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RESEARCH INVENTION JOURNAL OF SCIENTIFIC AND EXPERIMENTAL SCIENCES 5(1):75-79, 2025

©RIJSES Publications

ONLINE ISSN: 1115-618X

PRINT ISSN: 1597-2917

https://doi.org/10.59298/RIJSES/2025/517579

The Role of Community Gardens in Promoting Health and Well-Being

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ABSTRACT

As urbanization continues to reshape cities, community gardens have emerged as vital resources for promoting health and well-being. These green spaces provide numerous benefits, including access to fresh produce, opportunities for physical activity, mental health support, and social cohesion. Historically, community gardens have played a crucial role in addressing food shortages and fostering communal engagement. Today, they continue to serve as tools for improving public health, reducing social isolation, and promoting sustainable urban agriculture. This paper examines the various health benefits of community gardens, exploring their physical, mental, and social contributions. Additionally, it highlights the importance of further research and policy support to expand the reach and impact of these initiatives, ensuring inclusivity and accessibility for diverse populations. As cities face increasing challenges such as climate change, food insecurity, and limited green spaces, investing in community gardens remains a promising strategy for building healthier, more resilient communities.

Keywords: Community gardens, urban agriculture, public health, physical activity, mental well-being, social cohesion.

INTRODUCTION

Scholars are showing a growing interest in understanding the relationship between the natural world and public health, including reintegrating a natural environment into cities that have been made increasingly artificial through urbanization. They say that urban development has separated the public from natural resources necessary to sustain healthy living, from the land used to grow food to the water that supports life. A promising way forward to achieve sustainability, as well as well-being for a growing urban population, may be community gardens. While one obvious benefit might be that gardens can provide some communities with fresh food, the same gardens also can provide numerous other often under-recognized contributions, for example, opportunities for meaningful physical activity or exercise in the community, stress reduction, and mental health rehabilitation directly linked to interaction with one's community and the environment. In this paper, we will examine potential benefits of community gardens and related green spaces not only from a perspective of physical activity and nutrition but also through meaningful physical activity, social well-being, improved mental health, and social relationships. Many of the potential advocated benefits under discussion are, in fact, an extension of several related philosophical notions which are referred to regularly in the literature on health and well-being. The main goal of this paper is to inform the current debate on community gardens in a manner that is so compelling that we can connect a diverse group of practitioners with each other, as well as with a broader set of agencies and decision makers [1, 2, 3].

Historical Context of Community Gardens

Community gardens might be the last link to our history of domination, oppression, and broken soil. It has been only in the last 50 years in the United States and Canada that these gardens have rediscovered the role they once held in the fabric of our society. Although outcomes might be future-based, we must never stop being critical of why these community garden movements emerged now, and in the forms that they have. A look at the historical context of gardening movements can inform us regarding how they addressed social needs. These different motives over the past century are all based on social and economic

conditions that have forced more people to live in the city without adequate living arrangements. Since the late 1800s, immigrants and plant nurseries have made community gardens almost alien to this continent, until the last Depression in North America, when victory gardens became a new and widespread facet of community gardening. During the two World Wars, and especially during the Great Depression, city and town areas were short of food supplies. Otherwise, idle plots of land in and around town had to be tilled for food; farms in the West were threatened by the shortage of labor. Surpluses grew astronomically in victory gardens, many of which were cultivated for home storage. Suddenly, the idea that one form of useful labor was planting food had to be systematically explored. Citizens' committees were formed to teach communities how to plant, cultivate, store, and use produce directly. During the past two decades, there has been increasing concern within the gardener movements for a number of issues in the city and in relation to standards, design, and amenities that are seemingly issues for middle-class people of these cities. However, most importantly, since the mid-1980s, these issues have been addressed in many places by the institutions and the people who plan cities and towns, and it is no longer the focus of this paper. In large part, it is safe to say that community gardens will be here as long as there are suburban properties, mass production food systems, energy shortages, and various levels of social isolation within cities. Moreover, as the sources of food dwindle, whether from poisoned lands or social devastation, it will be the poor who are hurt first and worst, and it will be the poor who will have retained, by default or by choice, the knowledge and practice of gardening, which is something that this people's history tells them in fact gives them the power to live with dignity [4, 5].

Physical Health Benefits of Community Gardens

In addition to the benefits associated with the social aspects of community gardening, there are also many physical health benefits. Access to fresh fruits and vegetables can improve overall health status, and community gardens can also play a role in reducing food insecurity. One-fourth of community gardeners grow produce because they cannot afford to purchase these items. By providing people who may not have sufficient resources or nearby grocery stores with vegetables and herbs, community gardens promote healthy eating and improve dietary intake. In addition to promoting access to healthy foods, community gardens promote physical activity [6, 7, 8]. Physical activity is associated with numerous health benefits, including more energy, more restorative sleep, improvements in mood, and a reduction in the likelihood of developing chronic diseases. Some reports have indicated obesity rates lower in gardeners than in non-gardeners. Gardening also promotes cardiovascular health. Many gardening tasks are considered moderate or vigorous intensity physical activity. Lowering body weight, using calories more efficiently, or increasing the amount of physical activity recommended can improve muscular strength, balance, and agility, all of which can also reduce the risk of falling. Indeed, some reports have indicated that elderly gardeners are more flexible and have better hand strength than non-gardening seniors. Several reports have also indicated that gardeners report better overall health, reduced stress, and fewer symptoms of depression. In addition to physical health benefits, gardening can help promote healthy habits. Many participants in experiments also attribute garden participation to the perception that local residents value health [9, 10, 11].

Mental Health Benefits of Community Gardens

Certain gardening tasks, such as planting, weeding, and propagating, can act as a form of therapy, reducing stress levels and providing an escape from circumstances for garden participants. Gardeners also report that gardening helps reduce anxiety and confront fears. Indeed, gardening is viewed as a vehicle for providing respite to individuals traumatized by major life events, offering reassurance and strengthening their belief in themselves. Further testimony to the dual health benefits of gardening is provided by expert groups, including professional therapists who use natural settings to deliver psychosocial treatments and increasingly incorporate gardening and green exercise within this work. Of equal importance, the sense of belonging generated by teamwork can make a major difference to the resilience of both individuals and multi-problem families [12, 13, 14]. Numerous studies have shown that contact with nature can help to improve mood and alleviate the symptoms of depression. Lawn mowing and gardening feature less on everyday tasks most hated. Community gardeners often have the possibility to develop particularly strong connections with the soil and safe green space around their plots; an ability clearly facilitated by the unrestricted contact with nature afforded by community gardening activity. Furthermore, for many, it is very much an outlet for self-expression, with special features reflecting their characters or providing reminders of home and garden before ill health or economic issues intervened. These provide both a sense of continuity for the gardeners and reassurance through making contact with their cultural heritage. For a few, these may offer a means of making additional money through the sales of plants and produce. However, collective activities within community gardening can foster a sense of

belonging, a known protective factor in enhancing physical and mental resilience that is associated with both public health and community development. Time away from direct pressure enables meaningful relationships to develop and can be used to explore interests in cooking, crafts, art, writing, and to enjoy creative production, with a consequent increase in self-esteem. Furthermore, gardening is also seen as a vehicle for providing reassurance to traumatized individuals and a means to help them find their belief in themselves through success. The relationship with nature can offer a respite in times of personal danger and reduce the impact of long-term crises or discrimination. Awareness of the natural world is seen as a universal calming influence, reinforcing an individual's inner strength, however small. This is reaffirmed by gardening providing benefits such as the ability to stop the world during crises and give clarity, helping to make sense of the world. Thus, the benefits of time spent in safe green spaces cannot be underestimated [15, 16, 17].

Social Benefits of Community Gardens

Community gardens are used by residents to connect with each other, have fun, and gain a sense of satisfaction from growing and harvesting produce. They are high-quality communal spaces in which qualitative, sociable interactions take place. In many cases, community gardening projects facilitate interesting points of social interaction between members of diverse groups and cultures within a community. Participants connect in a non-threatening shared undertaking over which they can brag, exchange gardening tips, and organize produce swaps and recipes. Individual responsibility reflects itself in two ways in community gardening projects: first, on a micro level, by planning, cultivating, and tidying individuals' own garden plots, and second, on a collective level, by attending meetings as a form of democratic engagement, sharing communal responsibilities, and bringing about a sense of community cohesion. Gardening projects have a number of useful functions, such as the creation and maintenance of social networks and close relationships that are conducive to neighborhood trust and cohesion [18, 19, 20]. Community gardens also often participate voluntarily in broader local sustainable food action networks that seek to address food security and economic and environmental sustainability. This participation usually helps members to make greenspace more attractive, contribute to the regeneration of deprived areas, and mobilize their human and financial capacity for recruiting volunteers, distributing or marketing excess produce, and providing social support for underprivileged clients in the community. Participants view many garden activities as part of the process of contributing to communal well-being or common cause reached through their local or direct action and as a form of activism or resistance to the consumerist culture of their society. Community gardens are therefore seen as one of many ways members can act practically and develop a local resource, social capital, for resisting and disengaging from global economic forces and breaking the cycle of alienation typically felt by the disempowered or underskilled people they wish to support in their communities [21, 22, 23].

Future Directions

This paper has outlined the roles that community gardens occupy in promoting a diverse range of physical, psychological, and psychosocial health outcomes for gardeners and the wider community. While each of these benefits and outcomes may be experienced differently across a range of sociodemographic factors, there is general agreement that one can assume their importance from observations about levels of uptake, retention, and enthusiasm from gardeners and the strength of the advocacy for and expansion of these programs from health policy and non-government agencies more broadly. The already substantial investments made by government at local, state, and federal levels in community gardening initiatives indicate the widespread support for the role of community gardening in promoting health and well-being [21, 24]. As such, it seems vital that ongoing research seeks to provide the most up-to-date evidence documenting these benefits for an increasingly diverse set of garden environments, including specialized gardens for targeted populations and studies appealing to a greater level of clinical rigor. Research should aim to provide government, non-government, and health policy agencies with evidence that will better allow them to support, advocate for, and also expand the reach and quality of community garden projects. As urban environments increase in density and contend with pressures from climate change, associated impacts on food shortages and prices, and face reduced access to green space, efforts to further expand the evidence base for and capacity to effectively plan for and deliver community garden programs and policy will also be critical. Furthermore, the success of community garden programs in providing opportunities assists in advocating for and extending more robust urban food strategies and policies that strive to open up opportunities for sustainable living in densifying urban contexts, promote urban agriculture, and embed it within community health promotion activities. Given recent criticisms leveled at community gardening initiatives and garden projects for often coalescing around what might be termed an 'already converted middle-class demographic', it is also important for researchers to better

understand how to shape and encourage policy and practice that is inclusive and accessible to younger and more diverse populations that have limited access to both gardens and green space. It will be important over time to monitor the ongoing evolution of community garden programs and gardens in this light, with attention to the range and quality of opportunities provided for citizens to engage in gardening as part of these programs [25, 26, 27].

CONCLUSION

Community gardens play a vital role in fostering physical health, mental well-being, and social engagement. By providing access to fresh food, encouraging physical activity, and promoting a sense of community, these gardens contribute significantly to public health and urban sustainability. The widespread support from policymakers, non-governmental organizations, and local communities underscores their value in modern cities. However, as urban landscapes evolve, it is essential to ensure that community gardens remain inclusive, accessible, and adaptable to diverse populations. Future research should focus on expanding evidence-based practices, addressing social disparities, and integrating community gardening into broader urban food policies. By doing so, cities can maximize the benefits of green spaces and create healthier, more resilient communities for generations to come.

REFERENCES

1. Litt JS, Alaimo K, Harrall KK, Hamman RF, Hébert JR, Hurley TG, Leiferman JA, Li K, Villalobos A, Coringrato E, Courtney JB. Effects of a community gardening intervention on diet, physical activity, and anthropometry outcomes in the USA (CAPS): an observer-blind, randomised controlled trial. The lancet planetary health. 2023 Jan 1;7(1):e23-32. thelancet.com
2. Lampert T, Costa J, Santos O, Sousa J, Ribeiro T, Freire E. Evidence on the contribution of community gardens to promote physical and mental health and well-being of non-institutionalized individuals: A systematic review. Plos one. 2021 Aug 6;16(8):e0255621. plos.org
3. Charles-Rodriguez U, Venegas de la Torre MD, Hecker V, Laing RA, Larouche R. The relationship between nature and immigrants' integration, wellbeing and physical activity: a scoping review. Journal of immigrant and minority health. 2023 Feb;25(1):190-218. [HTML]
4. Marsh P, Diekmann LO, Egerer M, Lin B, Ossola A, Kingsley J. Where birds felt louder: The garden as a refuge during COVID-19. Wellbeing, Space and Society. 2021 Jan 1;2:100055. sciencedirect.com
5. Kato Y, Boules C. Pandemic gardening: Variant adaptations to COVID-19 disruptions by community gardens, school gardens, and urban farms. Journal of Urban Affairs. 2024 Aug 8;46(7):1308-28.
6. Landry MJ, van den Berg AE, Hoelscher DM, Asigbee FM, Vandyousefi S, Ghaddar R, Jeans MR, Waugh L, Nikah K, Sharma SV, Davis JN. Impact of a school-based gardening, cooking, nutrition intervention on diet intake and quality: the TX sprouts randomized controlled trial. Nutrients. 2021 Sep 1;13(9):3081. mdpi.com
7. Butterfield KL, Ramírez AS. Framing food access: Do community gardens inadvertently reproduce inequality?. Health Education & Behavior. 2021 Apr;48(2):160-8.
8. Song S, Lim MS, Richards DR, Tan HT. Utilization of the food provisioning service of urban community gardens: Current status, contributors and their social acceptance in Singapore. Sustainable Cities and Society. 2022 Jan 1;76:103368.
9. Hendrix SJ, Fischer JG, Reddy S, Lommel TS, Speer EM, Stephens H, Park S, Johnson MA. Fruit and vegetable intake and knowledge increased following a community-based intervention in older adults in Georgia senior centers. Journal of Nutrition for the Elderly. 2008 Jun 17;27(1-2):155-78.
10. Hume C, Grieger JA, Kalamkarian A, D'Onise K, Smithers LG. Community gardens and their effects on diet, health, psychosocial and community outcomes: a systematic review. BMC Public Health. 2022 Jun 23;22(1):1247. springer.com
11. Brown MD, Shinn LM, Reeser G, Browning M, Schwingel A, Khan NA, Holscher HD. Fecal and soil microbiota composition of gardening and non-gardening families. Scientific reports. 2022 Jan 31;12(1):1595. nature.com
12. Egerer M, Lin B, Kingsley J, Marsh P, Diekmann L, Ossola A. Gardening can relieve human stress and boost nature connection during the COVID-19 pandemic. Urban Forestry & Urban Greening. 2022 Feb 1;68:127483. nih.gov
13. Odeh R, Diehl ER, Nixon SJ, Tisher CC, Klempner D, Sonke JK, Colquhoun TA, Li Q, Espinosa M, Perdomo D, Rosario K. A pilot randomized controlled trial of group-based indoor gardening

and art activities demonstrates therapeutic benefits to healthy women. PloS one. 2022 Jul 6;17(7):e0269248. plos.org

14. Spano G, D'Este M, Giannico V, Carrus G, Elia M, Lafortezza R, Panno A, Sanesi G. Are community gardening and horticultural interventions beneficial for psychosocial well-being? A meta-analysis. International Journal of Environmental Research and Public Health. 2020 May;17(10):3584.
15. Ward KS, Truong S, Gray T. Connecting to nature through community engaged scholarship: Community gardens as sites for collaborative relationships, psychological, and physiological wellbeing. Frontiers in Psychiatry. 2022 Jul 28;13:883817.
16. Oh RR, Zhang Y, Nghiem LT, Chang CC, Tan CL, Quazi SA, Shanahan DF, Lin BB, Gaston KJ, Fuller RA, Carrasco RL. Connection to nature and time spent in gardens predicts social cohesion. Urban Forestry & Urban Greening. 2022 Aug 1;74:127655. google.com
17. Gray T, Tracey D, Truong S, Ward K. Community gardens as local learning environments in social housing contexts: Participant perceptions of enhanced wellbeing and community connection. Local environment. 2022 May 4;27(5):570-85.
18. Shur-Ofry M, Malcai O. Collective action and social contagion: Community gardens as a case study. Regulation & Governance. 2021 Jan;15(1):63-81.
19. Sharif SM, Ujang N. Community gardening and the capacity to enrich social bonding in urban neighborhoods. InIOP Conference Series: Earth and Environmental Science 2021 Apr 1 (Vol. 737, No. 1, p. 012061). IOP Publishing. iop.org
20. Du Toit MJ, Rendón O, Cologna V, Cilliers SS, Dallimer M. Why home gardens fail in enhancing food security and dietary diversity. Frontiers in Ecology and Evolution. 2022 Feb 11;10:804523. frontiersin.org
21. Raneng J, Howes M, Pickering CM. Current and future directions in research on community gardens. Urban Forestry & Urban Greening. 2023 Jan 1;79:127814.
22. Nowysz A, Mazur Ł, Vaverková MD, Koda E, Winkler J. Urban Agriculture as an Alternative Source of Food and Water Security in Today's Sustainable Cities. International Journal of Environmental Research and Public Health. 2022 Nov 24;19(23):15597. mdpi.com
23. McGuire L, Morris SL, Pollard TM. Community gardening and wellbeing: The understandings of organisers and their implications for gardening for health. Health & Place. 2022 May 1;75:102773.
24. Kirby CK, Specht K, Fox-Kämper R, Hawes JK, Cohen N, Caputo S, Ilieva RT, Lelièvre A, Poniży L, Schoen V, Blythe C. Differences in motivations and social impacts across urban agriculture types: Case studies in Europe and the US. Landscape and Urban Planning. 2021 Aug 1;212:104110. sciencedirect.com
25. Mabon L, Shih WY, Jou SC. Integration of knowledge systems in urban farming initiatives: insight from Taipei Garden City. Sustainability Science. 2023 Mar;18(2):857-75.
26. Schoen V, Blythe C, Caputo S, Fox-Kämper R, Specht K, Fargue-Lelièvre A, Cohen N, Poniży L, Fedeńczak K. "We have been part of the response": the effects of COVID-19 on community and allotment gardens in the global north. Frontiers in Sustainable Food Systems. 2021 Oct 4;5:732641.
27. Godrich SL, Macau F, Kent K, Lo J, Devine A. Food supply impacts and solutions associated with the COVID-19 pandemic: a regional Australian case study. International Journal of Environmental Research and Public Health. 2022 Mar 30;19(7):4116.

CITE AS: Ivan Mutebi (2025). The Role of Community Gardens in Promoting Health and Well-Being. RESEARCH INVENTION JOURNAL OF SCIENTIFIC AND EXPERIMENTAL SCIENCES 5(1):75-79. https://doi.org/10.59298/RIJSES/2025/517579