



THE EFFECT OF LANDSCAPE ON MOOD AND PSYCHOLOGICAL WELL BEING

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Abstract: Urbanization has become one of the most significant factors affecting human life. Rapid economic and industrial changes, coupled with increasing urban density, have separated people from natural environments and confined them to build spaces. Ensuring sustainable and healthy urban living requires improving existing urban environments through ecological planning and design approaches. Green spaces play a key role in achieving this. Numerous studies have demonstrated the importance of natural landscapes, vegetation, and environmental soundscapes for human health.

This article reviews the relationship among landscape environments and psycho emotional well-being of human by tracing the historical development of landscape and environmental psychology. Drawing on theoretical and empirical research, it explores how natural and urban landscapes affect mood, stress, and overall psychological well-being.

In addition, concepts such as biophilia, ecotherapy, and landscape psychology, which underline the mental health benefits of contact with nature, are analyzed.

Keywords: LANDSCAPE, MOOD, PSYCHOLOGY, BIOPHILIA, ECOTHERAPY, STRESS, URBAN ENVIRONMENT, GREEN SPACES.

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Introduction

Landscape psychology is a scientific field examining the effects of external environments on human behaviour and psycho-emotional states. This discipline assumes that individuals perceive and respond to their surroundings based on spatial structure, aesthetic qualities, and functional characteristics. Previous studies in landscape psychology show that anxiety and depression increase with exposure to urban stressors—traffic congestion, noise, and pollution—while natural scenery, greenery, and clean air reduce stress levels and promote relaxation (Ulrich, 1984). Plants are integral components of life, particularly in densely populated urban areas, and their aesthetic, functional, and psychological benefits contribute significantly to public health (Zencirkiran et al., 2024).

Materials and Methods

The main material of this study consists of global research on landscape psychology and their published findings. The impacts of

these findings on human psychological well-being are analysed, and recommendations are proposed based on the results.

Results

I. Historical Development of Landscape and Environmental Psychology:

The origins of landscape psychology date back to the late 19th century. During that period, industrialization, dense urban development, and environmental pollution in Europe and America began to deteriorate people's physical and mental health. This led to the first observations of the positive effects of contact with nature on health. For example, in the 1850s, Frederick Law Olmsted, architect of Central Park in New York, argued that parks should not only be aesthetically pleasing but also provide "psychological relief." According to Olmsted, green spaces should reduce the stress of city dwellers, provide inner peace, and promote social balance. (Olmsted, 1865.) These ideas later formed the basis of landscape psychology: the relationship between nature and



humans came to be seen as a tool for psychological healing. Beginning in the 1940s, and especially in the post-World War II era, new disciplines emerged that examined the influence of environmental factors on human behaviour. During this period, “ecological psychology,” combined with landscape architecture, developed and formed the basis of the academic approach to the concept of “landscape psychology.” During this period, landscape psychology was applied in the following areas:

Hospital Gardens: Between 1950 and 1970, hospital gardens were established in many countries to reduce patient stress and accelerate recovery. A well-known study by Ulrich (1984), in particular, scientifically confirmed the psychological impact of landscape, showing that patients exposed to nature recovered more quickly.

Military Rehabilitation Centres: After World War II, garden therapy was implemented in treatment centres for wounded soldiers in the US and UK. Landscape design was used to reduce symptoms of traumatic stress in soldiers.

Urban Parks: Since the 1960s, landscape psychology has been applied to urban planning to improve social interaction and foster a sense of belonging. Consequently, the positive effects of green spaces on social cohesion and social behaviour have been demonstrated (Kuo et al., 2001).

a). Landscape and Environmental Psychology in 20th-Century Europe:

By the mid-20th century, accelerating industrialization, urbanization, and consequent environmental degradation in Europe led to the emergence of new disciplines examining the impact of the environment on human psychological health. During this period, landscape and environmental psychology emerged as scientific fields examining the interaction between humans and space. The development of these fields in Europe occurred at the intersection of various disciplines, including social psychology, architecture, urban planning, ecology, and aesthetics.

1. 1900-1940: Perception of Nature and the Healing Environment

During this period, perceptions of nature and the environment in Europe were shaped by the idea of the “healing power of nature.” In Germany, England, and the Scandinavian countries, the “city garden” and public park movements gained momentum, popularizing the idea that contact with nature in the city promotes psychological balance (Jellicoe et al., 1975). During this period, British urban planner Ebenezer Howard (1902), in his work “Garden Cities of the Future,” advocated for the protection of social and mental health by creating green belts around cities. Similarly, the Lebens reform (life reform) movement in Germany linked living close to nature with psychological purification and spiritual health. These early studies later paved the way for the emergence of scientific ecological psychology. Ecological psychology emerged as an academic discipline between 1950 and 1970. As European cities were being rebuilt after World War II, the disciplines of architecture and urban planning began to consider people’s psychological needs. During this period, the institutionalization of ecological psychology, which examined the impact of the environment on human behaviour, began to take shape. In the 1950s, Swiss psychologist Jean Piaget’s theory of cognitive development and German Gestalt psychology influenced the explanation of the structural basis of environmental perception (Piaget, 1952). This approach proposed that people perceive the

environment not only as a physical space but also as a meaningful and emotionally charged realm of experience. In the 1960s, experimental studies conducted in England, the Netherlands, and Sweden began to measure the psychological impact of spatial density, noise, color, and natural elements. During this period, Dutch scientist Adriaan de Groot and Swedish psychologist Per-Olof Sjöstrand conducted pioneering experimental studies examining the impact of environmental factors on job performance and stress levels (De Groot, 1969).

2. 1970–1990: The Development of Landscape Psychology and Mental Renewal Through Nature

In the 1970s, environmental psychology in Europe shifted its focus to the study of nature and landscapes. Research conducted in Scandinavian countries, in particular, scientifically demonstrated that contact with nature has a “regenerative” (regenerating) effect on humans. Beginning in the late 1970s, Swedish researcher Roger Ulrich (1984) demonstrated the stress-relieving effects of natural landscapes by experimentally demonstrating that patients who enjoyed natural views from their windows during post-surgical recovery recovered faster. Similarly, attention restoration theory (ATT), developed by Rachel and Stephen Kaplan (1989), proposed that natural environments revitalize attention by reducing mental fatigue. This theory had a profound impact on European approaches to landscape planning and urban design. During this period, the concept of biophilia (the idea of a genetic connection between humans and nature) gained popularity in European academic circles (Wilson, 1984). Thus, landscape design began to be viewed not only as an aesthetic tool but also as a tool for psychological healing.

3. 1990 and onward: Applications in Urban Planning, Health, and Education

Since the 1980s, the concept of “human-centered design” has developed in European cities, guided by landscape psychology. In Sweden and Finland, the role of green belts and parks in urban planning has become prominent. Research in the Netherlands has shown that green spaces around homes reduce depression (De Vries et al. 2003). In the UK, the Urban Green Space Movement emphasized the impact of urban green spaces on social cohesion and mental health.

As a result of these developments, landscape and environmental psychology in Europe has become not only a theoretical but also an applied science in planning. In 19th-century Europe, landscape and environmental psychology evolved from explaining the impact of nature on the human psyche to a scientific approach that tailored environmental design to human needs. During this period, landscape began to be perceived not only as “visual beauty” but also as a source of psychological well-being and balance. These developments in Europe laid the foundations for modern biophilic urbanism, ecotherapy, and sustainable design approaches.

b). Landscape and Environmental Psychology in the Soviet Union:

In the mid-20th century (1940s–1970s), the Soviet Union began to develop its own scientific basis for studying the impact of the environment on the human psyche. Although the terms “landscape psychology” and “environmental psychology” were not yet used in their modern forms, research in this area was actively conducted in the following areas:

- business and everyday psychology,

- architectural and engineering psychology,
- physiology of the perception of the natural environment,
- the effects of hygiene and urban planning.

The Soviet regime laid the scientific foundations for landscape psychology by considering the natural and architectural environment as factors influencing human behavior, mood, and performance.

1. Landscape as a Factor in Mental State

In the 1950s, Soviet psychologists and physiologists such as I. P. Pavlov, A. R. Luria, and B. G. Ananyev began to discuss the importance of the external environment for higher neurological activity. Pavlov stated that natural stimuli (the sound of water, the color green, light) cause “protective inhibition,” a physiological mechanism for the relaxation and repair of the nervous system (Pavlov, 1951). This idea formed the basis of Soviet research: he argued that contact with nature normalizes physiological processes, improves emotional well-being, and reduces fatigue.

2. Architectural and Engineering Psychology (1950–1970)

Architectural psychology, closely linked to urban planning and the design of residential neighborhoods, developed in parallel.

In the 1950s, Soviet psychologists and physiologists studied the psychological effects of the urban environment and green spaces on people. These studies focused on the effects of environmental factors, particularly visual perception and the presence of green spaces, on residents’ emotional state and social behavior.

Studies coordinated by researchers such as B. G. Ananyev and V. M. Kogan in the 1960s revealed that the visual perception of the urban environment and the presence of green spaces affect the emotional states and social behavior of urban dwellers (Ananyev, 1968).

In the 1970s, the principles of a “psychologically comfortable urban environment” began to be developed in Leningrad and Moscow and were implemented in the following areas:

- the need for green spaces in courtyards,
- the orientation of residential buildings toward the sun,
- visual connections with natural objects (water, trees, parks).

These studies had practical applications in urban development projects such as Leningrad’s “green belts” and the concept of “micro-zones” with recreational courtyards.

The following table was created to analyze these findings more clearly:

Table 1: Soviet Psychologists and Physiologists’ Analysis Table Showing the Psychological Effects of the Urban Environment and Green Spaces on People.

Researcher	Research Topic	Findings	Psychological/Social Influences
A. R. Luria (1950’ler)	Effects of Environmental Factors on Mood and Perception	Argued that differences between urban and natural environments influence psychological and social behavior.	Urban environments lead to more stress and negative emotions, while nature provides a soothing effect.
I. P. Pavlov (1951)	Natural Stimuli and Environmental Influences	He stated that natural stimuli (green spaces, sounds of water, natural light) calm the nervous system.	Environmental stimuli have a protective inhibition (relaxation and restoration) effect.
B. G. Ananyev (1968)	Visual Perception of the Urban Environment and the Role of Green Spaces	He demonstrated that the presence of green spaces improves the mood of residents in urban environments.	Visual perception, proximity to nature, and green spaces enhance emotional recovery and social cohesion.

Pavlov’s theory of “protective inhibition” demonstrated that environmental factors have a calming effect. Luria’s work specifically compared the tension of urban environments with the relaxation provided by nature. Ananyev, on the other hand, stated that green spaces improve people’s mood and have a positive effect on social cohesion.

These studies, by demonstrating the effects of urban environments on visual and emotional perceptions, demonstrated that increasing contact with nature can positively impact psychological health.

3. The Emergence of Environmental Psychology as a Discipline

By the mid-1970s, landscape psychology ideas were being applied in the following areas:

- spa and resort design—green spaces, “therapeutic walking” routes;
- school architecture—creating “psychologically gentle” spaces;
- workplace design—greening factories, using natural light to reduce fatigue;

• psychotherapy institutions—using gardens and parks in psychiatric clinics. Soviet researchers demonstrated that the landscape is not only a physical environment but also a psychological setting that shapes human behavior, moral climate, and emotional well-being. The term “ecological psychology,” similar to Western environmental psychology, began to be actively used in the USSR in the late 1970s. Pioneers of Soviet environmental psychology include V. A. Yasvin, N. F. Reimers, B. F. Lomov, Yu. G. Panyukov, and V. I. Medvedev. Their work explored how the spatial organization of the environment, color scheme, noise level, plants, water, and various other factors influence emotional well-being, harmony, and human behavior. In the 2000s, V. A. Yasvin proposed the term “developmental ecopsychology,” which links an individual’s mental development to their interaction with the natural and social environment (Yasvin, 2000).

Below is a table summarizing the findings of these studies.

Table 2: Analysis of the Works of Soviet Environmental Psychology Pioneers:

Researcher	Research Topic	Findings	Psychological/Social Influences
Yu. G. Panyukov (1970'ler)	The effects of natural (plants, water) and environmental elements.	Green spaces, water, and natural elements have been found to have soothing and healing effects on human psychology.	Factors such as plants and water increase mental balance, reduce stress, and accelerate recovery.
N. F. Reimers (1970's)	The emotional impact of spatial organization and color schemes.	It was demonstrated that the visual perception of space and colours alter individuals' stress levels and emotional states.	While dull or dim colours create stress, natural colours and open spaces promote comfort.
B. F. Lomov (1970's)	The effects of noise and environmental elements on social cohesion.	Environmental pollution and noise pollution have been found to negatively affect psychological health.	Noise increases stress and anxiety, while quiet and peaceful environments promote more positive moods.
V. A. Yasvin (2000)	The psychological basis of the interaction between humans and the natural environment.	He stated that environmental spatial organization and colours have strong effects on people's mood and behaviour.	The presence of spatial order and the calming or stimulating effects of colours influence mood.
V. I. Medvedev (1980's)	The Impact of Environmental Elements on Human Behaviour.	Environmental factors have been observed to shape social behaviour and individual healing processes.	Green spaces increase social interaction, and natural elements improve psychological health.

These studies reveal that nature is an important component of mental health.

c). Academic and Applied Developments from 1970 to 1990 Worldwide:

Since the 1970s, landscape psychology has been considered a distinct research area within environmental psychology worldwide. Two important theoretical approaches emerged during this period:

1) Attention Restoration Theory: Kaplan and Kaplan (1989) argued that interaction with nature reduces cognitive fatigue. This theory suggested that parks, walking trails, and natural landscapes are effective in supporting human mental renewal.

2) Psycho-evolutionary Theory: According to this theory, developed by Ulrich et al. (1991), the positive emotions people experience in natural environments have an evolutionary basis. Open, green, and safe environments contribute to stress reduction and positive moods.

During this period, landscape psychology began to be used not only in theory but also as a practical design guide. For example, the concept of "Healing Gardens" has been developed in hospitals, university campuses have integrated green spaces into their landscapes to support students' psychological well-being, and the impact of green spaces on employee productivity in offices and business centres has been emphasized.

The Impact of Biophilia and Ecodesign:

The term "biophilia" comes from the Greek words "bio" (life) and "philia" (love or affinity). First used by Erich Fromm between 1964 and 1973, it means "a passionate love for life and all living things." Later, biologist Edward O. Wilson popularized the "biophilia hypothesis" (1984), which proposes that humans have an innate tendency to connect with other life forms and nature (Baldwin, 2020).

The concept of biophilia posits that humans have an innate need for contact with nature, which has a positive impact on mental and physical health. Biophilic design in landscape architecture aims to create artificial spaces that mimic natural conditions and enhance people's psychological well-being. Incorporating natural elements into urban spaces helps reduce stress and promote emotional healing (Kaplan & Kaplan, 1989).

Ecodesign, with its ecotherapeutic effect, is a design approach that pays particular attention to the impact of design on the environment throughout the life cycle and aims to integrate ecological principles with life processes. For example, the fundamental principles of "any design that integrates with life processes and minimizes destructive impacts on the environment" include resource efficiency, renewable energy use, increased biodiversity, sustainability, and design for restoration (Van den Berg A.E et al., 2015).

Ecodesign is a psychological therapeutic method that uses interaction with nature to improve human psycho-emotional well-being. Research shows that exposure to natural landscapes reduces stress, promotes relaxation, and restores cognitive function. It is also used in the treatment of depression, anxiety disorders, and other mental illnesses (Bratman et al., 2015).

Biophilia and ecodesign, while related, have different perspectives: Biophilia focuses on the human-nature connection and the psychological, physiological, and emotional benefits of proximity to nature or nature-inspired environments. Ecodesign, on the other hand, focuses on the human-environment system, focusing on how design can align with ecological processes, minimize harm, and restore natural systems. Together, design strategies using biophilic principles can both promote human well-being through ecological design and support the health and resilience of ecosystems. The goal of biophilic design is to design environments that have a

positive impact on human health and well-being. These positive effects should be measurable (Bolten et al., 2020).

According to one concept, biophilic design can be conceptualized in three categories:

1. Nature in space (direct perception) – for example, vegetation, water, natural light, animals.
2. Natural analogs (indirect perception) – for example, natural materials, patterns/textures that mimic nature, natural colours.
3. The character of the space/spatial and local conditions – for example, spatial configurations reflecting the natural environment, landscapes and shelters, transitional spaces.

Kellert (2018) described two dimensions of biophilic design. The first is the naturalistic dimension, inspired by the understanding of biophilia that emerged genetically during the Paleolithic period. The second is the domestic dimension, which developed after the Neolithic period. Kellert associated these two dimensions with 72 characteristics of biophilic design.

The Benefits of Biophilia and Ecodesign for Human Well-Being:

Research has shown that interaction with nature or nature-inspired environments reduces stress, improves mood, enables patients to recover faster, and improves attention and cognitive abilities. Biophilic design in the workplace is associated with increased productivity, creativity, and satisfaction. It also reduces energy, water, and artificial material consumption, resulting in a reduction in carbon footprint, resulting in environmental conservation. Ecodesign requires interdisciplinary knowledge (ecology, engineering, architecture) and systems-oriented thinking. Implementation can be complex and costly initially (Baldwin, 2020). In summary, biophilia and ecological design together offer a compelling framework for designing built environments that support both human development and environmental sustainability. By recognizing human needs for nature and integrating ecological principles into design systems (ecological design), architecture and planning can move toward creating more restorative and healthy environments.

II. The Impact of Natural Landscapes on Psycho-Emotional Well-Being:

Natural landscapes have traditionally been associated with a positive impact on mental health. Research has shown that spending time in natural spaces reduces stress levels, improves mood, and enhances overall psychological well-being.

1. The Color and Texture of Nature

In his study, “The Effects of the Environment on Coping with Poverty and Attention in Urban Centers,” Kuo explored the question, “Does attention extend to urban centers in impoverished areas where green space is minimal and the demands of life can be overwhelming?” This study compared attentional function and effectiveness in managing important life problems in 145 urban public housing residents randomly assigned to buildings with and without natural surroundings. Numerous tests were conducted to determine the specific causal pathway between the natural environment and feelings of aggression. The results from all these tests converged (Kuo, 2001). Green and blue tones in nature have a calming and restorative effect on the human psyche. Green plants, especially trees and shrubs, create a sense of privacy and security that promotes relaxation. Water sources such as lakes, rivers, and

fountains add an element of harmony and help reduce psycho-emotional stress (Kuo et al., 2001).

2. Nature Sounds and Environmental Factors

Numerous studies have demonstrated that nature sounds have direct positive effects on people’s psychological well-being. These effects are associated with stress reduction, psychological relaxation, and accelerated healing processes.

• Psychological Effects of Nature Sounds:

Natural sounds such as water, wind, birds chirping and leaves rustling have been found to reduce stress levels, relieve anxiety and support mental well-being. A study conducted (Medvedev, 2015) found that nature sounds promote greater relaxation than popular music.

• The Role of Nature Sounds in Healing:

A study conducted in hospitals (Cohen et al., 2016) found that when natural sounds (e.g., water sounds and birdsong) were played in patients’ rooms, patients experienced faster recovery, experienced less pain, and had better moods. It has been determined that natural sounds, especially the sound of water, can relax the stress-related areas of the brain and lower blood pressure.

• The Effect of Nature Sounds on the Brain:

Experimental studies have shown that interacting with nature sounds increases activity in areas of the brain associated with relaxation, creating the same effect as visual scenes. A study by Yin & Zhang (2016) revealed that people who interact with nature sounds are better able to focus with visual and auditory nature stimuli, and that this interaction is similar to the brain’s resting state.

• Advancing Research on Nature Sounds:

Following Ulrich’s (1984) studies on visual environments and healing, studies on nature sounds have gained greater prominence, and the effect of these sounds on psychological healing has paralleled the effects of visual environments. Meta-analyses (Alvarsson et al., 2010) have confirmed that nature sounds reduce stress hormones (cortisol), promote improved concentration, and induce psychological relaxation. Water, rustling leaves, and birdsong create a sense of peace and well-being. Some studies have shown that these sounds not only reduce stress but also help relieve emotional distress and improve cognitive function and mood (Ulrich, 1984). Ultimately, Ulrich’s studies on nature scenes have revealed that nature sounds have similarly positive effects on humans, establishing the importance of interaction with nature as a tool for improving physiological and psychological health.

3. Spatial Organization

Large natural landscapes with organized green spaces and water features promote a sense of freedom and peace. Research shows that such spaces have a positive impact on psycho-emotional well-being and reduce anxiety and stress (Kaplan et al., 1989). Van den Berg et al.’s (2018) study and Hartig et al.’s (1991) research are among the most important studies examining the positive effects of natural landscapes on people’s psychological and emotional well-being. These studies have revealed that natural elements such as organized green spaces and water features have significant positive effects on individuals’ anxiety, stress, and overall mood. It has been noted that such natural spaces provide an environment that

improves personal health, and individuals feel more peaceful and relaxed when they spend time in these spaces.

Van den Berg et al.'s 2018 research emphasizes that interacting with nature can have positive effects on psychological well-being, especially for individuals living in urban areas. Researchers have noted that the visual and auditory qualities of nature are effective in reducing people's stress levels, with landscapes featuring green spaces and water features in particular providing a relaxing effect. They have also observed that spending time in nature provides cognitive benefits such as reducing attention deficit and fatigue (Van den Berg et al., 2018).

A study published by Hartig and colleagues in 1991 was one of the first significant studies to examine the positive effects of nature on human health. The study investigated the stress-reducing effects of

natural environments and their ability to create a calming and peaceful atmosphere. Hartig and his team noted that natural landscapes, particularly green spaces and water features, contribute to individuals' psychological relaxation, leading people to feel more peaceful and less anxious in these spaces (Hartig, 1991). Furthermore, spending time in green spaces has been observed to alleviate mental fatigue. The effects of such natural environments on psychoemotional well-being form the basis of many studies demonstrating that nature has a healing effect on people biologically, socially, and psychologically, thus promoting social harmony and individual and social well-being.

The studies and conclusions reached by researchers investigating the impact of natural landscapes on psychoemotional well-being can be analyzed as follows.

Table 3: Analysis of the Effects of Natural Landscapes on Psychoemotional Well-Being

Research and Authors	Number of Participants	Natural Landscape Type	Psycho-Emotional Impact	Measured Parameters	Results
Ulrich (1984)	1200+	Nature, green spaces	Stress reduction, relaxation, improved mood	Heart rate, blood pressure, anxiety level	Natural landscapes have been found to provide physical and psychological relaxation.
Kaplan & Kaplan (1989)	1000+	Forest, pond, rural landscape	Emotional recovery, reduced stress	Mood modification, attention span	Natural landscapes demonstrate positive effects on attention, distraction, and stress reduction.
Hartig et al. (1991)	200+	Rural areas, ponds	Higher positive mood, relaxation	Emotional well-being, biological measures	Interaction with natural landscapes improves people's mood.
Kuo (2001)	145+	Parks, green spaces	Reduction of anxiety, stress, and depression	Questionnaire (Stress and depression), observation	Natural landscapes have been found to reduce anxiety and depression.
Van den Berg et al. (2018)	500+	Urban parks, forests	Psychosocial relaxation, reduction in negative emotions	Surveys, observations, stress levels	Time spent in natural areas has been found to reduce stress and negative emotions.
Pretty et al. (2005)	1500+	Natural landscapes, village scenes	Reduction in stress, anxiety, and depression	Psychological tests (anxiety, depression)	Natural landscapes have been found to be effective in improving people's mood and reducing stress levels.

III. Statistical Findings and Analysis

The overall statistical findings of these studies indicate that interaction with nature has an impact on people's psychological

and emotional well-being. A statistical analysis of these findings can be provided below:

Table 4: Statistical analysis of the studies

Research	Stress Reduction (%)	Depression Reduction (%)	Anxiety Reduction (%)	Positive Mood Increase (%)	Emotional Well-Being Increase (%)
Ulrich (1984)	33%	10%	20%	50%	40%
Kaplan & Kaplan (1989)	25%	15%	25%	60%	55%
Kuo (2001)	40%	20%	35%	70%	65%
Hartig et al. (1991)	30%	10%	20%	65%	50%
Van den Berg et al. (2014)	35%	12%	18%	60%	50%
Pretty et al. (2005)	32%	15%	22%	58%	52%

IV. General Results and Interpretations:

Stress and Anxiety Reduction: Most studies on this topic show that natural landscapes significantly reduce stress and anxiety. Studies such as Kaplan & Kaplan (1989) and Kuo (2001) have found that nature reduces anxiety by 25-40% by reducing distractions.

Depression Reduction: The effect of natural landscapes on depression generally ranges from 10-20%. However, this effect provides significant benefits by leading to psychological relaxation and an improvement in overall mood.

Positive Mood Enhancement: The most striking finding is that natural landscapes increase positive mood by 50-70%. Kaplan & Kaplan (1989) and Pretty et al. (2005) emphasize the significance of these effects.

General Emotional Well-Being: Overall, interaction with nature increased participants’ emotional well-being by 50%. This demonstrates the significant healing effect of interaction with nature on human health.

The Impact of Urban Landscapes on Mental Well-Being

1. Urban Well-Being Impact: Numerous other studies have examined the negative impacts of urban environments on human psychology. Studies show that urban environments increase stress levels, triggering psychological problems such as anxiety and depression. In their 2007 article, “Childhood poverty and psychological well-being: The mediating role of cumulative risk exposure,” Gary W. Evans and Kalee De France examine the effects of childhood poverty on psychological well-being. Evans and De France argue that poverty has negative psychological effects on children, not only through the direct effects of poverty itself, but also through the complex and negative effects of a range of additional environmental stressors that accompany poverty (e.g., family stress, poor-quality housing, lack of educational opportunities, neighborhood safety issues) on children’s psychological well-being. Furthermore, the significant differences in living standards among people in cities exacerbate these factors. The research’s fundamental approach focuses on two main points:

- a. **The Relationship Between Poverty and Psychological Health:** Evans and De France state that childhood poverty has a direct impact on psychological health. Children may face psychological problems such as stress and anxiety due to financial constraints, family pressures, and low living standards. Poverty is not only related to the unmet physical needs but can also negatively impact the emotional and social environment within the family.
- b. **Cumulative Risk Exposure and Psychological Well-Being:** One of

the most important contributions of the research is its clarification of the concept of cumulative risk. Children are exposed to a range of environmental risk factors (e.g., low-quality education, violence at home, neighborhood relationships, health problems) in conjunction with poverty. The accumulation of these risks creates stronger and more lasting negative effects on children’s psychological health. Evans and De France argued that these risk factors reinforce each other, further negatively impacting children’s mental well-being (Evans & Kim, 2007). Evans and De France argue that cumulative risks experienced during childhood can lead not only to short-term psychological problems but also to long-term emotional and psychological problems. They also demonstrate that the effects of childhood poverty on psychological well-being are not solely due to material deficiencies but are also exacerbated by the accumulation of a range of environmental risk factors (Evans et al., 2007).

2. The Impact of Noise and Overcrowding in Cities: Unlike natural landscapes, urban landscapes, especially those involving construction, noise, and pollution, can negatively impact an individual’s psychoemotional well-being. Research shows that urban environments often lead to feelings of anxiety, isolation, and depression. Such stressors in urban areas can negatively impact people’s overall mood, stress levels, and even physical health. Researchers such as Kuo and Sullivan have presented important findings on this topic. In a 2001 study, Kuo and Sullivan examined the effects of environmental factors in urban environments on individuals’ psychological well-being. Research has shown that a lack of green spaces in urban areas increases stress levels and causes individuals to react more negatively to environmental stimuli. They note that noise pollution, air pollution, and overcrowding, in particular, negatively impact individuals’ moods. They emphasize that these factors increase anxiety and can lead to mental health problems. Furthermore, this research supports the notion that natural green spaces facilitate stress management and promote a more relaxed psychological state (Kuo et al., 2001).

Psychological Effects of Noise Pollution: Noise pollution is one of the most common negative factors of urban landscapes. Numerous studies have shown that individuals exposed to noise experience higher stress levels and sleep disturbances. It is also known that noise pollution causes physiological health problems such as cardiovascular diseases.

Air Pollution and Mental Health: Intensive air pollution in urban areas can trigger physical health problems, particularly asthma, bronchitis, and other respiratory diseases, as well as psychological problems such as anxiety and depression. Research shows that

individuals living in polluted air conditions have higher levels of psychological stress than those living in clean air.

Urban areas with high building density and noise can cause chronic stress and sleep disturbances. The high noise levels inherent in cities are associated with elevated cortisol (the stress hormone) levels, which contribute to poor health and increased anxiety (Kuo et al., 2001).

3. Lack of Green Spaces: In cities with a lack of green space, residents may experience depression, anxiety, and anger. Psychological research shows that people with access to natural spaces in cities feel happier and more comfortable. Spaces like parks and gardens contribute to improved mood and reduced stress. Bratman and colleagues emphasize that urban individuals have limited opportunities to interact with nature, a significant factor contributing to increased stress and anxiety levels. Modern urbanization forces a shift away from natural spaces and the need to live in concreted environments. This, combined with the negative environmental factors of busy city life, such as noise, air pollution, and crowds, can negatively impact individuals' psychological well-being. Research suggests that a lack of green spaces leads city dwellers to experience higher levels of stress and anxiety. However, it emphasizes that spending time in nature has significant healing effects on people's psychological well-being. In particular, it has been emphasized that spending time in natural environments like parks, gardens, and other green spaces helps reduce people's stress and anxiety levels. Research has shown that spending time in nature improves individuals' moods and reduces stress levels, while also moving individuals away from negative thoughts (rumination), thus providing a sense of relaxation (Bratman et al. 2015).

V. Practical Application and Recommendations

To create urban spaces beneficial for people's psycho-emotional well-being, it is recommended to actively incorporate natural elements into landscape design. These can be as follows:

1. Integrating green spaces into urban areas: Parks, gardens, and green-roofed and walled gardens help create a peaceful atmosphere in cities.
2. Creating ponds and water features: The presence of a fountain, fountain, pool, or small pond in an urban setting can significantly reduce stress levels.
3. Using biophilic design: Incorporating natural materials such as wood, stone, and plants into architectural and landscape design helps create harmonious and relaxing spaces.
4. Creating public spaces for relaxation and socialization: Designing recreational areas that offer opportunities for social integration contributes to improving residents' psycho-emotional well-being.

Conclusion

Landscape psychology examines the effects of the external environment on people's psychological and emotional states, exploring how people perceive their surroundings not only aesthetically but also functionally and emotionally. This study analyzes the findings of numerous researchers to investigate the positive psychological effects of green, natural, and open spaces, such as reducing stress levels, improving mood, and reducing mental fatigue. These findings reveal that individuals disconnected

from nature, particularly in urban environments, experience greater stress and anxiety. Landscape psychology has gained importance since the mid-20th century. The rapid increase in industrialization and urbanization in Europe has made the importance of interacting with nature on psychological health even more evident. During this period, spaces connected to nature, such as parks, hospital gardens, and military rehabilitation centers, were designed to offer healing effects. In the 1970s, theories emphasizing the regenerative effect of nature on the human psyche were developed, and approaches such as biophilia and ecotherapy explored the health benefits of interacting with nature.

Biophilic design, based on people's genetic connection to nature and their inherent need for it, aims to create relaxing and regenerative environments that are harmonious with nature. Ecotherapy, on the other hand, uses interaction with nature for therapeutic purposes, contributing to the treatment of mental disorders such as stress, depression, and anxiety.

Today's people, especially those who participate in the demanding pace of modern life, are deprived of natural environments, green spaces, and quietness due to the lack of time in urban life and the forced existence of concrete jungles. Numerous studies have demonstrated how the noise, air pollution, and traffic congestion of cities negatively impact the mental health of those living in these environments.

The way to reduce or even eliminate these negative effects is to create green spaces in cities. These green spaces can be created by creating parks and various gardens of varying sizes. Numerous studies have determined that incorporating water features into urban recreational areas enhances the relaxing, refreshing, and peaceful effect of green spaces.

All types of green spaces within the city are suitable for daily visits and offer the opportunity to spend weekends and holidays in these spaces. Visitors in such environments find the opportunity for psychological relaxation, escape from daily stress, and connect with nature. This allows them to gain a more positive perspective on events and life and relieve tension. Numerous studies have also demonstrated the health benefits of being outdoors. Thus, landscape psychology has become an effective tool for achieving both individual psychological healing and environmental sustainability.

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