

## **NAMED**

### **Nature Impact on Mental Health Distribution**

**Contract - BR/175/A3/NAMED**

## **SUMMARY**

### **Context**

Mental health issues appear as a growing problem in modern societies and tend to be more frequent in big cities. Where increased evidence exists for positive links between nature and mental health, associations between urban environment characteristics and mental health are still not well understood. These associations are highly complex and require an interdisciplinary and integrated research approach to cover the broad range of mitigating factors.

### **Objectives**

This report presents the project Nature Impact on Mental Health Distribution (NAMED) that aimed to generate a more comprehensive understanding of associations between mental health and the urban residential environment. Following a mixed method approach, the project combined quantitative and qualitative research. In the quantitative part, we analyzed among the Brussels urban population associations between the urban residential environment and mental health, taking respondents' socioeconomic status and lifestyle factors into account. Mental health is determined by the mental health indicators in the national Health Interview Survey (HIS). The urban residential environment is described by objective indicators for buildings, network infrastructure, noise pollution, air pollution, and the green environment developed for the purpose of this project. We assessed the mediating role of lifestyle factors, such as physical activity and social support. In the qualitative part, we conducted walking interviews with Brussels residents to record their subjective well-being in association with their neighborhood. In the validation part, results from these two approaches were triangulated and evaluated through a citizen workshop, and interviews with stakeholders of healthcare and urban planning sectors to develop recommendations for their practices, policies, and the HIS. At last, an internal validation with the research team resulted in methodological recommendations for future research.

## **Conclusions**

Based on the results of the NAMED project, we conclude that concerning the outdoor urban environment, mental health benefits from a natural, social, and physically active environment. In contrast, motorized traffic harms mental health through the related air pollution, traffic noise, and lack of traffic safety. Both positive (presence of nature) and negative (motorized traffic) environmental factors are unequally distributed in the Brussels-Capital Region (BCR), with Brussels' dwellers with a lower socioeconomic status affected most by the environmental negatives and least by the environmental positives. We conclude that cities are complex systems, with urban mental health outcomes depending on many interactions between personal, social, physical, and institutional factors. Investigating urban mental health is further challenged by the low availability of fine-scaled mental health data. The use of the HIS data was challenged by a great amount of missing data on mental health and income, implying potential underestimations or biases in the current findings. We finalize this report with recommendations for practice, policy, research, and the HIS based on the involvement of experts from the environmental and (mental) health sector.

## **Keywords**

Mental health; Urban environment; Mixed method; Interdisciplinary approach; Brussels.