

The effect of ecological tourism on the psycho-emotional status of a person

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Abstract. *The issues of recreational potential of ecological tourism are becoming more and more popular due to the effect of nature tourism on human well-being. The aim of nature trip is to improve the emotional status and relieve psychological stress. The mechanisms of attracting urban population to nature and a health-improving effect of the natural environment are proved at the genetic level and discussed in modern medical studies.*

People strive for communication with nature to compensate for difficulties of their city life or to 'charge' themselves with the energy of nature.

Therefore, ecological tourism consists of weekend hiking tours, green tourism, etc. The experimental group included 25 persons, who took part in the so-called ecological tour. The study proved a positive effect of ecological tourism on the psychological and emotional status of people. It means that this approach can be used for a detailed study in this field. Similar studies can be conducted in different geographical, ecological, climatic, and natural regions.

Keywords – *active tourism, recreation, psycho-emotional status.*

I. INTRODUCTION

Ecological tourism is a field of tourism, the second name of which is Nature Tourism with a Soft Touch, which has minimal effect on the natural environment. The programs of nature tours provide the possibility of visiting ecologically friendly places and nature reserves. Ecological tourism is based on contact with the natural environment. The main objects of eco-tourism are nature reserves, national and natural parks, unique and typical landscapes, where natural resources are treated as recreational ones, the use of which is based on ecological laws. Being a unique phenomenon, ecological tourism affects positively the psychological and emotional status of a human.

Visiting protected natural areas is one of the types of ecological tourism. Such visits can be of sports, cultural or recreational character.

Scientific and technical progress leads to the change in living conditions in large cities, which results in constant stress. People from large cities suffer more frequently from nervous system related disorders. Therefore, their desire of going back to nature is quite understandable as they want to communicate with nature and relieve their nervous system from everyday stress. The mechanisms of people's attraction to nature and its recreational effect are proved genetically and described in the modern medical literature.

People strive for communication with nature to stay calm or receive energy from active tourism.

Therefore, ecological tourism consists of such forms of traveling as weekend hiking tours, green tours, agricultural tours, etc. The main motivation for such a tour is to have a rest, to relieve the nervous system or load it by getting away from it all and receiving new impressions.

In ecological tourism, nature is treated as a condition for relaxation and a tourist as a consumer of natural benefits who passively reacts to them. Therefore, eco-tourism is a form of active leisure with ecologically significant content being the environment integrating the activity of people, who build their relations with nature and other people based on mutual benefits, mutual respect, and mutual understanding. Tourists benefit from such communication receiving physical, psychological, intellectual, and emotional satisfaction.

Currently, there is a contradiction between the potential opportunities of ecotourism contribution to human health and the insufficient use of ecotourism in health preservation.

This determined the problem of our study, which consists in finding ways of the influence of ecological tourism on changing the psycho-emotional status of a person, improving his stress resistance, emotional recovery, well-being, mood, etc.

The purpose of the study is to identify the recreational nature of ecotourism based on monitoring tourists during the trip.

The hypothesis of the study is that the psycho-emotional status of tourists in the conditions of an ecological tour will demonstrate positive dynamics as a result of the influence of natural conditions.

In accordance with the purpose of the study and its hypothesis the following research objectives are formulated:

- to study the features of ecological tourism and choose the region and type of ecological tour for research;
- to study and choose methods for conducting experimental work;
- to identify and conduct a range of practical studies on changing the psycho-emotional status of tourists during the ecological tour;
- to conduct a comparative analysis of changes in the psycho-emotional status of tourists in the conditions of

various activities and the attractiveness of natural resources of ecological tourism

II. MATERIALS AND METHODS

Recently, various aspects of the impact of tourism on a traveler have been studied.

Studies of E. Gora are dedicated to the issues of human interaction with the environment, the restructuring of biorhythms under the influence of climate and seasonal fluctuations, the intersection of time zones, and shifted work and rest schedule. [1]

Ecological physiology and reserves of the human body in extreme and sports tourism are considered in the works of N. Agadzhanyan [2,3], G. Bobkova [3], Yu. Frolova [4], A. Kogan [5], A. Kvashina [6], S. Ryabtseva [7], G. Rung [8].

The work of I. Bobrovniksky is dedicated to the issues of using natural and physical factors to increase the functional reserves of the body. [9].

Studies of foreign scientists deal with the questions of psychology and “forest therapy” [10,11].

For the study, we chose the area of the mining zone of the Chelyabinsk region, where specially protected natural areas are located.

To conduct the study, we developed a 2-day tourist program in the form of a weekend trip which included three natural areas - two national parks (Zyuratkul and Taganay) and the Serpievsky Nature Reserve.

Three methods were chosen for self-assessment of the psycho-emotional status of a person - the Wessman – Ricks Mood Scale [12], V. Doskina, N. Lavrentieva, V. Sharay and M. Miroshnikova method [13,14] and the HADS scale [15,16]

The study was conducted in a two-day trip in January 2017 and involved 25 people.

On the first day of the trip, tourists visited the Bell and May Caves in the Serpievsky Nature Reserve and then moved to the Zyuratkul National Park. On the second day, tourists went to the Zyuratkul ridge and visited the Black Rock in the Taganay National Park.

The results of the study confirmed the possibility of conducting research on the influence of ecological tourism on the psycho-emotional status of a person.

The average age of the tour participants was 24.3 years (Table 1).

Table 1. The average age of the tour participants

Parameter	Total	Male	Female
Number of tourists	25	4	21
Age, years	10-34	21-34	10-34
Average age, years	24.24	28	23.5

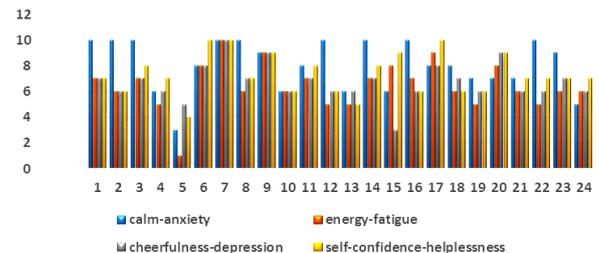
The age range of tourists is from 10 to 34 years. Most of the participants of the tour were women (84%).

III. RESULTS AND DISCUSSION

Let us consider the dynamics of the psycho-emotional status of the participants for each parameter of the Wessman-Ricks test as a result of a visit to the Serpievsky reserve (Fig. 1,2).

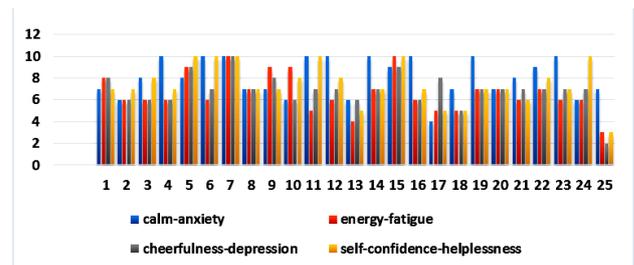
The analysis shows that as a result of visiting the Serpievsky reserve, 80% of tourists show restraint, poise, 50% of tourists maintain average indicators on the Energy-Fatigue scale (Fig. 1).

Fig. 1. Psycho-emotional status of tourists before the trip



From the average values of the “Cheerfulness-Depression” scale, 20% of tourists show an improvement in their condition, greater mobility and vigor (68% against 52%) (Fig. 2).

Fig. 2. Psycho-emotional status of tourists after the



Serpievsky reserve

Instead of helplessness and depression, 20% of tourists admitted that they became more confident and ready for active work that signified transition to a higher level of a psycho-emotional status.

Let us consider the dynamics of the psycho-emotional status of the tour participants as a result of visiting national parks (Fig. 3,4).

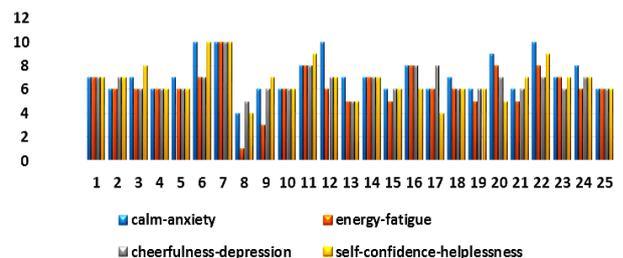


Fig. 3. Psycho-emotional status of tourists before visiting national parks

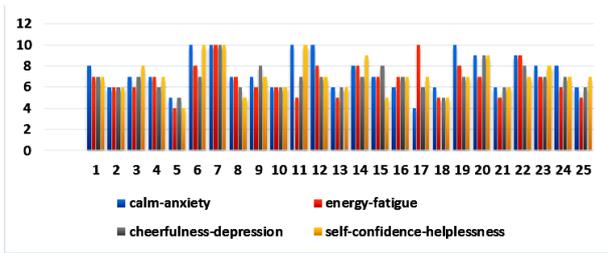


Fig. 4. Psycho-emotional status of tourists after visiting national parks

The analysis showed that as a result of visiting national parks, all tourists remain calm (96%) despite the physical fatigue associated with walking on a bumpy terrain, 92% of respondents report an increase in internal energy and readiness for active work, 20% of tourists note a transition from depression to cheerfulness. However, 13% report a feeling of helplessness and fatigue.

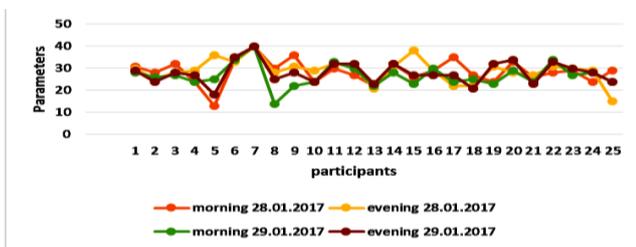


Fig. 5. The dynamic of the emotional status of the tour participants

80% of the participants of the tour highly estimate their emotional status, 20% give an average assessment of their emotional status while visiting the Serpievsky reserve and national parks. However, at the end of the trip, the emotional status of 14% of tourists deteriorates due to general physical fatigue.

Based on the Well-being, Activity, Mood methodology, the dynamics of changes in the above-mentioned parameters in tourists can be analyzed (Fig. 6,7,8).

The analysis showed that tourists feel better after visiting natural areas (by 4% after visiting Serpievsky Nature Reserve and by 8% after visiting national parks). However, in general, tourists' well-being worsens slightly compared to the data obtained before and at the end of the tour, and by 8% it worsens compared to the beginning of the trip. However, there is a slight improvement in well-being between morning and evening measurements, i.e. before visiting the caves and national parks, the data obtained were somewhat worse, and after visiting the caves and national parks, it improved slightly, i.e. by the evening, after visiting natural areas, tourists feel better (Fig. 6).

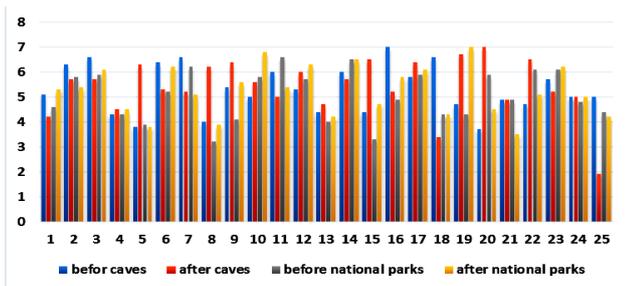


Fig. 6. The dynamics of tourists' well-being

The study showed that visiting natural areas contributed to an increase in human vitality (Fig. 7). So, at the beginning of the trip, 12% of tourists admitted a very low level of their own activity, apathy and lack of motivation. After visiting the Serpievsky Reserve, minor changes occurred, there were 8% of passive tourists, and after visiting national parks this number decreased to 4%. Within two days, the indicator of passivity and inactivity became 4% instead of 12%. More than 50% of respondents said about an indifferent attitude to activity and could not assess their condition before and after travel. After visiting the Serpievsky Reserve, tourist activity decreased from 64% to 32% and after visiting national parks it rose again to 60%. At the same time, it should be noted that 24% of tourists at the beginning of the trip had a high level of activity and this level increased to 36%, meaning that some inactive tourists (12%) declared an increase in activity to a higher level, which generally demonstrated the positive dynamics of human activity as a result of visiting natural areas.

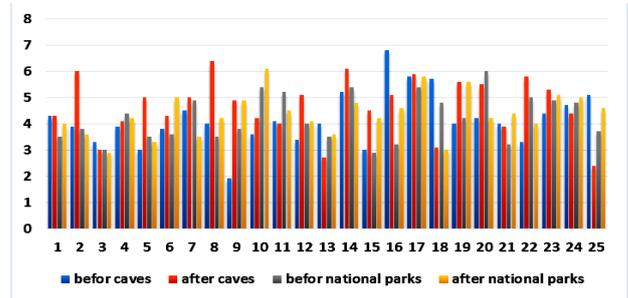


Fig. 7. The dynamics of tourists' activity

The analysis of indicators on the Mood scale showed that during a visit to natural areas the mood of tourists did not change (Fig. 8). Before visiting natural areas, 20% of respondents could not clearly assess their mood, and after visiting natural areas, this figure became 16%.

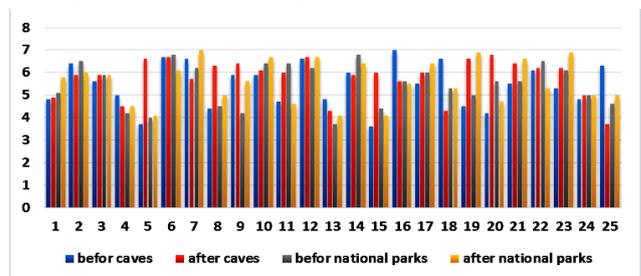


Fig. 8. The dynamics of change in the mood of tourists

However, for tourists who started the trip in a good mood, this figure increased. Moreover, after the Serpievsky reserve, it increased slightly (84% against 80%), and visiting national parks contributed more to improving the mood of tourists (from 76% to 84%).

The diagnostics of anxiety and depression was carried out before and at the end of the trip using the HADS scale. It showed that in general the group was without pronounced symptoms of anxiety and depression (Fig. 9). However, 16% of respondents showed an increase in subclinical anxiety, 4% of respondents showed an increase in subclinical depression, and 4% of tourists showed an increase in clinically significant depression. This is explained by the fact that at the beginning of the trip, 8% of tourists showed subclinically expressed anxiety, 8% showed clinically expressed anxiety,

and 4% of respondents showed an increase in subclinically expressed and clinically expressed depression.

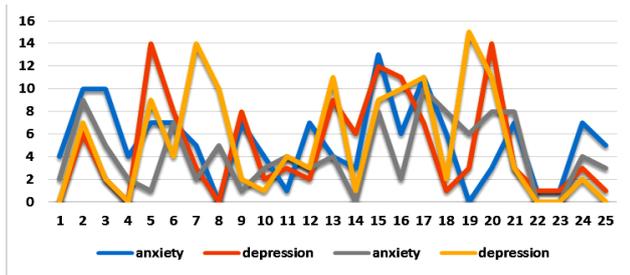


Fig. 9. Anxiety and depression in tourists

IV. CONCLUSION

Thus, the study showed that as a result of visiting natural areas of the Chelyabinsk region, the indicators of self-esteem, anxiety, and depression in tourists returned to the reference values, which indicated a favorable impact of the tour on the human body.

All this proves the positive effect of ecological tourism and allows us to use the term "ecotherapy", which reveals the recreational potential of nature for the psycho-emotional status of a person.

Our hypothesis contains confirmation and development in a number of studies dedicated to the psycho-emotional status of tourists during travels, in which scientists call the effect of recreation as "forest therapy" [10, 11].

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