

Return to Nature or Revere Nature: How Nature-based Therapy Treat Human?

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Abstract: The research question has four parts: 1. how nature-based therapy work 2. what the advantages and disadvantages of nature-based therapy 3. People's view on nature-based therapy 4. how to make nature-based therapy accepted by people. I will focus on the sound therapy and gardening for different kinds of people. It's not just a question related to nature or medicine, and many other aspects such as psychology and humanities in our lives are closely related to it. As for humanities, the relationship between human and nature will be thought and during our communication with nature the most peaceful place in our heart will be found. Until now some scientists have already created a comprehensive system for nature-based therapy and I will give the detail in the literature review. But what I want to emphasize is that maybe we can come up with some supplements to make the system better. In my research, the effectiveness and feasibility of nature-based therapy will be measured, and its strengths and weakness will be analyzed.

1. Introduction

Since the winter of 2019, a global epidemic of a novel Coronavirus has caused the world to suffer huge losses in almost every aspect, from global economy to public health. While a disease like this harms the physical health, it can have large impacts on the mental health as well. People may have to face separation from their families, witness sufferings and death, and live with inconvenience and insecurity, while having to find the courage to fight against the virus. Apart from physical damages which brought by the disease, the emotional and psychological trauma on people also needs attention. In the ongoing exploration of dealing with difficult medical conditions like cancer, chronic diseases, respiratory diseases, etc., nature-based therapy has been used as an alternative way to treat these psychological problems. A guide-dog for the blind, a cat for the manic-depressive or breeding a normal plant by a cancer patient himself, although these are ordinary things in our life, they will give patients unexpected strength and hope.

2. Background

2.1 Three Elements of Nature-based Therapy

When I first see the conception of mindfulness, I cannot tell what it means and how to use it. Later I searched it online to find out the elements which consisted of the nature-based therapy and how it works. Mindfulness includes "breathing techniques and dynamic yoga exercises" to rebuild the flexibility of our nervous system and decrease the pressure that physiological exposure caused (Poulsen, Stigsdotter and Djernis, 5).

Secondly, the nature-based activities are consisted of various kinds of tasks such as planting trees, breeding birds, watering flowers and so on. As you can see, most of these works are like a gardener to manage his own garden and such activities will encourage patients' self-motivation ability. As for the therapeutic individual sessions, it will hold on in a place which can guarantee patients' privacy and help them to open their heart to communicate with each other about their daily life (Poulsen, Stigsdotter and Djernis, 5).

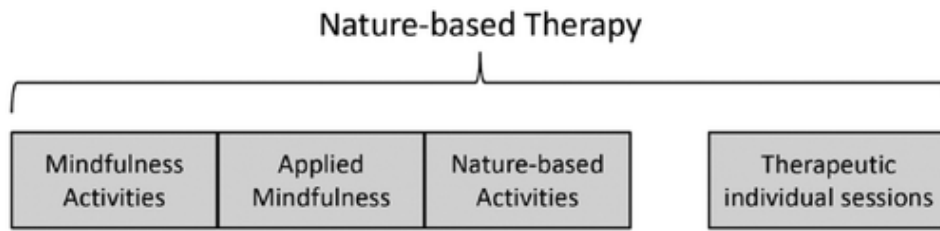


Figure 1 Environment of the corner of the garden (“Everything just seems much more right in nature”)

2.2 The Development of a Special Nature-based Therapy—Gardening

In the last thirty years, many researchers have examined strengths and weaknesses of nature-based therapy. They found that nature-based therapy will not only release the high stress during our life but also improve the quality of life (Cutillo et al. 4). As early as 2005, Dr. Wichrowski took an investigation about the benefits that nature-based therapy brought to the patients who have heart disease. A more beneficial way of nature-based therapy was found and it called gardening. Some nurses will take patients to the gardens in the hospital which are divided into two categories: healing gardens and therapeutic gardens. This was a research hold by The American Horticultural Therapy Association (AHTA) in 2012. Healing gardens are more like a shelter but therapeutic gardens are specially built for patients who have psychological illness (Cutillo et al.4). The reason why therapeutic gardens are especially is that the environment which designers created can stimulate the visual and auditory nerve and this function will be helpful for patients to recover. Gradually, gardening become an important part in nature-based therapy and it has proven to be very effective in the treatment of cancer, heart disease by Dr. Wichrowski and any other researchers.

2.3 Another Efficient kinds of Nature-based Therapy—Sounding

Most of us think nature-based therapy are all about the forest and rural areas which have natural environment but actually sound is also an essential member in the family of nature-based therapy. One part of the applications of nature-based sounds is the anxiety in women who has the gynecological examination. The study had three group and one group were in the nature-based sound. Moreover, there are four different kinds of natural sound which collected the sound of birds, forest, ocean and rain to ensure better comfort for women (Aktas Demet et al.527). Finally, researchers found that such non-pharmacological interventions especially the sound could be helpful in alleviate anxiety in women who has the gynecological examination.

Another application of nature-based sound is the veterans with Post-Traumatic Stress Disorder experience. “Coming home from war to continue a non-active military life is challenging for many soldiers. (Poulsen Dorte Varning et al.1)” Physical injury are easier to be healed but the wound inside their heart are difficult to eliminate. There was a large garden with a bonfire site and participates had to go through a botanical garden to obtain the destination. On the way to the garden, some natural factors such as stream and bird call will help the veterans release and integrate into nature.



Figure 2 Environment of the corner of the garden (“Everything just seems much more right in nature”)

2.4 Some Researchers' Views on the Nature-based Therapy

“The nature-based therapy (NBT) concept is defined as the theoretical delimitation of the therapy in relation to the outlook for the patient, the treatment theory of the program, the overall goals for the patient, and the overall means” (Corazon et al. 35). From the sources read during the preliminary research time, the nature-based therapy not just simply means being left in the nature. The ultimate goal is to improve patients' life quality, restore injured resources and regain the courage to live on (Corazon et al. 35). Sounds in nature are an important part in healing illness. A research shows that veterans coming back from war can benefit from roaming to the sound of birds and streams in order to treat post-traumatic stress disorder (Poulsen, Stigsdotter and Djernis, 3). In addition, another survey shows that “nature-based sound therapy is a non-pharmacological intervention in high-tech critical care settings where the noisy and stressful aspects of environments may stimulate nervous tensions” (Aghaie et al. 527). It is not only sounding in nature that have healing effect, being in a natural environment can be helpful as well. The results of some studies show that emotions, energy levels and living quality will have positive changes in the forest school (Birch, Rishbeth and Payne, “Nature doesn't judge you”). This suggests that urban nature can be a good choice for young people to improve their mental health. From the researches and conclusions above, nature-based therapy offers an opportunity to treat some psychological illnesses that cannot be cured by medical treatments.

3. Analysis

3.1 Analysis of people's view on Nature-based Therapy

This is a survey of people's understanding and perception of nature-based therapy and is based on interviews through social media of QQ and WeChat. There are almost thirty people participate in this survey. I collected these opinions from different kinds of people. They have different ages, different occupations and different experiences.

Table 1 Different opinions on nature-based therapy

Content	Yes	%	No	%
Do you know nature-based therapy?	14	63.6	8	36.4
Do you think nature-based therapy is useful in physical problems?	12	41.4	17	58.6
Do you think nature-based therapy is useful in psychological problems?	21	80.8	5	19.2
Content	much	%	a little	%
How much you know about the applications of nature-based therapy?	6	30.0	14	70.0
How much advantages do you think nature-based therapy will have?	13	65.0	7	35.0

As you can see from the Table 1, most people know nature-based therapy but they just know the superficial concept of nature-based therapy superficially. 70% people have no idea about how to use nature-based therapy to heal patients and another interesting phenomenon is that more than 50% people think nature-based therapy is useless in physical problems.

Through analysis, we can put forward corresponding solutions. First, we should broaden the propagation of nature-based therapy to help more people who suffer physical and psychological problems. Secondly, more professional investigation should pay more attention on the study of nature-based therapy for physical injury. The application of nature-based therapy should not stop at the research of psychological problems.

Then I focus on the mental problems and I assume that wether or not the physical therapy can cure such mental illness. The result surprised me because more than a half will choose nature-based therapy if physical therapy can cure their illness. This indicates that people's acceptance of nature-based therapy is still very high although some of them have few idea about nature-based therapy.

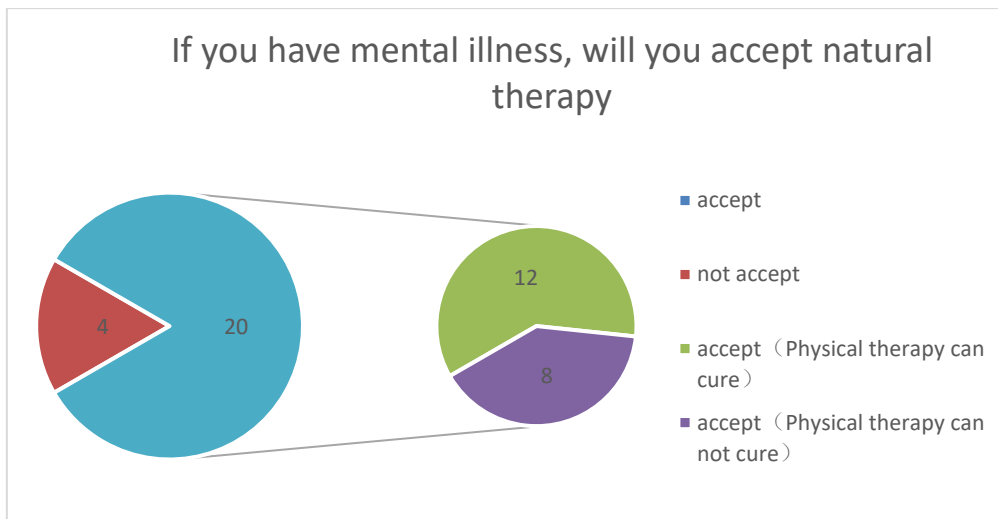


Figure 3 People's acceptance of nature-based therapy

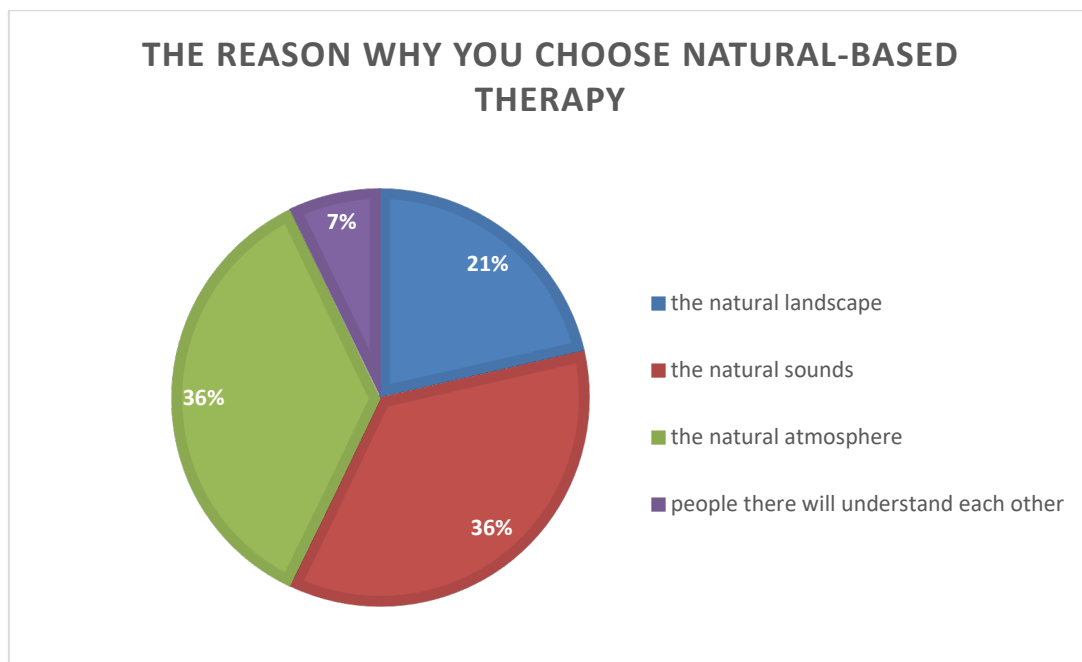


Figure 4 The Reason Why People Choose Nature-based Therapy.

As you can see in figure 2, the reason why people choose nature-based therapy are distributed well. We can conclude the main reasons of people choose nature-based therapy:

- 1) The natural sounds will release their body and heart. (auditory sense)
- 2) The natural atmosphere will release their body and heart. (auditory sense and visual sense)
- 3) The natural landscape will release their body and heart. (visual sense)

It follows that the sounding therapy is the most accepted form of nature-based therapy. And the combination of auditory sense and visual sense is also an essential way. Maybe researchers can combine multiple senses together to find more effective methods which will help patients to get better treatment.

3.2 Advantages and Disadvantages about Nature-based Therapy

3.2.1 Sounding

Every day in our daily life we are all inevitable to hear sounds no matter they are comfortable or harsh enough to hurt our auditory sense. But there is no doubt that some melodious music can help us to release body and eliminate fatigue. Actually, such method is inexpensive and non-invasive that the number of people who are suitable for are increased (Aghaie et al.531). It's a professional medical

terminology called relieving intervention and it will stimulate cells healing and improve their mood. Nature-based sound effectively reduce the consumption of anxiolytics and analgesics as well as the side effects. However, there is no targeted point-to-point treatment, and the treatment effect may vary from person to person. This is the drawback of nature-based sound and more researches could be conducted to explore an accurate and feasible way about nature-based sound.

3.2.2 Gardening

Compared with the individuality of sounding, gardening is more like a collective behavior because planting and watering need more than one people to accomplish. Patients have to communicate and discuss with each other to make their trees or flowers grow healthily. A more professional and accurate definition of gardening advantages are as follows:

Gardens have been used as part of rehabilitation services and are associated with emotional, cognitive, and sensory motor functional improvement; increased social participation; health; well-being; and life satisfaction though more rigorous research is necessary to draw empirical conclusions (Cutillo,5).

At the same time, it's also very meaningful to watch the trees you plant break, sprout and grow. The magic of healing that accompanies a life's growth is unimaginable and it will make a person have expectation of life. For example, gardens in children's hospitals or cancer centers are considered as a symbol of hope and happiness because patients think there are not alone in the life journey. There will be a little "fairy" with them to face the challenges and ordeal that life gives them. But sometimes gardening may exacerbate the social fear of patients, making them more autistic and unwilling to open themselves. So when researchers design their program they should consider all aspects and elements that will cause bad impact and try to eliminate such impact. That's a challenge for both patients and researchers.

3.2.3 Discussion

Through the previous analysis, we found that people don't know much about nature-based therapy and relevant researches are so few that the development of it is slow. The discussion part mainly talks about how to help nature-based therapy get more attention and let more people choose this treatment willingly. Therefore, I put out some possible solutions from the perspective of government and hospitals.

3.3 From Government's Perspective

The government's relevant policies are the largest support for the research of nature-based therapy. The research of nature-based therapy will not only be used in the field of medical treatment, but also in the field of nature, humanities, science and technology. All of them can benefit from it and cooperation between different fields will also be promoted. Biologists can take this opportunity to do further systematic research on natural organisms. Humanists will develop more research subject about the relationship between nature and humans. Scientists can also use artificial intelligence to give patients better experience in the process of treatment. Eventually, all of these achievements will promote the development of state economy. The government chooses to support research on nature-based therapy, that is, to support cross-learning in various fields.

Specific measures can be started from different aspect. The government can issue licenses for medical institutions which related to nature-based therapy. In order to alleviate the pressure of nature-based therapy research, it is also a good way for the government to reduce or exempt taxes. At the same time, the government can provide medical security for patients who choose nature-based therapy and that will reduce the financial burden of patients.

3.4 From Hospital's Perspective

Nowadays, the projects related to nature-based therapy are all recuperation projects established by tourism institutions. It's time to develop a complete system of nature-based therapy in hospitals. Medical institutions can set up a nature-based therapy system with the help of professionals and come into operation after testing. Meanwhile, patients who choose nature-based therapy should also be given

preferential treatment so that more people can afford it and the application of nature-based therapy will be expanded and recognized.

4. Conclusion

Actually, background shows the three elements of nature-based therapy: mindfulness, nature-based activities and therapeutic individual sessions; the sounding method and gardening method are stimulating the visual and auditory nerve, such non-pharmacological interventions will help patients recover. In analysis part, I interviewed almost thirty people some questions about their opinions on nature-based therapy and the result is that the acceptance of it is high although most people don't have much idea about nature-based therapy. Meanwhile, people also think the stimulation of auditory is the most useful way to help patients. After that, it's the advantages and disadvantages part. For gardening, this method is a symbol of hope and happiness which can ignite the enthusiasm to live. However, gardening may exacerbate the social fear of patients because they have to communicate with others when they are gardening. Sounding is also an important part in nature-based therapy. On the one hand, the treatment like sounding is inexpensive and non-invasive that decrease the economic and psychological burden of the patients. On the other hand, treatment effect may vary from person to person so that not everyone will have a good therapeutic effect.

Eventually, I suggest that the government should introduce relevant policies such as reduce or exempt taxes, provide medical security and issue licenses for medical institutions to support the research and application of nature-based therapy. At the same time, more and more hospitals should build a complete system of nature-based therapy and give certain preferential treatment to patients who choose nature-based therapy.

In the end, further research on nature-based therapy will contribute to the development of medical field. I hope that in the future, nature-based therapy will help more people get rid of diseases and have a better life.

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