

**Can access to nature improve our mental health?**

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Mental health issues appear to be on the increase, with 450 million people worldwide suffering from some kind of mental or behavioural disorder (World Health Organization, 2001). Mental health difficulties can be experienced both physically and mentally, as a result quality of life can be greatly reduced. Our lives have become more sedentary; Evans and McCoy (1998) reported that nearly 90% of our lives are confined to buildings, showing that daily experiences with nature have been significantly reduced compared to previous generations. As a society, most of our leisure time is confined within the safety and comfort of our homes. However, being in the natural environment is essential to positive mental health (Lawton, Brymer, Clough, & Denovan, 2017). The natural environment can act to reduce psychological distress as well as enhancing positive emotions and vitality (Ryan et al., 2010). This essay will present the benefits of exposure to the natural environment.

Lawton et al. (2017) studied the effects of exposure to the natural environment on psychological distress such as anxiety. Anxiety can be classified into two categories. State anxiety can be described as temporary condition where anxiety levels increase in a specific situation (Avgustinovich, Lipina, Bondar, Alekseyenko, & Kudryavtseva, 2000). Trait anxiety is similar to state anxiety with heightened levels of anxiety when there is a perceived threat, however it is more of a durable characteristic, rather than momentary feeling (Spielberger & Reheiser, 2009). Lawton et al. (2017) found that trait anxiety was lower for individuals who felt connected to nature and were more physically comfortable with the natural environment. Furthermore, Martyn and Brymer (2016) investigated trait anxiety and feelings of connectedness to nature, the results showed significantly lower levels of trait anxiety in the presence of nature. State anxiety and the effects of exercise in nature was also investigated by Mackay and Neill (2010), their findings concluded a significant decrease in state anxiety after participants exercised in natural environments. Some studies show people can make beneficial changes in their own homes, without the need to be in an outdoor

environment. Chang and Chen (2005) found that exposure to nature through indoor plants and a window view of nature produced lower levels of anxiety, if the indoor plants or view were removed, anxiety levels increased in participants. This research demonstrates how individuals living in urban areas, can still make positive changes using nature. These studies show that being connected to the outdoors or being surrounded by nature may help individuals reduce and manage their anxiety levels.

In addition, it has been found that individuals that are living in urbanised areas that lack natural environment, could be more vulnerable to stressors in life because they have less moments to use strategies that are nature based. (Van den Berg, Maas, Verheij, & Groenewegen, 2010). This restricted access to the natural environment may increase vulnerability to stressful events, impacting on mental and physical health (Ormel & Neeleman, 2000). This suggests that living in a natural environment may be important in moderating stressful situations and mental health. Similarly, a study in Côte d'Ivoire found that experiences of stress disorders were more likely to occur with people living in and around a degrading forest compared to non-degrading forests (Speldewinde, Cook, Davies, & Weinstein, 2011). Stigsdotter et al. (2010) investigated natural environment and self-perceived stress, they surveyed Danish residents and found that participants used green space more when they were stressed. The analysis showed residents living more than one kilometre away from green space reported higher stress levels compared to those who lived less than 300 meters away (Stigsdotter et al., 2010). This study concluded there is an association between lower stress levels and the natural environment and indicates that Danish residents are aware of the importance of the outdoors and their own mental health.

Attention restoration theory suggests that individuals can focus in natural environments more easily and effortlessly compared to urban settings (Pearson & Craig, 2014). Natural environments are associated with soft fascination as they offer opportunities to

reflect and capture attention (Atchley, Strayer, & Atchley, 2012). Weinstein, Przybylski and Ryan (2009) found that natural environments increased caring for others and promoted psychological benefits. Mayer, Frantz, Bruehlman-Senecal and Dolliver (2009) analysed the effects of nature on positivity and the capacity to reflect about one's own life problems. In the study, participants were asked to either walk in nature, an urban environment or watch videos of nature or urban settings. All of the studies showed that exposure to nature increases: positive emotions, ability to reflect on one's own life and connectedness to nature.

Furthermore, Zhang, Howell and Iyer (2014) found that life satisfaction and connectedness with nature had a positive correlation when individuals had higher engagements with the natural environment. It found that the greater the connection between the participant and nature, the higher the level of psychological well-being. The findings however, were not influenced by Big Five Personality Traits (Goldberg, 1990), gender, age or social desirability, showing that connectedness to nature offers potential benefits to all (Zang et al., 2014).

There have been many studies conveying the benefits between mental health and the natural environments, although there have been some inconclusive studies relating to exercise and nature (Karmanov & Hamel, 2008). Kerr et al. (2006) analysed psychological effects of exercise on natural environments and running in a laboratory. The results showed benefits to runners whether indoors or outdoors, suggesting the importance of the environment might be overstated for exercise (Kerr et al., 2006). Some studies have regarded the psychological benefits of exercise in natural environments but may not have accounted for whether participants were meeting the physical activity recommendations (Lawton, et al., 2017). This suggests that the physical activity promoted well-being in the individual, rather than the environment creating the positive effect.

Nevertheless, Ryan et al. (2010) surveyed vitality and the outdoors and found that greater vitality was associated with the outdoors and mediated by natural elements. Vitality in

an individual can be defined as having mental and physical energy (Ryan & Deci, 2008). Stilgoe (2001) proposed that the presence of natural environments in one's daily life is crucial to avoid exhaustion and Tarrant (1996) showed how the outdoors experiences are able to increase health and positive affect. Greenway (1995) stated that 90% of participants that were placed in a natural environment reported a greater feeling of being alive and more energy. This shows that vitality and the outdoors can have a significant impact on improve our mental health and mood.

The natural environment can also be used as a therapeutic tool to help increase the quality of life for people who are suffering from mental health problems (Frances, 2006). Psychologists have looked into therapy techniques to help individuals such as outdoor behaviour healthcare. Outdoor behaviour healthcare or wilderness therapy use adventure-based counselling in the outdoor environment with traditional counselling approaches (Roberts, 2015). Wilderness therapy helps individuals increase self-confidence and improve their social and interpersonal skills (Russell, Gillis, & Lewis, 2008). Gabrielsen et al. (2018) investigated wilderness therapy programme in Norway in which specialised in mental health, the study found that participants were roughly the same pre and post testing. However, when participants were assessed a year later their health measures had improved (Gabrielsen et al., 2018). These results showed that wilderness therapy had successfully helped participants improve their mental health, but the experience may take many months before it improves their daily lives.

In conclusion, there are many studies showing the benefits of the natural environment on our mental health. When participants are comfortable and feel connected with nature this can help reduce trait anxiety (Lawton et al., 2017). In addition, greater vitality was associated with the outdoors and natural environment (Ryan et al., 2010). Individuals that live in urbanised areas and are disconnected from the natural environment may be more vulnerable

to stressors (Van den Berg, et al., 2010). But strategies such as buying indoor plants to increase exposure to nature can reduce levels of anxiety (Chang & Chen, 2005). For individuals which suffer from mental health problems, wilderness therapy could be a viable alternative to counselling although the effect may not be immediate (Gabrielsen et al., 2018). With regards to nature and exercise there have been inconsistent results, questioning whether exercise is the overriding factor compared to the indoor or outdoor environment (Kerr et al., 2006). These studies provide evidence that the natural environment is a significant way to reduce anxiety, stress and promote psychological well-being. With a society that is confining its leisure time to staying indoors, more than ever individuals need to find nature-based strategies to improve their mental health. Nature is an essential part of our humanity and encouraging people to increase exposure to nature may help decrease the suffering of mental health difficulties.

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