

THE INFLUENCE OF THE ENVIRONMENT ON THE EFFECTIVENESS OF PSYCHOLOGICAL INTERVENTION APPLIED IN AN INTERNATIONAL ORGANIZATION

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Abstract

The aim of this study is to recognize and validate the influence of the environment on the effectiveness of psychological intervention. Increasing workload, pressure on performance, everyday stress brings challenges to well-being of all employees. This study focuses on managers in an international organization as a specific group who experience increase amount of stress. Sedentary work life within large offices is followed by corresponding consequences. Psychological intervention is conducted in office building, outside, and in nature. The first study (Study 1) examines the impact of nature interventions (IN) and includes students from the University of Economics in Prague. Study 1 is a pilot version of IN and will show whether the program is a feasible intervention with a significant improvement in participants' well-being. The second study (Study 2) transfers knowledge from Study 1 to business managers.

Key words: intervention, managers, environment

JEL Code: I10, I12

Introduction

I focus on the connection between contact with nature and the impact on mental health on the case of mindfulness. Against the background of globalization, climate change and ongoing urbanization, we live our daily lives in cities. Cities offer enormous potential for technological growth, for raising living standards (Vlahov & Galea, 2002). At the same time, however, they offer great potential for cardiovascular disease, reduced well-being.

Nature connection, which describes a positive relationship between humans and the rest of nature, has been recognized as a worthwhile goal of all education. Given its association with wellbeing, as well as the fact that it can predict ecological behaviors in children, there have been several calls for it to become central to environmental education, and an important

tool in tackling climate change. Programs usually cover various themes that include mindfulness, psychoeducation, resilience promotion, and stress management strategies.

Most of the modern programs that are based on the mindfulness training are derived from or inspired by a meditation practice that has originated thousands of years ago in many contemplative traditions, especially in Buddhism (Kabat-Zinn, 2003).

Secular mindfulness is commonly accepted as one of the hot psychological topics today (Creswell, 2017). The examination of mindfulness is also one of the main areas of a quite new scientific field called contemplative science, which can be defined as “an interdisciplinary study of the metacognitive self-regulatory capacity (MSRC) of the mind and associated modes of existential awareness (MEA) modulated by motivational/intentional and contextual factors of contemplative practices” (Dorjee, 2016). Dorjee (2016) explains MSRC as a natural propensity of the mind that enables introspective awareness of mental processes and behavior, while the MEA determines the sense of self and reality.

Modern definitions of mindfulness appear in various forms. The first definitions appeared in relation with MBIs (Gethin, 2011). The most famous of them is the operational definition of MBSR that explains mindfulness as “the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment” (Kabat-Zinn, 2003). Given the broad impact of mindfulness on mental health and well-being, achieving a full understanding of the nature and origins of dispositional mindfulness is a top priority in research (Maltais et al., 2020).

1 Natural environment and mental health

Contact with nature can be of different quality and can be fulfilled in different forms. We most often encounter a form of physical contact, which can be mediated by several different activities (hiking, camping, outdoor activities, breeding, gardening, etc.). We can distinguish between appreciative activities, non-invasive, based on observation and experience of nature (bird watching, photography, wandering) and consumptive activities associated with the consumption of a certain part of nature (fishing, hunting). Staying in nature and the activities associated with it can fulfill the need for contact with nature, but also other needs of the individual. Collecting wild berries can have an economic purpose, foreign holidays can meet the need for social recognition, familiar places evoke old memories of people. On an unconscious level, it can be the need to win (over mountains, weeds), overcome the feeling of self-inferiority (courage and perseverance associated with living in the wild),

have control and power over nature (gardening, hunting; *ibidem*). Connection of nature varies. It can be seen in relation to traditional psychotherapy, virtual reality, or psychedelics.

A variety of positive mental health outcomes have been linked with increased exposure to natural environments. However, there has been minimal investigation into how specific patterns of activity in the outdoors may be beneficial. Prior theory suggests that it is particularly nature-based physical recreation (e.g., hiking, cross-country skiing, canoeing) - reflecting attempts to enjoy, observe, and exercise in nature without substantial technological mediation or alteration of the environment - that is positively correlated with psychological well-being (Wolsko et al., 2019).

There is a need to develop novel complementary interventions aimed at enhancing treatment engagement and/or response for veterans with psychiatric and substance use disorders. There is evidence that both mindfulness training and nature exposure (MT/NE) may be beneficial for this population and that combining the two approaches into one intervention might result in synergistic benefit (Marchand et al., 2019).

1.1 Benefits of nature

Staying in nature provides space for regeneration, relaxation, and renewal of attention. In his "Restoration Attention Theory," Kaplan (1995) says that being in nature has a relaxing effect on a person, based on four components: a fascination with nature combined with sliding attention without intention; a feeling of "being outside" liberating from mental activity; the feeling of the greatness of nature accompanying the stay mainly in the wilderness, but also in the park; and the compatibility of the human propensity to move and the dominance of the positive power of nature for human beings (Kaplan, 1995). Nature has a positive effect on increasing vitality (Ryan et al., 2010), reducing aggression (Kuo & Sullivan, 2001). A wide range of literature draws attention to the direct positive influence of nature on human physical, cognitive and emotional well-being. People who have a positive attitude towards nature tend to be healthier, happier, more productive, more relaxed, and more satisfied with their home and work (Kahn, 2002). However, contact with nature can also evoke negative feelings (Bixler & Floyd, 1997).

Till nowadays, research has been focused on exposure to nature. Numerous meta-analysis (Kotera et al., 2020) proved that time in nature and self-awareness programs like mindfulness (separately) bring positive outcomes for people's well-being. Until now, within the field were presented complex programs that included psychotherapy, exposure to nature and different interventions that took up to six months (Jordan & Hinds, 2016). From these

studies no precise effect estimation of each intervention can be done. Thus, presented study brings concrete insight into the field with specific intervention and its impact can and will be assessed. Last but not least, this topic will be brought into light of managerial science where great potential ahead is present.

In the Czech Republic and in the international field, similar studies in relation to managers are absent, which is why the project intervention presented subsequently focuses on managers and the business environment.

2 Intervention

During the twelve weeks, program participants participate in the intervention six times. A 12-week program examining the influence of the environment (using nature as a mediator) in working with stress was described by Pálsdóttir (2016). Each intervention will take approximately 3 hours.

In my research, I focus on the benefits of nature for the mental health of adults and at the same time on the potential that nature offers for society and business. The research is divided into two studies. In the pilot project, I will examine the level of stress and well-being of students. Students will be divided into four groups: a) control group, b) group participating in the program in the room, c) group participating in the program in nature, d) group participating in the program outside in the city. Subsequently, a study will be conducted with the company's managers, who will be evenly divided into four groups: a) control group, b) group participating in the program in the room, c) group participating in the program in nature, d) group participating in the program outside in the city. Managers will be selected from one specific multinational organization.

The first study (Study 1) examines the impact of nature interventions (IN) and includes students from the University of Economics in Prague. Study 1 is a pilot version of IN and will show whether the program is a feasible intervention with a significant improvement in participants' well-being. The second study (Study 2) transfers knowledge from Study 1 to business managers. The sample is three times larger than in study 1, it is further divided into three groups (one group with an intervention in nature, one group with the same intervention inside, one group with the same intervention inside with different environmental conditions). Study 2 also examines the long-term effects of participation in the conducted intervention.

2.1. Measures

Subjective happiness. I use the Subjective Happiness Scale (SHS) to measure the level of subjective happiness. SHS is a self-assessment scale that contains four items that can be answered with a 7-point Likert scale, from 1 (at all) to 7 (very).

Perceived stress. The level of perceived stress is examined using the Perceived Stress Scale (PSS). The PSS contains 10 items that ask participants to evaluate their thoughts and feelings over the past month. One (never) to five (very often) Likert scale will be used.

Experienced stress. Experiential stress will be measured by the amount of the hormone cortisol in saliva

Individual exposure. Time spent outside the study (group intervention) will be examined using five items. Quantity and quality (type of exposure to nature) will be assessed on a five-part Likert scale (1 = never, 2 = occasionally, 3 = once a week, 4 = 2-3 times a week, 5 = four times a week or more).

For all measures, I will test their reliability, most likely focusing on Cronbach's alpha.

Verification by quality data collection through interviews.

HVO: How does nature affect the self-awareness program?

Hypothesis 1: Self-awareness program reduces stress levels.

Hypothesis 2: The self-awareness program increases the well-being felt.

Hypothesis 3: The program of self - awareness in nature reduces the level of stress more significantly than in the room.

Hypothesis 4: The program of awareness of one's own body in nature increases the perceived well-being more pronounced than in the room.

Conclusion

This study investigated whether the impacts of a commonly used wellbeing intervention combined with the benefits of exposure to a natural environment. In appendix you can find further evince (based on selected articles) proving that the results show that the mental health and wellbeing outcomes of interventions are greater when it carried out in a natural outdoor environment compared with indoor or built environments. Moreover, participants in the natural outdoor environment showed sustained improvements even after one month from completion of the intervention. Several studies support the potential value of natural environments as settings for the enhancement of health care delivery and therapeutic interventions.

A growing body of evidence also testifies to the benefits of engaging with nature in terms of supporting personal identity and feeling part of something bigger than oneself e.g. Birch et al., (2020) found urban natural environments had potential to provide young people with a non-judgemental space of “connection and care with the human and non-human world”.

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