

# Literature Review: Green Space and Well-being

N.S. Jayathunga

Sabaragamuwa University, Belihuloya, Sri Lanka. [nadeesara@ssl.sab.ac.lk](mailto:nadeesara@ssl.sab.ac.lk)

## 1. Introduction

Green spaces (GS) are a major component of human life and environmental assets, playing a vital role in urban planning. Most countries prioritize this concept because they need to plan and develop healthy, green cities. Green spaces are a highly effective means of promoting sustainable health and well-being (Rao, 2021). They offer numerous benefits, including improvements in human health, happiness, and quality of life. Urban green spaces are a significant investment that local authorities can make on behalf of citizens and their well-being (WHO, 2017).

Green spaces benefit both humans and animals. They are instrumental in reducing the urban heat island effect (Wang and Akbari, 2016), mitigating noise and air pollution, naturally cleansing the atmosphere, enhancing natural beauty, and providing environmental education. Psychologically, they offer mental relaxation, peace, quiet, leisure, and recreational opportunities. Furthermore, green spaces are integral to urban planning as they significantly enhance the city's environment.

However, due to rapid urbanization, population growth, development projects, commercial buildings, and construction, green spaces are diminishing rapidly. The UN has recommended a per capita green space of more than 30m<sup>2</sup> per person, while the WHO suggests it should not be less than 9.5m<sup>2</sup> per person (Jayasinghe, Hemakumara, and Hewage, 2017). Despite their essential role in improving human well-being and quality of life, urban green spaces are becoming increasingly insufficient for city residents. Therefore, the primary objective of this research paper is to explore the effects of green spaces on people's well-being.

The main objective of this study is to review the impact of green spaces on the well-being of urban residents. The specific objectives are to understand the impact of green spaces on psychological well-being, to examine their effects on physical well-being, and to explain their influence on social well-being. Although there has been considerable research on the relationship between green spaces and well-being across various fields, there is limited sociological research on this topic. This notable gap will be addressed by exploring the importance of green spaces for enhancing human quality of life and well-being. This study focuses specifically on physical, mental, and social well-being and is particularly timely and relevant.

## 2. Material and Methods

This study employed a historical approach, reviewing past empirical research on the impact of green spaces on the well-being of urban residents. A total of 50 research papers published between 1990 and 2021 were selected as sampling units for this analysis. The purposive sampling method, a type of non-probability sampling, was used because a comprehensive sampling frame was unavailable and the entire population was not accessible. Literature sources for this review were found through electronic searches.

The selected research papers represented a diverse range of journals, including the International Journal of Environmental Research and Public Health (12 papers), BMC Public Health (10 papers), Health and Place (7 papers), Urban Forestry and Urban Greening (5 papers), Management of Environmental Quality (4 papers), and Landscape and Urban Planning (4 papers). Additionally, several journals were represented by one paper each: Journal of Humanities and Social Science, International Journal of Environmental Health, Early Life

Environmental Health, Journal of Environmental Psychology, Cities, Social Science and Medicine, Sustainability, and Environment.

Data analysis began with data entry and processing using Microsoft Excel. Key factors were summarized according to main categories and headings. The columns included the author(s), journal name, year of publication, country where the research was conducted, sample size, unit of analysis, data type, data collection techniques, theoretical approach, definitions, and key findings related to the impact of green spaces on physical, social, mental, and environmental well-being. Descriptive analysis was employed for this data analysis.

Regarding the characteristics of the sample of research articles, the majority (64%) were published between 2014 and 2019. The largest proportion of articles came from the United Kingdom (26%), followed by China and the USA. The International Journal of Environmental Research and Public Health published the most papers, representing 24% of the sample. Concerning the sample units, most studies focused on residents as the unit of analysis (30%), while 20% centered on adults. Most studies in the sample were concerned with the impact of green spaces on psychological well-being and many employed psychological approaches in their research.

### **3. Results and Discussion**

Considering the main and specific objectives, the following are the major findings from the reviewed research articles regarding the impact of green space on the well-being of urban people, based on the three types of well-being. According to psychological well-being, green spaces have a positive impact on psychological disorders, particularly stress, depression, and anxiety. Many studies have found that green spaces directly influence stress reduction. People living near parks or other green spaces experience less stress compared to those in areas without such amenities. Forest bathing, for example, has been shown to directly reduce stress, lower blood pressure, and decrease heart disease, thereby positively impacting mental health (Mas et al., 2015). Additionally, window views of green spaces in high-rise buildings contribute to better mental well-being. Research indicates that individuals with higher psychological well-being are more likely to lead healthier and longer lives.

Related to physical well-being, the study found that the impact of green space on physical well-being is significant, promoting an active lifestyle. Access to green spaces helps people maintain proper physical fitness and reduces the risk of various diseases. Studies have shown that engaging in physical activities in natural settings, such as green exercises, not only provides relaxation but also helps alleviate mental disorders (Pretty, J. N. et al., 2007). People are generally more motivated to engage in regular physical activities when they have access to nearby green spaces. The benefits of walking for older adults (Godbey, G., 2009) and Green Space impacts on the everyday lives of older adults, for physical well-being were significant (Finlay, J. et al., 2015).

Considering social well-being the study found that urban green spaces enhance social inclusion and community cohesion. The social benefits of green spaces include recreational opportunities, aesthetic enjoyment, strengthened social ties, and educational opportunities (Giuffré, L., 2019, Mensah, C. A. et al., 2016). Green spaces reduce social isolation, foster the development of new relationships, and provide spaces for sharing experiences with peers. There was a relationship between social relations and health (Dinnie, E. et al., 2013). They also support group activities and enjoyment, contributing to improved social well-being. Green gatherings create opportunities for building social relationships, which can positively impact overall health. In summary, the literature review indicates that the overall impact of green space on physical, mental, and social well-being is positive.

#### **4. Conclusion**

Based on the above facts, several conclusions can be drawn. Most research studies have concentrated on the impact of green spaces on psychological well-being and health. A significant number of these studies were published between 2014 and 2019. The majority of this research originated from the United Kingdom, with many studies appearing in the *International Journal of Environmental Research and Public Health*. The survey method, particularly through questionnaires, was the most commonly used data collection technique, and residents were the most frequently chosen sample unit in the literature. According to Psychological well-being, many studies have found that green spaces positively influence psychological well-being. Specifically, green spaces help mitigate psychological distress, cope with everyday stress, and foster a positive mentality. People with higher psychological well-being are more likely to lead healthier and longer lives. Based on physical well-being research indicates that engaging in physical activities or exercises in green spaces has a positive impact on physical well-being. Green exercises contribute to improved fitness and help prevent various diseases. Based on social well-being urban green spaces positively influence social well-being by enhancing recreational opportunities, education, aesthetic enjoyment, and social communication. These spaces help reduce social isolation, foster community ties, and support group activities. Considering the Sri Lankan context, research has mainly focused on city sustainability, urban green space standards, and urban greenness surveys. However, there is a noticeable lack of sociological studies exploring how green spaces impact the well-being of urban people. As the Practical recommendations and policy implications for urban planners, green spaces should be designed as community hubs that foster social interaction and a sense of belonging. Planners can include spaces for cultural events, communal gardens, or open-air markets to facilitate engagement and strengthen social ties among residents, incorporating more passive green areas that encourage relaxation and mindfulness, particularly in busy urban environments, Urban design regulations should encourage such as green roofs, rain gardens, and urban wetlands that contribute to environmental sustainability and resilience while enhancing the aesthetic and recreational value of urban spaces. Overall, while there is substantial research on the psychological, physical, and social benefits of green spaces, more sociological studies are needed to understand their impact on urban well-being. The insights gained from this literature review can help direct future researchers and scholars by highlighting existing knowledge gaps and proposing potential avenues for further investigation and intervention.

#### **5. Keywords**

Green Space, Well-being, Impact, Literature Review

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