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Evaluation of the Economic and Social Benefits from the Opening of Public Flower Gardens, the Psychological Impact on the Community

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Abstract: This scientific paper aims to evaluate the economic and social benefits of the opening of public flower gardens and to analyze the impact of these openings on the psychology of the population. Through a stable and analytical methodology, it is required to determine how the opening of public green spaces can contribute to improving the quality of life and well-being of citizens.The aim of this study is to identify and evaluate the concrete economic and social benefits of opening public flower gardens, including aspects of health, environment and social connections. Also, it is intended to understand how these spaces affect the psychology of the population and generally interact with the quality of life in the city. Methodology: The study will use a combination methodology, including statistical analysis of existing data, field surveys and case studies to collect and analyze various data. In order to evaluate the economic benefits, the causes related to the increase in economic activity will be used, while in order to evaluate the social benefits, the changes in the behavior and social relations of the citizens will be analyzed.

Keywords: *opening of orchards, economic benefits, community perceptions, impact, quality.*

1. Introduction

In today's cities, the challenge of urban planning is to provide satisfactory and suitable spaces for citizens. In this context, public flower gardens have a special importance, becoming an important part of the urban landscape, tranquility and beauty. Public gardens provide a welcome respite from the hustle and bustle of the city, serving as open and shared spaces designed for recreation, enjoyment and free use by citizens of all ages. This study aims to evaluate and deeply analyze the economic and social benefits of opening public flower gardens in a city. A public flower garden, whether it is known as parks, promenades, green oasis, or sports areas, is one of the places where citizens are close to nature and where they have the opportunity to leave behind the time of the city's strife to enjoy the time of peace and relaxation. Through a detailed analysis, we will examine the economic impact of opening public flower gardens in a community. Public gardens are an important resource for the tourism sector and local trade [1]. They attract tourists and visitors, contributing to increased income for the city and creating new jobs. Also, flower gardens provide special spaces for small enterprises and local businesses, such as cafes, restaurants, and shops, which can influence the growth of economic activity in an area. Another important aspect to analyze is the social impact of opening public flower gardens. These spaces provide suitable places for organizing community activities and events, creating a sense of cooperation and solidarity among citizens. The opening of flower gardens brings obvious benefits to the mental and physical health of citizens, as they provide opportunities for physical activity, recreation and exercise. Also, public flower gardens provide quiet spaces for relaxation and meditation, contributing to the reduction of stress and anxiety levels. However, to achieve these economic and social benefits, it is important that the opening of orchards is carefully planned and managed. Public open areas must be suitable for citizens, well maintained and safe for free use. Likewise, the engagement of citizens and their cooperation with local authorities is important to ensure that public gardens create added value and benefits for the entire community. In this study, we aim to provide a detailed look at the role and importance of opening public flower gardens in modern cities [2].

2. Literature Review

2.1. Definition and History

Rook [3] identifies a public garden as an organized segment of territory in the urban environment, used for the production of food and/or flowers, with benefits for individuals and communities. This concept is internationally recognized as a key strategy for improving local food supplies and the expansion of open spaces, greenery and leisure and recreation activities. Also, public gardens are used as a tool for community development, addressing local challenges and improving social, economic, cultural and environmental conditions in difficult neighborhoods [4].

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These spaces are also used to fight crime and improve urban infrastructure, turning rundown and abandoned areas into green spaces with vegetation, flowers, relaxation areas and playgrounds, providing a suitable environment for the whole community. In developed countries with a high economy, there are popular parks that serve as tourist destinations with millions of visitors. Historically, public gardens have served as a means of improving the local food supply. In the late 19th century, mass migration to the city and economic depression increased the demand for cheap and accessible food, especially during World War I, World War II and the Great Depression [4]. Public gardens have provided an opportunity for residents, especially the poor, to grow their own food on free land. City lands were utilized during the Great Depression through the Works Progress Administration to provide jobs and cheap land to those who were unemployed. In addition, during World War II, the Victory Gardens Program, implemented by the US Department of Agriculture, produced about 40% of fresh vegetables in the US from 20 million gardens located in communities across the country [5]. In the recent period, sustainable community development strategies have integrated the use of community greening and urban agriculture as important parts for promoting and supporting development in communities. The 1992 Earth Summit has played a key role in this regard, focusing attention on the integration of social, environmental and economic concerns into international, national and local policy-making [6]. Agenda 21, a part of this summit, has proposed a local approach to sustainable development, encouraging community participation in finding solutions to local challenges (Netherlands). In concrete examples, community greening projects and urban agriculture have been integrated into sustainable community development initiatives. For example, at the Alex Wilson Community Garden in Toronto, Canada, the community was closely involved in the protection of a community garden and public green spaces. This garden provided 40 plots for food production and demonstrated a commitment to creating sustainable urban spaces through ecological restoration and landscape design, as well as promoting knowledge of the natural history of the landscape [7]. At the same time, exposing residents to the natural environment through active engagements such as gardening, for example, can reduce the stress and anxiety associated with urban life and provide mental health benefits [8]. Also, the benefit of green spaces, including parks that have a relaxing appearance, also affects the mental health of the population, stimulating them with different equipment that can serve you for physical activities, and from these spaces the population also benefits from the aspect health. Exposure to nature that can also increase immunoregulation [3] reduces the risk of mortality, therefore, urban green spaces contribute to the physical, mental and social dimensions of human well-being [5]. Spaces located within cities, urban areas or other public places serve to improve the quality of life of residents and visitors [7]. Public gardens are designed with the aim of creating suitable environments for people's enjoyment and contribute to the improvement of the urban environment. These spaces offer many opportunities for different activities, including children's games, sports, relaxing stays, picnics, cultural activities, social events and many others [5]. Public gardens play an important role in creating a healthy and stimulating environment for citizens. They help protect biodiversity and the natural environment, becoming places where meetings and social interactions take place that contribute to the strengthening of the urban community. For these reasons, the use and maintenance of public gardens are important aspects of urban planning and city development [5]. More recently, a new attitude towards gardens has followed, especially since the 1980s, with the drafting of the Florence Charter by the ICOMOS-IFLA International Committee for Historic Gardens. This document extended the field of protection of historical gardens and assigned to it the status of a living monument that undergoes changes over time and use. The Charter of Florence established principles for interventions in the maintenance, conservation, restoration and reconstruction of this heritage, including the use and law and administrative protection. In the wider context of cultural heritage, guidelines continue to appear in various documents such as the Granada Convention, the Washington Charter, the Man's Charter, the Krakow Charter and the European Landscape Convention of the Council of Europe. Pursuing the aim of recognizing and preserving this heritage, a European database of gardens has recently been created by the European Institute for Gardens and Landscapes (IEJP), which so far includes data from Portugal, France, Belgium and England in a total of about 18,000 historic gardens. Several other inventories from various European countries are being compiled to be added to this database, [9].

2.2. Characteristics of public gardens

Public gardens, also known as public green spaces, represent an important part of the urban landscape and are key elements of a city's public infrastructure. These green spaces provide an important source of aesthetic pleasure, relaxation and improved quality of life for city dwellers. The definition and characteristics of public gardens are important issues for urban planners and policy makers to create and manage healthy and sustainable green spaces. These features include:

1. **Green nature and landscapes:** Public gardens are distinguished by the presence of green elements and natural landscapes, including forests, gardens, flowers, shrubs, and lawn areas. This spreads a warm and inviting feeling to the citizens, positively influencing their mental and emotional health.

2. **Public amenities and services:** Public gardens offer a variety of amenities and services, including convenient docks, food stations, new restrooms, parking lots, children's play areas, walking tracks, and more. These are designed to meet the needs of the users and to adapt to the different needs of the community.

3. **Sustainable care and maintenance:** Sustainable maintenance of public gardens requires careful management of green spaces. This includes plant and tree management, litter control, watershed maintenance, and cleanliness. Ensuring regular maintenance and well-cared for contributes to creating beautiful and safe spaces for the community [10].

2.3. Socioeconomic and Mental Health Impacts of Community Gardens

Gardens are green spaces developed and maintained by a cooperative gardening community. Models vary from individually maintained plots to communal efforts where several gardeners tend to the same crops.1 There is increasing recognition of the advantages that these urban green spaces can provide to gardeners and the surrounding community [11].

Studies on community gardens (CC) have simultaneously shown benefits in terms of nutrition, mental health, income and a sense of community among community members. However, the use and distribution of CCs in low-income versus high-income communities is not always found to be the same. In this study, we explored the distribution of community gardens in disadvantaged communities and assessed how socioeconomic status affects the use of CCs. When usage trends among high- and low-income gardeners were studied, it was found that higher-income gardeners identified their main motivations for gardening as socialization, personal education, and further control of food quality and safety. theirs, while lower-income gardeners cited food security and financial constraints as gardening priorities. In addition, low socioeconomic status neighborhoods that develop successful CCs often find that CCs raise the level and perception of the neighborhood, thereby creating a process of gentrification that drives away many of the low-income families that CCs are intended to serve. they help them. Finally, we summarize the authors' recommendations for promoting access to CKs in low socioeconomic status communities through policy, future research, and collaborative community efforts to minimize these disparities [12].

From a total of 7226, 84 selected articles indicated that: (1) up to 50% were published by universities or institutions in the United States; (2) up to 44% of studies consider "community gardens" as the primary focus activity of the study; (3) one-third of studies involve adults; (4) almost 25% of studies used "general health" as the primary outcome when investigating the benefits of community gardens; (5) the percentage of studies that achieved results was variable across different dimensions of health. In conclusion, although a certain degree of variability in the use of definition and outcome still exists, community gardens can be a potential strategy for promoting well-being in terms of psychological, social and physical health and can be considered as an innovative urban strategy to promote urban public health [12].

3. Methodology

This study is a combination of primary and secondary to determine the impact of the opening of public flower gardens. To achieve the aim of the study, two main methods were used: To collect quantitative data, a structured survey was used that was distributed to 200 different respondents.

The purpose of this study is to examine and evaluate the economic and social benefits of opening public gardens in a given community, focusing on the psychological impact that this space can have on its residents. Through data analysis and evaluation of individuals' perceptions and experiences, it is intended to understand how the opening of public flower gardens can contribute to improving the quality of life in the local community.

Objectives of the study

The objectives of this study include:

1. Assessing the economic benefits of opening public gardens, including the impact on urban development, local tourism, local trade and the creation of new jobs.

2. Identifying and analyzing the social benefits of opening public flower gardens, including increasing community cooperation, improving the health and well-being of residents, as well as creating a more suitable environment for various social and cultural activities.

3. Including the analysis of the psychological impact that the opening of public flower gardens can have on the local community, researching the perceptions, emotions and feelings of residents regarding this initiative.

4. Identifying potential challenges and obstacles in the opening of public flower gardens and proposing recommendations for improving this process to achieve maximum economic, social and psychological benefits for the community.

3.1. Study instrument

The survey questionnaire includes closed-ended, rating scale, and multiple-choice questions. This questionnaire was designed to measure the respondents' evaluations regarding the impact of the opening of public flower gardens and the economic impact, community involvement and the

role of flower gardens in the preservation of the environment.

3.2. Study sample

The study sample includes 200 respondents who answered the survey. Survey respondents are diverse in age, gender, and experience with public gardens to provide a general representation of the community. The use of the quantitative method is designed to provide a rich and detailed understanding of the impact of the opening of public gardens on the economic and social benefits of the community.

3.3. Study procedure

During the implementation of the questionnaire, several factors were taken into consideration, including the subjects' permission to answer the questionnaires and their willingness to participate in the study.

The application of the questionnaire was carried out through the use of the method of randomness. This choice was made to facilitate the coordination of meetings with the subjects. Questionnaires were randomly distributed to subjects participating in the research. After distributing the questionnaires, the necessary instructions were given to the subjects. The questionnaire was completed over a period of 20 days.

3.4. Statistical processing

In the data collection phase of the study, the defined groups will include information from the questionnaires applied to the study subjects. After receiving the data, a database will be created to analyze through the statistical program IBM SPSS version 26. Following the statistical analysis steps for a descriptive and predictive study, the following procedures will be followed to avoid plagiarism:

-Reviewing the data (questionnaires) to identify any problems, and assessing whether they have been correctly completed by the study subjects.

Table 3 .Model for the impact of public gardens on an overall increase in the economic and social well-being of the community

Model	R	R Square	Adjusted Square	RStd. Error of the Estimate
1	.876[a]	.768	.765	.14148

-Elimination of subjects that may cause inhomogeneity in the sample, to ensure that the group of subjects remains representative and suitable for analysis.

-Data coding to prepare them for statistical analysis. This process involves transforming the data into a format suitable for statistical software.

- Construction of the database, organizing the data in a stable and easily processable structure by the statistical program.

- Data analysis through statistical methods defined for the study, including descriptive analysis and statistical tests that are relevant to the study questions and hypotheses.

3.5. Study hypotheses

HYPOTHESIS 1. The opening of public flower gardens will affect a general increase in the economic and social well-being of the community.

HYPOTHESIS 2. The opening of public flower gardens is positively related to the physical and mental health of citizens.

4. Results

Tabel.1 Gender of respondents

		Frequency	Percent
Valid	Female	56	28.0
	Man	144	72.0
	Total	200	100.0

From this table we see that out of the total of 200 participants, 56 of them (or 28.0%) are women, while 144 of them (or 72.0%) are men.

Table 2 Age of respondents

	N	Minimum	Maximum	Mean	Std. Deviation
Age	200	20.00	55.00	36.9200	10.07278
Valid N (listwise)	200				

This table presents information on the age of the participants. Of the 200 participants, the youngest is 20 years old, while the oldest is 55 years old. The mean age for all participants is 36.92 years, with a standard deviation of 10.07. This shows a different age distribution in the group of participants.

HYPOTHESIS 1. The opening of public flower gardens will affect a general increase in the economic and social well-being of the community.

This model is designed to examine the impact of the opening of public flower gardens on an overall increase in the economic and social well-being of the community. The results show that R Square (approximate coefficient explained) is 0.768, which means that 76.8% of the overall welfare variable can be explained by the opening of public flower gardens in this model. An increased R Square suggests a strong explanation of the variables by the model.

Table 4 ANOVA analysis of the impact of public gardens on a general increase in the economic and social well-being of the community

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.029	2	6.515	325.457	.000[b]
	Residual	3.943	197	.020		
	Total	16.973	199			

The ANOVA analysis (Analysis of Variance) shows that there is a statistically significant difference between the overall group of economic and social well-being and the follow-up variables (public flower gardens). The p-value (Sig.) is very small (0.000), which means that there is a significant impact.

Table 5 Coefficients for the impact of public gardens on a general increase in the economic and social well-being of the community.

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	3.268	.074		44.321	.000
Economic well-being	.114	.016	.250	7.270	.000
Social Welfare	212	.009	.823	23.917	.000

The coefficients show how the outcome (economic and social well-being) changes depending on the opening of public flower gardens. For example, economic well-being has a coefficient of 0.114, indicating an increase of 0.114 for a different standard unit of opening public flower gardens. A low p-value (0.000) indicates that this effect is statistically significant.Looking at the results, hypothesis 1 is confirmed, as there is a significant and positive impact of the opening of public flower gardens on a general increase in the economic and social well-being of the community.

HYPOTHESIS 2. The opening of public flower gardens is positively related to the physical and mental health of citizens.

Table 6 The connection between the opening of flower gardens, physical health and mental health

		The opening of flower gardens	Physical health	Mental health
Spearman's rho	The opening of flower gardens	Correlation Coefficient	1.000	.790**	.141*
		Sig. (2-tailed)	.	.000	.047
		N	200	200	200
	Physical health	Correlation Coefficient	.790**	1.000	-.192**
		Sig. (2-tailed)	.000	.	.006
		N	200	200	200
	Mental health	Correlation Coefficient	.141*	-.192**	1.000
		Sig. (2-tailed)	.047	.006	.
		N	200	200	200

The table shows the relationship between the opening of flower gardens, physical health and mental health of citizens.

The Spearman correlation coefficient (rho) is 0.790 with a very small p-value (0.000). This shows a strong and positive correlation between opening flower gardens and physical health. The closer the correlation value is to +1, the stronger the relationship between the two variables. The Spearman correlation coefficient is 0.141 with a p-value of 0.047. This correlation is weaker and indicates a relatively low association between flower opening and mental health.

Hypothesis 2 mainly consists of the correlation between the opening of flower gardens and physical health. The results show a strong and statistically significant correlation, proving that the opening of flower gardens public among is positively related to the physical health of citizens. However, the link between the opening of flower gardens and mental health is weaker and less clear. Thus, for this part of the hypothesis, a more critical assessment should be made and it should be considered that other influencers may have their role in the mental health of citizens.

5. Conclusion

Our study aimed to investigate the impact of opening public flower gardens on the economic and social well-being of a community. The results of the model show a positive and significant impact of the opening of these spaces on the overall well-being of the community. Here we will review some key points that emerge from the data analysis.

One of the fundamental aspects of the results is the approximate explained coefficient (R Square), which is

0.768. This result shows that about 76.8% of the overall welfare variable can be explained by the opening of public flower gardens in this model. Such an R Square suggests a strong explanation of the variables from the model, making this impact of opening orchards important for understanding community well-being.

Analysis of Variance (ANOVA) confirms statistically significant differences between the general group of economic and social well-being and follow-up variables (opening of public flower gardens). The small p-value (0.000) indicates a significant impact, emphasizing the importance of opening these spaces for the improvement of community life.

The coefficients determine the changes in welfare depending on the opening of public flower gardens. For example, the coefficient of economic welfare is 0.114, it shows an increase of 0.114 for one different standard unit of opening public flower gardens. This difference is statistically significant with a p-value of 0.000.

The verification of the first hypothesis through the analysis of the results confirms that the opening of public flower gardens has a positive effect on the overall increase in the economic and social well-being of the community. This discovery brings enlightenment to urban planners and policy makers that investments in the opening of green spaces have a visible impact in improving the lives of residents and strengthening communities. This suggests that civic strategies and policies that encourage the opening and maintenance of public gardens can bring significant benefits to the well-being and development of the city.

Our study also aimed to analyze the relationship between the opening of public flower gardens and the physical and mental health of citizens. The results of the analysis show some key elements that can help to interpret the interaction between the opening of flower gardens and the health of citizens.

Spearman's correlation between the opening of flower gardens and physical health is 0.790, indicating a strong and positive relationship. The very low p-value (0.000) confirms the statistical significance of this association. This result suggests that the more public flower gardens are opened, the more there is an improvement in the physical health of citizens.

On the other hand, the Spearman correlation between the opening of flower gardens and mental health is 0.141, with a p-value of 0.047. This indicates a relatively weak association and a small p-value, one suggests statistical significance of the link, but not to a high degree. This can be interpreted as a link that exists, but is not as strong as that of physical health.

In order to evaluate the part of the hypothesis related to mental health, it is important to consider that mental health is a complex sphere and influenced by many factors. In this case, there may be other influences that play a role in the mental health of citizens, making the connection with the opening of flower gardens weaker compared to physical health.

The results fit hypothesis 2, proving that the opening of public flower gardens has a significant and positive relationship with the physical health of citizens, while the relationship with mental health is weaker and more complex. These results can be very important for urban planners and policy makers to promote the opening and maintenance of green spaces in the city, considering the health benefits of the community.

Our study aimed to shed light on the impact of the opening of public flower gardens on economic and social well-being, as well as the possible connection with the physical and mental health of citizens. The analysis of the data and the interpretation of the results has brought a rich conclusion and important information for the understanding of the role of public flower gardens in the urban environment.

Regarding the first hypothesis, the study has confirmed that the opening of public flower gardens has a significant and positive impact on the overall increase in the economic and social well-being of the community. Model results and ANOVA analysis have shown a statistically significant relationship, suggesting that communities with green spaces have an advantage in improving economic and social conditions.

As for the second hypothesis, the study has proven that the opening of public flower gardens is positively related to the physical health of citizens. The strong correlation and low p-value indicate that there is a clear relationship between the opening of flower gardens and improved physical health. However, the link with mental health has proven to be weaker and more complex, demonstrating the need for in-depth consideration of other influencing factors.

6. References and Footnotes

6.1. References

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Author contributions

Hekuran Sabedini: Conceptualization, Methodology, Software, Field study,

Mimoza Bytqi Maksutaj: Data curation, Writing-Original draft preparation,

Besir Kryeziu: Software, Validation.,

Nazmi Maksutaj: Field study Visualization,

Isak Berbatovci: Investigation, Writing-Reviewing and Editing.

Conflicts of interest

The authors declare no conflicts of interest.

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