

Ekolojik Aktivizm Olarak Hortikültürel Terapi Uygulaması

Horticultural Therapy Practice as Ecological Activism

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ÖZ

Bu makale, hortikültürel terapi ile ekolojik aktivizm arasındaki ilişkiyi incelemeyi amaçlamaktadır. Mevcut literatür, kütüphane araştırması yöntemiyle kapsamlı bir şekilde değerlendirilmiştir. Çalışmada, hortikültürel terapinin ekolojik aktivizmin bir aracı olarak, bireylerin çevresel farkındalıklarını artırırken ruhsal ve fiziksel sağlıklarını iyileştirme potansiyeline sahip olduğu vurgulanmıştır. Çevresel sorunlar ve sürdürülebilirlik hedefleriyle şekillenen 21. yüzyıl dünyasında, ekolojik aktivizm, bireyleri çevre dostu davranışlar konusunda bilinçlendirmeyi amaçlarken, aynı zamanda onların var olan iyilik hallerinin geliştirilmesine de katkı sağlamaktadır. Hortikültürel terapi, doğayla iç içe olma ve bitkilerle etkileşim yoluyla yaşam kalitesini artırırken, ekolojik farkındalık ve sürdürülebilirlik bilincini geliştirmekte, bireylere ekosistemleri anlamaları ve sürdürülebilir yaşam biçimlerini benimsemeleri için fırsat sunmaktadır. Farklı alanlarda uygulanan hortikültürel terapi, çevreye duyarlı bireylerin yetişmesini teşvik etmektedir. Gelecek çalışmalar, hortikültürel terapinin farklı yaş grupları ve topluluklar üzerindeki etkilerinin incelenmesine, uzun dönemli etkilerinin araştırılmasına odaklanabilir. Ayrıca, toplum bahçelerinde gerçekleştirilen uygulamaların ekolojik aktivizm bağlamında değerlendirilmesi, hortikültürel terapinin daha geniş kitlelere ulaşmasının ve ekolojik aktivizmle bağlantılı toplumsal faydalarının daha derinlemesine anlaşılmasının sağlanması yararlı olabilir.

Anahtar Kelimeler: Çevresel farkındalık, ekolojik aktivizm, ekolojik bilinç, hortikültürel terapi

ABSTRACT

This article aims to explore the relationship between horticultural therapy and ecological activism. The existing literature has been thoroughly reviewed through a library research method. The study highlights that horticultural therapy, as a tool of ecological activism, has the potential to enhance individuals' environmental awareness while improving their mental and physical health. In the 21st century, shaped by environmental issues and sustainability goals, ecological activism seeks to raise awareness about eco-friendly behaviors while also contributing to the improvement of individuals' overall well-being. Horticultural therapy enhances quality of life through interaction with plants and immersion in nature, while fostering ecological awareness and sustainability consciousness. It offers individuals the opportunity to understand ecosystems and adopt sustainable lifestyles. Horticultural therapy, applied in various fields, encourages the development of environmentally conscious individuals. Future research could focus on examining the effects of horticultural therapy on different age groups and communities, as well as investigating its long-term impacts. Additionally, evaluating the applications in community gardens within the context of ecological activism could be beneficial in understanding how horticultural therapy can reach a wider audience and how its societal benefits related to ecological activism can be more deeply understood.

Keywords: Environmental awareness, ecological activism, ecological consciousness, horticultural therapy

Introduction

The 21st century represents a period in which environmental issues are deepening, and the concept of sustainability is gaining increasing importance. Crises such as global warming, the climate crisis, biodiversity loss, deforestation, and water scarcity have led to the emergence of various activist movements aimed at increasing ecological awareness and strengthening efforts to protect the environment. In this context, ecological activism seeks to raise awareness among individuals and communities about environmental issues and to contribute to the protection of nature through environmentally friendly practices. However, the effects of ecological activism on individuals are not limited to environmental awareness; it also positively impacts their mental and physical health. In this regard, horticultural therapy, a practice that has gained attention in recent years and can be considered a part of ecological activism, has emerged. Horticultural therapy is a therapeutic method aimed at improving individuals' mental health and overall quality of life through interaction with plants and immersion in nature (Barut & Kara, 2020; Gonzalez, 2010). Gardening activities offer individuals the opportunity to connect with nature while also providing practical experiences related to ecological sustainability. Horticultural therapy, applied in various areas such as community gardens, rehabilitation centers, and school programs, transforms individuals' perspectives on nature and encourages them to adopt a more environmentally conscious way of life. This article aims to examine horticultural therapy not only as a mental health and rehabilitation tool but also as a form of ecological activism. It is known that ecological activism increases individual and societal awareness through interaction with nature. In this sense, horticultural therapy promotes environmentally conscious practices while offering individuals the opportunity to be a part of ecological activism. Through practices such as gardening, plant cultivation, and developing an understanding of ecosystems, individuals strengthen their connection to nature and can take concrete steps towards environmental protection. In the following sections of the article, the role of horticultural therapy in the context of ecological activism will be addressed, and examples will illustrate how this practice enhances individuals' ecological awareness, encourages community participation, and supports sustainable living practices. A deeper examination of the critical role horticultural therapy plays within the framework of ecological sustainability and its impact on individuals and society aims to provide a new perspective on considering this practice as a tool for ecological activism.

Method

Research Model/Design

In this review article, the connections between horticultural therapy and ecological activism have been examined through a comprehensive library research approach. Library research refers to the systematic review and use of library resources to gather information on a specific topic (Sümbüloğlu & Sümbüloğlu, 2019). This process involves obtaining information from various sources such as books, journals, articles, theses, reports, and archival documents. Library research is a widely used method in both academic and professional contexts. It is a critical step in academic writing, thesis work, and professional projects to gather necessary information and data. The careful selection and evaluation of sources during the information gathering process enhance the quality and reliability of the research.

Data Collection and Analysis

The databases used for the literature review are crucial in determining the scope of the research. In this study, the literature review was conducted using specific databases and keywords, with a focus on studies published within certain time intervals. PubMed was used as a comprehensive resource for research on health sciences and therapeutic approaches. Scopus, as a multidisciplinary database, provided access to significant works in the fields of social sciences and environmental research. Web of Science offered the opportunity to explore scientific literature by providing access to high-quality and reliable journals, while PsycINFO served as a valuable resource offering in-depth information in the fields of psychology and social sciences. Finally, Google Scholar enabled a broad literature search, providing access to a wide range of academic publications.

During the literature review, keywords and search terms such as "horticultural therapy," "ecological activism," "connection with nature," "environmental awareness," and "mental health" were used. These keywords were designed to address research questions by focusing on both general and specific topics. Combinations of these keywords were particularly used to provide information from specific perspectives. The literature review focused on studies published from the year 2000 to the present. This time frame was chosen to cover both classical and modern approaches, aiming to track the development of connections between horticultural therapy and ecological activism over time. The review included randomized controlled trials, observational studies, case studies, systematic reviews, and meta-analyses. Review articles that did not present applications or data, as well as health-related research that was not directly linked to ecological activism, were excluded from this review.

The collected literature data was evaluated and presented within the framework of a systematic review. A systematic review is a research method that rigorously compiles and analyzes existing literature to answer a specific research question (Yıldız, 2022). This type of review adopts a systematic and transparent approach, ensuring the identification, evaluation, and summarization of all relevant studies related to a particular topic or field.

Findings

This section presents the findings obtained through the collection of literature data within the framework of ecological activism and horticultural therapy practices, gathered via a library research method. The findings will be presented in detail.

Ecological Crises and the Rise of Activism

In the last century, human activities have severely disrupted the balance of nature, leading to an array of environmental problems such as the climate crisis, biodiversity loss, deforestation, water scarcity, and pollution. The majority of these issues stem from human activities, including industrial operations, uncontrolled urban expansion, excessive consumption of natural resources, and unsustainable agricultural practices (Dominelli, 2012; McKinnon, 2013). Modern society, while advancing, has simultaneously increased the extent of harm done to nature, resulting in a global ecological crisis that threatens the future of the planet. One of the most significant elements of ecological crises is the climate crisis (Kara, 2021). The greenhouse gases released into the atmosphere have triggered global warming, causing rising temperatures, changing seasonal patterns, and an increase in extreme weather events. The climate crisis affects not only weather conditions but also ecosystems, causing many plant and animal species to lose their habitats. Biodiversity loss is not only an environmental issue but also a major threat to food security, human health, and natural cycles. Many scientists point out that the climate crisis and biodiversity loss are interconnected and that resolving these crises requires global cooperation (Cudworth & Hobden, 2011; Hornsey et al., 2016; van der Linden, 2015). Other significant aspects of ecological crises include air, water, and soil pollution. Industrial waste, chemicals, plastic pollution, and agricultural pesticides are damaging the environment, harming ecosystems, and human health. The pollution of water sources has made access to clean water difficult worldwide, while issues like deforestation and soil erosion pose major risks to agricultural production and food security. Furthermore, the excessive use of fossil fuels such as coal, oil, and natural gas has led to the rapid depletion of natural resources, highlighting the need to transition to renewable sources. This has sparked a range of responses from individuals, NGOs, academics, and policymakers working to find solutions to ecological problems. Ecological activism has strengthened as a social movement aimed at raising awareness about environmental issues, advocating for policy changes in favor of environmental protection, and promoting sustainable lifestyles (Leroy et al., 2024). In recent years, the growing interest of youth in this movement has expanded the reach of ecological activism to a broader audience. Activists are engaged in active campaigns worldwide on issues such as climate justice, phasing out fossil fuels, protecting nature, and creating sustainable cities (Sheldon et al., 2016). The rise of ecological activism has led to a reshaping of global environmental policies and has encouraged individuals, local governments, and large organizations to adopt sustainable practices. At the same time, the widespread

use of social media has facilitated the dissemination of environmental issues and increased public awareness (Jacqmarcq, 2021). Young climate activists, as key players in this process, are fighting for an environmentally conscious future through actions held across the globe. Additionally, environment-focused NGOs and volunteer organizations are collaborating at both local and global levels to develop and support solutions to the ecological crises.

With the increasing impact of ecological activism, sustainability principles have become widespread in many fields (Martinez-Alier et al., 2014). Today, practices such as the zero-waste movement, sustainable agriculture, renewable energy use, and community gardens are encouraging environmentally conscious lifestyles. Furthermore, individuals, by gaining sensitivity to environmental issues, have started to turn to sustainable alternatives in their daily lives. Horticultural therapy, as one of these sustainable approaches, aims to integrate with nature, promote nature conservation, and encourage a responsible lifestyle towards the environment. The severity of ecological crises is directing more individuals towards ecological activism in order to raise environmental awareness. These activism movements, which increase social sensitivity, have evolved into multifaceted practices that not only aim to protect the environment but also support the mental and physical health of individuals.

Definition, Purpose, and Scope of Horticultural Therapy

Horticultural therapy involves therapeutic practices using plants and gardening activities to improve individuals' physical, mental, and emotional health (Pouya, 2018). This form of therapy takes advantage of the healing power of being in nature and engaged in gardening, and it relies on the therapeutic effects of activities involving plants (Dadvand et al., 2016). Horticultural therapy applications serve many purposes, such as promoting mental and physical relaxation, reducing stress, and improving emotional balance (Clatworthy et al., 2013). This therapeutic approach allows individuals to reconnect with nature while also fostering ecological awareness and encouraging a sustainable lifestyle (Sempik et al., 2005). The primary goal of horticultural therapy is to improve individuals' health and quality of life through a process based on interaction with plants. This therapy has been shown to be particularly effective in dealing with mental health issues such as stress, depression, and anxiety, contributing to individuals leading a harmonious and healthy life with the environment (Pantiru et al., 2024). Applications in therapeutic gardens support individuals in staying connected with nature and maintaining their physical and mental well-being. Horticultural therapy, used in various fields ranging from rehabilitation for physically disabled individuals to elderly care and child therapy, provides an experience that strengthens social relationships and makes individuals more environmentally conscious (Barut & Kara, 2020). Furthermore, group interventions in community gardens and rehabilitation centers help develop a sense of social bonding and community solidarity.

The Importance of Horticultural Therapy in the Context of Ecological Activism

Ecological activism focuses on environmental protection and developing a lifestyle in harmony with nature. Horticultural therapy, by offering a nature-integrated form of therapy, reconnects individuals with nature and invites them to adopt a lifestyle that is in harmony with the environment. In this context, horticultural therapy can be considered a reflection of ecological activism, especially on an individual level. Therapeutic work with plants increases environmental sensitivity in individuals and fosters ecological awareness. Throughout this therapeutic process, individuals become aware of the benefits that nature offers them, thus becoming more sensitive to environmental protection and sustainability principles. Horticultural therapy practices provide individuals with the opportunity to learn about the cycles of nature, understand the workings of ecosystems, and experience sustainable gardening methods. For instance, through practices such as composting, natural irrigation techniques, and organic farming, individuals learn to use the resources provided by nature efficiently without harming the ecosystem. Thus, horticultural therapy not only improves individuals' health but also promotes environmentally friendly practices by fostering ecological consciousness. The awareness gained through horticultural therapy can encourage individuals to participate in broader ecological activism movements. In this sense, horticultural therapy becomes part of environmental activism by taking small yet effective steps to protect nature.

The relationship between horticultural therapy and ecological activism is based on individuals strengthening their environmental sensitivity, supporting their mental well-being, and developing environmental awareness by connecting with nature. The process of horticultural therapy helps individuals get to know nature more closely while contributing to the formation of an environmentally conscious mindset that reinforces the goals of ecological activism. The intersection of these two areas creates a foundation for an approach that supports individual health and promotes a sustainable lifestyle. Connecting with nature not only fulfills individuals' desires to integrate with nature but also helps them develop an awareness of the necessity of protecting the environment. Horticultural therapy allows individuals to directly interact with nature, take care of plants, and feel as part of the ecosystem. During this process, individuals rediscover their connections to soil, water, plants, and other natural elements while also enhancing their environmental awareness. Time spent gardening provides an opportunity for individuals to learn about the cycles of nature, seasonal changes, and the complexity of ecosystems. Individuals who connect with nature become more sensitive to environmental changes and are more inclined to avoid behaviors that harm the environment. For example, sustainable practices such as organic farming and avoiding chemicals during horticultural therapy increase individuals' sense of responsibility towards the environment. In this context, horticultural therapy offers an experience that not only connects individuals with nature but also develops environmental consciousness and encourages them to become more environmentally aware. During this process, awareness develops on issues such as the protection of natural resources, the life cycles of plants, and the necessity of living in harmony with nature.

Horticultural therapy plays a significant role in helping individuals develop ecological sensitivity. As individuals immerse themselves in nature during this process, they learn to take responsibility not only for their physical and mental well-being but also for the protection of the environment. By spending more time with natural cycles, they better understand the impact of human intervention on nature. Activities such as soil cultivation, planting, and harvesting provide individuals with an opportunity to observe the unique rhythm of nature and gain knowledge about ecosystem balance. The sustainable gardening methods used in horticultural therapy promote environmentally friendly agricultural techniques. For example, composting, using natural fertilizers, and water conservation methods enable individuals to reduce their environmental impact. During this process, individuals learn the importance of contributing not only to nature but also to societal sustainability goals. By integrating eco-friendly practices into daily life, ecological sensitivity becomes internalized, and individuals are more actively engaged in environmental issues. With this sensitivity, individuals are encouraged to participate in initiatives that support ecological activism in their communities, such as joining community gardens or supporting local environmental movements.

The relationship between horticultural therapy and ecological activism not only increases environmental sensitivity but also supports individuals' mental health. An eco-friendly lifestyle can reduce stress levels and promote mental balance. Time spent in nature reduces mental fatigue and creates a more balanced and calm mood. Studies show that contact with nature is effective in alleviating mental health issues such as anxiety, depression, and stress. During this process, the bond formed with nature creates an effect that supports individuals' inner peace and enhances their life satisfaction. This connection between ecological activism and mental health is associated with individuals who adopt a sustainable lifestyle and have high levels of environmental awareness and personal fulfillment. Through horticultural therapy, individuals who transition to a nature-sensitive way of life find themselves leading a more meaningful and satisfying life by contributing to the environment. For example, participating in community gardens not only allows individuals to contribute to nature but also provides a social support system and mental relaxation. In this context, horticultural therapy not only supports the individual healing process but also fosters ecological sensitivity, bringing individuals together around a larger purpose.

Horticultural therapy not only enhances individuals' environmental sensitivity but also increases their participation in solving environmental issues as part of ecological activism. Practices in therapeutic gardens or community gardens allow individuals to gain awareness of environmental issues and engage in ecological actions. Through this process, individuals become more responsible and conscious toward

the environment, adopting a more sustainable lifestyle. Individuals who form a strong bond with nature through horticultural therapy tend to be more sensitive to environmental issues and are more willing to participate in actions aimed at protecting the environment. As a result, horticultural therapy and ecological activism are mutually supportive, providing a holistic approach that strengthens both environmental sensitivity and mental health. By reconnecting with nature, individuals gain environmental awareness and become more sensitive to environmental problems, while ecological activism guides individuals toward a healthier, more balanced, and fulfilling way of life. Horticultural therapy not only promotes individual healing but also raises environmental consciousness, encouraging participation in social and environmental activism movements. In this context, horticultural therapy and ecological activism stand out as two complementary tools in fostering healthier relationships with nature.

Horticultural Therapy as Ecological Activism

Horticultural therapy not only helps individuals reconnect with nature but also serves as a tool that enhances social solidarity, promotes ecological awareness, and generates environmental sensitivity. When applied in public spaces such as community gardens, this therapeutic method strengthens social interaction among individuals, increases sensitivity to environmental issues, and supports the spread of ecological activism within communities. Horticultural therapy can be considered a form of ecological activism that enhances social benefit, as it encourages communities to adopt an environmentally friendly lifestyle and creates a strong foundation for local ecological actions.

Horticultural therapy is a process that encourages individuals to form connections not only with nature but also with one another (Er et al., 2020). Community gardens (Image 1) provide an opportunity for people from various age groups and socioeconomic backgrounds to come together in a nature-infused environment and build social relationships (University of Washington, 2011). This setting allows individuals to unite for common goals, reduce social isolation, and strengthen the spirit of solidarity (Lombardozzi et al., 2019). During gardening activities, participants share knowledge about plants, divide responsibilities, and strengthen their social relationships through the satisfaction of growing crops together. Community gardens, beyond supporting social interaction among people, also contribute to the development of empathy and cooperation skills (Fayetteville Parks and Recreation, 2018; Veen et al., 2016). As individuals adopt an environmentally conscious lifestyle, their sensitivity to the environment also enhances their sensitivity to one another. Particularly in urban areas, community gardens bring people together in a natural setting, reinforcing a sense of social solidarity. Such social bonds help individuals feel a sense of belonging to the community and create a stronger culture of solidarity in addressing environmental issues.



Image 1. Example of a Community Garden

Horticultural therapy has the potential to be an important tool in supporting the spread of ecological activism in society. Individuals' relationships with plants contribute to their increased sensitivity to environmental issues (Gommers et al., 2020). In this process, individuals realize they are part of the ecosystem and gain awareness of environmentally friendly practices. People who form this kind of bond with nature are more likely to integrate the sustainability principles, which form the foundation of ecological activism, into their daily lives. Horticultural therapy practices carried out within communities' help take concrete steps toward the dissemination of ecological activism. By encouraging individuals to apply the knowledge they acquire during the process to their own living spaces, they can develop environmentally friendly habits. Through such practices, environmental awareness at the societal level increases, and a broader section of the population is encouraged to participate in ecological activism movements. As a result, horticultural therapy becomes a tool that fosters ecological sensitivity and promotes environmental responsibility.

Horticultural therapy contributes to the empowerment of local communities and the spread of an environmentally friendly lifestyle (Kamioka et al., 2014). Community gardens are spaces where local people come together to collaborate and contribute to the environment (Lopez-Sanchez et al., 2024). These spaces allow individuals within the community to experience a lifestyle in harmony with nature through cooperation. In this process, the local population becomes more sensitive to environmental issues by experiencing eco-friendly practices, thereby developing a stronger awareness of ecological activism. Community gardens not only increase individuals' environmental sensitivity but also contribute to local food security. For instance, community gardens established in urban centers allow individuals to grow their own vegetables and fruits. This approach supports local production, reduces environmental footprints, and encourages a sustainable lifestyle. The learning and implementation of eco-friendly agricultural practices within communities create a strong foundation for protecting the local ecosystem by raising environmental awareness (Wood et al., 2022). Furthermore, horticultural therapy practices strengthen the sense of community solidarity and contribute to bringing local communities together for shared goals (Sato et al., 2023). For example, environmentally conscious educational programs allow children and young people to acquire knowledge about nature. As a result, the younger

generation grows up more environmentally conscious, and a lasting culture of environmental sensitivity is formed within communities.

It is possible for individuals to gain ecological awareness through horticultural therapy applications (Jueng & Chen, 2022). Today, critical issues such as environmental problems, the climate crisis, the decline in biodiversity, and the depletion of natural resources have made it mandatory for individuals and communities to develop ecological consciousness. Ecological consciousness is the capacity of individuals to recognize, understand, and develop sensitivity towards environmental issues (Lingis, 2002; Relf & McFarland, 2013). This awareness is of fundamental importance in adopting sustainable lifestyles and promoting environmentally friendly practices. Moreover, ecological consciousness is closely related to ecological activism. The relationship between ecological consciousness and ecological activism is based on the sensitivity to environmental problems and the willingness to take action regarding these issues (Chen & Liu, 2018; Kadirhanogullari & Vural Aydın, 2023). Ecological consciousness refers to individuals and communities being informed about environmental issues, understanding their significance, and developing sensitivity towards the protection of nature (Hynes & Howe, 2014). This awareness forms the basis of ecological activism. Conscientious individuals have the desire to take action to protect the environment. Ecological consciousness is the motivating factor that leads individuals to ecological activism. Highly aware individuals cannot remain indifferent to environmental problems, and this compels them to fight for environmental change. Ecological activism, as a reflection of this motivation, aims to bring about social change. Ecological activism generally takes place on a group or community level. Ecological consciousness increases individuals' willingness to participate in social issues and the pursuit of environmental justice. This enables individuals to come together around a common goal and participate in efforts to solve environmental problems. Ecological activism aims to raise awareness and provide information about environmental issues to communities. This process contributes to the further spread of ecological awareness. Ecological activism strives for environmental sustainability and justice. Ecological consciousness enhances individuals' ability to understand and advocate for the changes necessary to achieve these goals. Therefore, ecological activism represents the efforts of conscious individuals and communities to address environmental issues and create change. At this point, community gardens are areas where local communities come together to engage in agricultural activities, share knowledge and resources, strengthen social relationships, and develop collective solutions to environmental problems. These gardens increase individuals' ecological awareness while also promoting social solidarity and community participation. The relationship between ecological awareness and community gardens strengthens individuals' connection to nature and guides communities towards a more sustainable future (Gray et al., 2022; Ibourk et al., 2024; Krasny & Tidball, 2009). Figure 1, created by the author of this study, visualizes the stages in this process and explains how ecological awareness development and participation in community gardens follow a particular path. *Awareness development*, this is the initial stage where individuals or communities begin to recognize environmental issues and the importance of ecological sustainability. This awareness can stem from education, media exposure, or personal experiences. *Interest and motivation*, once awareness is established, individuals develop an interest in ecological practices. This could be motivated by personal values, social influence, or the desire to improve their local environment. *Knowledge acquisition*, in this stage, individuals seek information about ecological practices, sustainable gardening techniques, and the benefits of community gardens. Workshops, seminars, and community events are often organized to facilitate this knowledge transfer. *Skill development*, as interest grows, participants begin to develop the necessary skills for gardening and sustainable practices. This may include hands-on training in planting, composting, and maintaining a garden. *Participation in community gardens*, with acquired knowledge and skills, individuals can actively participate in community gardens. This stage involves collaboration with others, sharing responsibilities, and contributing to the garden's maintenance and growth. *Community building*, as individuals engage in community gardening, relationships and networks develop. This fosters a sense of belonging and collective responsibility towards the environment. *Feedback and reflection*, participants reflect on their experiences, assessing the impact of their involvement on personal and community levels. This feedback loop can lead to improved practices and greater ecological awareness. *Advocacy and action*, the final stage involves participants advocating for ecological practices within

their broader community. This can include promoting sustainable policies, organizing events, and inspiring others to engage in similar initiatives.

There are numerous benefits that individuals and communities can gain within the framework of the dynamics of horticultural therapy and ecological activism (Colley et al., 2012; Cooper et al., 2014; Gonzalez et al., 2010; Verra et al., 2012). These dynamics have been visualized by the author of this study and are presented in Figure 2. These dynamics have the potential to enhance individuals' mental health. Engaging with nature has been shown to have significant positive effects on mental health. Activities like gardening can reduce stress levels and improve overall mood. Being in green spaces and interacting with plants can promote feelings of relaxation and well-being. The sensory experiences of gardening, such as the sights, sounds, and smells of nature, contribute to this mental health improvement, helping individuals feel more connected and less anxious. Additionally, physical health improvement is possible, especially through horticultural therapy. Gardening involves a range of physical activities, including digging, planting, weeding, and watering, which promote physical movement and health. These activities can improve strength, flexibility, and overall fitness. Regular engagement in gardening can also contribute to cardiovascular health, weight management, and enhanced physical stamina. This physical aspect is particularly beneficial for individuals who may have limited opportunities for exercise in other contexts. The aforementioned dynamics increase social cohesion. Group gardening activities foster social interaction and strengthen community bonds. When individuals come together to work on a community garden, they build relationships and a sense of belonging. These interactions can lead to the formation of friendships, support networks, and collaborative problem-solving. Social cohesion is essential for community resilience, as it helps individuals feel connected and supported, particularly during challenging times. These dynamics also enhance individuals' environmental awareness. Participation in horticultural therapy can lead to increased sensitivity to ecosystems and the environmental impact of human actions. As individuals learn about plants, ecosystems, and sustainable practices through gardening, they become more aware of the interconnectedness of life and the importance of preserving natural resources. This awareness can motivate individuals to adopt more environmentally responsible behaviors in their daily lives. These dynamics make it possible to empower communities. Ecological activism fosters solidarity and empowerment in communities by encouraging collective action towards environmental sustainability. Through community gardening and other ecological initiatives, individuals can work together to address local environmental issues. This empowerment can lead to greater community involvement in decision-making processes and enhance individuals' confidence in their ability to effect change. These dynamics bring with them sustainable practices. Horticultural therapy can promote eco-friendly activities, such as recycling, composting, and sustainable gardening techniques. By incorporating these practices into gardening initiatives, individuals learn the importance of reducing waste and utilizing resources wisely.

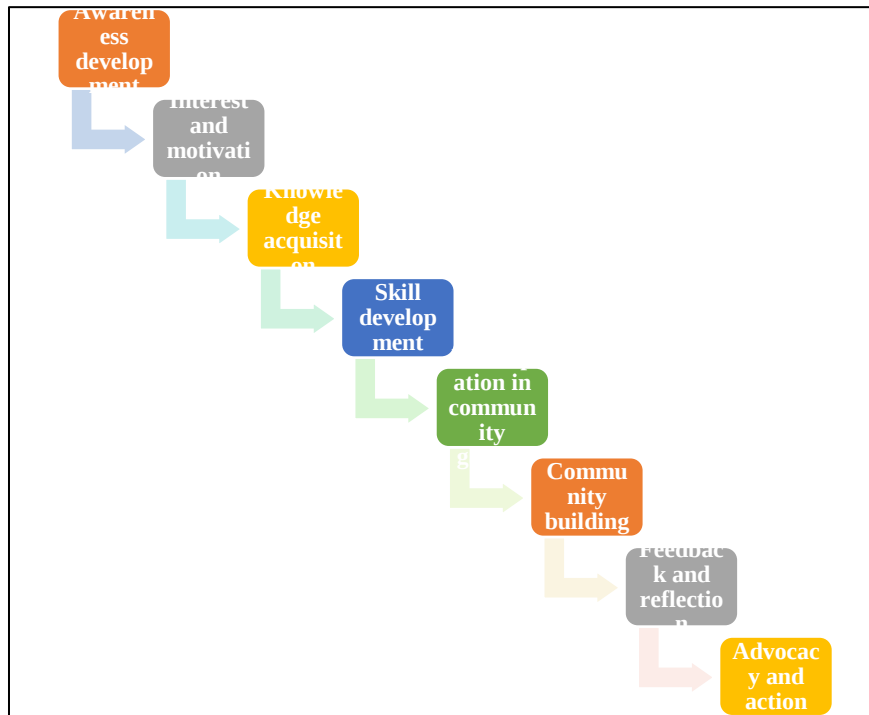


Figure 1. Stages of Ecological Consciousness and Community Garden Participation

Sustainable practices not only benefit the environment but also create a sense of stewardship among participants, reinforcing the idea that individual actions can have a positive impact on the planet. These dynamics also contribute to environmental education. Community gardens and therapeutic gardening spaces serve as valuable platforms for environmental education. They provide opportunities for individuals of all ages to learn about local ecosystems, plant care, and the importance of biodiversity. Educational programs can include workshops on organic gardening, soil health, and water conservation. This knowledge equips participants with the skills to engage in ecological activism and promote sustainable practices within their communities.



Figure 2. The Relationship Between Horticultural Therapy and Ecological Activism

Conclusion, Discussion and Recommendations

Horticultural therapy, as a form of therapy that enhances environmental sensitivity, shares many common points with ecological activism. Horticultural therapy, which supports mental recovery by helping individuals establish a connection with nature, also includes practices that encourage the adoption of an eco-friendly lifestyle and promote environmental sustainability. When combined with projects that support environmental awareness, this therapy method contributes to the strengthening of ecological activism, the spread of environmental consciousness in society, and the development of an environmentally harmonious lifestyle among individuals. The combination of horticultural therapy and ecological activism paves the way for positive environmental changes at both individual and societal levels.

Horticultural therapy and ecological activism are processes that support and complement each other. Horticultural therapy applications allow individuals to establish closer relationships with nature and develop a sense of responsibility toward the environment. In this process, individuals benefit from the healing power of nature and become more sensitive to ecological issues. For example, group activities conducted in therapeutic gardens not only offer participants an individual healing experience but also foster environmental awareness and inspire them to take an active role in nature conservation. Ecological activism contributes to the wider adoption of horticultural therapy within society. Community gardens supported by activist groups and environmental organizations bring local people together, allowing them to learn and implement eco-friendly farming methods. Thus, horticultural therapy is recognized as an ecological movement and contributes to raising social awareness on environmental protection and

sustainability. This mutual interaction enables individuals to develop a love for nature and a more conscious approach to environmental issues.

Horticultural therapy is an effective method for strengthening ecological awareness. This type of therapy, which encourages direct contact with nature, increases individuals' awareness of environmental protection and living in harmony with nature. Applications such as community gardens, rehabilitation centers, and environmental education programs enable individuals to take responsibility for nature conservation and contribute to the adoption of an environmentally conscious lifestyle. Especially community-based horticultural therapy programs allow individuals to experience the concept of environmental sustainability in a concrete way. In these practices, individuals gain a deeper understanding of the ecosystem by observing the growth processes of plants, and their sensitivity to the environment increases. Moreover, time spent in nature contributes to stress relief and mental healing. As individuals' environmental sensitivity increases, their ecological awareness strengthens, and they take more responsibility for nature conservation.

The relationship between horticultural therapy and ecological activism should be supported by further research and application. In future studies, it will be important to more comprehensively address the effectiveness of horticultural therapy in developing environmental awareness and to develop new methods that can be used in the fields of ecological activism and environmental education. For example, community gardens and green space projects established in cities should be expanded in a way that connects more individuals to nature and increases environmental sensitivity. Research should evaluate the effects of horticultural therapy not only on mental health but also on its impact on environmental awareness. Horticultural therapy programs specifically designed for young people, children, and the elderly can be effective tools for strengthening their relationship with nature. Environmental education and horticultural therapy programs organized in educational institutions and rehabilitation centers can increase environmental awareness by introducing individuals to sustainable living practices. Strengthening the role of horticultural therapy in ecological activism movements requires the support of local governments and environmental organizations. Municipalities, civil society organizations, and environmental activists can collaborate to reach broader audiences and spread environmental awareness across all segments of society. Furthermore, considering the potential of horticultural therapy in the health field, the initiation of programs aimed at raising environmental consciousness in health institutions will contribute to the establishment of a lasting link between ecological activism and therapy. In conclusion, horticultural therapy, as an inseparable part of ecological activism, can make significant contributions to the construction of a sustainable future. By developing new strategies for individuals to live in harmony with the environment, ecological sensitivity can be increased, and environmental protection awareness in society can be strengthened. In this context, the potential of horticultural therapy to contribute to the strengthening of ecological activism is immense; therefore, further research and application should be developed for the sake of public health and environmental sustainability.

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