Study on the Development Strategy of Forest Movement from the Perspective of Forest Health

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Abstract. With the rapid development of economy and the improvement of life quality, people enjoy the achievements of modern civilization, at the same time, some chronic diseases and sub-health problems emerge, which have seriously affected people's health. As a new tourism industry, forest health is gradually becoming a focus. Based on the perspective of forest rehabilitation, this paper will sort out and classify the forest movement in the rehabilitation project, analyze the development strategy of forest movement and put forward feasible suggestions.

1. Research Background
In recent years, with the rapid development of social economy, people are more and more urgent to leave the metropolis for forest recreation, outdoor leisure, fresh air, and relaxation of nervous body and mind[1]. Human beings have a kind of natural kindness to the forest, which is not only because human beings originated from the forest, but also because the photosynthesis of forest plants produces a large number of negative oxygen ions, pyrrocicider and other environmental factors beneficial to human health. A comprehensive analysis of the development strategy of the forest movement will bring unprecedented help to the development of China's forest health industry.

2. The Role of Forest Movement
Since the concept of healthy tourism was put forward, forest healthy tourism is the pioneer and pioneer of healthy tourism development. As the main activity of forest healthy tourism, forest movement is the project that participants experience the most in the process of healthy tourism, and also one of the factors that test the conditions of forest healthy base. Therefore, the relationship between forest movement and forest healthy tourism is inseparable. The specific relationship is shown in Figure 1. Sports therapy began to enter a more systematic stage in the 16th century, and the 17th century began to emphasize the role of exercise in longevity[2]. At the same time, exercise can improve the quality of life, reduce mental and social function defects, and reduce depression symptoms[3].
3. Principle of Forest Movement
Forest movement mainly affect the physical and mental health of participants through physiological and psychological aspects. In physiology, when the human body exercises, it will cause the regulation of cardiovascular function. The regulation range is related to exercise intensity. Its function is to meet the needs of energy materials and the elimination of metabolites, so as to maintain the working environment of normal muscles. At the same time, the lung is also undergoing gas exchange, and the respiratory rate and lung ventilation increase with the increase of exercise intensity. Compared with the conventional sports, the advantage of forest movement is that there are many beneficial factors in the forest environment. It is one of the fundamental purposes of forest movement to absorb the beneficial factors in the forest environment through sports, such as pythoncidere and negative oxygen ions. Pythoncidere can inhibit the activity of microorganisms, and it is also a component of forest fragrance, which is not only beneficial to health, but also has obvious rehabilitation effect[4]. On the other hand, in psychology, through the integration with nature and mutual communication with the forest, we can get a kind of psychological relaxation and correction to achieve the purpose of psychological counseling[5].

4. Classification of Forest Movement
At present, there are many kinds of forest movement, but there is no clear classification standard. In the process of forest rehabilitation, due to the different age and physical fitness of the participants, the suitable forest movement are not the same. Therefore, we can classify them according to the intensity of forest movement. Metabolic equivalent (MET) is the oxygen consumption needed to maintain resting metabolism. 1 met is also defined as the consumption of 3.5 ml of oxygen per kilogram of body weight per minute, which is roughly equivalent to the consumption of oxygen per minute when a person is sitting in a quiet state without any activity. An activity of 5 Mets indicates that the oxygen consumption during exercise is 5 times of that during quiet state. Met is used to express the relative energy metabolism level of various activities. It is also another method to express exercise intensity in addition to heart rate and conscious exercise intensity. The metabolic equivalent table of daily behavior activities (were shown in Table 1) and the comparison table of exercise intensity and heart rate (were shown in Table 2) can be used to draw the forest movement classification table (were shown in Table 3) by means of deduction and comparison.
Table 1. The metabolic equivalent table of daily behavior activities.

| Daily activities | Metabolic equivalent (MET) | Daily activities | Metabolic equivalent (MET) |
|------------------|---------------------------|------------------|---------------------------|
| Stand            | 1                         | Dance            | 6                         |
| Walk (4km/h)     | 3                         | Rope skipping    | 12                        |
| Run (9.7km/h)    | 10.2                      | Badminton        | 5.5                       |
| Cycling (slow)   | 3.5                       | Tai Chi          | 3                         |
| Cycling (fast)   | 5.7                       | Yoga             | 3                         |
| Go up stairs     | 9                         | Go down stairs   | 5.2                       |

Table 2. The comparison table of exercise intensity and heart rate.

| Age   | Maximum heart rate | Heart rate during high intensity exercise | Heart rate during moderate intensity exercise | Heart rate during low intensity exercise |
|-------|--------------------|------------------------------------------|---------------------------------------------|----------------------------------------|
| 20    | 200                | 160                                      | 140                                         | 120                                    |
| 30    | 190                | 152                                      | 133                                         | 114                                    |
| 40    | 180                | 144                                      | 126                                         | 108                                    |
| 50    | 170                | 136                                      | 119                                         | 102                                    |
| 60    | 160                | 128                                      | 112                                         | 96                                     |

Table 3. The forest movement classification table.

| Exercise intensity | Metabolic equivalent (MET) | Sport event | Suitable age |
|--------------------|---------------------------|-------------|--------------|
| Low                | ≤3                        | Tai Chi, Yoga, Forest walk, Forest Bath, Forest meditation, etc. | 40–60 |
| Moderate           | 3~10                      | Forest jogging, Mountain climbing, Hiking traversing, Forest riding, etc. | 30–50 |
| High               | ≥10                       | Forest running, Forest ball game, Rock Climbing, Forest extreme sports, etc. | 20–40 |

Forest movement are divided into low-intensity forest movement, medium-intensity forest movement and high-intensity forest movement. The metabolic equivalent of low-intensity forest movement is usually less than or equal to 3, mainly including Tai Chi, yoga, forest walk, forest bath, forest meditation, etc. It is suggested that people aged 40-60 should participate. The metabolic equivalent of moderate intensity forest movement is usually between 3 and 10, mainly including forest jogging, mountain climbing, hiking, forest cycling, etc. It is suggested that people aged 30-50 should participate. The metabolic equivalent of high-intensity forest movement is usually more than or equal to 10, which mainly includes forest running, forest ball sports, rock climbing, forest extreme sports, etc. It is suggested that people aged 20-40 should participate.

5. Development Strategy of Forest Movement

5.1. Adapt to The Background of The Times

Under the current background, forest health care is a new industry in China, which has broad prospects for development. At the same time, the health China strategy has become a national strategy, and the health industry will develop rapidly in China[6]. In this primary stage, we should seize the opportunity, speed up the construction of forest health base, and draw lessons from foreign advanced concepts of forest health and forest movement.
5.2. **Strengthen Personnel Training**
Talents are one of the driving forces leading the development. At present, there is a shortage of forest commentators and forest health professionals, and there is no targeted training on Forest Medicine and Sports Medicine in forest movement. A professional forest health teacher can choose suitable forest movement programs for different groups of people through the judgment of physical quality. In a word, strengthening personnel training will provide impetus for the development of forest movement.

5.3. **Improve Supporting Facilities**
The supporting facilities such as sports ground and equipment are essential. They provide the participants with sports space and auxiliary functions. Especially in the forest movement, compared with other forest health care projects, the scope of activities of the forest movement is larger and the risk coefficient is higher. The perfect supporting conditions will bring the participants a happy experience and security guarantee.

5.4. **Improve The Classification of Forest Movement**
This paper classifies forest movement with different intensity of sports, which can not only define the service function of forest movement, but also determine the target group, so as to bring targeted health experience for participants. Low intensity forest movement are mainly for middle-aged and elderly participants, with the main functions of health preservation and recuperation. High intensity forest movement are mainly for young people and middle-aged and young people, with the main functions of physical fitness and stress relief. Moderate intensity forest movement are between the two. At the same time, the classification of forest movement should tend to be specialized. The way and amount of each forest movement should form quantitative data, which can be used to formulate different forest health strategies. The perfection of forest movement type will become the theoretical support for the development of forest movement.

5.5. **Strengthen Publicity**
With the rapid development of the Internet, the network has become a more effective way of publicity. In addition to advertising on the network, it can also be associated with the sports fitness app to organize sports fitness enthusiasts to participate in the experience of forest movement to achieve the purpose of publicity. In a word, we should expand social publicity, make highlights and features, innovate publicity methods, plan relevant activities, integrate traditional media and modern media, and increase the sense of identity and gain of the masses.

6. **Conclusions**
As a new thing, the concept and connotation of forest health are still in constant exploration. This paper classifies the forest movement in the forest health products with the consumption object, product content and service function as the main body. The problems and pressures faced by the forest movement are various. It is necessary to take strong measures from the aspects of macro-control, development mechanism, product construction, scientific research monitoring and talent team construction, supporting facilities and services, publicity and marketing, etc. to promote the sustainable development of the forest movement. In a word, the development of the forest movement is bound to promote the development of the forest health industry. On the other hand, the development of the forest health industry will have a favorable impact on the forest movement. The two are inseparable and complementary.

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8. **References**
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