

Review Paper

Methodological Support of Social and Natural-Resource Evaluation of Inclusive Tourist Objects in the Sustainable Development Context

Oksana Kravchenko^{1*}, Viktoriia Krasnomovets², Maryna Mishchenko³, Halyna Bondarenko¹, Liudmyla Moroz³, Alla Voitovska¹, Nataliia Yaremenko⁴ and Iryna Sarancha⁵

¹Department of Social Education and Social Work, Pavlo Tychyna Uman State Pedagogical University, Uman, Ukraine

²Department of Tourism and Hospitality, Bohdan Khmelnytsky National University of Cherkasy, Cherkasy, Ukraine

³Department of Psychology, Pavlo Tychyna Uman State Pedagogical University, Uman, Ukraine

⁴Department of English for Technical and Agrobiological Specialties, National University of Life and Environmental Sciences of Ukraine, Kyiv, Ukraine

⁵Department of Psychology and Social Work, Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University, Vinnytsia, Ukraine

*Corresponding author: oksolkravchenko@ukr.net (ORCID ID: 0000-0002-9732-6546)

Received: 18-08-2023

Revised: 30-11-2023

Accepted: 08-12-2023

ABSTRACT

This research aims to form a scientifically grounded and usable methodological support of social and natural-resource evaluation of inclusive tourist objects for the effective formation of a sustainable inclusive tourism space. The author's understanding of the social and natural-resource evaluation of inclusive tourist objects as a set of ecological, economic, social, inclusive, and rehabilitation approaches is suggested, which allows monitoring the natural-resource potential taking into account individual characteristics, the accessibility of the tourist object and its rehabilitation opportunities for people with disabilities of various nosologies. The research is based on an attempt to take into account subjective and objective conditions in the aesthetic landscape valuation. The results obtained during their interaction will make it possible to take into account the peculiarities of the landscape that affects a person, as well as the specifics of perception and the degree of susceptibility of a person. Compliance with the recommendations for social and natural-resource evaluation will make the socio-cultural space unhindered for all categories of the population, which will provide access to social services for each person for their integration, socialization, and adaptation. Methodological principles of quantitative evaluation of accessibility parameters and attractiveness factors of natural resources and tourist infrastructure objects for participants on the implementation of an inclusive rehabilitation and social tourism programme have been developed, which will provide access to social services for every person and promote their integration, socialization, and adaptation.

HIGHLIGHTS

- Science-based methodological support for social and natural resource assessment of sustainable inclusive tourism sites has been formed, taking into account subjective and objective conditions for the aesthetic assessment of the landscape.
- Methodological principles have been developed for quantifying the parameters of accessibility and factors of the attractiveness of natural resources and tourism infrastructure for participants in the implementation of a sustainable inclusive wellness and social tourism programme.

Keywords: Sustainable Inclusive Tourism, Accessibility, Attractiveness, Evaluation, Criterion, Potential

How to cite this article: Kravchenko, O., Krasnomovets, V., Mishchenko, M., Bondarenko, H., Moroz, L., Voitovska, A., Yaremenko, N. and Sarancha, I. (2023). Methodological Support of Social and Natural-Resource Evaluation of Inclusive Tourist Objects in the Sustainable Development Context. *Econ. Aff.*, 68(04): 2067-2080.

Source of Support: None; **Conflict of Interest:** None



The adoption of the National Strategy for Barrier-Free Environment in Ukraine by 2030 stipulates 'the creation of a barrier-free environment for all groups of the population, ensuring equal opportunities for each person to exercise their rights, receive services on an equal basis with others by integrating physical, information, digital social, civil, economic, and educational barrier-freeness into all spheres of state policy' (The Cabinet of Ministers of Ukraine, 2021).

Social and natural-resource evaluation of objects is an important stage in the development of tourist routes, taking into account which will help create a sustainable inclusive environment. In order to predict the sustainable inclusive development of society, in particular, to ensure access for people with disabilities to the historical, cultural, and environmental heritage, its use in the conditions of rehabilitation and for the purpose of social integration, it is necessary to carry out a social and natural resource evaluation of a particular tourist object, as well as to determine the parameters of their accessibility.

That's why the use of social and natural-resource evaluation of tourist objects becomes actual in sustainable inclusive tourism, the methodology of which should be supplemented by (inclusive, social) approaches that meet the complex needs of society and take into account its diversity. Such an evaluation should include, along with comprehensive indicators, an evaluation of natural resources for the effective implementation of the processes of sustainable inclusive development of society and the restorative capabilities of nature for the human body to compensate for lost functions due to disability.

LITERATURE REVIEW

With the mass adoption of the principles of sustainable development in everyday life, the study of the problem of sustainable inclusive tourism in the scientific works of scientists from different countries of the world is only gaining momentum. In particular, the search for articles by keyword 'Inclusive Tourism' in Scopus yielded 122 results for all years, and in Web of Science 119 results, while keyword 'Tourism' yielded 135,622 and 206,625 results, respectively. This may mean that the problems of the formation and sustainable

development of inclusive tourism at the theoretical and methodological levels are just beginning to be explored and have not gained wide popularity.

Among the research studies, those devoted to the social and environmental problems of the development of inclusive tourism should be highlighted separately. Thus, R. Scheyvens and R. Biddulph proposed seven elements of inclusive tourism: marginalized people as tourism producers; marginalized people as tourism consumers; changing the tourism map to involve new people and places; widening of participation in tourism decision-making; promotion of mutual understanding and respect; self-representation in dignified and appropriate ways (Scheyvens and Biddulph, 2017). This concept was developed by B. Gillovic and A. McIntosh, who substantiated the key role of accessibility in the study of inclusive tourism development, which is based on the involvement of people with disabilities in tourism and society (Gillovic and McIntosh, 2020).

N. Belousova & O. Lyubitseva studied the theoretical and methodological foundations of the development of inclusive tourism and substantiated the theoretical aspects of the concept of an 'inclusive rehabilitation and social tourism', as well as analysed the modern world and Ukrainian experience in the development of inclusive tourism in Ukraine (Belousova and Lyubitseva, 2019).

E. Marlina and T. Herawan formulated the concept of geotourism in Indonesia taking into account the political direction of the development of local and national tourism, the requirements of the Geopark Global Network concept, consideration of the environment, social and cultural environment, and the need for a trend of increasing interest in tourism among society (Marlina and Herawan, 2020). Based on the example of 39 European national tourism organizations, M. Marczak and J. Borzyszkowski proved that natural resources are an important element of tourist assets and largely determine the form and level of attractiveness of a tourist destination (Marczak and Borzyszkowski, 2020).

O. Adeniyi, T. Kumeka, S. Orekoya and W. Adekunle investigated the mutual impact between tourism sector development and inclusive growth in 45 African countries for 1995–2019 (Adeniyi *et al.* 2021). Based on the results of the analysis

of trends in the development of rural tourism in an inclusive environment, the identification of factors of investment attractiveness of recreational areas, the study of the impact of tourist flows on the ecological state of the recreational territory of Ukraine, O. Popova, V. Koval, I. Mikhno, I. Tarasov, N. Asaulenko and L. Filipishyna suggested a new approach of 'solidarity tourism' as a specific type of inclusive tourism, which is a process of cooperation between various participants in the tourism industry rural households and people with special needs (Popova *et al.* 2022).

M. Roman, J. Abrham, A. Niedziółka, E. Szczucka, L. Smutka and P. Prus have developed the concept of social tourism as a tourism for all, including disadvantaged social groups: small-income people, single parents, the elderly (usually with below-average income who face deteriorating health), people with sustainable disabilities or in the process of rehabilitation after an accident, immigrants (mainly from low-income countries), and persons caring for people with disabilities (Roman *et al.* 2022).

In the analysed works, certain aspects of social, resource, natural evaluation of the sustainable development of inclusive tourism are studied, and insufficient attention is paid to the methodological provision of social and natural-resource evaluation of sustainable inclusive tourism objects.

The main purpose of the research is to form a scientifically based and suitable for applied use methodological support of social and natural-resource evaluation of sustainable inclusive tourism objects for the effective formation of a sustainable inclusive tourism space.

MATERIALS AND METHODS

A methodology for evaluating the natural resource potential of territories has been developed so far, which is based on four approaches. The economic approach suggests considering a cost estimate of the components of the natural resource potential of the territory. The ecological approach considers the level of rational use of natural resources by identifying them and forecasting their use. The sociological approach provides for the identification of opportunities for providing the processes of vital activity of the population with natural resources. The production approach is aimed at determining

the level of use of the natural resource potential of the territory by various types of economic activity, taking into account the factor of rational nature management.

RESULTS AND DISCUSSION

We consider the social and natural resource potential of sustainable inclusive tourism as a set of natural and artificially created by man resources that have aesthetic, natural, and climatic attractiveness, accessibility, historical and cultural significance, and can be used in the conditions of health improvement and rehabilitation of people, including those with disabilities.

In this context, the natural complex should be evaluated not only as a resource for restoring the psychophysiological state of the human body, but also for the human capabilities related to the physiological accessibility to the use of these resources.

In view of the above, the social and natural-resource evaluation of sustainable inclusive tourism objects is a set of ecological, economic, social, inclusive, and rehabilitation approaches and allows monitoring of the natural resource potential, taking into account individual characteristics, the accessibility of the tourist object and its rehabilitation opportunities for people with disabilities of various nosologies.

The purpose of evaluating the social and natural resource potential of sustainable inclusive tourism is to analyse the state of natural and artificially created by man resources (natural complex and landscape gardening) as a set of recreational and rehabilitation resources of a particular area, which are accessible for vulnerable categories of citizens.

On the basis of scientific generalizations, we have supplemented the criteria for evaluating the social and natural resource potential of tourist objects for each type of disease in the following areas: technological, psychological, physiological, and rehabilitation (from a technological point of view, it is important to develop innovative pedagogical technologies; for psychological evaluation, it is important to take into account the emotional and aesthetic impact of the landscape on a person, to determine the importance of the emotional component to improve the health of children and young people with disabilities; physiological

evaluation determines the degree of accessibility of natural conditions for children and young people with various diseases; rehabilitation potential is important for determining the restorative capabilities of tourist objects for people with disabilities).

Criteria of the *technological area* include the following indicators:

- ♦ General indicators: conceptuality (reliance on a certain scientific concept, its justification); consistency (the interconnection of all components of the structure); algorithm-driven approach (a clear sequence of operations); manageability (planning, design, correction of results); efficiency (maximum result at optimal costs); reproducibility (repeatability).
- ♦ Special indicators: functionality (purpose, use of the resource for a particular type of recreational activity); territory exploration degree; permissible recreational load (an indicator characterized by the number of recreants per unit area for a certain period); recreational digression (a process resulting from uncontrollable recreational development of the territory); recreation capacity.

The *physiological area* provides for the following indicators: accessibility; safety; a complex of geophysical and meteorological conditions and human susceptibility to them; contrasting variability of meteorological conditions (for example, mountain climate); recreational properties.

Psychological (psychological and aesthetic) area. Evaluation of the qualities of the landscape is reflected in the concept of attractiveness. This evaluation takes into account the degree and nature of impact of the natural environment on a person (recipient). When choosing criteria, most researchers of the problem of landscape attractiveness are guided by objective signs and characteristics that depend on the structure of the landscape itself, but much less attention is paid to the psychological and aesthetic component (feelings and emotions of a person).

Thus, A. Melluma, I. Sture and A. Zarina believe that the main criteria that characterize the aesthetic attractiveness of the landscape (area conservation) may be the features of the terrain (ravines, mountains, etc.), the degree and nature of forest

cover (change in forest types, alternation of forest areas with open areas), and the availability of lakes (year, other water bodies) (Melluma *et al.* 2006). According to S. Kellert, the most important things in evaluating the attractiveness of the landscape are the complexity of the landscape (the availability of numerous dissimilar elements), its structuredness, the presence of points that attract special attention, the depth of the landscape, the surface of the earth, the absence of a sense of danger, the presence of water bodies (Kellert, 2005).

O. Grodzynska identifies five common factors that a person pays attention to when perceiving a landscape: consistency of structure (degree of order), identification (degree of typicality), complexity (amount of information that the landscape contains), mysteriousness (amount of 'hidden' information), and spatiality (degree of openness). It should be noted that the dependence of attractiveness on these factors is not linear, but is determined by their interaction (Grodzynska, 2014, p. 229).

Each personality has its own individual psychological and physiological characteristics, which is manifested in the group of personally significant aesthetic feelings (subjective factor), which will also be taken into account when selecting the criteria of the psychological and aesthetic component in evaluating the landscape (Nohl, 2001).

Aesthetic perception is an extremely complex and multi-level process, which combines both innate sensory features and those acquired in the process of upbringing and individual development. The subjective factor acts as a kind of filter of aesthetic impulses. It depends on many conditions: the emotional sensitivity of a person, his/her life experience, the background of emotional experiences, individual qualities. In the process of perception, a subconscious comparison of what is seen with the aesthetic ideal takes place. That's why aesthetic evaluation by different recipients can vary significantly (Nikolaev, 2013, p. 189).

All materials of this study are an attempt to take into account both subjective and objective conditions in the aesthetic evaluation of the landscape. The results obtained during their interaction will make it possible to take into account the peculiarities of the landscape that affects a person, as well as the specifics of perception and the degree of susceptibility of a person.

Criterion of aesthetic need. In our opinion, one of the main criteria for evaluating the attractiveness of natural landscapes is the criterion of aesthetic need, which allows comparing human expectations and the possibility of their implementation. Common types of motives can be distinguished:

- ♦ 'Escape' (when a natural resource serves as a place of withdrawal from real problems and tasks that need to be solved).
- ♦ 'Discovery' (the opportunity to enjoy, to delve into reflection, to restore the connection with one's self).
- ♦ 'Learning' (study of a specific natural zone, its conditions and features).
- ♦ 'Adventure' (laying one's own tourist route, a long journey with unforeseen circumstances).

Given the choice of a particular natural environment, it is possible to estimate whether expectations can be fulfilled. After all, if the purpose of going for a walk is the desire to cover a long tourist route, the person is unlikely to get a lot of pleasure if he/she chooses a park zone for the implementation of his/her idea.

Criterion of rest. The frantic pace of life and the presence of limits force most people to have inner discourse all the time. They think about relevant information over and over again, make decisions, make plans, and get buried in negative thoughts and memories. However, interaction with a natural object makes it possible to get rid of obsessive thoughts and quickly recover from a stressful situation.

The feeling of peace allows feeling truly alive, without a familiar autopilot mode developed over the years. As a result, awareness increases, a feeling of spontaneity appears, mood and physical condition improve.

Being in the open space among trees, bushes, ponds, full of life, a feeling of emptiness and despair disappears, and the person begins to subconsciously feel protected, which contributes to an increase in the overall emotional background. Gradually, he/she begins to feel self-confidence, gets motivation and enthusiasm.

The criterion of virginity (a sense of remoteness from civilization). In the 18–19th centuries, it was believed that only pristine natural areas had the greatest

impact on the human psyche. This was the reason for the emergence of the idea of protecting nature from human influence in order to keep it intact, and therefore, aesthetically attractive. Subsequently, a 'positive direction' was formed, the supporters of which believed that it was necessary to learn to appreciate nature as such, without dividing it into 'beautiful' and 'ugly'.

Most people sometimes have a quite natural desire to discharge emotionally, feel in the privacy of their own mind, pay attention to their needs, feelings, and reconsider their objectives for the future.

In the natural environment, an unconscious desire to feel part of the whole, to achieve inner freedom and unity with oneself, lost for hundreds of years, returns to a person; this is possible only if the person is dissolved and feels unity with nature.

The criterion of spiritual exaltation is characterized by the smells and sounds of nature that cause it, which is generated by the perception of phenomena that exceed the usual measure of phenomena in which the greatness of nature is expressed. Awareness of its power and a subconscious sense of struggle with it create two multidirectional mental states that collide and form a person's awareness of his/her unity with nature, which is expressed in a deep sense of belonging and desire to know the unknown.

In a contemporary context, a person has to turn to his/her origin, to pristine nature, when it existed in an idealized form. That's why staying in natural conditions gives a sense of security, ease, and inspiration.

V. Dovbyshchenko and O. Reshetnikov substantiate the idea that scouting helps form a proactive approach to life, a positive attitude to life, initiative, and a desire to change and improve. Scouting is a movement whose participants promote the achievement of complete physical, intellectual, and socio-psychological well-being by a person with an emphasis on practical exercises in natural conditions (Dovbyshchenko and Reshetnikov, 2001, pp. 34–35). It is noted that the participants of such a movement have a stable character, independence, a tendency to overcome difficulties, zealously explore the natural world, using their imagination, the ability to reason and find ways out of difficult situations.

The criterion of spiritual exaltation is primarily associated with the subconscious desire of man to achieve unity with nature while coming to know it, and therefore, connectedness to a higher harmony and order. In this way, man can achieve inner security, develop a proactive approach to life, develop volitional qualities, and feel the impetus for positive changes.

Concentration criterion. Given the relaxing influence of the natural environment, it is not surprising that most people experience an increase in energy and concentration, which improves memory, thinking, and gives focus and a sense of confidence. In addition, the absence of the need to scatter attention to several objects at the same time (like in a street with intense automobile and pedestrian traffic) helps reduce anxiety, excessive caution is replaced by a sincere interest, a desire to explore the world, while focusing on specific objects.

Another feature is that the more objects we think we grasp at the same time, the less concentrated we are. The resulting negative consequence may be information intoxication that occurs in the conditions of information smog, which creates an image of ambiguity and inaccuracy in the existing information space. Due to the problem of overload, an 'information fatigue syndrome' term was introduced, the main symptoms of which are believed to be the fixation of thinking (the desire for additional information), the inability to make decisions, anxiety, and insomnia in the information space (Grabovska and Musakovska, 2020, p. 21).

Information overload is the most common cause of stress, when a person's actions are mostly rash, while the effectiveness of activities is at a low level. In this case, the practice of information discharge (detoxification) is particularly useful, the main features of which are the focus on the natural environment, the lack of technical information carriers, the dosage of physical exertion, and fixation on one's internal state.

Fascination criterion. As we know, creative personalities often go for a walk in the forest or park in order to find inspiration and refresh themselves to get a new idea. Observing natural objects, man begins to think outside the box, unconventionally, to formulate the right questions, and uses the whole range of mental operations to

find the answer (abstraction, comparison, analysis, synthesis, etc.). Gradually relaxing, man becomes more spontaneous, any object getting into the field of the man's sight becomes central, like a toy for a child that has become the centre of the child's universe. This concentration on one object stimulates the development of creativity and allows accumulating creative energy and directing it to handle a certain problem.

The criterion of fascination in the context of a particular natural zone depends on the ability of a person to feel and perceive phenomena and objects of surrounding reality. By interacting with nature, we are able to become more sensitive to the influence of environmental factors. Such sensitivity can manifest itself in different ways, depending on the leading experience type of the personality. It is easier for visual learners to get to know the objective world by concentrating on visual images (colours, shapes); for auditory learners, hearing is of paramount importance, because of which they are more susceptible to sounds in the natural environment (rustling leaves, rain noise, birds' singing, etc.); the kinaesthetic type of perception involves a person's tendency to know the surrounding reality through touching the object of observation, as well as through taste and smell (touching moss, smelling a fir).

The artistic and emotional sense of harmony is a response to the peculiarities of the interaction of tone, saturation, contrast, and harmony of colours, the specifics of the combination of various natural factors of the environment. So, a person becomes aware of beauty through form, colour, symmetry, order, harmony, image, etc. Consequently, one can cause a person to have a corresponding emotional reaction through a certain set of lines, forms, colours, or sounds. One of the main laws of harmony is the Fibonacci golden ratio. It illustrates the division of a whole segment into two uneven parts so that the greater part refers to the smaller part as the whole segment to the greater part. Such a mathematical manifestation is embodied in nature everywhere, all we have to do is just pay attention to the position of sunflower seeds, a snail shell, or pine cones.

When a person has a walk in a natural environment, it is easier for him/her to establish semantic, causal, and associative connections between objects and phenomena. He/she can generate a very large

number of unusual and extraordinary ideas simply by observing the peculiarities of the life of plants and animals, the dynamics of changes in the environment, the variability and specificity of meteorological conditions, as well as their impact on the ecosystem. Associative thinking helps create new original ideas, develop imagination and creative thinking. The association of artistic and emotional sensations with specific phenomena or objects helps us to carry out a deep self-reflection. During this process, a person focuses his/her consciousness on himself/herself and reflects on his/her own mental state.

It has been established that there is a positive trend in the connection of critical thinking with regular physical activity (for example, speed walking). A person with developed critical thinking has a proactive approach to life, is characterized by reflexivity, the ability to make decisions and take responsibility for the consequences.

Thus, isolation of certain information that accumulates in experience emphasizes the importance of cognitive interest in the studying of attractiveness of the natural landscape.

The criterion of individual susceptibility and features of visual perception. The measure of aesthetic pleasure is associated with an individual understanding of the concept of 'beauty'. Not the beauty of nature, but beauty in nature, i.e., the ideal criteria for beauty, is understood as beautiful (aesthetic). At the same time, it is not the matter of existence of the beauty of nature as a whole, but of the extent to which a particular part of nature meets these criteria. A person strives for this beauty all his/her life and gets sincere pleasure when he/she finds its reflection in a natural object. It is worth noting that children are much more sensitive to the manifestation of natural beauty than adults, and women are more receptive to beauty than men. Therefore, the age and gender aspect should be taken into account to a certain extent when assessing the attractiveness of the landscape.

The highest stage in the development of human sensibility is an aesthetic emotion, characterized not only as a reaction of the body to external stimuli, distinguished by harmony, perfection, integrity, and order (Sotska, 2015, p. 391).

Subjective memories caused by emotional experiences when contemplating natural phenomena affect the perception of an aesthetic image. Furthermore, the contrast between our prior information, knowledge, and aesthetic experience of knowing the environment confirms or contradicts our expectations. Generally accepted assumptions often contradict the direct experience of natural or cultural phenomena, which creates a sense of paradox and uncertainty. For example, the scene of the roots of a tree making a crack in a rock is both bizarre and paradoxical, just because we're not really aware of the power of biopersistence. The senses of paradox and spectacularity (the latter is stimulated by huge sizes, spectacular contrasts, and amazing shapes in the landscape) are very common psychological and aesthetic reactions that attract the attention of tourists to specific and unusual places (Ignaacio, 2010, p. 45).

Inspiration, exaltation, and activation of internal energy promote the accumulation of harmonious, deep aesthetic energy. Measure and harmony act as synchronizers of emotions, leading to catharsis (purification). Since aesthetic feelings are fixed in thoughts, emotions, feelings, and behaviour, the experience of previous impressions and experiences is important, which naturally affects the indicator of individual susceptibility.

The theory of gestalt (holistic image) takes a special place in aesthetic evaluation. The holism means compositional unity, spatial and dynamic interconnection of its heterogeneous structural elements. The stage of a holistic aesthetic image is gradually changed by the stage of visual structuring of the aesthetic image, because the knowledge of the whole is impossible without analysing its components.

Considering the natural landscape (a comfortable type of visual environment), the human eye is able to cover and capture significant details, transmitting signals about the environment to the brain. However, once a person looks at the environment, which consists of aggressive or homogeneous types of visual environment, the person's eye loses the point of support and does not find an object to catch hold of, which makes the person feel discomfort. It is important to remember that such chaos indicates spatial pollution. Miller's magical number (7 ± 2 units

of information) reflects the number of objects that a person is able to perceive at the same time.

Features of spatial perception (holism, selectivity) are characterized by subjectivity. The display of space is possible due to paired analysers that humans have and their functional asymmetry. The perception of space is significantly different from the perception of the shape of an object. What makes it different is that it relies on other systems of jointly functioning analysers and can be at different levels. The spatial properties of objects include: size, shape, spatial arrangement (Merie, 2019, p. 75). One of the peculiarities of the perception of space is the contrast of objects. The environment in which the object of perception is located influences its perception. For example, the waterfall seems smaller against the backdrop of high mountains.

The criterion of the landscape emotionality. Try to imagine the aesthetic attractiveness of a particular natural landscape if you completely remove warm colours from its colour scheme or increase the intensity of a particular colour by 50%. Undoubtedly, such a change will have a striking effect on the perception of the full picture of a particular natural environment.

A powerful emotional impulse is associated with the colour scheme of the landscape, which is reduced to a comparison of the cold and the warm, the light and the dark, the bright and the dull. At the same time, you have to take into account the nature of natural light.

Natural landscapes are characterized by the presence of green, yellow, and red shades of colour. In combination with celestial blue and sporadic inclusions of other colours, the composition acquires artistic expression and unity of all elements.

The presence of green and its shades has a very positive effect on the human nervous system, symbolizing peace and freshness. Green colour calms, gives a sense of comfort and tranquillity. In addition, it gives a sense of clarity, reduces appetite, and helps get tired less.

Brown colour (bark of trees, yellowed leaves) gives a sense of stability and allows concentrating on bodily sensations. Yellow is the colour of openness, balance, purposefulness; on the other hand, it symbolizes frivolity and variability. Pink is considered to be the colour of spiritual love, joy;

it is able to strengthen feelings, makes people more attentive and responsive. Orange creates a sense of well-being and charges with optimism and love of life. Red causes excitement, the desire to do a particular thing, pushes for determination and activity (Buchynska, 2015, p. 77).

Blue minimizes the negative impact of a tense rhythm of life, gives a feeling of incredible freshness, and has an extremely beneficial effect on the normalization of sleep. Blue colour suggests peace, contemplation, and prudence.

There is a concept of 'contrasts of colours'. This is a combination of two colours, one of which is light and the other dark, complementing each other. These colours are as follows: red is complemented by black, yellow, gray, brown, beige, orange, and blue; blue is complemented by gray, blue, brown, yellow, and red; yellow is complemented by brown, black, beige, red, orange, gray, light blue, blue, and purple; green is complemented by lemon, gray, yellow, black, golden, salad, and brown; brown is complemented by beige, yellow, black, light blue, blue, orange, gray, etc.

You should remember that even if a certain colour is easy to notice, its visual attractiveness is still much less than that of a multicoloured landscape. The presence of warm colours (red, orange) in completely green landscapes enhances the visual contrast, which, in turn, can improve the aesthetic quality of the landscape (Ma, Hauer and Xu, 2020, p. 14).

A number of studies have been conducted, the result of which shows that people prefer a landscape, in which the ratio of pink to green is 2:1, compared, for example, with a completely green mountain landscape (Ma, Hauer and Xu, 2020, p. 14).

The measure of uniqueness of a natural or cultural landscape (the value of landscape) plays a special role in evaluating attractiveness. Examples of unique natural objects are glaciers, karst arches, grottoes, etc., which will always add attractiveness and mystery to the landscape.

Different classes of landscapes have specific features that are taken into account when evaluating its attractiveness. For example, forest landscapes are characterized by the predominance of woody vegetation and the absence of visible signs of human activity. As for a swampy area, it is characterized by

monotony, an impoverished combination of colours (brown, green, fallow), suppressed vegetation, which can cause such negative emotional states as sadness, depression, disgust, anxiety, and increases the likelihood of symptoms of anxiety and fear. Such places are predominantly rough and not too safe. That's why swampy landscapes are considered the least attractive from an aesthetic point of view.

Thus, it is the factors of mysteriousness and complexity that will be evaluated in the perception of forest resources. As for parks, they should be considered as a place where a person can regain his/her strength in a short period of time, so the main factors are primarily the consistency of structure and spatiality.

Currently, there is a conflict in environmental aesthetics associated with an 'aristocratic' perception of nature, when eyes are fixed on the picturesque areas of the landscape only. With this approach, the energy of wildlife disappears, replaced by a 'picturesque view' that distorts our perception of a particular natural zone or terrain. Thus, the use of any criteria in the evaluation will not reflect reliable results.

The synaesthesia of the landscape is its sensory cognition, i.e., the specifics of the combination of visual, auditory, and tactile sensations. Thus, a person develops a holistic emotional image (Savytska, 2013, p. 191). For example, in the taiga, we feel the effect of cold on our skin considerably; while walking through a coniferous forest, we can feel that the air is saturated with aerofillins; when being close enough to the waterfall, we are enveloped by a soothing 'white' noise, etc. However, it is the complex gamut of all components that creates an image of the landscape.

As we know, 75% to 90% of information about the environment is transmitted with the help of visual images. They are complemented by a variety of sounds, which, unlike noise pollution of large cities, contribute to recovery from stress and information discharge. Smell is an equally important sensation of the sensory perception by a person of the natural environment. In some cases, the emotional response that has arisen as a result of the specific smells of the landscape may exceed the emotional experiences when contemplating the scenery (Savytska, 2013, p. 191).

Thus, the psychological and aesthetic aspect of evaluating the attractiveness of landscapes reflects the possibility of satisfying the aesthetic needs of a person, taking into account his/her individual and psychological characteristics, emotional state, and personal expectations. Although the singled out criteria are quite conditional, in combination with other methods of social and natural resource evaluation, the field of studies of landscape attractiveness is expanding significantly.

The *rehabilitation area* should study the availability of resources and their impact for the comprehensive restoration of the lost functions of the human body with disabilities (medical, psychological and pedagogical, professional, labour, physical culture and sports, physical, social, and psychological rehabilitation).

Along with the social and natural-resource evaluation, we have determined the *parameters of accessibility* of natural resources and tourist infrastructure objects for participants in the programme of inclusive rehabilitation and social tourism.

1. *Recreational parameter* is the availability of natural resources that can be used for recreational purposes (parks in cities, forests, area conservations, natural and cultural landscapes, natural landmarks, ravines, bends, rivers, lakes, artificial reservoirs) with recreation areas for people in need of rehabilitation and social services.

Recreation, active recovery involves a system of measures related to the use of people's free time for their recreational, cultural and leisure activities in specialized areas that are located outside their permanent homes. Recreation covers all types of rest. Restoration of health and working capacity by resting in the bosom of nature, or during a tourist trip while visiting national parks, architectural monuments, and museums.

Table 1: Determination of the level of recreational accessibility

Evaluation	Characteristics
0	There are no natural resources and anthropogenic factors that can be used for recreational purposes
1	There are natural resources and anthropogenic factors that can be used for recreational purposes

2. *Medical and wellness parameter* is the availability of sanatorium and resort facilities, rehabilitation and recreational facilities (rehabilitation centres), recreation centres, boarding houses, green and rural plots of land of camping sites, etc. Primary wellness tourism is a trip to the resort areas for the purpose of recovery and treatment. The purpose of primary wellness tourism is the complex use of natural therapeutic factors and motor activity for therapeutic and preventive purposes.

It is clear that medical tourism and wellness tourism are often combined through the related purpose of travel and the realization of this goal based on the use of one recreation facility.

Primary wellness tourism is divided into medical tourism, the purpose of which is treatment, therapy, rehabilitation after diseases, and wellness tourism, aimed at maintaining the body in a healthy state and maintaining a balance between the physical and psychological health of a person. Wellness tourism, in turn, can be active (sports and fitness) and passive (beauty programmes). The term 'wellness' in the scientific literature appeared not so long ago and means the excellent condition of both the body and the soul, relaxation, revitalization of the body through active recreational activities.

Recently, the market of medical and health services has been changing. Traditional sanatoriums and resorts cease to be a place of treatment for the elderly and become multifunctional health centres intended for a wide range of consumers. It is becoming trendy to live a healthy lifestyle, the number of people who want to stay in shape and need restorative anti-stress programmes is growing.

These are mostly middle-aged people, persons with disabilities, and other social groups who need medical and wellness services, prefer active recreation, and are often limited in time.

Table 2: Determination of the level of medical and wellness accessibility

Evaluation	Characteristics
0	There are no conditions for the comprehensive use of natural therapeutic factors and motor activity for therapeutic and preventive purposes
1	There are conditions for the comprehensive use of natural therapeutic factors and motor activity for therapeutic and preventive purposes

Programmes of the medical and wellness area in tourism are becoming increasingly diverse and provide for all kinds of cultural and sports events, which provide a wide range of health and recreational services, taking into account the socio-psychological state of a person.

3. *Transportation parameter* is the availability of accessibility conditions (hard surface, proximity to the main transport roads, railways, and waterways) for tourists to a certain object of tourist and recreational contemplation, using one or more modes of transport to access this object, including scooters and electric wheelchairs for wheelchair users.

Table 3: Determination of the level of transport accessibility

Evaluation	Characteristics
0	There are no transport accessibility conditions
1	There are conditions of transport accessibility

4. *Architectural parameter* is the architectural accessibility provided according to the DBN (State Construction Standards of Ukraine) for persons with disabilities, ramps with an elevation angle of no more than 10–12 degrees, travelators, lifts, elevators, side walks (width and passability), pedestrian crossings, exit ramps to pedestrian crossings, signals and buttons for the blind, including for wheelchair users, where needed, at a height of no more than three cm), special information boards with Braille text, with relational system symbols.

Table 4: Determination of the level of architectural accessibility

Evaluation	Characteristics
0	No architectural accessibility is provided according to the DBN for persons with disabilities
1	Architectural accessibility is provided according to the DBN for persons with disabilities

5. *Sanitary and hygienic parameter* provides for the availability of conditions that comply with sanitary and hygienic standards at tourist facilities.

Table 5: Determination of the level of sanitary and hygienic accessibility

Evaluation	Characteristics
0	The conditions of sanitary and hygienic standards are not complied with at this tourist facility
1	The conditions of sanitary and hygienic standards are complied with at this tourist facility

6. *Rehabilitation parameter* is the availability of conditions for the provision of social and rehabilitation services.

Table 6: Determination of the level of rehabilitation accessibility

Evaluation	Characteristics
0	There are no conditions for the provision of rehabilitation services
1	There are conditions for the provision of rehabilitation services

Rehabilitation of persons with disabilities is a system of medical, psychological, pedagogical, physical, professional, labour, physical culture and sports, social and household activities aimed at assisting persons in restoring and compensating for impaired or lost body functions to achieve and maintain social and material independence, labour adaptation, and integration into society, as well as the provision of persons with disabilities with technical and other means of rehabilitation and medical devices. Rehabilitation Services are services aimed at restoring the optimal physical, intellectual, mental, and social level of a person's life in order to promote his/her integration into society (The Verkhovna Rada of Ukraine, 2005).

Table 7: Determination of the level of accessibility of medical rehabilitation

Evaluation	Characteristics
0	There are no conditions for the provision of medical rehabilitation
1	There are conditions for the provision of medical rehabilitation

6.1. *Medical rehabilitation* is a system of therapeutic measures aimed at restoring impaired or lost functions of the body of a person, identifying and

activating the compensatory capabilities of the body in order to provide conditions for a person's returning to normal life, preventing complications and relapses of the person's disease (The Verkhovna Rada of Ukraine, 2005).

6.2. *Psychological and pedagogical rehabilitation* is a system of psychological and pedagogical measures aimed at the formation of methods of mastering knowledge, skills, and abilities, providing psychological assistance, in particular, on the formation of self-affirmation and proper self-esteem of a person's capabilities, mastering the rules of social behaviour through systematic educational work (The Verkhovna Rada of Ukraine, 2005).

Table 8: Determination of the level of accessibility of psychological and pedagogical rehabilitation

Evaluation	Characteristics
0	There are no conditions for the provision of psychological and pedagogical rehabilitation
1	There are conditions for the provision of psychological and pedagogical rehabilitation

6.3. *Vocational rehabilitation* is a system of measures aimed at preparing a person for professional activity, restoring or obtaining professional ability to work through adaptation, re-adaptation, training, retraining, or training for a new occupation with possible subsequent employment and necessary social support, taking into account personal inclinations and wishes of the person (The Verkhovna Rada of Ukraine, 2005).

Table 9: Determination of the level of accessibility of vocational rehabilitation

Evaluation	Characteristics
0	There are no conditions for the provision of vocational rehabilitation
1	There are conditions for the provision of vocational rehabilitation

6.4. *Labour rehabilitation* is a system of measures developed taking into account the inclinations, physical, intellectual, and mental capabilities of a person and aimed at mastering labour skills necessary for labour activity and adaptation to production conditions, including through the creation of special or specially adapted workplaces.

Table 10: Determination of the level of accessibility of labour rehabilitation

Evaluation	Characteristics
0	There are no conditions for the provision of labour rehabilitation
1	There are conditions for the provision of labour rehabilitation

6.5. *Physical culture and sports rehabilitation* is a system of measures developed using physical exercises to restore the health of a person, aimed at restoring and compensating for the functional capabilities of the person's body through physical culture and sports to improve the physical and psychological condition of the person (The Verkhovna Rada of Ukraine, 2005).

Table 11: Determination of the level of accessibility of physical culture and sports rehabilitation

Evaluation	Characteristics
0	There are no conditions for the provision of physical culture and sports rehabilitation
1	There are conditions for the provision of physical culture and sports rehabilitation

6.6. *Physical rehabilitation* is a system of measures aimed at the development and application of sets of physical exercises at various stages of treatment and rehabilitation that provide functional recovery of the person, identify and develop reserve and compensatory capabilities of the body by developing new movements, compensatory skills, using technical and other means of rehabilitation, and medical devices.

Table 12: Determination of the level of physical rehabilitation accessibility

Evaluation	Characteristics
0	There are no conditions for the provision of physical rehabilitation
1	There are conditions for the provision of physical rehabilitation

6.7. *Social rehabilitation* is a system of measures aimed at creating and ensuring conditions for returning a person to active participation in life, restoring his/her social status and ability to independent social, family and household activities through social and environmental orientation and social and household

adaptation, social services to meet the need for technical and other means of rehabilitation.

Table 13: Determination of the level of accessibility of social rehabilitation

Evaluation	Characteristics
0	There are no conditions for the provision of social rehabilitation
1	There are conditions for the provision of social rehabilitation

6.8. *Psychological rehabilitation* is a system of measures aimed at restoring and correcting psychological functions, qualities, and properties of a person, creating favourable conditions for the development and fulfilment of a person.

Table 14: Determination of the level of accessibility of psychological rehabilitation

Evaluation	Characteristics
0	There are no conditions for the provision of psychological rehabilitation
1	There are conditions for the provision of psychological rehabilitation

Along with the accessibility parameters, it is advisable to determine the social and natural resource evaluation of the potential of natural conditions for each type of disease and the criteria for its measurement.

One of the comprehensive indicators of the psychological and aesthetic evaluation and at the same time the criterion for determining the market value of a recreational object (area) is its attractiveness. To determine it, the method of expert evaluation of various signs and factors, combined into 5 groups, is used (Table 15).

Table 15: Quantification of attractiveness factors

	Factors	Loading
1. Natural	Natural sights, attractions	0.132
	Climate	0.092
2. Social	Public buildings, cultural monuments, stadiums	0.051
	Cultural events	0.029
	Ethnographic features, handicraft centres	0.026
	Fairs and exhibitions	0.011
	Attitude towards tourists	0.054

3. Historical and cultural	Archaeological sites, historical monuments	0.057
	Artistic and architectural monuments	0.053
	Historic landmarks	0.065
4. Recreational and trade services	Provisions for doing sports	0.046
	Provisions for raising the educational level	0.015
	Provisions for rest	0.032
	Provisions for the development	0.045
	Trade services	0.036
5. Infrastructure, catering, accommodation	Infrastructure	0.131
	Provisions for food and accommodation	0.125

Source: (Sotska, 2015; Omelyanenko et al. 2019; Bezliudnyi et al. 2020).

Each of the factors was assigned loading by the experts. Under certain conditions, attractiveness can be used as one of the options for a comprehensive evaluation of recreational resources.

CONCLUSION

Thus, the undertaken improvement of the methodological support of social and natural-resource evaluation of sustainable inclusive tourism objects allows drawing the following conclusions:

Firstly, compliance with the developed recommendations for social and natural-resource evaluation will make the socio-cultural space unhindered for all categories of the population. This, in turn, will provide access to social services for each person, which will contribute to their integration, socialization, and adaptation.

Secondly, the suggested methodological principles of quantitative evaluation of accessibility parameters and attractiveness factors of natural resources and tourist infrastructure objects for participants in the implementation of the programme of inclusive rehabilitation and social tourism will ensure the reliability of social and natural-resource evaluation of the potential of natural conditions for each type of disease and criteria for its measurement.

Thirdly, the developed recommendations will be useful not only for educators, specialists of inclusive resource centres, rehabilitation and social institutions, representatives of communities, public organizations, but also for specialists who directly

provide cultural services, and occupy one of the main roles in the implementation of sustainable inclusive tourism.

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