be; what additional resources, skills and support might be needed for families and adults with LD to engage in these activities; what the possible barriers might be to engaging with therapeutic gardening.

The purpose of study O5 was to gather information to guide the development of new knowledge, skills and andragogical tools for educators to enable them to encourage and support adults with intellectual disabilities and their families to engage in therapeutic family gardening and cooking as a means to a more independent life for adult family members with intellectual disabilities.

For the O5 Study, a questionnaire was conducted in all participating countries. We wanted to discover how many families have a garden or a space to grow plants. We also wanted to know what size it is, and how they use the space (what do they grow, who gardens, etc.)

We also wanted to discover what respondents think are the benefits of gardening for adults with learning disabilities might be. We also wanted to know what kind of support would help adults with learning disabilities and their families get involve in gardening and maximise the lifelong learning and wellbeing potential of therapeutic gardening as an intervention.

The questionnaire was divided into two parts; the first part consisted of some general information about the family and the second part consisted of questions relating to gardening and to the opportunities and barriers to gardening in a family setting

The following synthesis report contains the questionnaire results and analysis from the individual countries along with a short discussion of the national attitudes, availability, affordability and engagement with gardening in the general population and for families with AFMID.

## 2 NATIONAL REPORT OF CROATIA

In our national report, we first present the attitudes and approaches to gardening of the general population in Croatia, and the positive effects of gardening on physical and mental health. Furthermore, we present gardening opportunities for people with intellectual disabilities in Croatia along with examples of good practice. Finally, we presented the results of the questionnaire for Croatia. The questionnaire was administered to families with adult members with intellectual disabilities (AFMID).

### **Attitudes and approaches to gardening of the general population in Croatia**

Development of civilization is gradually deleting the boundaries between countryside and cities in a number of aspects. This transforms the traditional role of the rural environment, which increasingly falls under the process of industrialization of food production and, consequently, the dominance of traders, with all the ecological, health, cultural, economic and even political consequences of dependence on large production and trade systems. Such systems are key to maximizing yield and profit. The consequences of this development are, for example, pollution of food (fertilizers, pesticides, GMOs, etc.), long-term freezing, maturation in storage and transport, etc., and thus increasing the questionability of its health value and a new form of alienation from natural cultivation.

Gardening in Croatia is more prevalent in the countryside and rural areas, on land owned by the people in those areas. Nowadays, the source of food is often questionable. We are increasingly reaching for home-grown vegetables. More valuable vegetables are grown in our own garden, designed according to our own plan, planted with our own hands, which grows and develops before our watchful eyes. Vegetables from the home self-supply garden also mean a considerable relief on the family budget, as well as comfortable relaxation and movement in the fresh air. Fresh homemade vegetables, which we just picked up from the garden, also have the most vitamins, minerals and nutrients. The longer the process and time it takes from the garden to our plate, the less nutrients and healthy substances it has. Namely, it has been proven that the level of vitamins and minerals with a longer storage period is decreasing in many types of vegetables.

Rural gardening is more commonly used by the population of people between 30 and 70 years of age, although family farms on which adult members of the same household carry out farming are increasingly developing.

The richest Croatian region in wheat and corn is Slavonia. In Istria, the Croatian Littoral and Dalmatia, viticulture and fruit growing (figs, olives) are prominent, and in the Neretva valley there are rich tangerine plantations.

However, urban gardening is becoming increasingly popular in Croatia. In addition to gardens on infields and city land, gardens on windows, balconies, terraces and roofs slowly began to sprout. Due to space congestion, people are finding very imaginative solutions to make the most of it and beautify it. In fact, it is a trend that takes its typical forms: as a return to the original or new discovery of a rural garden, to a more serious movement of collective city gardens or a comprehensive deliberate exploitation of unused public spaces.

Plant cultivation and occasional ground work is a very effective way of relaxing. Today, many are gardening or growing balcony flowers to enjoy the peace and ease of caring for a living being, even if it is just a plant. Some do this precisely because the plants do not need all our attention, but only a little of our leisure time, and it will still repay us with its beautiful appearance, flower or fruit.

Talk about gardening can often be heard at gatherings and family reunion. Nowadays, educational and useful gardening tips can be heard in specialized shows on TV and radio. Also, there are no newspapers that do not publish a piece on gardening, as well as websites which are full of content about this topic.

### **People are engaged in gardening because it has a positive impact on physical and mental health**

- Reduces stress and relieves you of tension

Going to the garden after a hard day's work lowers stress and reduces fatigue.

- Reduces the risk of heart disease and diabetes

Gardening leaves you in shape and reduces stress levels, which means it can prevent heart disease, diabetes and obesity. Of course, if you eat what you have grown, the benefits will be much greater for your health.

- Provides a sense of happiness

There is plenty of evidence that problems such as anxiety and depression are directly related to the time a person spends outside the home. Gardening will

drive away any sadness, give room for creativity, and give you a sense of pride when harvesting the fruits of your labour.

- It keeps the brain healthy

The results of a study published in “Alzheimer's Disease” confirmed that various physical activities, one of which is gardening, reduce the risk of developing Alzheimer's disease by 50 percent.

- Provides better and easier sleep

Physical activity is calming, and working on something you love relaxes the most, so a combination of these factors will help you fall asleep more peacefully and firmly.

### **Gardening opportunities for people with intellectual disabilities**

Intellectual disabilities are a complex occurrence of the condition of the child or person, which is difficult to determine uniquely because it contains medical, psychological, pedagogical and social determinants. Namely, there is no one satisfactory definition that would express all its complexity.

People with intellectual disabilities throughout history have been degraded and disenfranchised, often characterized as deviant and undesirable and as such segregated from society by a segregated treatment system. Intellectual disabilities have been interpreted differently throughout history: in primitive societies, it was thought of as punishment by force majeure, the result of witchcraft or obsession with supernatural powers, while in recent history poverty, illiteracy and poor living conditions have been cited as the most common causes.

In the 1960s, a significant change occurred in the approach to and interpretation of disability, and the medical model gradually changed to a social one, emphasizing the role of society in the emergence of disability, interpreting it as something not an individual characteristic but a reflection of economic and social conditions in society. Encouraged by this, for the first time a policy of deinstitutionalization of persons with intellectual disabilities and the work to exercise their right to live in the community emerges. Not only many experiences but also common sense show that the inclusion of people with intellectual disabilities in the wider social community and society is generally not only desirable from the aspect of human rights and the normalization of their lives, but that it is indeed possible.

Accordingly, the deinstitutionalization of persons with intellectual disabilities has become one of the goals and tasks of all EU Member States under a number of international conventions signed and ratified by the Government of the Republic of Croatia. According to them, the right to live in the community is one of the fundamental human rights that apply to all people, regardless of their type and degree of difficulty or disability. All people have a common right to independent living and involvement in the community, including the right to choose their place of residence, the choice of roommate, and the right to live in dignity; and these rights are enshrined in many European and United Nations documents.

Following on from the above, in Croatia most often Community Service Centres and Associations are those who work intensively with people with intellectual disabilities to master the activities of daily living. The emphasis is on learning how to cook simple meals and dishes and cutlery hygiene, space hygiene, body and clothing hygiene, stretching and ironing, using various appliances for everyday use, shopping and using money, moving around the city, getting to know the city, communication and socialization.

Among the activities of daily living there are an increasing number of activities in gardens, for which there is ample evidence that it has a beneficial effect on the physical, psychological, social and spiritual health of people with intellectual disabilities. Caring for the garden is the essence of gardening and the essence of its therapeutic effect. But the garden is not only a place for gardening, but also a place for "rest, peace, innocence and sweet solitude." Gardening enables every human being, regardless of limitations, to work, acquire new knowledge and relax.

Feedback from users involved in various activities of daily living shows that they are very happy to learn and participate in daily activities, acquire new abilities and habits, feel important and useful, and are happy to highlight what they have learned.

### **Good practice examples in Croatia**

- o **Ozalj Community Service Centre**

The Ozalj Community Services Centre is a public institution founded by the Ministry of Demography, Social Policy and Youth and provides services to children, young people and adults with intellectual disabilities. It operates in the Karlovac County. The headquarters of the Center are located in Jaskovo near Ozalj, in an old curia surrounded by a beautiful park, and a stationed unit in Karlovac. In addition to numerous social services, work activities are carried out

in the areas of: agricultural production, processing of agricultural products and production of natural cosmetics.

Agricultural production includes: arable farming, pig farming, vegetable growing, fruit growing, floriculture, and cultivation of aromatic and medicinal herbs. Processing of agricultural products includes: production of fruit juice, drying of vegetables, fruits and medicinal / aromatic herbs, and packaging operations. Natural cosmetics are made using high quality natural ingredients and are made of: soaps, oils for skin care and cleansing, oily grease, calendula grease, lip balms, massage tiles, peels, aromatic salts and fragrant waters for rooms and body.

- o **Cooperative Martin's Cloak**

The purpose of establishing a cooperative is to promote the care of vulnerable and for any reason marginalized groups of society and individuals, and to systematically raise the spiritual-moral and material quality of life at all levels, respecting physical, natural and moral laws.

One of the projects of the cooperative is the "Mini Urban Folding Garden" adapted for disabled people with adjustable dimensions and heights, lifted from the base: in crates, containers. It is also suitable for wheelchairs, as well as anyone who has problems with bending, squatting, such as the elderly and people with motion diseases. The urban folding mini-garden for disabled people is easily installed on balconies and terraces and is ideal for gardening as a relaxing family activity.

In addition to the mini urban folding gardens, the cooperative also provides a package of offerings containing:

- Initial training on organic (eco) farming
- Continuous e-counselling
- Nutritional counselling: drawing up healthy menus, menus adapted to certain diseases or conditions (diabetes, autism, etc.), measuring minerals and vitamins in the body, etc.
- The possibility of presenting the garden on site in: associations, institutions, etc. that bring together and / or care for the disadvantaged, the elderly and people with disabilities.

- o **Association of Persons with Disabilities of Karlovac County (UOSIKAZU)**

In the wake of comprehensive activities of daily living, UOSIKAZU in partnership with the Ozalj Community Service Center, has applied the project "Development and Improvement of Social Services - Practical House of Knowledge II", which includes the cultivation of aromatic and medicinal plants. The proposed project is fully implemented at the invitation Expanding the Community Social Services Network - PHASE 1, Call Code: UP.02.2.2.06.

The partnership with the Ozalj Community Service Centre is based on the transfer of knowledge and experience in inclusive practice and non-institutional support, and the Association will implement them in its operations. The acquired knowledge in occupation activities of horticulture, the process of planting and growing calendula on raised (adapted) flower beds, education on organic cultivation and care of seedlings to the finished product of natural cosmetics (calendula grease, natural soaps and hydrolytes) will enable the Association to independently start the listed activities that may be marketed in the future.

### **Questionnaire analysis**

The questionnaire was divided into two parts; the first part consisted of some general information about the families with AFMID and the second part consisted of questions regarding gardening in the family setting, which were answered by the family respondents.

With the questionnaire we first wanted to find out how many families have a garden or a space to grow plants. We also wanted to know what size it is, what do they grow and who does most of the gardening.

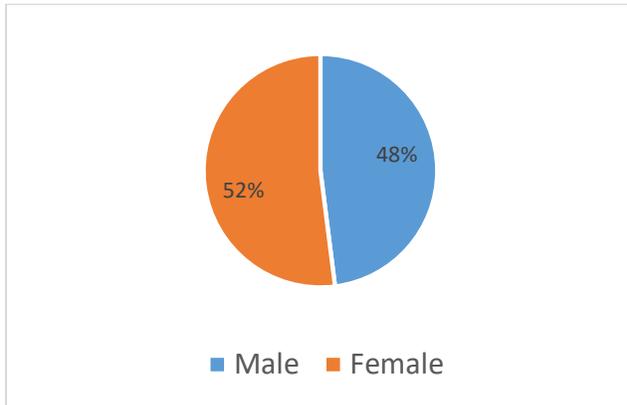
Furthermore, we wanted to find out what families think are the benefits of gardening for adults with intellectual disabilities. We also wanted to know what are the practical barriers that prevent families and their AFMID from engaging in gardening. Next, we wanted to know what kind of support would help them to get involved in gardening. At the end we gave respondents a chance to write their comments on the topic of family gardening.

A total of 21 families with AFMID completed the questionnaire.

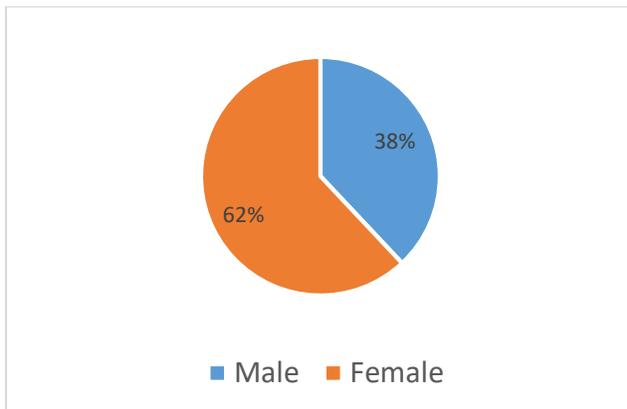
**About families:**

**Q1. Age and gender of key family members**

The AFMIDs age is between 19 and 60 years, their average age is 33 years. 52% of AFMIDs (11 people) are female, 48% (10 people) are male.



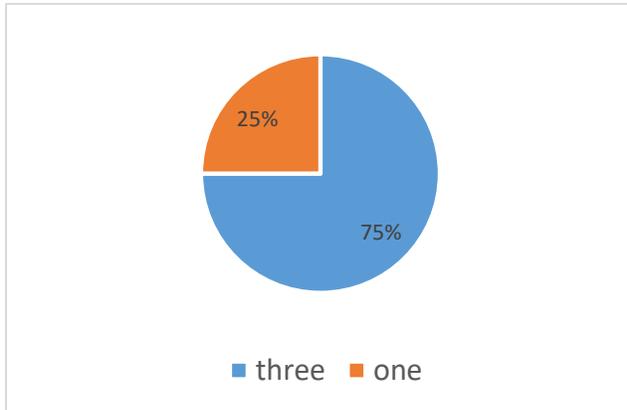
The parents / guardians are between 43 and 84 years old, their average age is 59 years. Of the 29 parents / guardians, 62% (18 people) are female and 38% (11 people) are male.



The questionnaire was completed by 16 parents / guardians and 5 AFMIDs.

**Q2. How many other members are there in your family group? (n=12)**

25% of the families that participated in the questionnaire (3 participants) have three other family members. 75% (9 participants) of the families have one more family member.

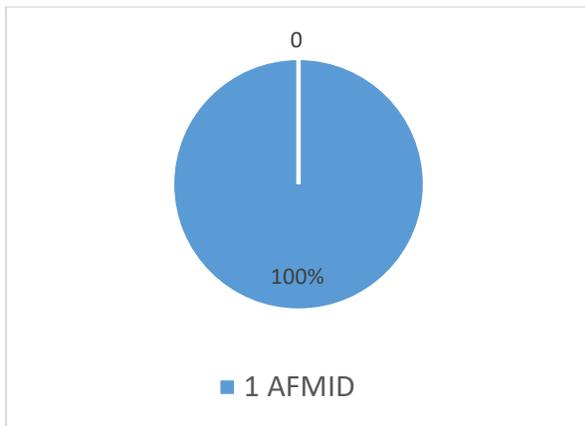


### How many children under 18?

No one answered that they have family members under the age of 18.

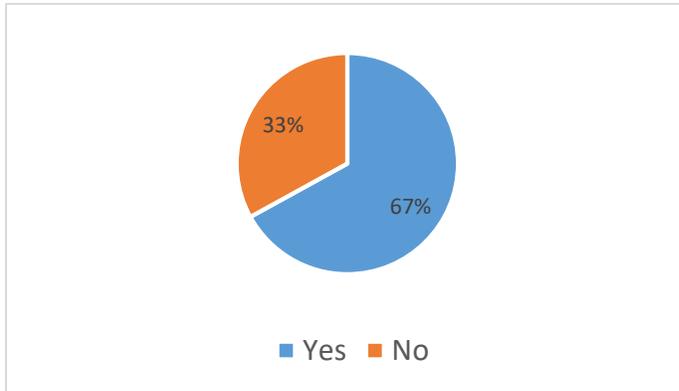
### Q3. How many family members of your family group have intellectual disabilities?

All families who participated in the questionnaire (100%) have only one member with intellectual disabilities.



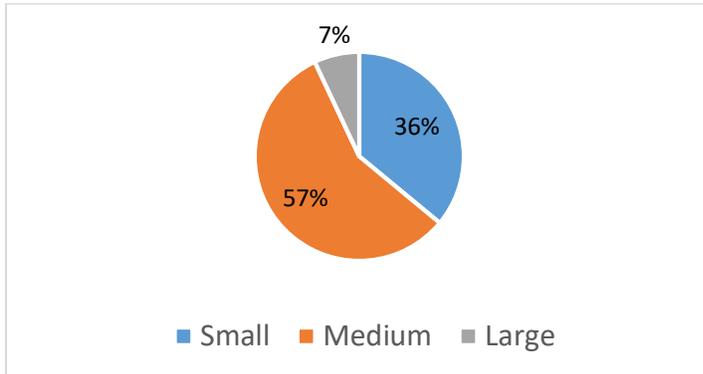
### Q4. Do you currently have a garden or other space for growing plants?

14 families (67%) have their own garden, while 7 families (33%) do not own a garden or any other space for growing plants.

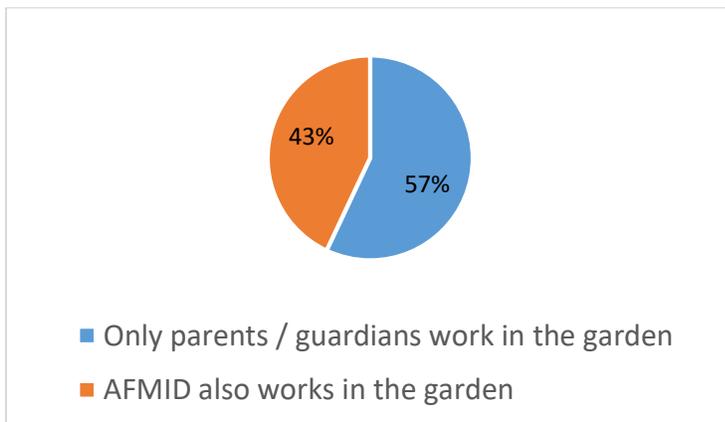


**Q4a. If yes, please tell us a little about your garden, what do you grow? What size is it? Who does most of the gardening? (n=14)**

8 families (57%) own a medium-sized garden, 5 families (36%) have a small garden and one family (7%) owns a large garden.



In 8 families (57%) only parents / guardians or other family members work in the garden and in 6 families (43%) the AFMID also works in the garden.

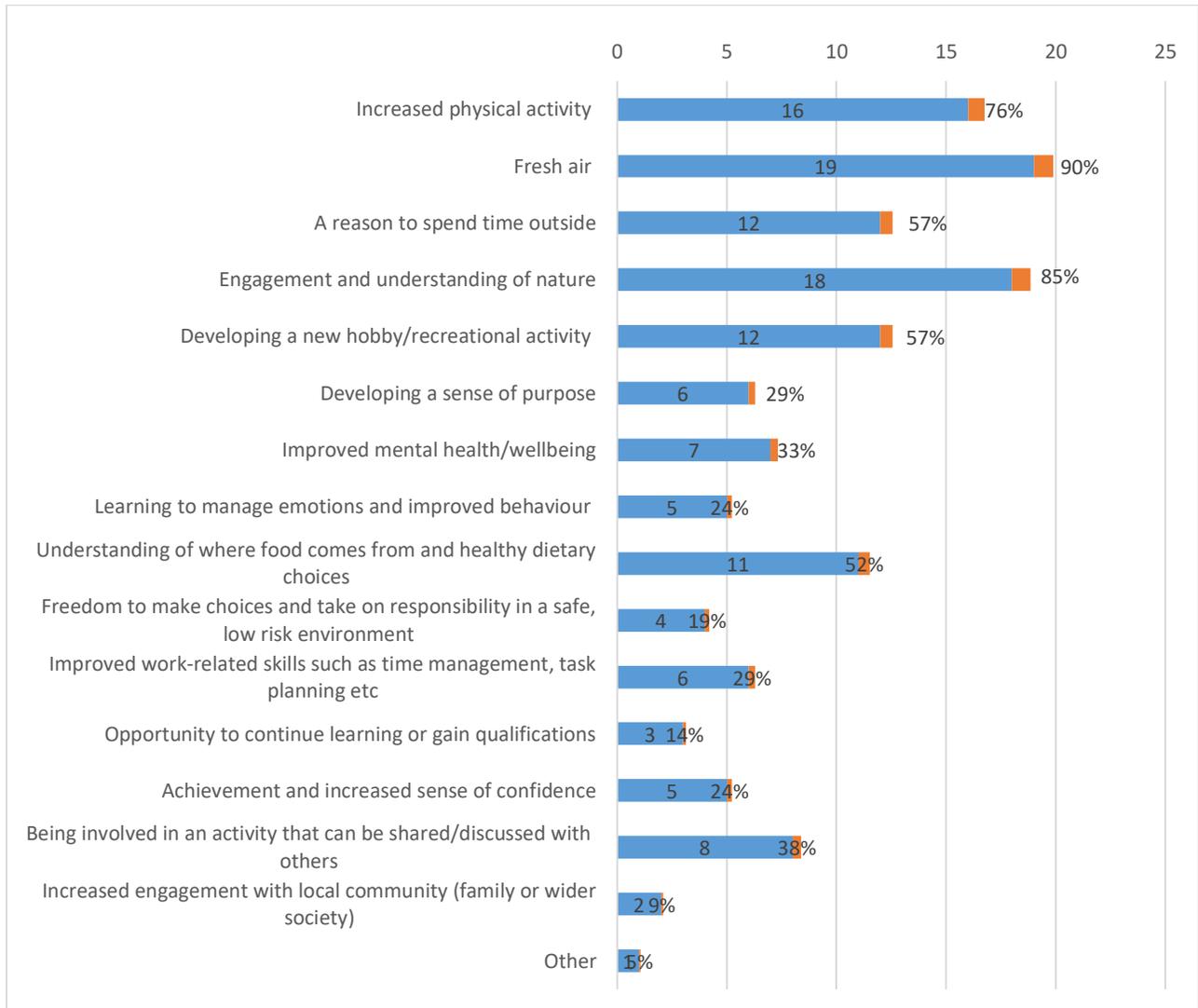


When asked what they grow in the garden, families gave the following answers:

- Miscellaneous vegetables (kale, chard, carrot, onion, cabbage, lettuce, beetroot, cucumbers, tomatoes, beans, peppers, leeks, potatoes, etc.)
- Fruit Trees
- Flowers

**About family gardening:**

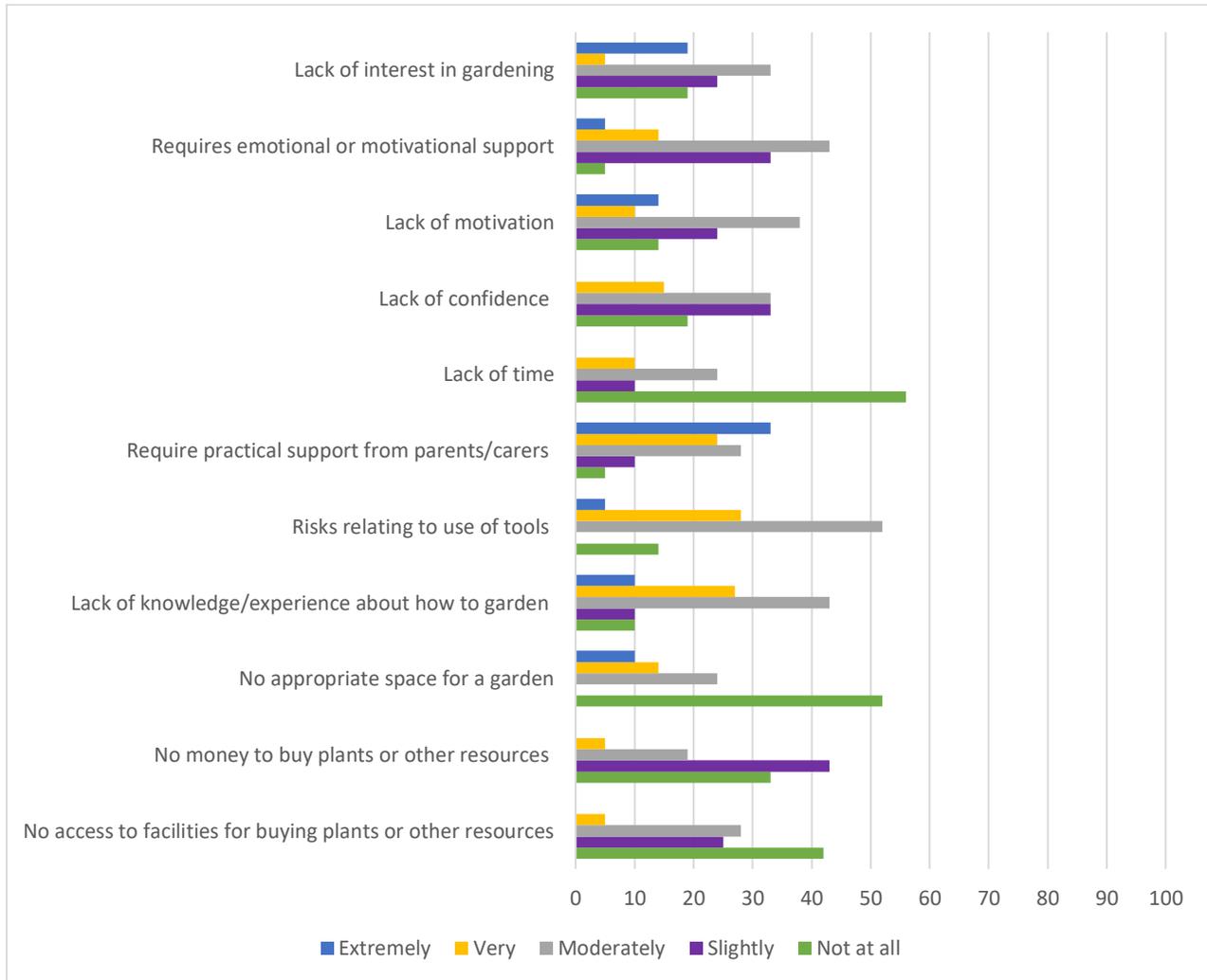
**Q5: What do you think are the benefits of gardening for AFMID?**



The three most important benefits of gardening are the "fresh air", „engagement and understanding of nature“ and "increased physical activity". Under the "other" option, the answer is "mastering the skills and activities that will enable the

cultivation of some types of food for your own nutrition, which contributes to independence."

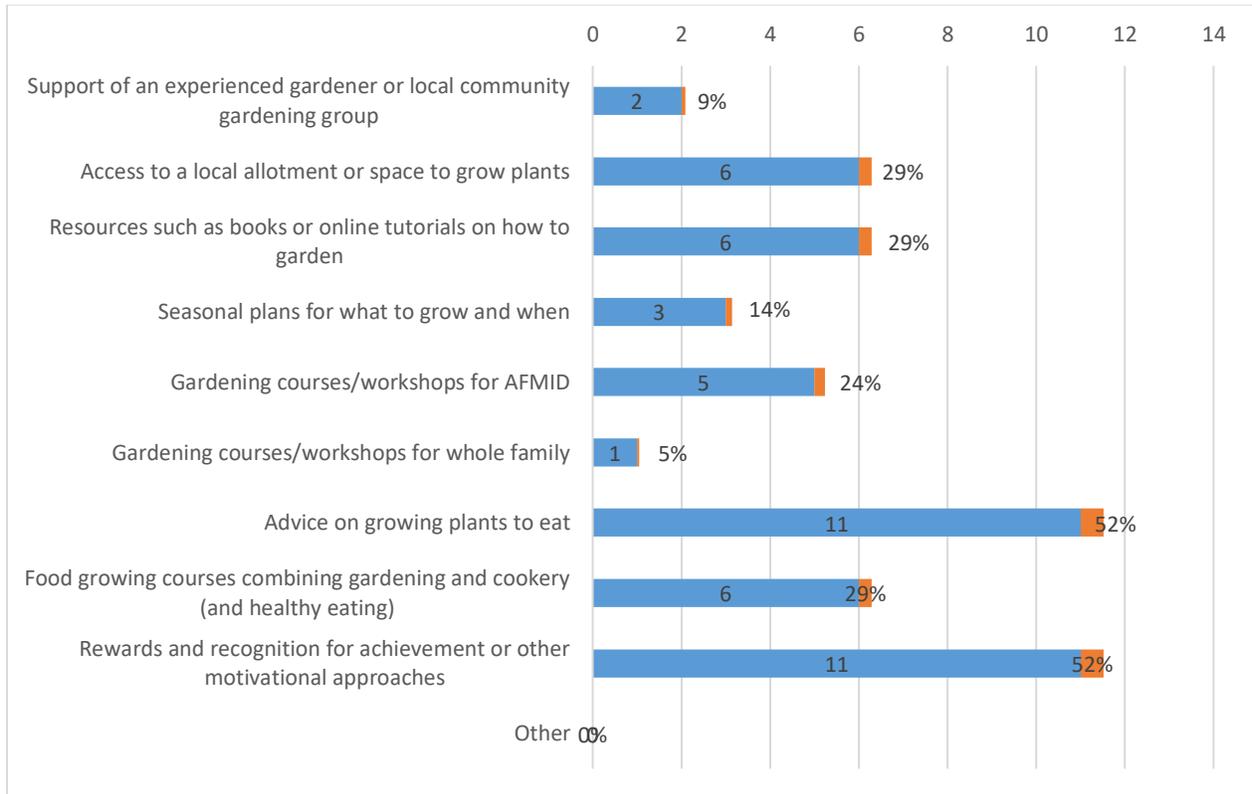
**Q6. What are practical barriers to gardening at home? Please indicate how much of an impact the following factors have on the opportunities for your adult family member with intellectual disabilities to engage in gardening with your family.**



The barriers that have the greatest impact on the AFMID's opportunity to engage in gardening with their family are "requiring practical support from parents / guardians" (GPA 3.7), "lack of knowledge / experience about how to garden" (GPA 3.2) and "risks relating to use of tools" (GPA 3.0), followed by "lack of motivation" (GPA 2.9), "lack of interest in gardening" (GPA 2.8), and "requiring emotional and motivational support" (GPA 2,8).

Other potential problems / barriers are: - depends on the type and degree of disability of the AFMID; - depends on AFMID's interest; - AFMID's inability to focus longer on an action.

**Q7. What kinds of support would help your AFMID to engage in gardening?**



The most important types of support that would help families and AFMID engage in gardening include “advice on growing plants to eat” and „rewards and recognition for achievement” or other motivational approaches.

**Q8. Any other comments about family gardening for AFMID?**

- Useful and educational.
- Motivating.

**Questionnaire Summary**

According to the results, all families who participated in the questionnaire had only one member with intellectual disabilities. Most families (67%) own a garden

and are engaged in gardening, growing various vegetables, fruits and flowers. However, in most families (57%), AFMID is not involved in garden work.

The three most important benefits of gardening for families are fresh air, staying in nature and a sense of nature, and increased physical activity. The Barriers that have the greatest impact on the AFMID's opportunity to engage in gardening with their family are the requiring practical support from parents / guardians, lack of knowledge / experience in gardening, and the risk of using tools.

The most important types of support that would help families and AFMID engage in gardening include advice on growing plants to eat and rewards and recognition for achievement or other motivational approaches.

### References:

<http://www.napravivrt.hr/hr/moj-vrt/zasto-vrt>

<https://www.vrtlarica.com/o-nama/>

<http://ordinacija.vecernji.hr/budi-sretan/upoznaj-sebe/5-razloga-zasto-je-vrtlarjenje-dobro-za-vase-zdravlje/>

[http://www.citymaking.eu/wp-content/uploads/2015/10/Vrtovi-nasega-grada\\_ebook1.pdf](http://www.citymaking.eu/wp-content/uploads/2015/10/Vrtovi-nasega-grada_ebook1.pdf)

<http://www.savezosit.hr/inelektualne-teskoce/>

Therapeutic gardens and therapeutic horticulture as an intervention in health care - Josip Dujmović Clinical Hospital Center Zagreb, Clinic for Psychiatry, Zagreb, Croatia

<http://www.centar-ozalj.hr/8085-2/>

<http://www.martinov-plast.hr/>

### 3 NATIONAL REPORT FOR ITALY

In the national report for Italy, CSC Danilo Dolci researches the popularity of gardening in Italy. Afterwards, we present gardening opportunities for people with intellectual disabilities in Italy along with examples of good practice. At the end, CSC Danilo Dolci presents the results of the questionnaires collected in Italy. The questionnaire was filled by families with adult members with intellectual disabilities (AFMID).

#### Popularity of gardening in Italy

The hobby of gardening is certainly a healthy habit, which allows you to remove the stress, anxiety and thoughts of everyday life. Many also choose to engage in this hobby with their children or grandchildren. According to a study by GfK, more and more Italians are dedicated to gardening as a hobby. According to the survey conducted by the German company that investigates consumer habits, one Italian in three is dedicated to gardening. One of the main advantages of gardening is that this practice can be conducted either by those who have a garden or a vegetable garden, but also by those who have a small balcony or veranda at their disposal. Depending on the available space it is possible to grow different plants, ranging from aromatic herbs to flowers. The survey conducted in 17 countries interviewing as many as 23,000 people around the world made it possible to find out how many on a global basis are those who wish to take care of the garden and their garden plants. The Italians, in line with the world results, showed that:

- 7% of respondents dedicate themselves to gardening every day
- 25% at least once a week
- 19% once a month
- 21% sometimes
- 28% says they have never practiced gardening

#### Who practices the hobby of gardening more? Men or women, young people or adults?

The GfK survey also indicated in which age group gardening is best and whether more men or women take care of the garden. According to the analysis, from the point of view of sex there are no great differences between women and men, in fact it seems that we take care of gardening, in much the same way. The differences instead exist mainly in the age groups. In fact, both nationally and internationally those who are over 60 are mainly dedicated to gardening. After the sixties, there are forty-year-olds, in fact 37% dedicate themselves to gardening on a weekly or daily basis. As we could imagine, the band that is less dedicated to gardening is precisely that of teenagers between 15 and 19 years old. About 59% of young people never dedicate themselves to gardening. Finally, those who dedicate themselves more to gardening have a vegetable garden or a garden, 25% live in rent, while 18% live in a

condominium. In any case, gardening is a perfect way to spend time with the family, in fact many choose to devote themselves to the little ones, to make them appreciate nature and the environment more.

### **Why engage in the gardening hobby?**

Gardening is a hobby that offers several advantages. First of all it allows you to make your own garden liveable, beautiful to look at, colourful and why not also useful. Who has a vegetable garden or a garden can self-produce their own vegetables and fruits, choosing to follow the dictates of organic farming. Having the spices on the balcony, or a fruit tree is also optimal for those who live in the apartment and has a small balcony available. In any case, gardening has positive implications also from a psychological point of view. To relax and get better with yourself and the environment around us, there are many methods, surely treating the plants is one of them. Taking care of a plant as well as being relaxing, if you dedicate yourself to this hobby with children, also allows you to create a stronger bond with them. Furthermore, involving children in productive activities can be an added value to their growth path. All these positive aspects are thus leading more and more Italians to love and practice gardening alone, as a couple, or with their children or grandchildren.

In Italy there is a new gardening trend: urban, shared, ethical. Italy fifth market in the world for shared gardening. It is growing in city spaces, schools, condominium terraces and in techno-apartment spaces. All over the world the love for gardening is reborn and Italy is placed in the top ten of the countries that spend the most for the care of vegetable gardens and gardens in general. The passion infects the Millennials, those born after 1980, who however reject chemical fertilizers and don't really have room for gardens and vegetable gardens. They find new ways to develop their green thumb, even in a few square meters of home. This is attested by a new report by Euromonitor International which states that, globally, about 84 billion dollars were spent on plant and vegetable care, 11 percent more in the last 5 years. The figure is set to rise again to reach 88 billion in 2020, analysts predict. Italy, after 3 years of decline in green purchases linked to the most difficult macroeconomic situation, is now the fifth market in the world after the United States, Germany, France and England. Last year Italy spent 3.4 billion euros to do gardening but we do it very differently than our parents. Life has changed considerably, those who own large gardens to house plants, lawns, orchards and fruit trees is the minority. The escape from the countryside and the extension of the cement even in the suburbs has brought (and will bring even more in the future) an impressive increase in the number of inhabitants in the apartments compared to those lucky enough to own a garden-equipped house. There is talk of 5 billion people who in 2030 will live in 1.7 billion apartments. Despite the lack of greenery, a new figure is emerging, that of the urban gardener, quite young (he is 35 years old on average), loves nature and prefers organic vegetables and fruits. And even when he doesn't have his own field, he wants to be with his hands in the ground.

So he invents the way or exploits, where it already exists, the "social sharing", that is the sharing of patches of land (granted by more and more numerous municipalities of the peninsula, starting from Rome) or courtyards and condominium terraces to make vegetable gardens and flower gardens. There is also a social datum to underline: the shared garden in city plots or in its own condominium goes in the direction of building communities, even in neighbourhoods where there were not even squares. They are therefore a true and own enhancement of the territory and also a principle of horizontal subsidiarity on the maintenance of the public good. Many new buildings in the suburbs already include the condominium gardens in the project. And then you share everything with those who have the same passion, from grass-mowing to watering cans, from hoes to pruning shears, because they don't have a storage room just for their tools. Among other things, the eco-bonus with the 36% tax deduction is also in force, which is certainly an incentive for new gardeners.

In the name of a greener life, the technology applied to the sector is also taken advantage of these new enthusiasts with green thumbs who furnish homes with plants that grow with hydroponic systems (in pots without soil, the roots are in water, now they are sold also in large plants, warehouses because the demand has increased), or by hanging baskets or bags with plants on the walls to make green walls with a tropical effect. In the name of technology, the new gardeners fully exploit the automatic and electronic irrigation systems, calibrated drop by drop exactly on the type of vegetable that is grown, and no longer go to the garden every day to give water to the vegetables as their predecessors did. And then they get information, read manuals also online and participate in forums and chats between "colleagues" to learn more and read fertilizer and fertilizer labels, preferring natural systems to chemical ones to grow their plants and vegetables because they care about the environment. More and more often, finally, before planting carrots and potatoes, they analyse land and water from laboratories to test their quality. Gardening is in great shape, but it's something else than before.

### **Gardening opportunities for people with intellectual disabilities in Italy and good practices**

The care of a garden as a therapeutic method for the work and social reintegration of a group of patients suffering from mental illness: this is the project launched by the "**Maccacaro Mental Health Department**" in Turin for day centre patients gathered in the association called "Il Sorriso", born in 2005 and formed by patients and a group of volunteers. Thanks to the collaboration of the local administration, the group was entrusted with the direct management of the public garden in Turin.

Equipped with tools, seeds, bulbs and fertilizer, the group began to clean up the area, cutting grass and hedges, refurbishing the benches and cleaning the streets, planting seeds and bulbs. The project started with a three-morning commitment each week. At the end of the project, the

flower beds were embellished by burying flowers and ornamental plants to complete the work and restore a more pleasant space to the city. In addition to the staff of the ASL (local health company) and the educators of the “Zenith Cooperative”, the project involves the AFAP (Association of Sick Persons) and District V, which ensured the supervision of the work by a specialized technician. For this commitment, patients will receive financial compensation thanks to some “work grants” funded by the Department for Social Health.

“Once the acute phase has been resolved - explained Roberto Messaglia, psychiatrist and manager of the day care centres headed by the “Maccacaro” - our task is to help the patient to re-enter the social context, overcoming marginalization and loneliness and regaining confidence in his own abilities and social role”.

This project aims to create a bridge between health facilities and neighbourhood resources, creating a network that allows the progressive reintegration of the psychiatric patient. At the same time, the commitment related to the direct management of a green area allows the patient to recover manual skills and the ability to self-responsibility, regaining self-esteem through gratification linked to the results obtained, financial compensation and awareness of carrying out a socially useful work appreciated by the citizens”.

Another good practice is due to the agronomist **Beatrice Marucci** is importing into Italy the experience of “**therapeutic green**”, widely used in the United States for people with disabilities: “Building an urban garden increases harmony, in large structures, but also in the family”. The artisan garden is an activity of bricolage in the apartment that Beatrice Marucci teaches, who is a Perugian agronomist in reality specialized in large therapeutic green projects. Beatrice designs and creates gardens to make it less difficult to stay in facilities that house people with physical disabilities, mental illness, and terminal illnesses. She is now working on a therapeutic garden project that will engage LUISS university students in Rome with autistic children. The discipline that has deepened is called **Horticultural therapy** and is still little known in Italy in its various applications of therapeutic gardening and healing landscape. Cultivating a vegetable garden is a discipline of the spirit, not just the makeshift activity for pensioners or the burden of necessary autarchy for family budget crises.

The vegetable garden seen as a therapy for the mentally disabled. The patients of the **Sant’Anna Housing Community**, within the social farm in the Sant’Elia district in Sardinia, are in charge of sowing, harvesting fruits, gardening and arranging the garden. Tasks that can stimulate the sense of smell, sight, touch, hearing and develop skills and competences. It is the objective of the project “**Cultivating Yourself**”, promoted by the Housing Community managed by the Humanitas cooperative in collaboration with the “Il Sorriso” association.

According to experts, these activities would improve the physical and mental health of the patients themselves. But also motor skills: sowing, pruning, gathering fruits and other activities

in contact with nature encourage movement also favouring eye-hands-arms coordination. Assimilating the name of some plants, learning space-time notions, cyclical seasons, are all activities that enhance learning skills and the cognitive sphere. Furthermore, the insertion in a work group where a common intent is pursued and an activity takes place together with the others, sharing spaces, tools, promotes socialization. The project began with the farm workers teaching patients the procedure to sow seedlings. When the work was finished, the boys went to the snack area where they shared new emotions and expectations.

There are cases in which the care of the garden “cures” not only plant products, but also people's health. This will be the case in the Cardinal Ferrari Centre of Fontanellato in Emilia Romagna starting from the coming months, thanks to an agreement signed with the Boschi di Carrega Regional Park. Objective: the creation of a garden vegetable garden dedicated to occupational therapy. The therapeutic idea of garden is born within the Occupational Therapy pathways studied by the CCF experts to involve more patients with results of severe acquired brain injury, mainly of a cognitive-behavioural nature.

“It is a project - explains the neurologist Donatella Saviola, head of the CCF Day Hospital - which aims to increase autonomy and improve the quality of life and is based on the constant observation of patients carried out over the years”.

The project in fact refers to an analysis, carried out by a multidisciplinary team of the centre, from which it appeared that patients often reported solitude after the intensive rehabilitation phase, with little response to the recovery of non-domestic autonomies, to school and social reintegration working. The new proposal bodes well, as the first phase of experimentation has already documented. The groups, composed of 5 participants, worked every day for a month, with 90-minute supervision. Despite half of the participants being understood, initially, between an insufficient and scarce level as regards memory impairment and problem-solving, in all the participants there was an increase in the motivation to the activities (only two cases of absence at one session during the whole month) with the development of social relationships that were then maintained even outside the 90 minutes of therapy. In 3 subjects, particularly penalized from a mnemonic point of view, the ability to carry out simple tasks, periodically re-proposed, such as watering or pulling weeds, has developed.

“With our pilot experience - continues Saviola - we observed that group therapy, through the involvement in the care of a vegetable garden, favours participation and aggregation, which would be difficult to obtain, instead, with traditional methods, i.e. in structured cognitive-behavioural therapy sessions”.

## References

[https://www.ansa.it/lifestyle/notizie/passioni/giardino/2016/12/08/orti-condivisi-e-giardini-in-terrazza-con-i-giardinieri-urbani-italia-quinto-mercato-al-mondo\\_f672d394-32da-43b3-b99d-791120c41204.html](https://www.ansa.it/lifestyle/notizie/passioni/giardino/2016/12/08/orti-condivisi-e-giardini-in-terrazza-con-i-giardinieri-urbani-italia-quinto-mercato-al-mondo_f672d394-32da-43b3-b99d-791120c41204.html)

<https://www.cittadiniecologisti.it/alimentazione/hobby-giardinaggio-italia/>

<https://www.disabili.com/aiuto/articoli-qaiutoq/-sp-19721>

<https://www.lastampa.it/cronaca/2015/07/10/news/insegno-a-fare-gli-orti-per-curare-i-disabili-1.35240130>

[http://www.naturanakupenda.net/1/ortoterapia\\_720099.html](http://www.naturanakupenda.net/1/ortoterapia_720099.html)

## Questionnaire Analysis

The questionnaire was divided into two parts; the first part consisted of some general information about the families with AFMID and the second part consisted of questions regarding gardening in the family setting, which were answered by the family respondents.

With the questionnaire we first wanted to find out how many families have a garden or a space to grow plants. We also wanted to know what size it is, what do they grow and who does most of the gardening.

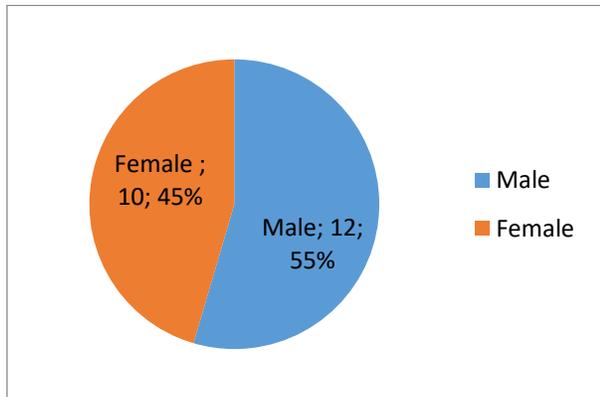
Furthermore, we wanted to find out what families think are the benefits of gardening for adults with intellectual disabilities. We also research what are the practical barriers that prevent families and their AFMID to engage in gardening. Next, we wanted to know what kind of support would help them to get involved in gardening. At the end we gave respondents a chance to write their comments on the topic of family gardening.

A total of 22 families with AFMID completed the questionnaires.

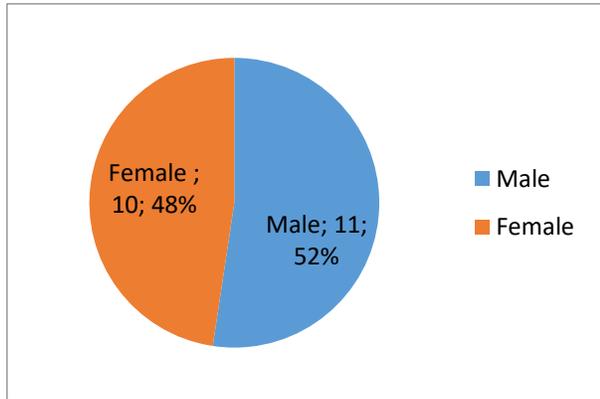
### About families:

#### Q1. Age and gender of key family members

The AFMIDs age is between 18 and 61 years, their average age is 32 years. 55% of AFMIDs (12 people) are male, 45% (10 people) are female.



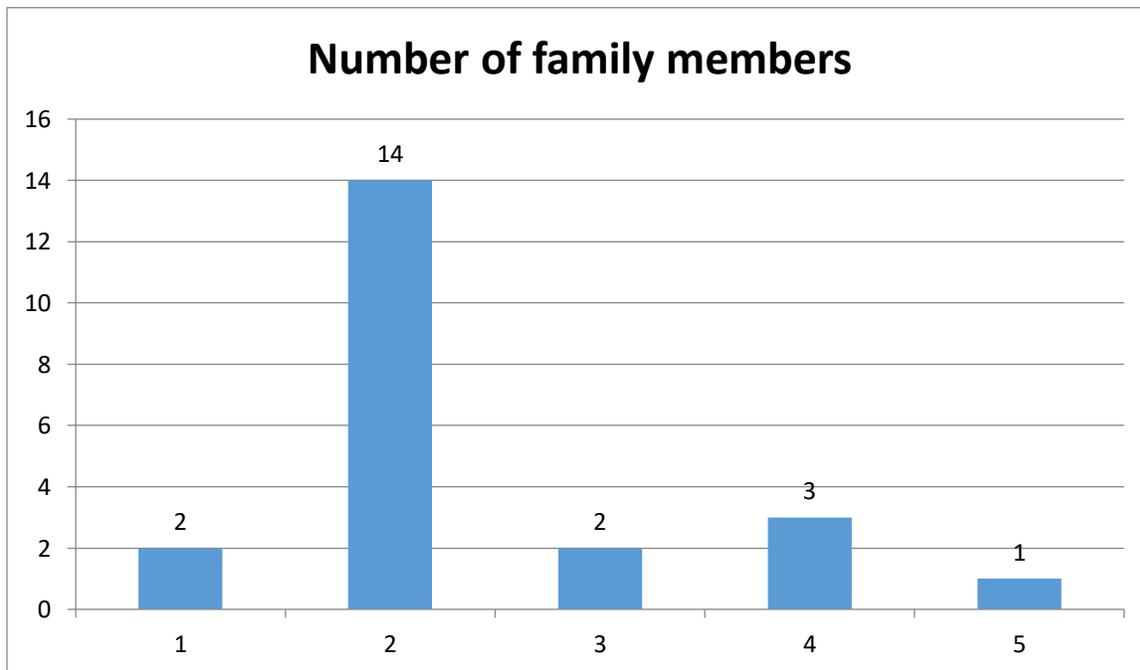
The parents / guardians are between 30 and 72 years old, their average age is 56 years. Of the 21 respondents - parents / guardians, 52% (11 people) are male and 48% (10 people) are female.



The questionnaire was completed by 21 parents / guardians and 1 AFMID.

**Q2. How many other members are there in your family group?**

14 respondents said that their family is composed by 2 persons, 3 said that they are 4 people, 1 family is made of 5 components and 2 respondents said their family is made of 1 and 3 components.

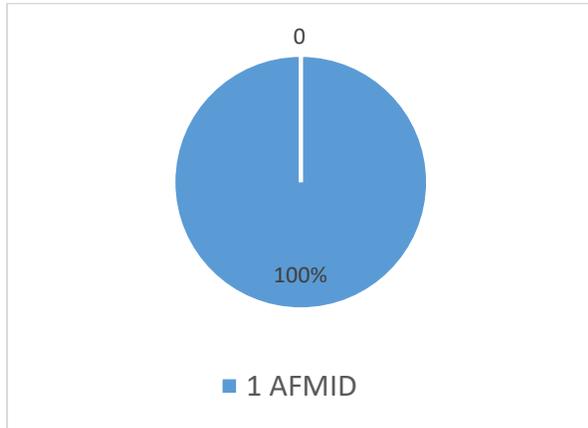


**How many children under 18?**

20 families have no members under the age of 18. 2 families have children under 18 years old.

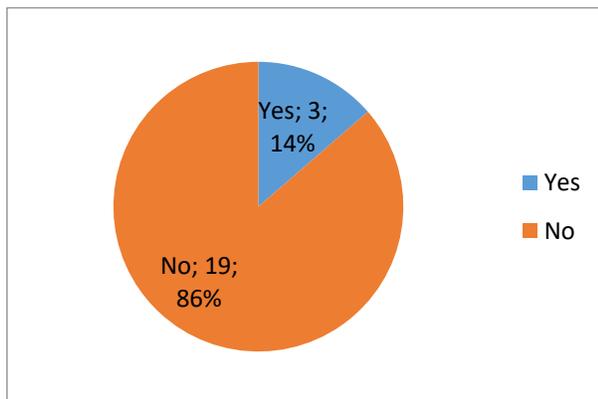
**Q3. How many family members of your family group have intellectual disabilities?**

All families who participated in the questionnaire (100%) have only one member with intellectual disabilities.



**Q4. Do you currently have a garden or other space for growing plants?**

3 families (14%) have their own garden, while 19 families (86%) do not own a garden or any other space for growing plants.



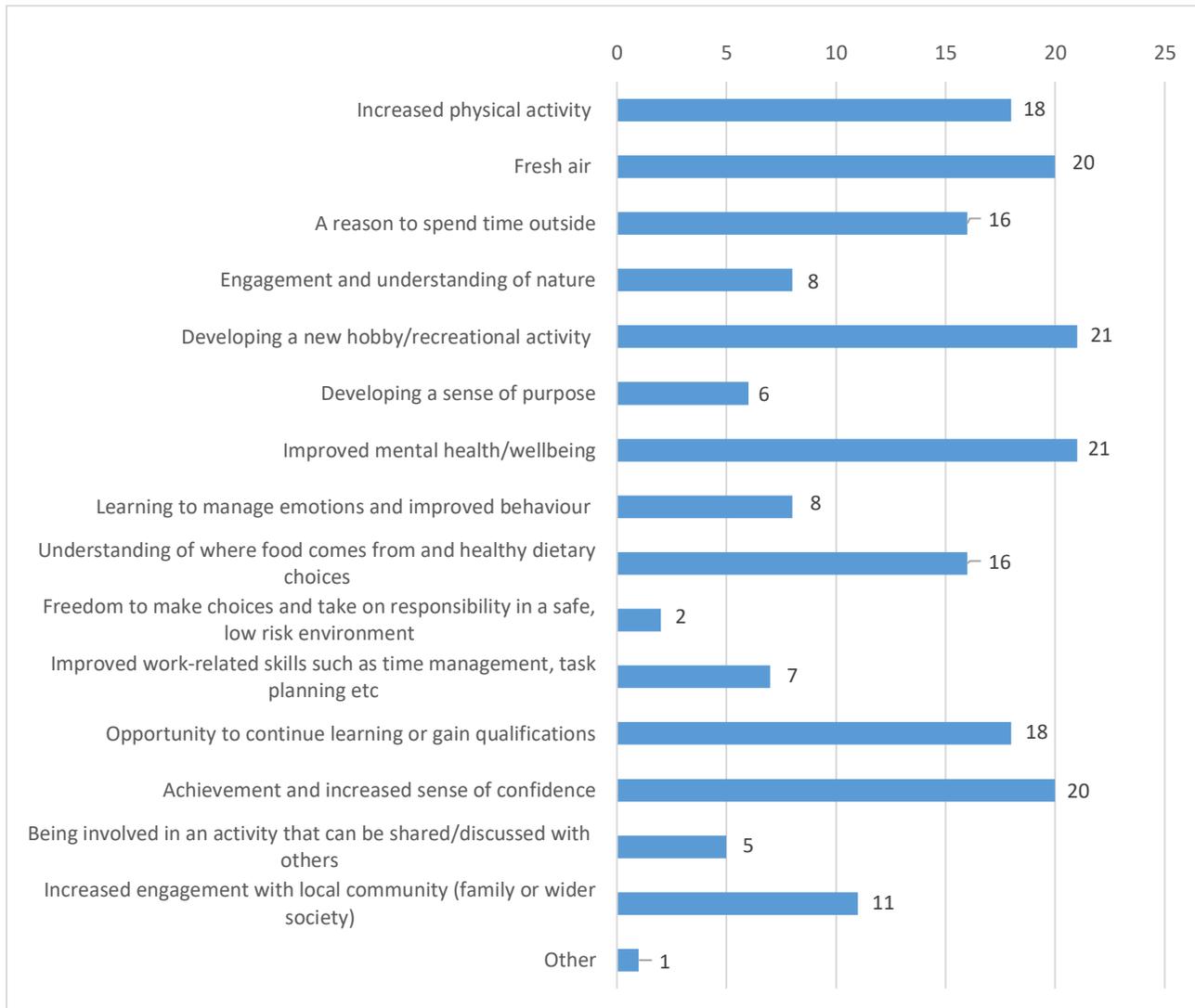
**Q4a. If yes, please tell us a little about your garden, what do you grow? What size is it? Who does most of the gardening? (n=14)**

The only data we collected here were about what is produced:

- A terrace, I cultivate aromas
- Vegetables, aromas, the mother does gardening
- Balcony, I grow aromatic plants and is 20 square meters large

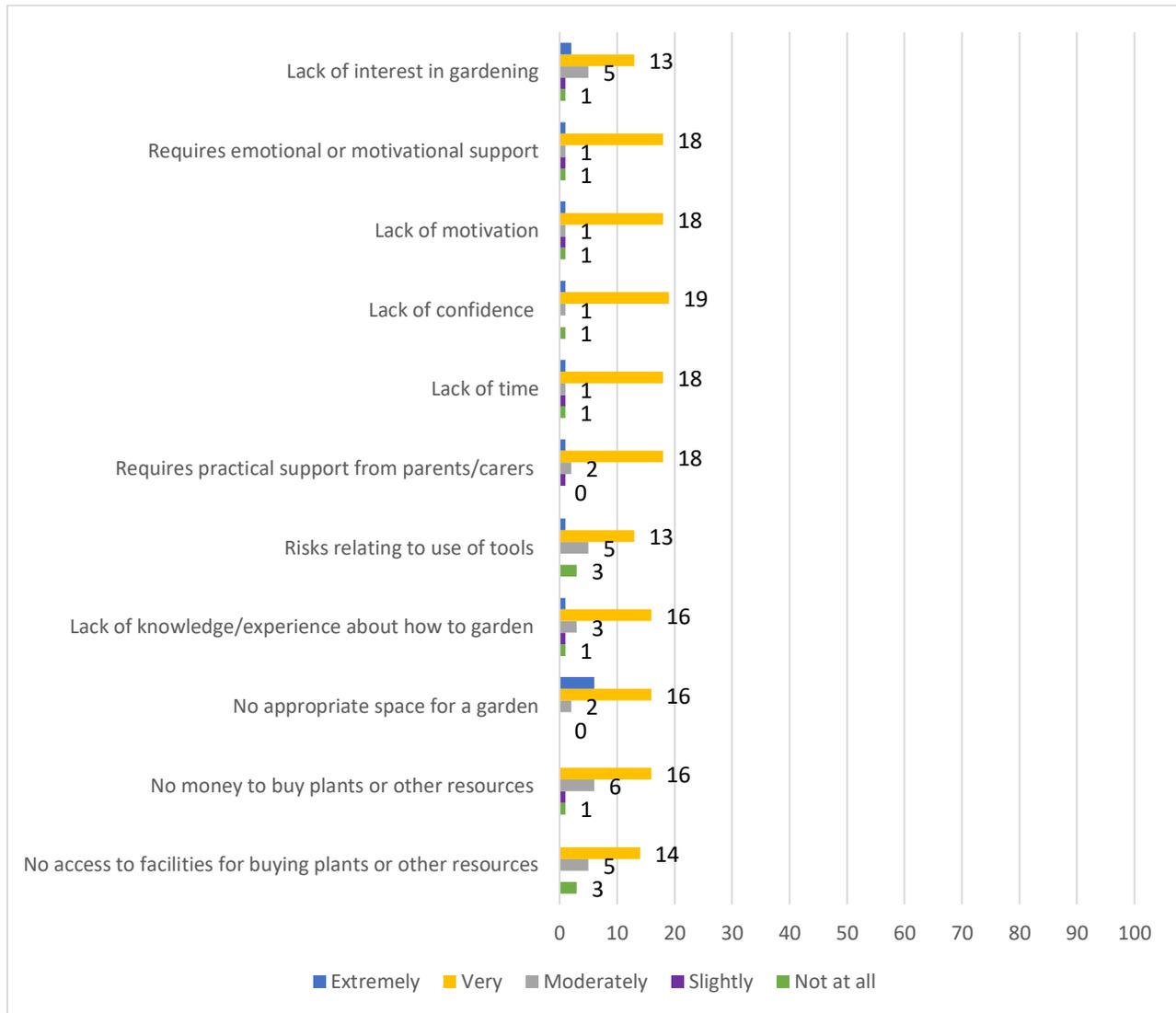
## About family gardening:

### Q5: What do you think are the benefits of gardening for AFMID?



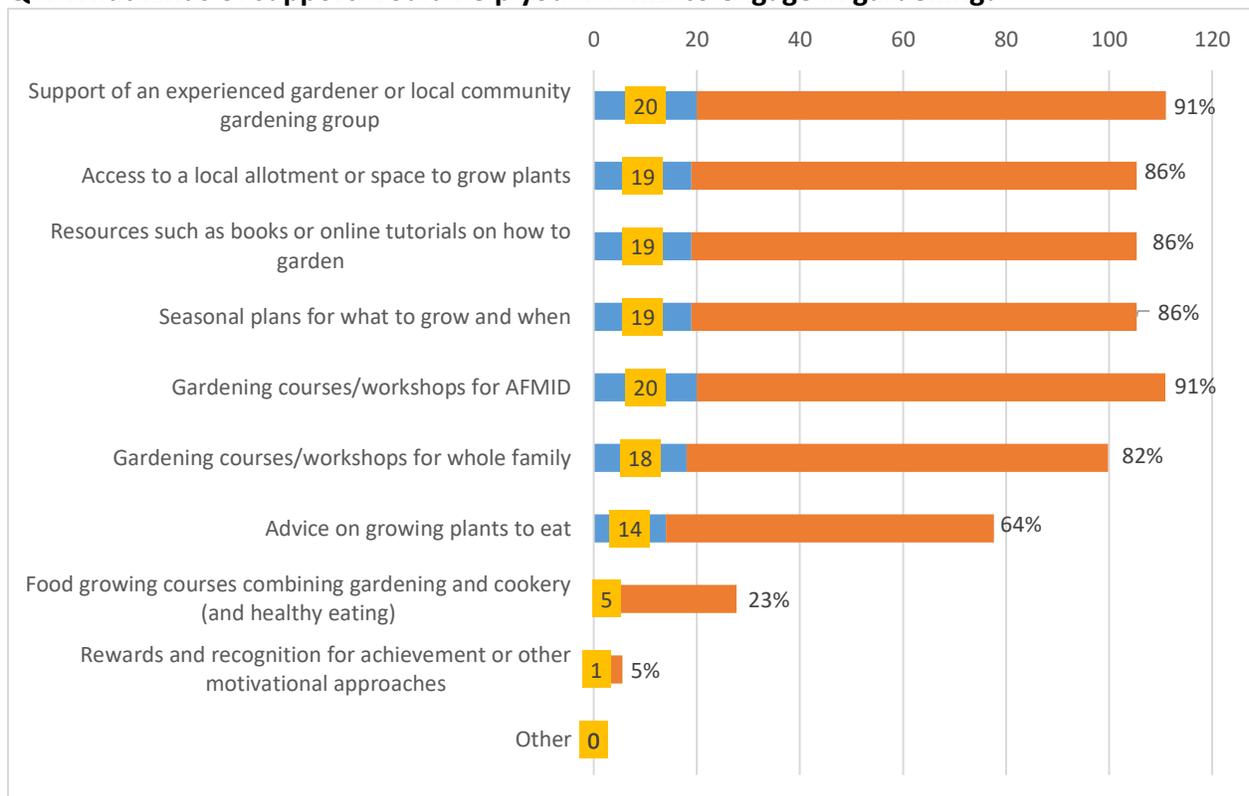
The most important benefits of gardening are the “developing a new hobby / recreational activity”, “improving mental health / well-being”, “fresh air” and “achievement and increased sense of confidence”. Also “increased physical activity” and “opportunity to continue learning or gain qualifications” are considered very important for the respondents.

**Q6. What are practical barriers to gardening at home? Please indicate how much of an impact the following factors have on the opportunities for your adult family member with intellectual disabilities to engage in gardening with your family.**



The barriers that have the greatest impact on the AFMID's opportunity to engage in gardening with their family are "lack of confidence" (19 answers), followed by "require practical support from parents / guardians", "lack of time", "lack of motivation", "requires emotional or motivational support" (18). Also "lack of knowledge/experience about how to garden", "no appropriate space for a garden", "no money to buy plants or other resources"(16) are important as an obstacle to family gardening.

### Q7. What kinds of support would help your AFMID to engage in gardening?



The most important types of support that would help families and AFMID engage in gardening include “support of an experienced gardener or local community gardening group”, “gardening courses/workshops for AFMID” (20 answers) followed by “access to a local allotment or space to grow plants”, “resources such as books or online tutorials on how to garden”, “seasonal plans for what to grow and when” (19) and “gardening courses/workshops for whole family” (18).

### Questionnaire Summary

According to the results, all families who participated in the questionnaire had only one member with intellectual disabilities. Most families (86%) don’t own a garden and are not engaged in gardening.

The most important benefits of gardening are the “developing a new hobby / recreational activity”, “improving mental health / well-being”, “fresh air” and “achievement and increased sense of confidence”. Also “increased physical activity” and “opportunity to continue learning or gain qualifications” are considered very important for the respondents.

The barriers that have the greatest impact on the AFMID's opportunity to engage in gardening with their family are “lack of confidence” (19 answers), followed by “require practical support from parents / guardians”, “lack of time”, “lack of motivation”, “requires emotional or motivational support” (18).

## 4 NATIONAL REPORT FOR SLOVENIA

Growing vegetables was once something that was a common thing for all families. Home-grown vegetables were always on hand, and options for buying vegetables were limited. With the development of modern cities, more solid infrastructure was established, and with the construction of multi-family buildings there was no longer enough space for each family to have its own garden. As the demand for vegetables remained, a trade in vegetables developed which encouraged the emergence of large industrial vegetable production plants. Only in the countryside and in smaller towns did vegetable production in the home garden continue. However, a true farm garden intended for vegetable production is still an integral part of rural farms.

But in Slovenia vegetable production is well developed almost every house has at least a small garden. In Slovenia there is still a strong culture of owning a garden and cultivating vegetables at home. One of the more popular Slovenian hobbies is urban gardening and many Slovenes dream about having a quiet house with a garden.

Gardeners in Slovenia are also residents of apartment buildings that own/rent garden lots (usually near their home) for growing vegetables. There are usually several such garden lots in one place, so the “neighbours” socialize, help each other and spend quality time outside.

Most bigger towns in Slovenia have this garden lots available for rent, and in most cases, they are totally full, so there are long waiting lines if a new person wants to rent one. In smaller towns there are usually no garden lots, since most people have a place beside their house for a garden.

Home-grown vegetables have many advantages over the vegetables we buy at the store. It usually tastes better because it is raised in a more natural way without modern industrial approaches. Most often, we sow and plant varieties that are not best suited for industrial production and cannot be bought in a store or market. Homemade vegetables can be more human-friendly, as we usually use organic fertilizers and fertilizers that are produced organically.

Growing vegetables in a home garden is not economically viable, strictly through money. Considering the time invested in cultivation, home-grown salad is many times more expensive than purchased at a market or grocery store. But

on the other hand, it is also a hobby where we are in contact with nature. The cultivation of a vegetable garden also requires some physical effort and is a form of recreation. The pleasure we have in harvesting and enjoying home-made tomatoes, lettuce, carrots and other vegetables is priceless.

Another thing special to Slovenia is beekeeping. Beekeeping occupies a special place in Slovenia's economy as one of its oldest traditional crafts. Slovenians are a genuine beekeeping nation, and beekeeping is a traditional agricultural activity in Slovenia and enjoys a status equal to that of other types of agricultural activity.

Population of Slovenian gardeners is very diverse, from students to persons in retirement. There are also very different sizes of gardens/garden-like-spaces. A lot of people that live in apartment buildings, have their plants on the balcony in smaller or bigger pots (depending on what they grow). In private houses the gardens are bigger and more diverse in plant selection.

Decision on what to grow is based on the needs and wishes of the gardener, available space, finance, and of course time, that needs to be invested in order for plants to grow successfully.

Among most popular plants are definitely herbs and spices, because they are relatively easy to grow and you can keep them on a window sill if you do not have a garden or a balcony. Recently there has been an increase in tomato and strawberry growing on balconies, probably due to new varieties that are easier to grow in pots. People with bigger gardens tend to grow more vegetables in combination with fruits and herbs as well. Most of the balconies (apartments and houses) tend to have ornamental flowers.

Reasons for gardening are as versatile as people are. Some enjoy the fresh air; some like the touch of the soil; some use it instead of exercise; some love the feeling of growing something new from seed to fruit; some are just used to it from their parents/grandparents and some just want their own home-grown food. No matter the reason, gardening always seems to be a good idea.

There are numerous magazines, web sites, courses and other sources of information on gardening in Slovenia.

Frequently there are farmers markets, fresh vegetable exchange events; indigenous seed exchange and other events that promote gardening and the use of our indigenous seed selection, so the plants thrive and are suitable for our environment.

## HORTICULTURAL THERAPY

Several definitions of horticultural therapy have been given. This term is used for numerous matters that range from the obtainable benefits from social gardening, flower cultivation, the programs of environmental education of children in kindergarten and elementary school, up to proper programmes of support and rehabilitation for individuals with learning difficulties, physical and mental handicaps or problems related to drug and alcohol abuse, periods of incarceration or, finally ageing. The simplest definition of horticultural therapy is probably “rehabilitation through contact with nature”.

Horticulture is becoming an increasingly important tool in vocational rehabilitation of handicapped individuals who can garden in so-called enabling gardens or simply enjoy the benefits which come from visiting a beautiful environment. The enabling garden is a safe, comfortable place where people of all ages and abilities can participate in gardening. It can be made more easily accessible to people with physical and intellectual disabilities or for others who have difficulty performing the activities connected to gardening. It is important to understand the social functions that therapeutic gardens are intended to fulfil in order to be functional.

## EXAMPLES OF GOOD PRACTICES IN SLOVENIA

### Eco-social farm Korenika

The Korenika eco-social farm is located in Šalovci, at the very heart of the Goričko Landscape Park (north-east part of Slovenia). After only a few years of operation, Korenika has already become recognizable in a wider geographical area. The professional public recognizes it as an example of good practice in social entrepreneurship, employing people with disabilities and other vulnerable social groups, as well as sheltered employment.

At the Korenika farm, they established a system of organic food production and processing. They produce crops, herbs, fruit and vegetables on over 20 hectares of land. They also pick wild fruit and turn them into organic products. They produce and sell their own brand of herbal teas, cold-pressed oils, dried and pickled fruit and vegetables, food for the winter, juices, syrups and much more.

They arranged a spacious herb garden and animal park, which is home to many animals popular with youngest visitors. As the number of visitors continues to rise,

they offer more and more activities and educational events in this pleasant, soothing and impressive rural environment. The increasing number of visitors has positively influenced the development of their tourist and catering offer. They offer workshops based on experiential learning for many schools and kindergartens, where children and young people can learn, relax and play at the same time.

### **Occupational Activity centers (OAC) for people with intellectual disabilities**

Most of the OAC are oriented in working together with their users, so they learn every-day-life skills including setting the dining table, water the plants and do simple chores. Most of the OAC in Slovenia have their own garden and some even have their own bee hives, so they produce their own honey.

In OAC Tončke Hočevar in Ljubljana they have a therapeutic garden. Horticultural activities have a long tradition in their institution. It is very popular among users, especially due to a variety of activities that are held throughout the year. They plant balcony flowers, ornamental flowers, grow room flowers, herbs, vegetables and berries. They take care of the lawn and ornamental shrubs, organize flower arranging workshops, have organised visits to garden shops and parks; they get to learn about plants. The main goals of horticultural activities are as follows: learning new skills and acquisition of new knowledge, experience and roles; gaining responsibility; refocusing attention; relaxation and promoting a healthy lifestyle; creativity in gaining experience of satisfaction at success. Herbs, fragrances and vegetables are used in their every-day life, so in this way they get to know the value of plants. The activities take advantage of the therapeutic effects of the plants: they create a better mood and improve the quality of their life. In their therapeutic garden that is equipped with benches, a swing and garden furniture is a place to relax, socialize and performing other therapeutic activities. The garden is adapted for people who are wheelchair users, surfaces are wide enough into paved, garden-raised beds that make it easy to work with plants.

In OAC Zagorje ob Savi one of their activities is beekeeping. Participants of the activity have weekly meetings. Beekeepers have a lot of work to do when taking care of their bee families and producing the honey.

## Questionnaire Analysis

The questionnaire was divided into two parts; the first part consisted of some general information about the family and the second part consisted of questions regarding gardening in the family setting, which were answered by the family respondents.

With the questionnaire we first wanted to find out how many families have a garden or a space to grow plants. We also wanted to know what size it is, what do they grow and who does most of the gardening.

Furthermore, we wanted to find out what respondents think are the benefits of gardening for adults with intellectual disabilities. We also wanted to know what are the practical barriers that prevent respondents and their AFMID to engage in gardening. Next, we wanted to know what kind of support would help them to get involved in gardening. At the end we gave respondents a chance to write their comments on the topic of family gardening.

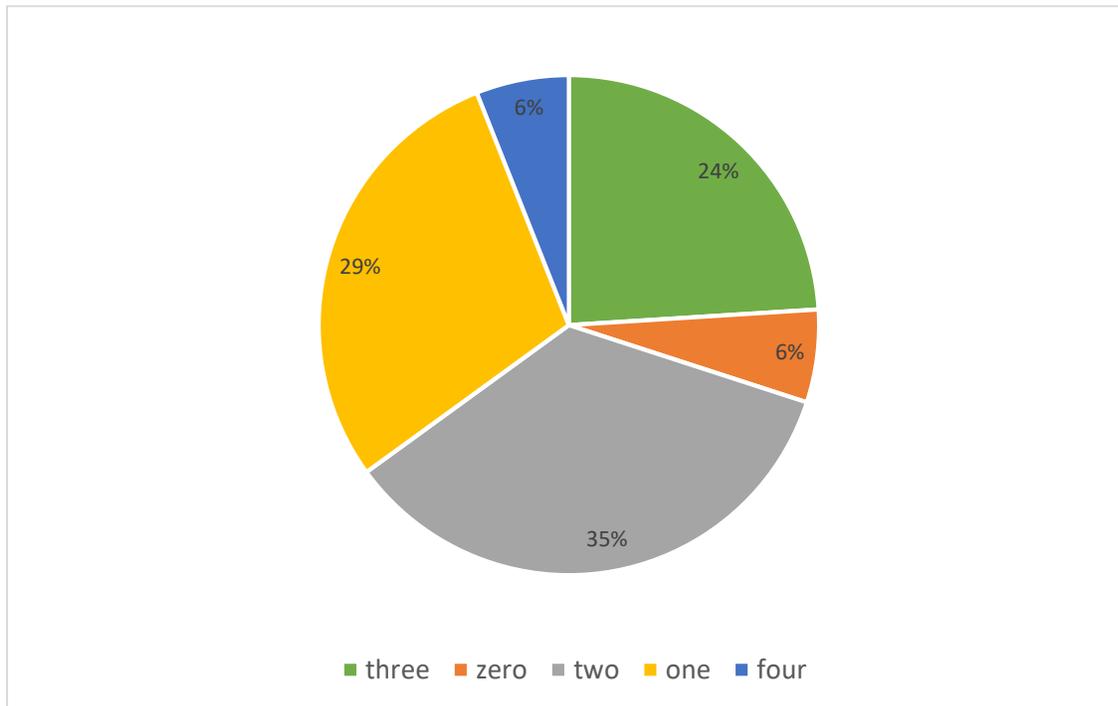
## About families

### Age and gender of key family members

Minimum age of AFMID is 21, maximum is 65 and the average age of AFMID is 38. 64% of AFMID are male 36% are female. Minimum age of parents of AFMID is 43, maximum is 85 and the average age of parents is 62. 74% of the parents are female, 26% are male.

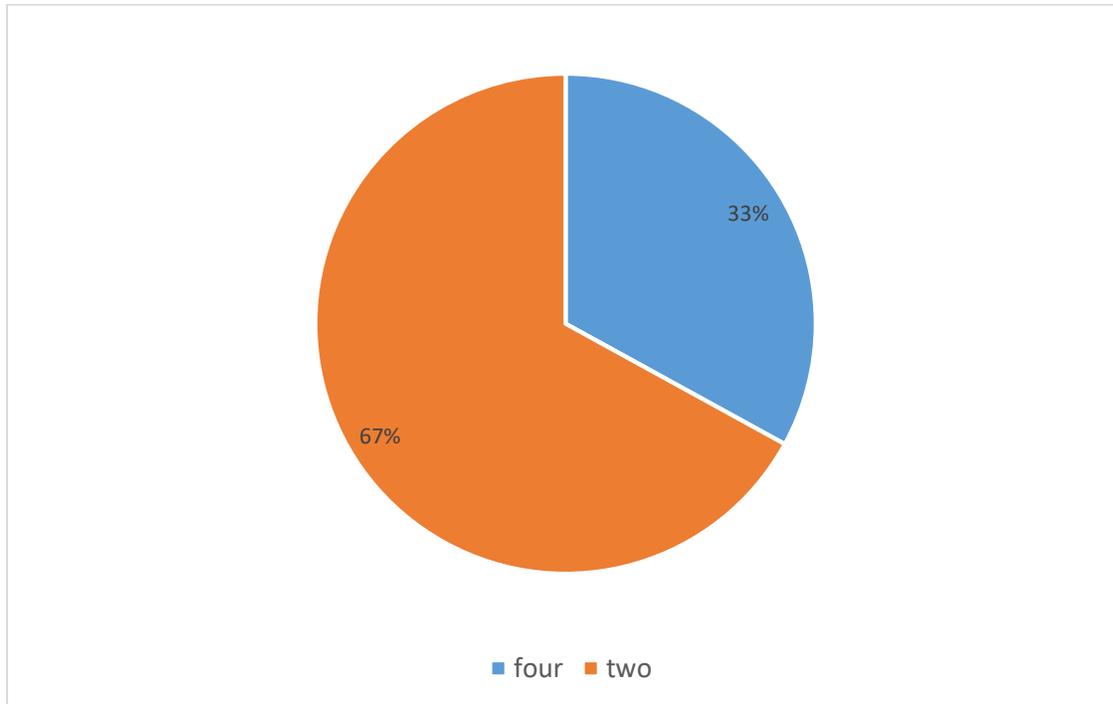
### How many other members are there in your family group? (n=17)

35% of the families that participated in the questionnaire (6 participants) have 2 other family members in their family group. 29% (5 participants) of the families have 1 other family member and 24% (3 participants) have 3 other family members in their family group. 6% of the families that participated in the questionnaire (1 participant) have 4 other family members and also 6% do not have any other family members in their family group.



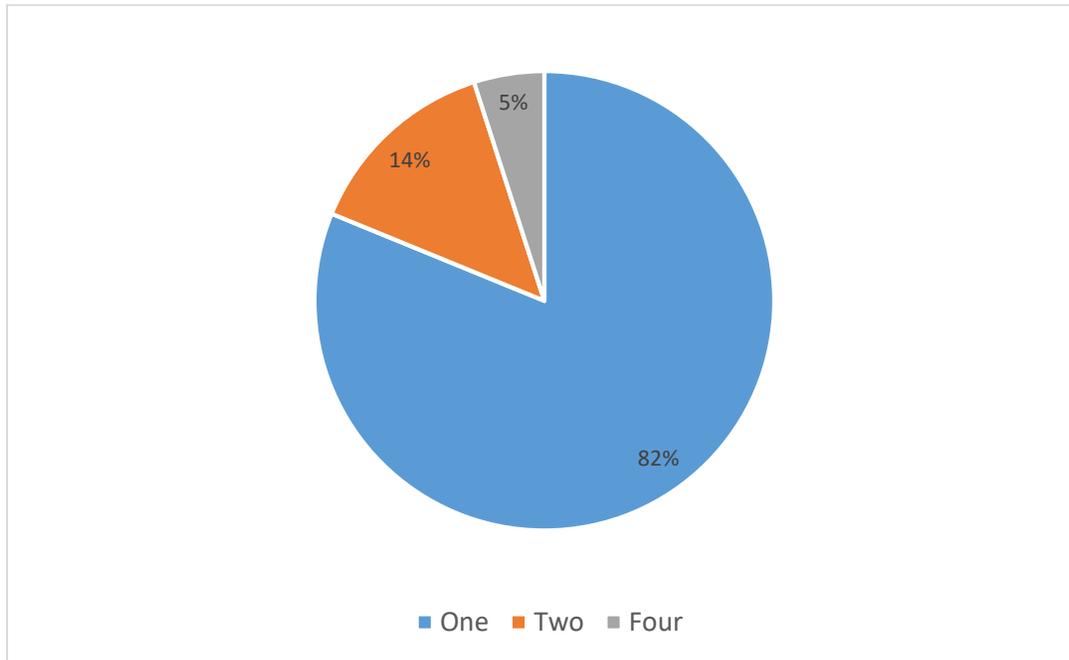
### How many children under 18? (n=3)

67% of the families that participated in the questionnaire (2 participants) have two children, 33% (1 participant) have four children.



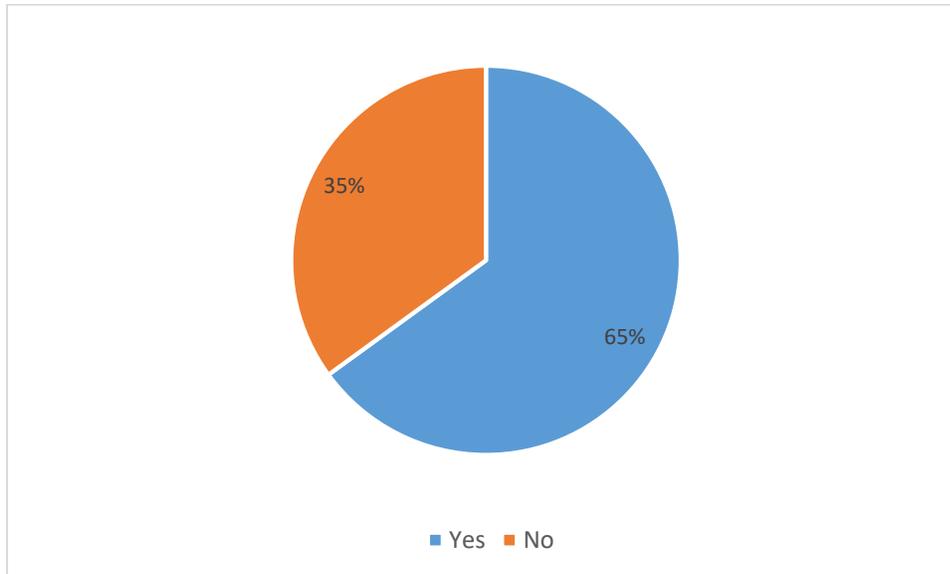
### How many family members of your family group have intellectual disabilities? (n=22)

In 82% of the families that participated in the questionnaire (18 participants) they have one member with intellectual disability. In 14% (2 participants) they have two members with intellectual disability. In 5% of the families (1 participant) there are four members with intellectual disabilities.



### Do you currently have a garden or other space for growing plants? (n=26)

65% of the families that participated in the questionnaire (17 participants) have a garden or other space for growing plants, 35% (9 participants) do not.



### If yes, please tell us a little about your garden, what do you grow? What size is it? Who does most of the gardening? (n=16)

1. Our garden is 50 m<sup>2</sup>. we grow lettuce, parsley, chicory, leek, celery, peppers, tomato... (2 participants)
2. I grow flowers, vegetables, potato, beans, asparagus...
3. We have a farm, my son and his family run the farm.
4. 1 hectare.
5. The garden is about 800m<sup>2</sup>, we grow potatoes and vegetables for our household.
6. 800m<sup>2</sup>, apples, vegetable garden.
7. 200m<sup>2</sup>, vegetables, fruit, flowers.
8. 800m<sup>2</sup>, vegetables, herbs, flowers. every family member is on his area.
9. Approx. 20m<sup>2</sup>, daughter in law takes care of it.
10. We have a big garden and a greenhouse. Mostly I take care of the garden, other family members help as much as they can.
11. Balcony. We grow herbs, lettuce and tomatoes.
12. 5x10m, my partner takes care of it.
13. We grow everything we need for [the kitchen cooking](#).
14. It is about 25m<sup>2</sup>, we grow cucumbers, tomatoes... all family members take care of the garden.

15. Small garden, about 10-20m<sup>2</sup>; we grow vegetables for our household.

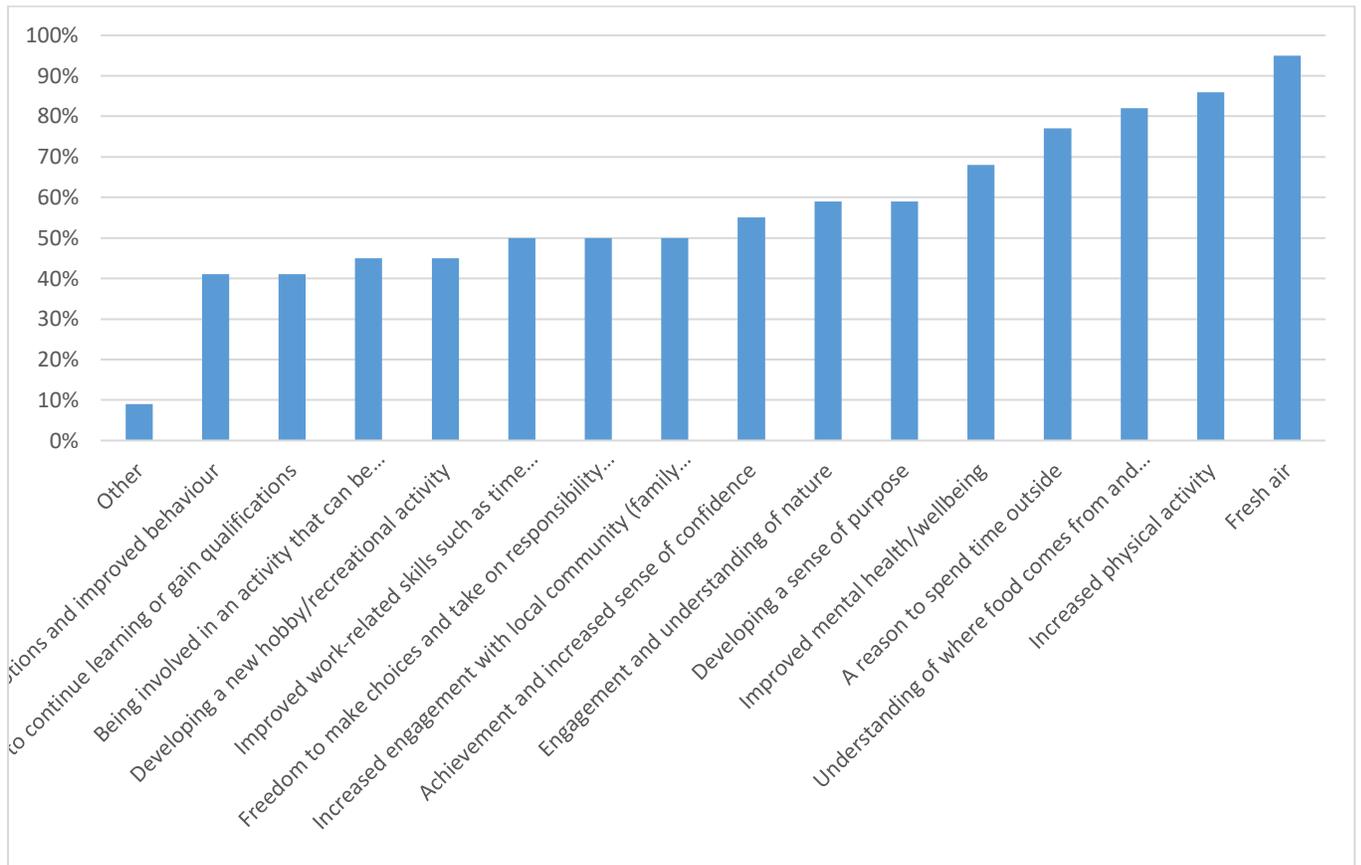
### About family gardening

#### What do you think are the benefits of gardening for AFMID? (n=22)

95% of the families that participated in the questionnaire (21 participants) think that fresh air is beneficial when gardening, 86% (19 participants) think the increased physical activity is beneficial part of gardening. 82% of the families that participated in the questionnaire (18 participants) the benefit of gardening understands where food comes from and healthy dietary choices. 77% (17 participants) believe that gardening is a good reason to spend time outside and 68% (15 participants) think gardening improves mental health/wellbeing. 9% (2 participants) replied “other” and the answers were:

1. Cheaper living
2. I can agree with all answers, but I have problem motivating [her](#) AFMID for gardening

a) Increased physical activity	86%
b) Fresh air	95%
c) A reason to spend time outside	77%
d) Engagement and understanding of nature	59%
e) Developing a new hobby/recreational activity	45%
f) Developing a sense of purpose	59%
g) Improved mental health/wellbeing	68%
h) Learning to manage emotions and improved behaviour	41%
i) Understanding of where food comes from and healthy dietary choices	82%
j) Freedom to make choices and take on responsibility in a safe, low risk environment	50%
k) Improved work-related skills such as time management, task planning etc.	50%
l) Opportunity to continue learning or gain qualifications	41%
m) Achievement and increased sense of confidence	55%
n) Being involved in an activity that can be shared/discussed with others	45%
o) Increased engagement with local community (family or wider society)	50%
p) Other:	9%



**What are practical barriers to gardening at home? Please indicate how much of an impact the following factors have on the opportunities for your adult family member with intellectual disabilities to engage in gardening with your family? (n=20)**

	Not at all	Slightly	Moderately	Very	Extremely	No
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						answer
Lack of interest in gardening	15%	5%	25%	25%	30%	0%
Requires emotional or motivational support	10%	0%	15%	35%	30%	10%
Lack of motivation	10%	10%	20%	30%	15%	15%
Lack of confidence	15%	10%	25%	15%	20%	15%
Lack of time	20%	10%	20%	15%	10%	25%
Require practical support from parents/carers	10%	0%	10%	30%	30%	20%
Risks relating to use of tools	10%	10%	5%	20%	25%	30%
Lack of knowledge/experience about how to garden (how to grow plants, what to grow and when)	10%	5%	5%	30%	30%	20%
No appropriate space for a garden	15%	5%	5%	15%	35%	25%
No money to buy plants or other resources (tools, seeds, plants etc.)	30%	10%	0%	10%	25%	25%
No access to facilities for buying plants or other resources	20%	10%	5%	10%	20%	35%

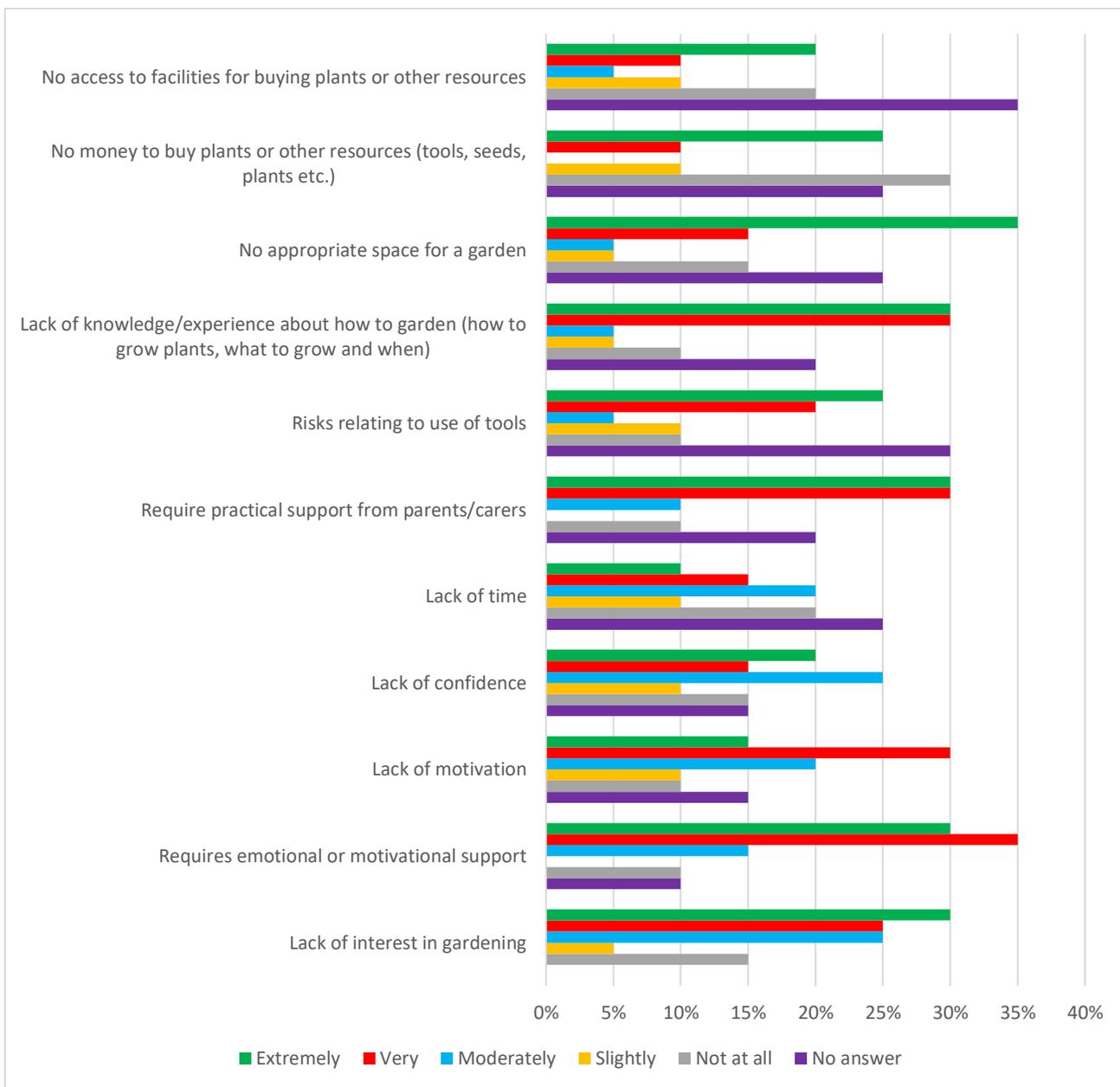
1. **LACK OF INTEREST IN GARDENING:** 30% of the families that participated in the questionnaire (6 participants) say that lack of interest in gardening has an extremely big impact on AFMID to engage in gardening. 25% of the families say that it has a very big impact, 25% of the families say that has a moderate impact and 5% say that it has a slight impact. 15% of the families say it does not have an impact at all on AFMID to engage in gardening.
2. **REQUIRES EMOTIONAL AND MOTIVATIONAL SUPPORT:** 35% of the families that participated in the questionnaire (7 participants) say that requirement for emotional and motivational support has a very big impact on AFMID to engage in gardening. 30% families say it has an extremely big impact, 15 % say it has a moderate impact. 10% say it does not have an impact at all. 2 participants did not answer this particular feature.
3. **LACK OF MOTIVATION:** 30% of the families that participated in the questionnaire (6 participants) say that lack of motivation has a very big impact on AFMID to engage in gardening. 20% say it has a moderate impact and 15% say it has an extremely big impact. 10% say it has a slight impact and also 10% say it does not have an impact at all. 3 participants did not answer this particular feature.

4. LACK OF CONFIDENCE: 25% of the families that participated in the questionnaire (5 participants) say that lack of confidence has a moderate impact on AFMID to engage in gardening. 20% say that it has an extremely big impact, 15% say it has a very big impact and 10% say it has a slight impact. 15% say it does not have an impact at all. 3 participants did not answer this particular feature.
5. LACK OF TIME: 20% of the families that participated in the questionnaire (4 participants) say that lack of time does not have an impact at all on AFMID to engage in gardening. 20% say it has a moderate impact, 15% say it has a big impact and 10% say it has a slight impact. 10% say it has an extremely big impact. 5 participants did not answer this particular feature.
6. REQUIRE PRACTICAL SUPPORT FROM PARENTS/CARERS: 30% of the families that participated in the questionnaire (6 participants) say that requirement for practical support from parents has an extremely big impact on AFMID to engage in gardening. 30% say it has a very big impact, 10% say it has a moderate impact and 10% say it does not have an impact at all. 4 participants did not answer this particular feature.
7. RISKS RELATING TO USE OF TOOLS: 25% of the families that participated in the questionnaire (5 participants) say that the risk relating to use of tools has an extremely big impact on AFMID to engage in gardening. 20% say it has a very big impact, 10% say it has a slight impact and 10% say it does not have an impact at all. 5% say it has a moderate impact. 6 participants did not answer this particular feature.
8. LACK OF KNOWLEDGE/EXPERIENCE ABOUT HOW TO GARDEN (HOW TO GROW PLANTS, WHAT TO GROW AND WHEN): 30% of the families that participated in the questionnaire (6 participants) say that lack of knowledge has an extremely big impact on AFMID to engage in gardening. 30% say it has a very big impact, 10% say it does not have an impact at all. 5% say it has a slight impact and also 5% say it has a moderate impact. 4 participants did not answer this particular feature.
9. NO APPROPRIATE SPACE FOR A GARDEN: 35% of the families that participated in the questionnaire (7 participants) say that not having appropriate space for a garden has an extremely big impact on AFMID to engage in gardening. 15% say it has a big impact and also 15% say it does not have an impact at all. 5% say it has a moderate impact and 5% say it has a slight impact. 5 participants did not answer this particular feature.
10. NO MONEY TO BUY PLANTS OR OTHER RESOURCES (TOOLS, SEEDS, PLANTS ETC.): 30% of the families that participated in the questionnaire (6 participants) say that not having money to buy resources does not at all

impact AFMID to engage in gardening. 25% say it has an extremely big impact, 10% say it has a big impact and also 10% say it has a slight impact. 5 participants did not answer this particular feature.

11. NO ACCESS TO FACILITIES FOR BUYING PLANTS OR OTHER RESOURCES: 20% of the families that participated in the questionnaire say that not having access to facilities for buying resources has an extremely big impact on AFMID to engage in gardening. 20% say it does not have an impact at all, 10% say it has a big impact, 10% say it has a slight impact and 5% say it has a moderate impact. 7 participants did not answer this particular feature.

12. OTHER POTENTIAL ISSUES/BARRIERS: Nobody answered this feature.



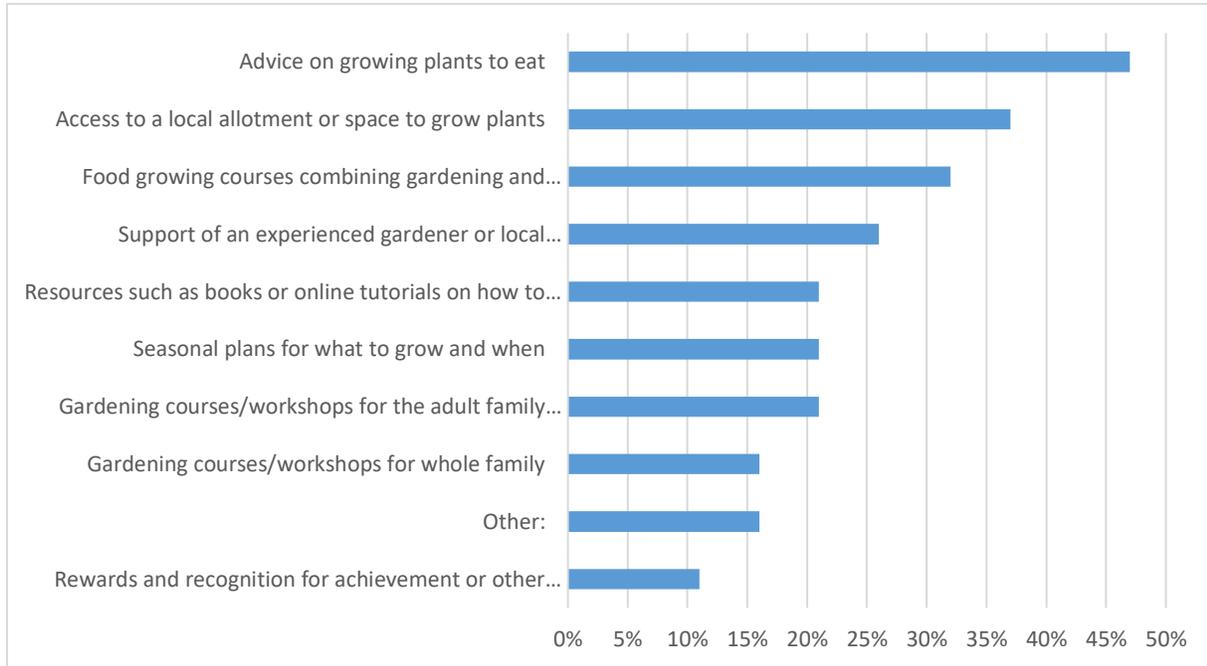
### What kinds of support would help your AFMID to engage in gardening? (n=19)

47% of the families that participated in the questionnaire (9 participants) say that advice on growing plants to eat would be a good support, 37% (7 participants) would need access to a local allotment or a space to grow plants in order to engage in gardening. 32% of the families that participated in the questionnaire (6 participants) say it would be helpful if they could take courses combining gardening, cookery and healthy eating. 26% (5 participants) say they would need support of an experienced gardener or a local gardening group in order to engage their AFMID in gardening. Three types of support were equally marked by 21% (4 participants) of the families that participated in the questionnaire:

1. Resources such as books or online tutorials on how to garden
2. Gardening courses/workshops for AFMID
3. Seasonal plans for what to grow and when

16% of the families that participated in the questionnaire (3 participants) say gardening courses/workshops for the whole family would help to engage AFMID in gardening. 11% (2 participants) say that rewards and recognition for achievement (or other motivational approaches) would help their AFMID to engage in gardening. 16% (3 participants) replied "other" and the answers were:

1. Not capable of working
2. It is rewarding to have your products that are good and healthy
3. We would love some ideas on how to motivate her for gardening



### Any other comments about family gardening for AFMID? (n=5)

Five answers were given:

1. Father does most of the gardening
2. To have the right and appropriate tools, so the person with disability does not get hurt
3. AFMID helps with all the chores on the farm
4. Appropriate for those who are able and have the opportunity

### Questionnaire Summary

According to the results, majority of the respondents have a garden or a place to grow plants. Most of them grow vegetables and herbs for their own consumption.

Majority of respondents believe that fresh air is beneficial when gardening. Other benefits of gardening are: increased physical activity, spending time outside; understanding where food comes from and improved mental health/wellbeing.

Main practical barriers that prevent AFMID and their family to be engaged in gardening are: no appropriate space for gardening; lack of interest in gardening; requirement for support (emotional and physical); and lack of knowledge about how to garden.

Majority of respondents say they could use some support in engaging their AFMID in gardening by receiving advice on growing edible plants. Other forms of support include access to a local allotment (garden); food growing courses combining gardening and cookery; and support of a local gardener or a gardening group.

## References:

Eko-socialna kmetija Korenika. Retrieved 17.10. 2019 from: <https://www.korenika.si/o-koreniki>

Ferrini, F. (2003). Horticultural therapy and its effect on people's health. *Advances in Horticultural Science*, 17(2), 77-87. Retrieved from <http://www.jstor.org/stable/42882222> (retrieved 9.10. 2019)

Slovenia.si. Beekeeping in Slovenia. Retrieved 17. 10. 2019 from: <http://www.slovenia.si/visit/trails/beekeeping-in-slovenia/>

VDC Tončke Hočevar. Retrieved 17.10. 2019 from: <http://www.vdc.si/wp-content/uploads/2016/08/Hortikultura-in-terapevtski-vrt.pdf>

VDC Zagorje ob Savi. Interesne, nadstandardne aktivnosti. Retrieved 18. 10. 2019 from: <http://vdc-zagorje.si/dejavnost/interesne-nadstandardne-aktivnosti/>

Vrt in narava. Retrieved 9.10. 2019 from: <https://www.vrtnarava.si/zelenjavni-vrt/pridelava-zelenjave>

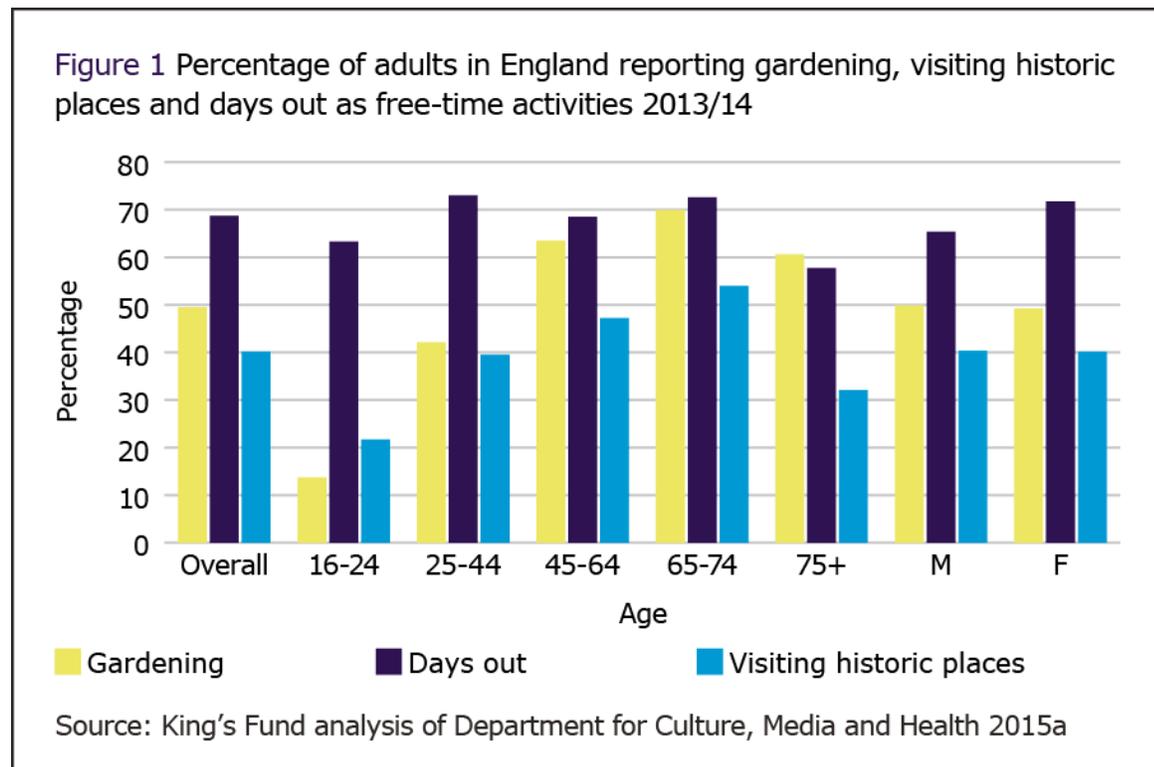
## 5 NATIONAL REPORT FOR UNITED KINGDOM

### Gardening in the UK

#### Who Gardens:

The latest statistics (from April 2013 to March 2014) on how adults use their free time (Department for Culture, Media and Sport 2015) show that half of adults (49.5 per cent) report gardening as a free-time activity, far less than watching television (90.4 per cent) but far more than playing a musical instrument (10.4 per cent). (David Buck, 2016).

This would seem to show that in the UK gardens are appreciated for their aesthetic qualities as well as being a place in which to grow vegetables. It is estimated that of this 40.9% of hobbyist gardeners 57% are female. Though this contradicts statistics taken from the Kings Fund survey of adults taken in 2015 (shown below) which females as being only marginally more active when in taking part in gardening activities.



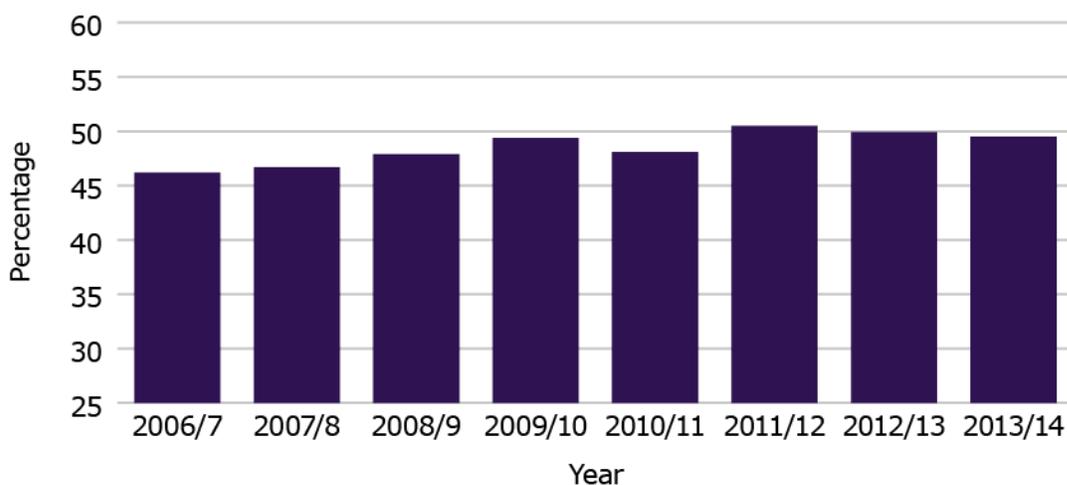
The above chart demonstrates that gardening while not being popular with those in a younger age bracket does start to be taken up as an activity when people reach their mid-20s. It may also be reasonably assumed that within the 25-44 year old age bracket it is those nearing 40 who are more likely to be taking up gardening as a past time once they are more comfortable in their financial and familial settings. Until then, as the younger generation are having children and settling down at an older age, they are going to work and looking after children so have little expendable time to be going out into the garden. Days out however may be easier to achieve.

As we get older, our relationship with gardens and gardening changes. Surveys suggest they become much more important to us as a source of physical activity, but also in terms of our identity and independence, and in ameliorating loneliness (David Buck, 2017)

Among 30 activities, gardening is ranked 12th overall in terms of prevalence among adults, but 7th for those aged 75 and over, and 8th and 9th respectively for those aged 65–74 and 45–64 (David Buck, 2017)

The above statements show that while gardening activity may decline in those aged 75 it is still an important and viable activity. It could also be said that generationally this age bracket may have grown up being taught gardening by their parents and the sights, smells and familiarity of some of the tasks can act as an important link to their pasts in later life. We can also add that those aged 75 and over do not have to be doing physical tasks to benefit from being outside and that even the vitamin D from the sun and access to natural air and a clean environment would be good for them in the long-term.

**Figure 2** Percentage of adults in England reporting gardening as a free-time activity 2006/7 to 2013/14



Source: King's Fund analysis of Department for Culture, Media and Sport 2015a



### Size and type:

Gardens are often thought of as intimate private spaces attached to private households, but they can also be large private or formal gardens open to the public, or part of hospitals, care homes or hospices (David Buck, 2016).

UK gardens are varied greatly in size by location and who owns the property. The average garden size is 14m<sup>2</sup>, the general trend shows that the younger the owner, the smaller the garden (Horticultural trade association, 2019). This is due to house prices increasing in recent years so younger people cannot afford to live in large homes. With a growing population, it is becoming harder to accommodate people. The “honeypot effect” attracts people to the cities where most jobs are located, and this has resulted in properties in urban areas becoming smaller with little or no garden space. However, some buildings have had innovative transformations to incorporate green space into the built environment with rooftop gardens, balcony plants and many potted plants (Wyevale garden centres, 2018).

The typical British garden is well kept, with mowed lawns and trimmed bushes. Many people view their gardens as a ‘fifth room’ and are used for entertainment purposes such as barbeques and garden parties. People want them to look nice without having to do too much work which has led to low maintenance plants and decorative feature sales increasing by 25% including patios, decking, evergreens and plants already grown to full maturity (Wyevale garden centres, 2018).

We see here how the aesthetic quality of the garden is of importance to a ‘typical’ household but there are more reasons for having a garden than just a space of land attached to the property that is pleasant to look at.

Parents value gardens as play and discovery spaces for their children, with just 2 per cent in a survey saying they would ‘swap a bigger house for no garden’, but increasing numbers of younger adults also want to grow food (David Buck, 2016)

This would imply that 98% of parents owning property with a garden value it for what it can offer their children and the connection their children can have with it and how it can help benefit their development.

For those who wish to have access to green space but do not have room where they live there is also the option of getting an allotment. These are traditionally vegetable growing plots in communal areas that also act as spaces for communities to congregate adding a more social side to gardening and growing plants.

An allotment is traditionally measured in rods (perches or poles), an old measurement dating back to Anglo-Saxon times. 10 poles are the accepted size of an allotment, the equivalent of 250 square metres or about the size of a doubles tennis court (The National Allotment society 2019).

### **Popularity of different kinds:**

The Oxford English Dictionary defines a garden as 'a piece of ground adjoining a house, used for growing flowers, fruits, or vegetables', or as a term that can represent 'ornamental grounds laid out for public enjoyment and recreation'. It is also an activity; one can become an active participant by working in a garden as a 'gardener' or by having 'gardened' (Oxford University Press 2016).

The definition of gardens and gardening differs widely in terms of scale, function and activity. Gardens are often thought of as intimate private spaces attached to private households but they can also be large private or formal gardens open to the public, or part of hospitals, care homes or hospices. Gardens can be cultivated for flowers or growing food, used as spaces for exercise, relaxation, solace and recovery, as places to play, meet and volunteer, and as one part of wider environmental, planning or sustainability policies. In short, gardens have many and varied functions – some individual, some community, some directed and some indirect or incidental (David Buck, 2016).

As the above demonstrates, gardening is a very broad term that can fit many definitions. Whether it be self-sustaining vegetable growing or a keenness maintenance work such as mowing and pruning roses. There is a lot of scope for all sorts of individuals to involve themselves with gardening or gardening projects and find an area to best fit their own individual interests. Though it is hard to assess where the most popular trends lie, I would hope this document would lead to an understanding of the breadth of trends available instead.

### **Gardening trends:**

It perhaps could be argued that in these uncertain political times many people have decided that getting out into nature and growing their own vegetables is exactly what they need to unburden themselves of stress and worry. While our landscape may be becoming more urban there is a certain 'fight back' from across the generations. Leading us to be perhaps more optimistic about the future of green spaces within the UK.

Gardeners' World reached almost three million viewers according to latest figures, but was replaced by sport twice in the last month, with snooker and football being seen by just one million viewers each (Horticultural week 2017)

Garden retail in the UK is worth over £5 billion (Wyevale garden centres, 2018).

In 2015 The Telegraph newspaper reported waiting lists of 100,000 for allotment spaces in the UK. This would again point to a renewed interest in gardening and self-sufficiency for food. With many people in the UK wishing to be involved in gardening.

Gardens can provide other important environmental functions, such as reducing flood risk and moderating climate and pollution, which have knock-on benefits for health (David Buck, 2016)

With global warming being a talking point amongst the younger generation, positive effects on the environment would be another reason to peruse greening our landscape. Lifestyle choice would also play a factor with many younger people turning their back on meat eating and looking for a more sustainable and animal friendly way of life.

82% Brits would like to attract more wildlife into their gardens- 37% deem wildlife to be most appealing garden feature (Wyevale garden centres, 2018)

At least 542,000 people in Britain are now following a vegan diet. This is a whopping increase since the last estimate of 150,000 ten years ago, making veganism one of Britain's fastest growing lifestyle movements. (The Vegan society 2019)

If the younger generations coming up are indeed consuming less meat it would also follow on that they have an invested interest in where their produce is coming from and it is within reason for them to want to play a part in its growing and making sure it is developed in a way that is ecologically friendly to the planet.

### **Gardening qualification:**

Gardening has also more recently found its way into the school system and proving itself to be of benefit to those in the classroom.

Well-designed studies of school gardening suggest that children's fruit and vegetable intake can be significantly increased combined with efforts to improve parental support; a further range of studies points to increased knowledge, and preferences for fruit and vegetables. Teachers report positive wellbeing effects, personal achievement and pride in 'growing' and, where volunteers are involved, gardening can be a way to break down social boundaries inherent in academic settings. For children with learning difficulties or behavioural problems, gardening as a non-academic task and the garden as a place of peace and meditation are particularly valuable (David Buck, 2016)

We see here how children and perhaps young adults are not just learning the fundamentals of growing and biology within nature but there is also the learning, hidden or otherwise, of how it is beneficial for their health.

Recent increase in 16-18-year olds looking to do horticulture courses at college. (Love the garden, 2019)

The RHS has also noted a year on year increase in numbers of those wishing to gain qualifications in horticultural studies. This could leave us to believe that individuals may want to garden, not just a hobby but find vocational use for their skills within the field. So instead of doing jobs that would mean being confined to a desk or working in a large building in the city many may want to be outdoors and benefiting from green spaces around them.

This is also true of those with learning disabilities or mental health issues for whom gardening, in the right environment, may have less stress attached or be more achievable with less reliance on dealing with the public or having to have a demand for high cerebral capability.

### **Cultural differences:**

What is demonstrated in the above is that the UK is a nation of gardeners. Green spaces are valued despite being less easy to access in some areas. An aerial view of London would make it apparent that parks or an area of grass/nature should be within a short distance of most homes. London was ranked the 5<sup>th</sup> most green city in the UK with Edinburgh being the top most green space per capita in the main 10 cities in the UK.

Social prescribing is also being seen as a valid alternative for dealing with those with mental health needs and create meaningful work for those in need.

The NHS is increasingly using social prescribing and community referral schemes to refer patients to a range of local non-clinical services and support in local communities, in the knowledge that much of what determines and supports our health is rooted in social and economic factors. There are an increasing number of community garden schemes – for example, the Lambeth GP Food Co-op covers 11 practices in south London, where patients with long-term conditions work together to grow food, which is sold to King's College Hospital, enabling one set of patients to provide food for others. Other examples include 'reciprocal' gardening schemes, which connect isolated older people with untended gardens with those who have no garden but want to garden and grow things. These have been shown to lead to improvements in self-rated health, mobility and independence, with indications of savings to the NHS (David Buck, 2016).

There is also an economic benefit involved as the hope would be to benefit users of the garden and improve physical fitness, to name but two goals, without resorting to medication or gym memberships, both costing more financially. Gardens are being used across a broad range of practises and social prescribing seems to be gaining momentum within the UK. With the total cost of mental health problems in England estimated at around £105.2 billion, gardening or nature-based intervention is being viewed as a way of trying to take some of the strain of the medical community.

### **Learning disabilities and lifelong learning within gardening (STH):**

Within these chapters I would like to explore the breadth and popularity of Social Therapeutic Horticulture (STH) programmes within the UK and get a better idea of what their functions are and how they operate to benefit those with learning disabilities and equip them with lifelong learning to enable them to have meaningful occupation and gain a better level of independence for their future. When writing about STH programmes Joe Sempik observes:

The first recorded project, which is still active, was founded in 1913 in Ayrshire, Scotland, and four have been active since before 1955. From 1986 onwards there was a sharp rise in the number of projects being started that reached its peak in 2002 with 58 new projects that year (Joe Sempik, Jo Aldridge and Saul Becker 2005).

It was estimated in 2005 that there was a total of 836 STH projects running in the UK.

Although the distribution of projects throughout the UK is not uniform, they are to be found in every region (Joe Sempik, Jo Aldridge and Saul Becker 2005).

These numbers are significant when considering that people with learning disabilities make up 48.7% of the overall client groups using STH. It is also worth noting that of the organisations and institutions connected with STH projects Colleges make up 11.8% of the overall intake. If you were to combine colleges, community centres, schools, garden centres and specialist schools, in other words, places that may have the most connection to those with learning disabilities or would have a stake in promoting further learning you are looking at 24.4% of organisations connected with STH within the UK.

The goals that would be beneficial to be achieved at these institutions was outlined in a government policy briefing paper outlined in 2018. It was proposed within this that there were two areas that the government wanted to make progress with within the Learning disability community. These were:

Paths to employment/ increase in occupation and increased levels of independence

These goals would aim to facilitate all those within a broad range of learning disabilities and allow for people with learning disabilities to become more prevalent within society. The main aim is for those with learning disabilities to be less reliant on the care systems they are part of or family and start building towards self-sufficiency on whatever level is most appropriate for any individual and for the more capable, gainful employment.

Cowden (1969) gives a brief description of an ad hoc work program set up for 19 patients with learning disabilities. A shortage of workers on the local tomato harvest led to a small group of the patients being selected for a short period (20, four hour days) of paid employment. The productivity of the patients was lower than that of the workers but they were better at selecting usable fruit and all the fruit picked by the patients passed selection. The activity led to an improvement in the patients' colour discrimination and co-ordination. The act of earning money created a feeling of accomplishment and increased self-esteem. They were able to demonstrate promptness by meeting their bus and "good work habits when they cleaned their bus each evening" (Joe Sempik, Jo Aldridge and Saul Becker 2005).

We see here of a case of an STH project working with people with learning disabilities and how it succeeds in providing a pathway to paid work. It also

allows for lifelong learning to take place in that they were able practice timekeeping and care for their equipment as well as the benefits such as improved co-ordination and sense of accomplishment. It's worth noting the holistic nature of STH also in that all these goals are being achieved in the boundaries of one activity rather than a range of tasks being set. So, with a social prescribing becoming more of a norm within the UK and a government focusing on independence and employment as goals for those with learning disabilities, STH can provide a useful and cost effective resource for the future.

## References

- Buck, D. (2016) gardens and health Implications for policy and practice [Online], the king's fund. Available at [https://www.kingsfund.org.uk/sites/default/files/field/field\\_publication\\_file/Gardens\\_and\\_health.pdf](https://www.kingsfund.org.uk/sites/default/files/field/field_publication_file/Gardens_and_health.pdf) (18/07/2019)
- The horticultural trade association (2019) Garden consumers [Online]. Available at <https://hta.org.uk/learn-develop/market-information/garden-consumers.html> (18/07/2019)
- The Horticultural trade association (2019) garden statistics [Online], Available at <https://hta.org.uk/learn-develop/market-information/garden-statistics.html> (18/07/2019)
- Love the garden (2019) Gardening popularity- is it growing or declining [Online]. Available at <https://www.lovethegarden.com/uk-en/article/gardening-popularity-it-growing-or-declining> (18/07/2018)
- The negotiator (2019) What is the right garden size? [Online]. Available at <https://thenegotiator.co.uk/homes-and-gardens/> (19/07/2019)
- Wyevale garden centres (2018) Garden trends report [Online], Wyevale, Publisher. Available at <https://www.gardenforum.co.uk/media/articles/WGC%20Garden%20Trends%20Report%202018.pdf> (18/07/2019)

## Questionnaire Analysis

The questionnaire was divided into two parts; the first part consisted of some general information about the family and the second part consisted of questions relating to gardening and to the opportunities and barriers to gardening in a family setting

We wanted to discover how many families have a garden or a space to grow plants. We also wanted to know what size it is, and how they use the space (what do they grow, who gardens, etc.)

We also wanted to discover what respondents think are the benefits of gardening for adults with learning disabilities might be . We also wanted to know what kind of support would help adults with learning disabilities and their families get involve in gardening and maximise the lifelong learning and wellbeing potential of therapeutic gardening as an intervention.

21 families responded to the survey. Two of the forms where completed by the adult family member with learning disabilities, the remainder where completed by parents or carers

### Questions about the family

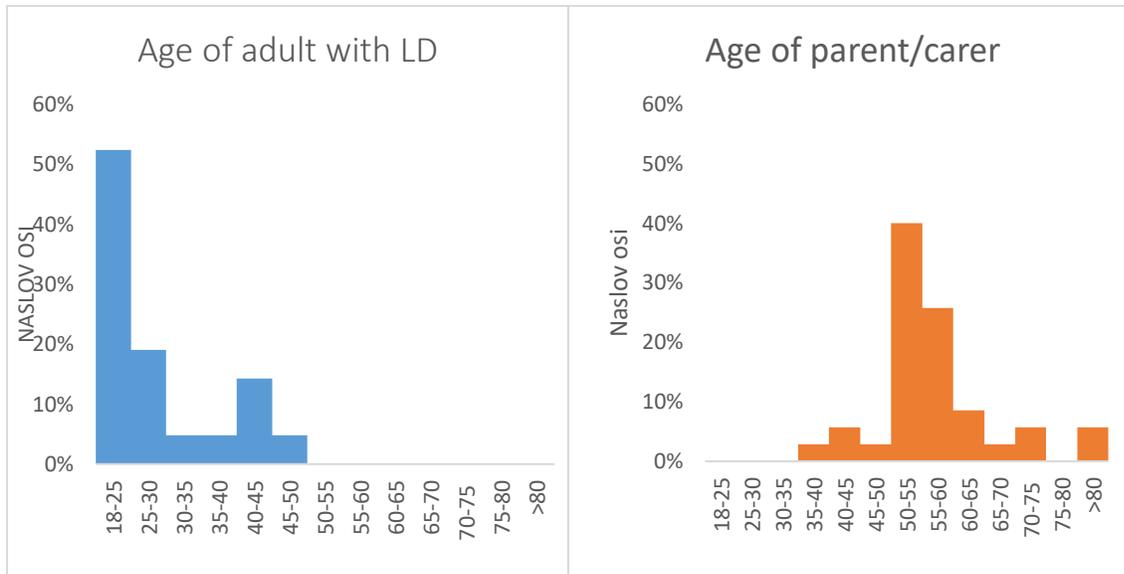
#### 1. Age and gender of key family

members

	Adult with LD	Parent/carer
male	57%	48%
female	43%	52%

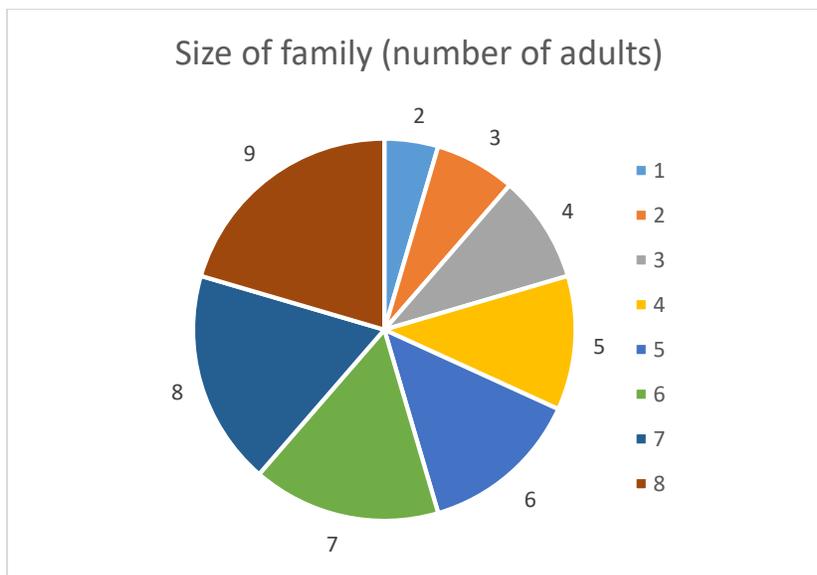
	Adult with LD	Parent/carer
1 - Age		
min	18	40
max	47	83
ave	29	58

There were slightly more adults with LD who were male than female, but parents/carers were roughly equally represented. The average age of AFMID were 29 but ages ranged from 18-47, with the majority being under 30 but 14% in the 40-45-year-old category. The average age of parents/carers was 58 and the majority were aged 50-65 but a significant number (12% were over 70)



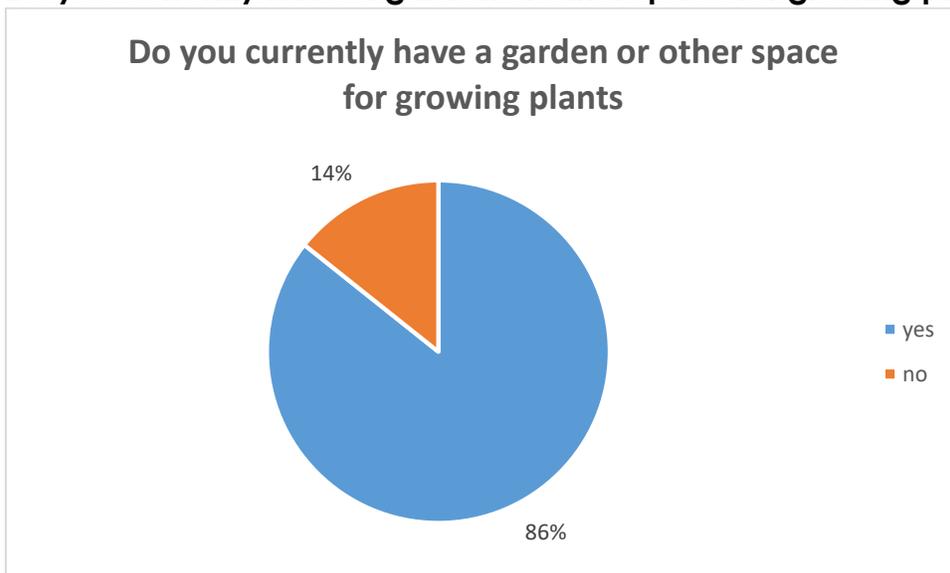
2. How many other family members (adults and children under 18)?
3. How many have LD?

Family size varied from 2 to 9 adult members. Four of the families had children (under the age of 18) Only two families had additional children with learning disabilities.



## Questions about gardening

### 4. Do you currently have a garden or other space for growing plants?



86% of respondents said that they had a garden or space for growing plants

#### a. If yes, please tell us a little about your garden, what do you grow? What size is it? Who does most of the gardening?

6 of the families reported that they had a big garden, 2 said theirs was small and 2 said they had an average size family garden. 1 also had an allotment. 2 of the families mentioned that they found the gardening challenging.

Many of the families grow fruit (fruit trees or fruit bushes). 6 of the families are currently growing vegetables and two others mentioned that they have in the past or would like to.

#### Comments:

- Garden at home and allotment. Mature fruit trees. Soft fruit. Vegetables.
- Small mostly grass. Small plum tree. Pampas grass in border and then hedges of hawthorn and beech. Snowdrops under the hedges and daffs in the lawn. We got rid of apple, cherry and pear trees due to MS and eyesight loss issue. Carer cuts the lawn and does pruning.
- Big, tomatoes, cucumbers, chillies, peppers,
- Small garden - soft fruit, salad, tomatoes, Jerusalem artichokes Parents
- Shrubs mainly and lawn. Dad does most of the gardening
- Quite large for a suburban garden. Mostly grass & flowerbeds. Dad does most of gardening.
- grows vegetables and plants

- It is very small and does not get much sunlight. I do the gardening
- Average size family garden. Mum does most of gardening. Flowers and shrubs but have grown vegetables in past. Would love raised vegetables bed for son to grow vegetables in
- Family garden with pond
- We have a three quarters of an acre gardening which I want to develop so that people with learning difficulties, and other vulnerable or lonely people can access and learn and form a community with year round activities based around cooking gardening and art. It has a small orchard area, a natural pond and a vegetable garden and greenhouse. We grow fruit including mulberries, plums, apples, currants as well as a wide range of flowers and vegetables. I do as much gardening as I can but it is difficult as I am also fighting to get my daughters wish to return home fulfilled. And sorting out a court case against the local authority is expensive and time consuming.
- 1930 property garden 100 feet x 80 feet. old apple trees a lot of berry plants strawberry blackberries raspberries gooseberries, veg plot not used, greenhouse with grape vine and growing tomatoes, a lot of uncultivated areas with wild flowers, plus hedgehogs. Old Anderson air raid shelter in middle .hanging baskets and pots with herbs. My son also has access to daughters garden as she lives at bottom of our garden...she has a pond . All gardening is a combined family effort. Currently working on helping daughter find her garden after years of neglect as just moved in but we only help when asked.
- Mum does most of the gardening. Mum grows vegetables. It is a big garden which needs a lot of work.

**5. What do you think are the benefits of gardening for adults with learning disabilities? (please select all that apply)**

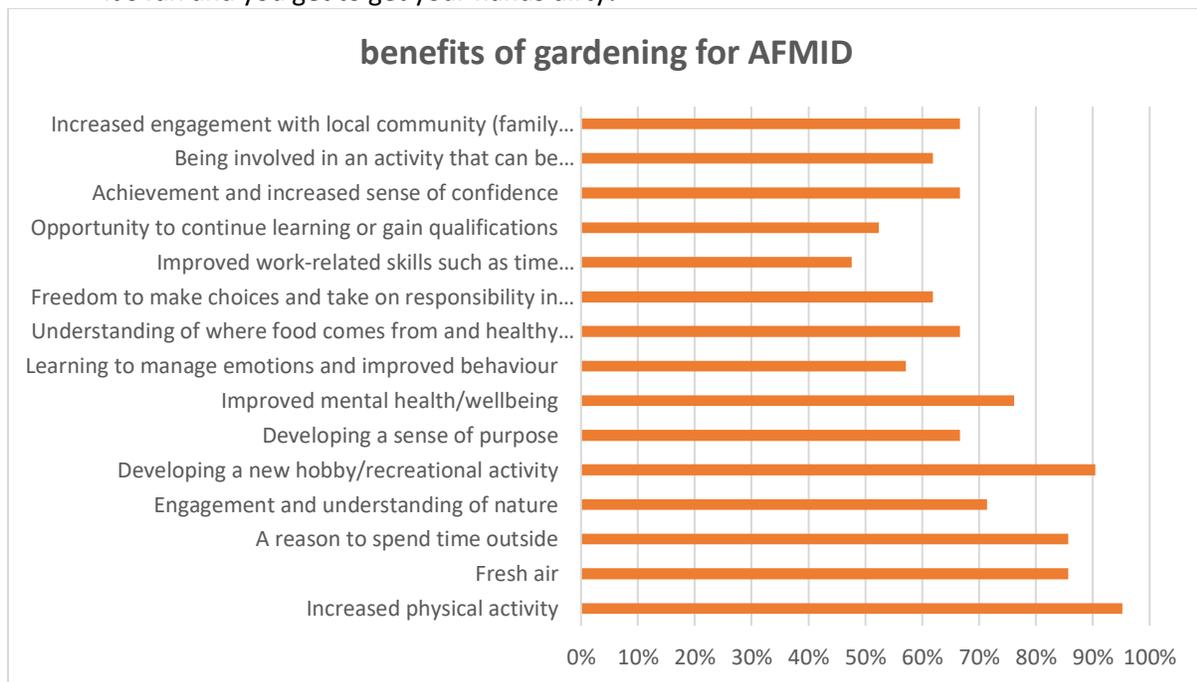
The main benefits reported by families relate to being outside and physically active. In particular, gardening was seen as a reason to spend time outside. Families also recognised the benefits to health and wellbeing as well as an understanding of dietary choices, increasing confidence and engagement with the family or wider society. Only ½ of the families thought that work skills and learning/qualifications were important benefits (this may be because of the level of impairment of the adults with LD, i.e. that they were unlikely to be able to enter work).

Increased physical activity	95%
Developing a new hobby/recreational activity	90%
Fresh air	86%
A reason to spend time outside	86%
Improved mental health/wellbeing	76%

Engagement and understanding of nature	71%
Developing a sense of purpose	67%
Understanding of where food comes from and healthy dietary choices	67%
Achievement and increased sense of confidence	67%
Increased engagement with local community (family or wider society)	67%
Freedom to make choices and take on responsibility in a safe, low risk environment	62%
Being involved in an activity that can be shared/discussed with others	62%
Learning to manage emotions and improved behaviour	57%
Opportunity to continue learning or gain qualifications	52%
Improved work-related skills such as time management, task planning etc.	48%
Other (please specify)	5%

Other:

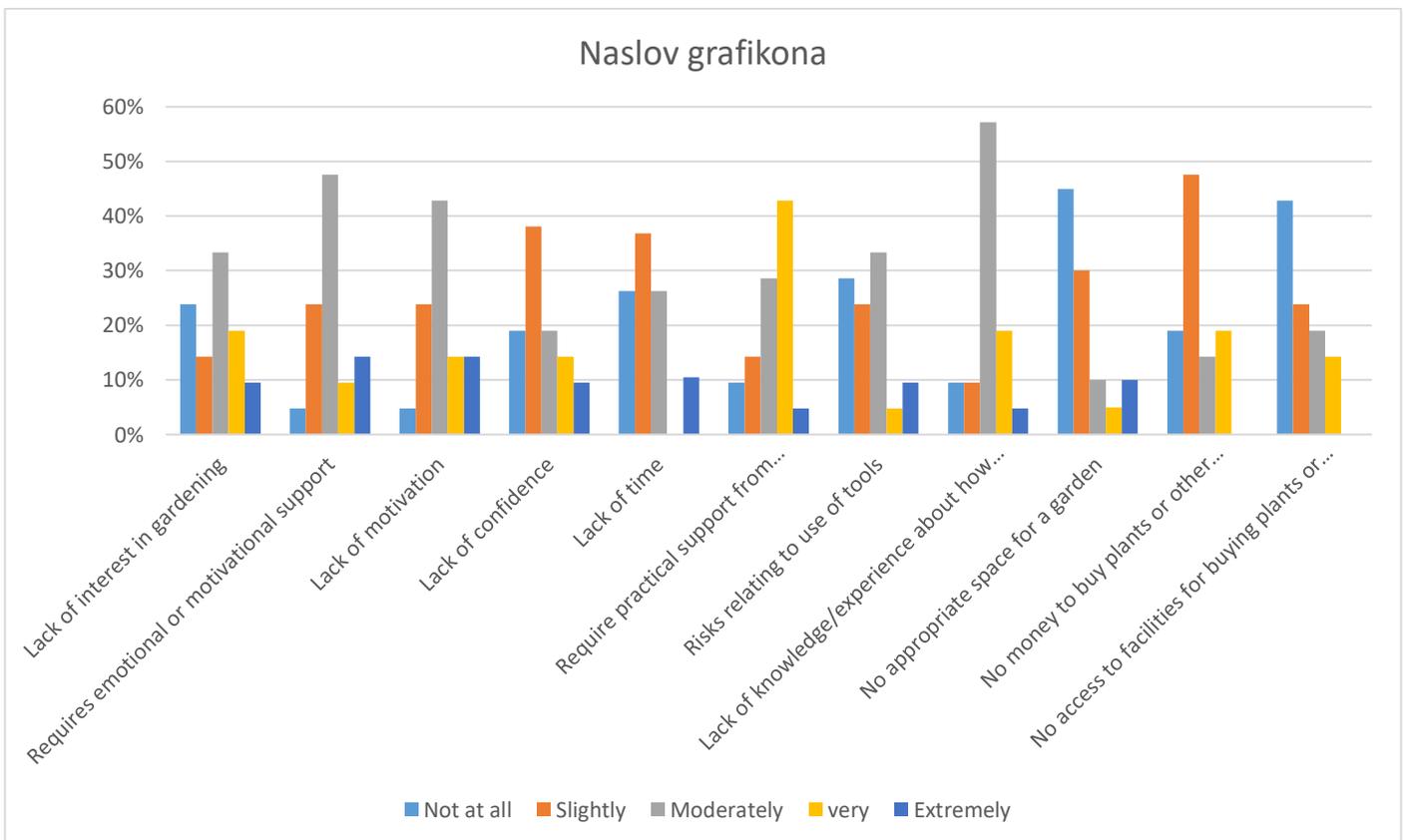
- It's fun and you get to get your hands dirty!



**6. What are the practical barriers to gardening at home? Please indicate how much of an impact the following factors have on the opportunities for your adult family member with learning disabilities to engage in gardening with your family**

	Not at all	Slightly	Moderately	very	Extremely
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Lack of interest in gardening	24%	14%	33%	19%	10%
Requires emotional or motivational support	5%	24%	48%	10%	14%
Lack of motivation	5%	24%	43%	14%	14%
Lack of confidence	19%	38%	19%	14%	10%
Lack of time	26%	37%	26%	0%	11%
Require practical support from parents/carers	10%	14%	29%	43%	5%
Risks relating to use of tools	29%	24%	33%	5%	10%
Lack of knowledge/experience about how to garden (how to grow plants, what to grow and when)	10%	10%	57%	19%	5%
No appropriate space for a garden	45%	30%	10%	5%	10%
No money to buy plants or other resources (tools, seeds, plants etc.)	19%	48%	14%	19%	0%
No access to facilities for buying plants or other resources	43%	24%	19%	14%	0%

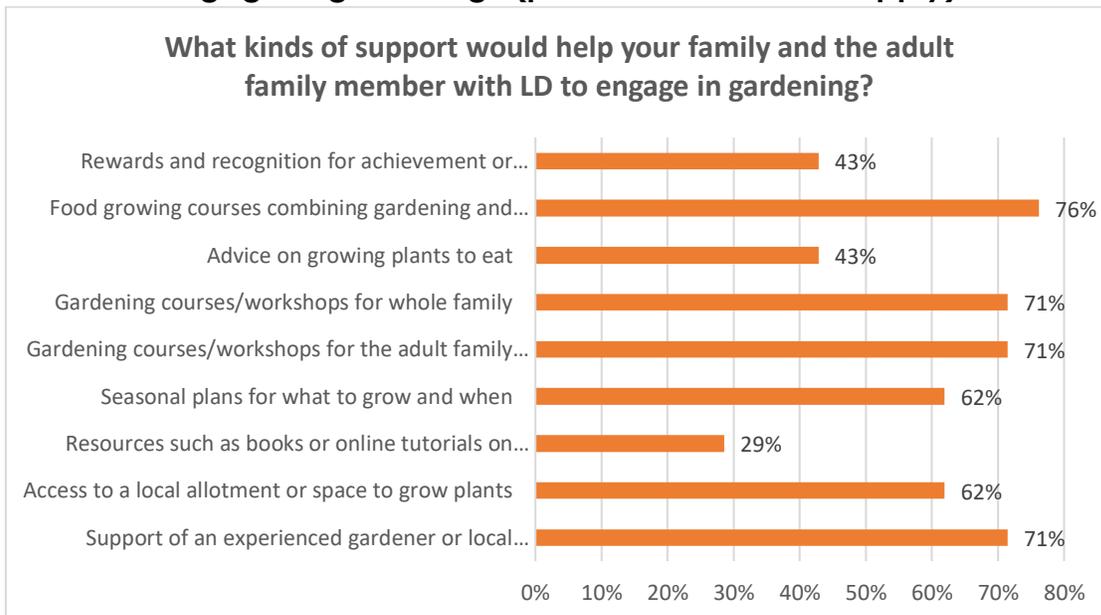


- Respondents didn't seem to think that lack of interest in gardening would be a major barrier to gardening and nearly a quarter thought it would have no impact. The majority though it would have a moderate impact.
- The need for emotional or motivational support was seen to be mainly a slight or moderate barrier
- Most respondents reported that they had access to space for garden, facilities for buying materials and money to buy plants
- Lack of time, confidence and risks relating to tool use were slight barriers
- Major barriers were the need for practical support from carers/parents and Lack of knowledge/experience about how to garden (how to grow plants, what to grow and when)

#### Other barriers

- Living 43 miles away and only being able to come home once a week
- Not enough good supportive gardening sessions with different providers or opportunities to do horticulture courses in the local area.

### 7. What kinds of support would help your family and the adult family member with LD to engage in gardening? (please select all that apply)



The most popular kind of support were courses, on food growing combining gardening and cookery (76%) or course for adults with LD on gardening (with or without the family, 71% each). Support of an experienced gardener or community gardening group were also seen as important (71%).

The least useful support was seen to be resources such as books or online tutorials (only 29% though this would be helpful) and advice or recognition for achievement were seen as useful by less than 50% of respondents.

## 8. Any other comments about family gardening for adults with learning disabilities?

- The facilities available for adults with learning disabilities is so patchy across the country. Also, adults who attended main stream schools miss out on information about what is available locally and therefore miss out on opportunities.
- I am involved in running a community gardening project with the University of Cambridge Botanic Garden as a volunteer for the last four years. However I am a qualified Garden Designer with over 30 years of gardening experience. It is becoming a successful project where some of the residents we work with tell us that they are gaining more confidence in their abilities and really enjoy the experience of community gardening. Cooking is becoming an important factor as it enables them to see how to use the herbs and vegetables to easily make healthy meals. I would like to do this as a separate project using my own garden with a different client group.
- The idea of supporting a family unit in promoting cooking and gardening skills is good. I can admit that we have good intentions at home but family life often gets in the way so you start a project is growing from seed or planting veg plot and sustaining it is often the problem. Any independent skills learnt for the future is a good idea and filling in this questionnaire makes us consider what we are doing right and wrong at home.
- I would like my autistic daughter to be included in gardening projects in her local area and beyond as she can find she is ignored and not treated well sometimes by other people in the community

## Questionnaire Summary

The majority of respondents have space for growing plants. Several mentioned that they had large gardens and that they found the garden challenging. Many grow fruit (on fruit trees or bushes), possibly because this is a low maintenance way of growing edible crops with minimal time and effort. Many are already growing vegetables and other have grown them in the past or would like to,

The main benefits of gardening relate to having a reason and motivation to be outside and physically active. Families also recognised the general benefits to health and wellbeing of being engaged with nature but understanding dietary choices and increasing confidence and engagement with the wider society were also seen as important. Gaining qualifications or work skills were seen as less

important possibly because the level of impairment of the adults in the study means that these are not relevant goals.

The major barriers that respondent identified were the need for practical support from parents/carers and the lack of knowledge and experience about how to garden (how to grow plants, what to grow and when). Most had space for gardening and access to materials and finances to buy resources.

The most popular forms of support were courses, either on food growing or on general gardening and respondents were equally interested in course just for AFMID or for courses also including families. Support of an experienced gardener or community gardening group were also seen as important.

The least useful forms of support were seen to be resources such as books or online tutorials and general advice or recognition for achievement.

## 6 Synthesis of Questionnaire results

### 1. Age and gender of key family members

	Adult with LD	Parent/carer
Croatia	33	59
Italy	32	56
Slovenia	38	62
UK	29	58

The demographics of the families with AFMID who were surveyed were very similar across the four countries. In general the AFMID is in their early thirties and the parent/carer in their late 50, early 60s.

### 2. How many other family members (adults and children under 18)?

### 3. How many have LD?

In all countries the majority of families only had one family member with learning disabilities. Only Slovenia reported more than one family member (2 families) with one family having 4 members with learning disabilities

	Family members with ID
Croatia	1
Italy	1
Slovenia	18(1) 2(2) 1 (4)
UK	1

This suggests that in most cases the AFMID will be the only individual with ID in the family and those parents and carers will not have ID themselves.

#### 4. Do you currently have a garden or other space for growing plants?

	Garden	No garden/ space		
Croatia	67%	33%	Small/medium gardens 1 large	Lots of Vegetables, fruit trees, some flowers
Italy	14%	86%	Terraces/balconies	Vegetables, aromatic plants (herbs)
Slovenia	65%	35%	Small/ medium 1 farm,2 large	Primarily vegetables, herbs some flowers
UK	86%	14%	Majority have big Rest small to medium, one has allotment	Many grow fruit Most vegetables (although some used to but not now, health issues/time – grass and flowers)

**5. What do you think are the benefits of gardening for adults with learning disabilities?  
 (please select all that apply)**

	Cr	IT	SL	UK
Increased physical activity	76%	82%	86%	95%
Developing a new hobby/recreational activity	57%	95%	45%	90%
Fresh air	90%	91%	95%	86%
A reason to spend time outside	57%	73%	77%	86%
Improved mental health/wellbeing	33%	95%	68%	76%
Engagement and understanding of nature	85%	36%	59%	71%
Developing a sense of purpose	29%	27%	59%	67%
Understanding of where food comes from and healthy dietary choices	52%	73%	82%	67%
Achievement and increased sense of confidence	24%	91%	55%	67%
Increased engagement with local community (family or wider society)	3%	50%	50%	67%
Freedom to make choices and take on responsibility in a safe, low risk environment	19%	9%	50%	62%
Being involved in an activity that can be shared/discussed with others	38%	23%	45%	62%
Learning to manage emotions and improved behaviour	24%	36%	41%	57%
Opportunity to continue learning or gain qualifications	14%	82%	41%	52%
Improved work-related skills such as time management, task planning etc.	29%	32%	50%	48%
Other (please specify)	1.5%	5%	9%	5%
	90%		9%	

Key benefits across all countries were seen to be increase physical activity, fresh air and a reason to be outside. Gardening was also thought to improve mental health and wellbeing. In Italy, learning/qualification and achievement and increased confidence were seen to be important benefits, but not in the other three countries. In Croatia and the UK, engagement and understanding nature were seen as important benefits but less so in the other two countries. In Italy and the UK, developing a new hobby/recreational activity was seen as an important benefit, but less so in Croatia or Slovenia.

This maybe because gardening is seen as a more practical activity in the latter two countries but as more of a recreational activity in the former two?

**6. What are the practical barriers to gardening at home? Please indicate how much of an impact the following factors have on the opportunities for your adult family member with learning disabilities to engage in gardening with your family**

	Croatia	Italy	Slovenia	UK
Lack of interest in gardening	x		x	
Requires emotional or motivational support	x	x	x	x
Lack of motivation		x	2	x
Lack of confidence		x	2	2
Lack of time		x		2
Require practical support from parents/carers	x	x	x	x
Risks relating to use of tools	x		2	
Lack of knowledge/experience about how to garden (how to grow plants, what to grow and when)	x	2	x	x
No appropriate space for a garden		2	x	
No money to buy plants or other resources (tools, seeds, plants etc.)		2	2	
No access to facilities for buying plants or other resources				

The main barriers to gardening in all country are the need for emotional, motivational and practical support for the AFMID to garden. This may be even more of a barrier if the parent/carer has limited time e.g. If they are working or where parents/carers are elderly. Lack of knowledge and experience about how to garden was also a barrier (knowing what to do when and how). Although there are plenty of gardening books and online material which advise on seasonal tasks, we have not yet discovered any in

easy read format designed for adults with LD (although there are cookery books written in easy read format). This may also be a way to motivate and engage the AFMID in gardening.

Size & availability of gardens may also be a barrier in some cases. Slovenia and Italy reported a lack of space while several UK respondents mentioned that their gardens are too big for them to maintain or require too much work is an issue

## 7. What kinds of support would help your family and the adult family member with LD to engage in gardening? (please select all that apply)

	Croatia	Italy	Slovenia	UK	overall	Rating*
Support of an experienced gardener or local community gardening group	9%	91%	26%	71%	49%	4
Access to a local allotment or space to grow plants	29%	86%	37%	62%	54%	4.5
Resources such as books or online tutorials on how to garden	29%	86%	21%	29%	41%	3
Seasonal plans for what to grow and when	14%	86%	21%	63%	46%	3
Gardening course/workshops for AFMID	24%	91%	21%	71%	52%	4
Gardening courses/workshops for whole family	5%	82%	16%	71%	44%	2.5
Advice on growing plants to eat	52%	64%	47%	43%	52%	3
Food growing courses combining gardening and cookery (healthy eating)	29%	23%	32%	76%	40%	2.5
Rewards and recognition for achievement of other motivational approaches	52%	5%	11%	43%	28%	1.5
Other			16%			

- Rating highest choices as 1.5 (green) and second choices as 1 (orange)
- 

There was less consensus across countries on the preferred for of support that would help the family and AFMID to engage in gardening. Rewards, recognition of achievement and other motivational approaches were seen as least useful overall, although this was the joint first preference for Croatia, along with advice on growing plants to eat, which was also the highest preference for Slovenia. Access to space was seen as a key support need, along with support of an experienced gardener or group and gardening courses for the AFMID. Family gardening groups and combined cookery and gardening courses were seen as less essential. Seasonal plans for what to

grow and advice for growing plants to eat were seen as moderately useful along with the need for other resources such as books or tutorials.

## 7 Conclusion

The national reports and results from the questionnaires show a generally similar situation in all of the participating countries. There may be some national differences in the availability of space for gardens and primary motivations, barriers and support approaches which should be borne in mind in the design of future methodologies and resources.

The majority of respondents believe that gardening would be a useful occupation for adults with ID particularly in terms of improving physical and mental wellbeing as a result of spending more time outside in the fresh air and engaged with nature, and that growing food to eat would be a good motivation to encourage this. The main barriers to this are the need of the AFMID for emotional, motivational and practical support and the limited time, energy and knowledge/experience of parents and carers to provide this.

The next stages of the project will involve developing a methodology and supporting resources to support gardening and cookery at home or close to home for adults with intellectual disabilities, their families and local educators.