SUSTAINABILITY IN MENTAL HEALTH

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ABSTRACT

Beyond mere exposure to nature, sustainable practices such as gardening and urban farming are also important for mental health, providing a sense of connection and well-being, as offered by Clatworthy et al. (2013). Technology has also been used to investigate this relationship, with Bakolis et al. (2018) showing positive associations between urban natural features. Children and adolescents are especially benefited by interaction with nature, with impacts on aspects such as emotional well-being and attention, according to Tillmann et al. (2018). Other studies, such as the one by Bratman et al. (2019), propose to integrate experiences with nature into the plan. More recent research, such as that of Ningtyas et al. (2023), confirms that greater exposure to nature reduces stress, anxiety, and depression. Milenović et al. (2018) reinforce that even short-term interactions with nature can have positive effects. These findings point to the importance of incorporating natural elements and sustainable practices into urban life to improve mental health in a society.

Keywords: Sustainability. Mental health. Urban green spaces. Psychological well-being.

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INTRODUCTION

In the current landscape, the intersection of sustainability and mental health is becoming a field of research of fundamental importance. This interconnectedness reflects a growing awareness of how environmental choices and lifestyles influence psychological well-being. This study delves into the dynamics between sustainable environments and mental health, considering how human contact with nature can have significant therapeutic effects, improving mood and reducing stress. Bratman et al. (2015) emphasize the importance of this interaction, suggesting that contact with nature has a substantial positive impact on mental well-being. In addition, the phenomenon of urbanization and the consequent disconnection with the natural world raise concerns about the environmental impact on people's psychological well-being. Hartig et al. (2014) found that urban areas with greater access to green spaces are associated with better mental health indicators. This finding underlines the critical importance of sustainable urban planning in promoting psychological well-being.

The influence of preservation on mental health goes beyond mere exposure to natural environments. Sustainable lifestyles and mindful practices, such as gardening and urban farming, have shown mental health benefits. Clatworthy et al. (2013) point out that these activities not only reduce environmental impact, but also promote a sense of well-being and connection with nature. The research also explores how nature and the urban environment interact to affect mental well-being. Bakolis et al. (2018) developed a smartphone-based tool to investigate how exposure to natural features in the urban environment affects mental well-being in real-time, finding significant associations between mental well-being and various natural features.

In addition, children and adolescents represent a crucial demographic group in the context of the relationship between nature and mental health. Tillmann et al. (2018) conducted a systematic review, concluding that interaction with nature has beneficial effects on the mental health of children and adolescents, with impacts on aspects such as emotional well-being and Attention Deficit/Hyperactivity Disorder.

Bratman et al. (2019) provide a consensus view on the benefits of experiencing nature for mental health, as well as a model for integrating it into urban design. This research highlights the importance of preserving and enhancing opportunities for the experience of nature, especially with rapid urbanization.

The research by Herchet et al. (2022) presents an overview on how nature benefits mental health, exploring popular theories used to explain these effects and the potential for development of these theories. Trøstrup et al. (2019) conducted a systematic review on the

effect of nature exposure on the mental health of patients with physical illnesses, finding a significant impact of nature on the mental well-being of these patients.

They investigated the impact of exposure to nature on mental health and well-being in West Bandung Regency, Indonesia, a region characterized by diverse natural landscapes. Their findings indicated that greater exposure to nature was associated with lower levels of stress, anxiety, and depression Ningtyas et al. (2023).

They discuss how the natural environment affects mental health and how the urban environment impacts stress levels. Their work suggests that being surrounded by nature can improve health and that even short-term exposure to the senses is beneficial for mental health Milenović et al. (2018).

Each of these studies contributes to a richer understanding of the relationship between sustainability and mental health, highlighting the importance of integrating nature and sustainable practices to promote mental and physical well-being in an increasingly urbanized society.

OBJECTIVE

The objective of this work is to understand how sustainability, especially in urban environments, affects mental health. We focus on exploring the effects of interacting with nature and adopting sustainable lifestyles on psychological well-being. The study addresses the importance of sustainable urbanism for mental health, the contribution of practices such as gardening and urban agriculture, and how public policies and business practices can integrate sustainability and mental health. The ultimate goal is to provide recommendations for the development of sustainable cities that promote mental health, offering valuable insights to professionals from various fields.

METHODOLOGY

The methodology of this study on sustainability and mental health in urban environments comprises a comprehensive and interdisciplinary approach. Starting with a detailed review of the literature, the research examines academic studies and reports to establish a theoretical understanding. Practical case studies are analysed to understand the implementation and impacts of sustainable practices and green spaces. Qualitative reports from experts in relevant fields are conducted to gain practical and in-depth insights that address sustainability in Mental Health.

DEVELOPMENT

The relationship between natural environments and mental health has been a significant research focus. Bosch and Sang (2017) illustrate how regular contact with green spaces can lower stress levels and increase well-being. This finding is of utmost importance, especially in urban contexts, where access to nature may be limited. Van den Berg, Hartig and Staats (2007) highlight the urgent need to incorporate natural elements into urban design. The expansion of cities presents the challenge of maintaining a connection to the natural world, which is essential for the mental well-being of urban residents.

Work environments are also an important sphere where nature can have a significant impact. Sadick and Kamardeen (2020) note that integrating natural elements into workspaces can increase employee satisfaction and productivity, emphasizing the role of nature in organizational sustainability. Urbanization has been one of the main drivers of change in human interaction with nature. Seto et al. (2017) discuss how urbanization affects mental health and sustainability, stressing the importance of urban planning in creating accessible green spaces. Mobile technology, such as smartphones, has been used to study the impact of nature on mental well-being in urban settings. Bakolis et al. (2018) used an app to assess how specific natural features in the urban environment affect individuals' mental well-being.

Wu's (2009) research focuses on the complexity of cities and how this impacts mental health. He argues that urbanization can bring both innovation and significant challenges to psychological well-being. Environmental restoration theory is another area of interest. Giusti and Samuelsson (2020) investigate how different types of natural environments contribute to psychological restoration, highlighting the importance of urban green spaces. Urban parks, for example, offer an escape from hectic urban life. Chiesura (2004) explores how these spaces contribute to the emotional well-being of citizens, providing a valuable source of relaxation and satisfaction. Alcock et al. (2020) examine the relationship between contact with nature and pro-environmental behavior. They find that regular experience with nature can lead to greater engagement in sustainable practices. The relationship between healthy ecosystems and human health is a key area in sustainability science. McMichael (2002) argues that the maintenance of healthy ecosystems is essential not only for biodiversity, but also for human well-being. Zelenski et al. (2015) investigate how exposure to nature can foster cooperation and sustainable behaviour. They suggest that positive interactions with nature can lead to greater consideration for the environment in everyday decisions.

Urban health in developing countries is addressed by Harpham and Werna (1996), who emphasize the importance of combining health and sustainability in urban policies to address unique challenges in developing contexts. Shifts to areas with more green space have been associated with improvements in mental health, as discussed by Alcock et al. (2014). This study suggests that access to natural environments can have long-lasting beneficial effects. In this way, Baynes and Wiedmann (2012) focus on methods of assessing environmental sustainability in urban areas, highlighting the need for extensive approaches in urban planning to promote mental and physical health. The relationship between green spaces and mental health is addressed by Bernardini and Irvine (2007), who examine how different types of green spaces can influence the mental well-being of individuals in urban settings.

Rapport (2006) discusses the role of sustainability science in promoting healthy ecosystems and, by extension, in promoting the mental and physical health of populations. In this context, Bratman et al. (2019) highlight the need to integrate the experience of nature into urban design to promote mental health, offering a model for how this can be achieved. The relationship between public health and natural environments is explored by Bosch and Sang (2017), who highlight the need to better understand how different aspects of natural environments can influence mental and physical health. Wu (2014) reviews the approaches to urban ecology, highlighting the need to incorporate mental health and well-being into the design and planning of sustainable urban environments. On the other hand, Bosch and Sang (2017) also discuss how the concept of nature-based solutions can be used to improve public health, illustrating the importance of integrating natural aspects into urban environments to promote mental health. In this study on the mental health and well-being of urban residents, Berman et al. (2012) argue that natural environments within cities can serve as an antidote to the stress and mental fatigue caused by urban living. Along with the psychological benefits, exposure to nature has also been linked to reduced symptoms of mental disorders. Dzhambov and Markevych (2020) found that proximity to green spaces can decrease the incidence of disorders such as depression and anxiety. Cox et al. (2017) examine the impact of urban biodiversity on mental health, highlighting that species diversity in urban settings is positively related to residents' happiness and well-being. In light of this, Gascon et al. (2015) analyze the effects of the urban environment on mental health, suggesting that urban green spaces can act as important places for social interaction and recreational activities, both of which are vital for mental health. Louv (2005) introduces the concept of "nature deficit disorder", arguing that children's increasing

disconnection with nature in urban areas can have negative consequences for their development and mental well-being.

White et al. (2019) emphasize the importance of the quantity and quality of urban green spaces for mental health. They indicate that it is not enough just to have access to green spaces; The quality of these spaces is also crucial to maximizing the mental health benefits. An important aspect of the relationship between nature and mental health is nature's role in recovering from stress and mental fatigue. Kaplan and Kaplan (1989) propose the theory of attention restoration, according to which nature facilitates recovery from mental fatigue caused by prolonged focus on tasks that require attention.

Kellert (2005) discusses biophilia, the inherent and necessary connection of humans to nature, arguing that the integration of nature into the built environment is essential for mental health and well-being. Ulrich (1984) explores the role of natural environments in promoting patient recovery in hospitals, demonstrating that views of natural environments can accelerate the recovery of patients after surgery. Finally, Nisbet, Zelenski, and Murphy (2011) investigate the relationship between connectivity with nature and well-being, concluding that individuals who feel more connected to nature tend to have greater happiness and satisfaction with life. These diverse perspectives and studies illustrate the complex relationship between sustainability and mental health. They underscore the need for an integrated and holistic approach when planning and developing urban environments that are sustainable and promote mental well-being.

FINAL CONSIDERATIONS

The relationship between sustainability and mental health in urban environments, we highlight several key points. Firstly, the research reinforced the critical importance of green spaces and nature for people's mental well-being, especially in densely populated urban areas. It has been shown that interaction with natural environments not only reduces stress and improves mood, but also has a significant impact on reducing symptoms of mental disorders.

The role of sustainable urbanism has emerged as a crucial factor in the development of mentally healthy cities. The analyses demonstrated that the integration of green spaces and sustainable practices in urban environments can be an effective strategy to improve the mental health of urban dwellers. In addition, the research highlighted that sustainable lifestyles, such as gardening and urban farming, contribute significantly to psychological well-being, providing a valuable connection with nature and promoting mental health.

This study reaffirms the interconnection between environmental sustainability and mental health, emphasizing the need for greener and more sustainable urban environments. The evidence presented in this paper supports the idea that a commitment to environmental sustainability not only benefits the planet, but is also critical to the mental and physical well-being of urban populations. The proposed recommendations aim to inspire future action and further research in this critical area, contributing to the development of effective strategies that promote sustainable and mentally healthy urban environments.

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