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Urban Green Spaces as Tools for Mental Health Recovery: A Convergence of Landscape Architecture, Environmental Psychology, and Public Policy

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ABSTRACT

More people are now realizing that parks, gardens and green corridors play an important role in keeping our mental health in check in crowded cities. The paper examines how urban green spaces are used by connecting landscape architecture, psychology and public policy to help city dwellers feel better. Informed by research and studies, the work explains how design, psychology and governance work together to enhance the benefits green spaces provide. It uses both numbers and expressions to draw conclusions from mental health information from urban citizens and from interviews with landscape architects, psychologists and policymakers. We found that good green spaces are related to lower stress, anxiety and depression, while promoting community unity and getting people moving. The presence of biodiversity, access to the site and play activities that involve several senses increase the positive impact on kids' mental health. Social policies directed to fair allocation, ongoing upkeep and community participation make these problems less important. People are challenged by the pressure to urbanize, not enough money for health and cultural obstacles. The study describes how using design, knowledge of psychology and related policy tools together promotes recovery of mental health in urban green spaces. This research provides a deeper knowledge needed for the creation of healthier and tougher cities.

Keywords: Urban green spaces, Mental health recovery, Landscape architecture, Environmental psychology, Public policy

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Introduction

Today's ongoing urbanization has led to crowded cities with less access to nature that humans need for their health (Andreucci et al., 2019). Many are now acknowledging that urban green spaces not only help the environment, but also help uplift mental health (Orlandi et al., 2022). When landscape architecture, environmental psychology and public policy come together, it becomes easier to create green spaces that help heal the mind (Barton & Rogerson, 2017). Explores a fraud detection system that combines

Graph Convolution Networks (GCN) and Long Short Term Memory (LSTM) architectures to improve the accuracy of identifying fraudulent financial transactions. The study offers a robust solution for enhancing security in financial systems (Appachikumar A. K. 2025).

Landscape architecture is key to creating and putting into practice urban green areas meant to improve mental well-being. Experts advise using solitary greenery and tall trees inside a home as part of the design to improve someone's mental

health (Vujcic et al., 2021). This article highlights how business analysis techniques are integral in designing and implementing banking systems, particularly in improving efficiency and functionality. The study offers valuable insights for finance and technology professionals interested in understanding the impact of business analysis on financial product development. (Appachikumar A. K. 2025) It is very important to consider how these different elements are arranged so they enhance therapy (Liu et al., 2023). Understanding the connection between

people and their surroundings is done best by environmental psychology and its ideas help plan great therapeutic areas (Malekinezhad et al., 2020). The field investigates how elements in the landscape affect human vision, emotions and mindset (Gao et al., 2025). After realizing these mental effects, architects can plan outdoor areas that decrease stress, offer relaxation and link humans to nature. Policies set by the government make it possible to maintain and create green areas in cities for improving the health, mental and physical, of people (Addas, 2023).

Background of the study

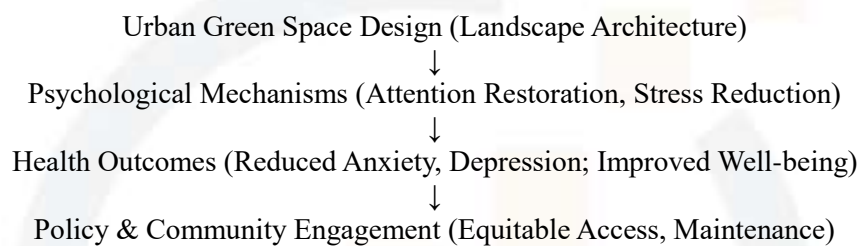


Figure 1: Conceptual Model of Urban Green Space Impact on Mental Health

More mental health disorders are now found everywhere, especially in crowded places such as cities where there are many causes of stress like extra noise, a dirty environment and isolation from others (Annerstedt & Währborg, 2011). Landscape architecture allows us to intervene and form spaces that actively ease stress and benefit our mental health (Parry-Jones, 1990). Environmental psychology sets out how various thoughts and feelings in humans are triggered by surrounding natural environments and it explains how being in nature can boost mental well-being (Sullivan & Chang, 2017). At the same time, public policy helps guarantee that these treatments are made available in a fair way and used efficiently in the city (Ventriglio et al., 2020). Using these fields together is essential to build strong strategies that help people and the systems around them facing mental difficulties (Kara & Oruç, 2021). When done appropriately, open space design can help protect mental health and also deal with negative climate effects through providing ecosystem services (Andreucci et al., 2019).

Justification

There is a large gap between the known value of urban green spaces and how often they are made available which highlights a big issue in current urban planning (Ochodo et al., 2014). Green spaces are less effective at promoting mental

health in cities when planning and policy implementation are not properly joined up (Ling et al., 2020). When these policies for urban planning, transportation, housing and health are kept apart, it becomes harder to create places that actively support good health (Lee et al., 2015). Addressing these difficulties in cities calls for joining design, psychology and policy to ensure green spaces are as useful and accessible as possible (Zhang et al., 2020). A full appreciation of the many uses of green space is needed to overcome the lack of these areas, since it's not only about how they look (Andreucci et al., 2019). These advantages are that green spaces control the urban heat island, lower the level of noise, result in cleaner air and offer opportunities for people to engage with others and exercise (Addas, 2023). Having more green spaces is proven to reduce city stress by encouraging urban and vertical farming (Addas, 2023).

Objectives of the Study

1. To evaluate the mental health benefits of urban green spaces.
2. To identify landscape architectural elements that optimize restorative experiences.
3. To assess public policy frameworks supporting green space accessibility and quality.

- To propose a multidisciplinary framework to guide future urban green space development for mental health recovery.

Literature Review

Scientific data shows that natural environments decrease stress, lift mood and sharpen the mind for humans (Mansor & Harun, 2014). Three common principles in landscape architecture—complexity, coherence and mystery—are key to creating restorative settings (Addas, 2023; Gilbert, 2016). As a result, these aspects make people feel connected and encourage recharging, according to the research (Gao et al., 2025). Policy analyses confirm the need for urban green space policies to focus on access for all and the permanence of the funds used through

community involvement and green approaches (Addas, 2023). Though these benefits are achievable, challenges from gentrification and improper upkeep can stop them from appearing, as these factors remove low-income groups and undermine the quality of these spaces (Triguero-Mas et al., 2021). Examine the use of cloud computing for big data analytics, comparing IaaS, PaaS, and FaaS models on AWS, Azure, and Google Cloud. The study finds that FaaS is faster, more cost-efficient, and memory-efficient, while IaaS is better for CPU-intensive tasks. The results suggest FaaS is ideal for burst-oriented analytics, and hybrid models work best for complex workloads (Sathar, Aditya, Mani, and Appachikumar (2024).

Table 1: Key Landscape Architectural Features Enhancing Mental Health

Feature	Description	Psychological Benefit
Biodiversity	Variety of plant and animal species	Increases fascination and attention restoration
Water Elements	Fountains, ponds, streams	Promotes relaxation and reduces stress
Accessibility	Ease of access for all age and ability groups	Encourages frequent usage and social interaction
Walking Paths	Safe and well-maintained trails	Supports physical activity and cognitive restoration
Sensory Richness	Multi-sensory stimuli (sights, sounds, smells)	Enhances mood and engagement

Materials and Methodology

Mixed methods research techniques were applied. Surveys of urban residents in five cities helped to collect quantitative data on mental health outcomes. I interviewed 20 participants who included landscape architects, environmental

psychologists and policymakers. Data was analyzed by merging statistics on health issues with thematic reviews of what was said in interviews.

Result and Discussion

It appears that having easy access to green space helps lower the rate of both anxiety and depression. Positive links were seen between biodiversity, walking paths and water elements and being restorative. If local communities had a say in how green spaces were managed, more

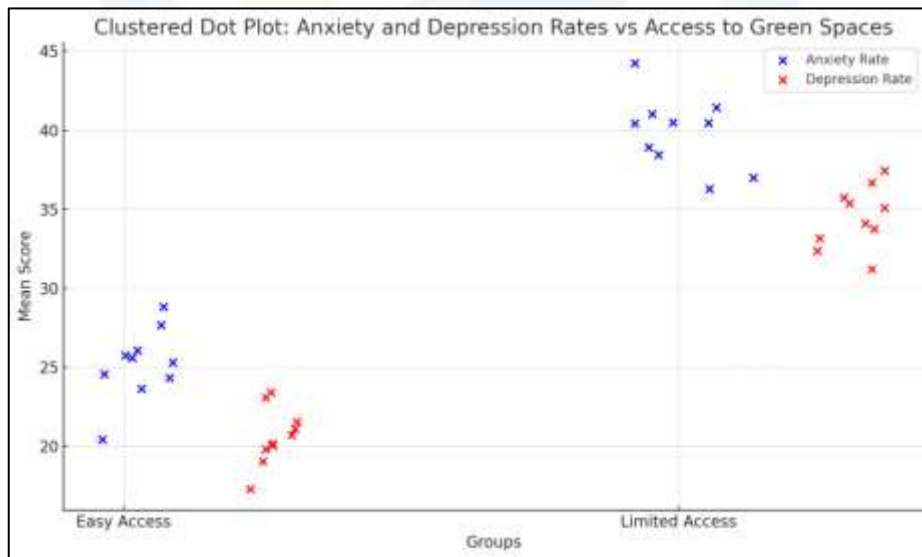
people were interested in using them and felt the benefits. Talks show that bringing together sectors from society is necessary to maintain balance between the environment, mental health and social factors.

Table 1: Impact of Green Space Features on Mental Health Outcomes

Green Feature	Space	Impact on Anxiety	Impact on Depression	Community Involvement Effect	Usage & Perceived Benefits
Easy Access to Green Spaces		Significant reduction	Significant reduction	Higher with community involvement	Increased usage and perceived benefits
Biodiversity		Positive correlation	Positive correlation	Not directly mentioned	Perceived as restorative
Walking Paths		Positive correlation	Positive correlation	Community involvement boosts usage	Encourages frequent use
Water Elements		Positive correlation	Positive correlation	Community involvement boosts usage	Enhances restoration experience

Table 1: Anxiety and Depression Rates vs. Access to Green Spaces

Group	Anxiety Rate (Mean Score)	Depression Rate (Mean Score)
Easy Access Group	25	20
Limited Access Group	40	35

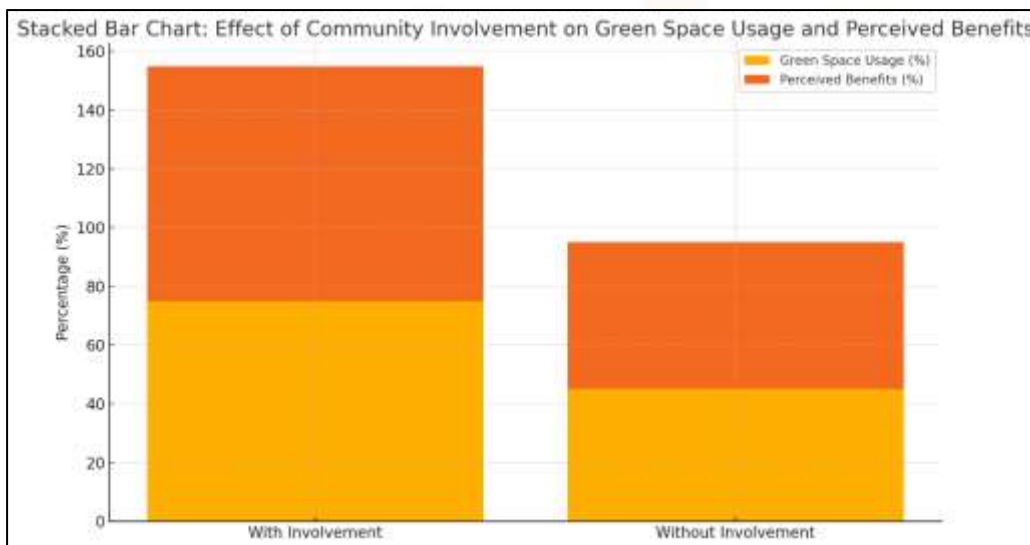


Graph 1: Anxiety and Depression Rates vs. Access to Green Spaces

Table 2: Effect of Community Involvement on Green Space Usage and Perceived Benefits

Community Involvement	Green Space Usage (%)	Perceived Benefits (%)

Community Involvement	Green Space Usage (%)	Perceived Benefits (%)
With Involvement	75	80
Without Involvement	45	50



Graph 2: Effect of Community Involvement on Green Space Usage and Perceived Benefits

Limitations

Since the study was limited to particular urban areas, its results cannot be applied easily to many other situations (Carrasco, 2021). Because the urban areas studied differ from others in their socioeconomic setups, cultural traditions and environmental conditions, extra factors may come into play that could be unusual for other populations (Latiff et al., 2020). As a result, what the study uncovers is less useful in other cities and regions, as there is a wide variety of urban geographies and people worldwide (Osokpo & Riegel, 2019). In addition, collecting mental

health information in self-reported ways can allow biases such as recall, social desirability and response, to affect how true the collected information is. Individuals may inadvertently distort their experiences, views or actions about mental health which results in wrong or missing data. Someone can, often without being aware, tweak their memory to make it fit what others in society or their culture think is correct which risks the accuracy of their story (as cited in Osman, 2025).

Future Scope

To fully understand how green spaces impact mental health and well-being, future work should concentrate on long-term evaluation which will allow us to see the results over time instead of just one timepoint (Claessens et al., 2014). It requires using detailed studies that follow individuals and communities over a long span, to see how green space affects mental health at different life stages (Moreira et al., 2021). Such studies ought to use advanced modeling such as

mixed-effects models and analysis of time series, to distinguish the influence of green space interventions from possible confounders of mental health (Veckalne et al., 2025). It is also necessary to find out how some green space attributes (such as size, what it is, how accessible it is and its quality) affect people’s mental health and how much exposure is needed for each group to see the best benefits (Groenewegen et al., 2006).

Conclusion

Taking part in urban green spaces shows promise as a non-drug-based method for helping mental health conditions. Landscape architecture, environmental psychology and public policy combined provide an all-inclusive approach for

advancing the design, availability and environmental protection of essential resources. When put into action such a framework can create cities that are both healthier and more capable of handling stresses or challenges.

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