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ORIGINAL PAPER

Cultural heritage protection as a function of the forest in the opinions of adult Poles

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ABSTRACT

Cultural heritage protection is one of the functions performed by the forest. This paper assesses the perception of cultural heritage protection and defines a model socio-demographic profile of people who consider cultural heritage protection an important function of forests. The research material consists of a questionnaire survey on 1402 people visiting forests for recreational purposes within the range of the Regional Directorate of State Forests in Radom. A logistic regression model was used to determine the influence of socio-demographic characteristics of respondents to develop a profile of forest visitors who consider cultural heritage (CH) functions as important. The following socio-demographic characteristics significantly influenced CH perception: education level had the most significant impact, followed by satisfaction with the standard of living, then frequency of visits to forests, age, and gender. The profile of citizens who most often indicate CH as very important can be defined as follows: women with secondary or higher education, aged over 40, who consider their material status satisfactory and visit forests several times a week. In contrast, the least likely to indicate CH as very important were men aged 18-40, with primary education, visiting forests several times a year and assessing their material status as unsatisfactory.

KEY WORDS

culture values of the forest, ecosystem services, forest visitor profile, logistic regression, questionnaire, social preferences

Introduction

CULTURAL HERITAGE – DEFINITION OF THE CONCEPT. Cultural heritage is what previous generations have built and left behind. It is also how contemporary society interprets, values, and manages it (Hølleland *et al.*, 2017). Cultural and historical elements are important reminders of the heritage and are considered important for the visual quality of the landscape (Tveit *et al.*, 2006). Historical artifacts and how practices connect to historical elements of the landscape are

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also considered heritage because we ascribe a certain value to them (Muñoz Viñas, 2012). Cultural heritage refers to the material products of human activity and to knowledge, beliefs, art, law, techniques of making and using tools, and ways of communicating. Despite the many definitions of the concept, there is still, according to Hølleland *et al.* (2017), no consensus on what cultural heritage is in the context of ecosystem services (ES), which are the products generated by natural ecosystem processes and human activities (Fischer and Eastwood, 2016). Cultural heritage in forests undeniably provides recreational, aesthetic, and spiritual benefits, which fall within the scope of cultural services provided by forests. This is a non-material benefit that people obtain from contact with forest ecosystems. Many societies value preserving historically important landscapes, 'cultural landscapes', or culturally significant species.

The role of forests in heritage conservation. The forest and the forest management associated with it have an important role in protecting cultural heritage. By this, protection means both the preservation and the consolidation of cultural values, but also their management and making them available to the public. Acting to protect cultural heritage is a very urgent need. The Millennium Ecosystem Assessment report (MEA, 2005) highlights that although cultural services are steadily increasing, ecosystems' capacity to provide cultural benefits has been significantly reduced over the last century. Many of these benefits are being degraded as a result of changes in forest ecosystems (climate change, *e.g.*, hurricanes, floods, natural plant succession resulting in the obliteration of traces of former settlements, memorials, generational changes in forest stands) or as a result of social change (transformational processes, rapid urbanization of space, development of technical infrastructure, blurring of cultural differences). The protection of cultural heritage is fostered by public education, popularization, and dissemination of information about the cultural resources of the forest in society, which involves the need to monitor the state of knowledge and understanding of the level of appreciation of cultural heritage in society. This is all the more important because, as Eriksson (2018) notes, heritage is not a value-neutral concept. The meaning and value that people ascribe to material manifestations of culture can change over time. Many researchers (Daw *et al.*, 2011; Casado-Arzuaga *et al.*, 2013; Bennett *et al.*, 2015) point out that although stakeholder perceptions and preferences are a prerequisite for effective assessment of ecosystem services and human well-being, we still have too little empirical knowledge about perceptions of ecosystem services and their impact on human well-being. Participatory approaches (such as questionnaires and focus groups) are quite often used to clarify the importance and contribution of ecosystem services to human well-being (Pereira *et al.*, 2005; Abunge *et al.*, 2013; Sandhu and Sandhu, 2014; Ciftcioglu, 2017). Although, as Chen *et al.* (2022) note, research on forest ecosystem services has grown rapidly over the past two decades, a lot is still unknown about how the public perceives the importance of the forest in the context of cultural heritage conservation. According to Agnoletti and Santoro (2015), cultural values currently play a limited role in Sustainable Forest Management (SFM). This fact indicates the scant consideration given to the role of culture and history and the lack of a comprehensive landscape approach. Eriksson (2018) also points out that many questionnaire-based surveys of preferences for various forest features do not even ask about cultural values. Cultural ecosystem services are an emerging area of research (Horcea-Milcu *et al.*, 2013). So far, no such studies have been conducted in Poland. Thus, our study aimed to assess perceptions of forest heritage protection and identify a model socio-demographic profile of those considering heritage conservation a very important forest function in Poland.

Material and methods

Data. The research material consists of the results of questionnaire surveys carried out within the framework of the research topic commissioned by the State Forests National Forest Holding: 'Demand for tourist and recreational functions of forest on the example of the Regional Directorate of State Forests (RDSF) in Radom'.

The area of Radom RDSF is located in the central-eastern part of Poland. It covers vast and diverse areas from river valleys and plains through highlands to mountains. They range from 143.0 meters above sea level to 612.0 meters above sea level – Łysica (the highest peak of the Świętokrzyskie Mountains). The average annual air temperature is 5.7°C to 8.2°C (BDL, 2019).

The Radom RDSF covers areas with highly developed agriculture due to the high proportion of fertile soils. Forests cover an area of about 470,000 hectares (25.1%) of the RDSF Radom area. Their largest forest complexes are located in the central and western parts of the analysed area. Vegetation that can mainly be found are pine, fir, spruce, beech, and oak. The most valuable natural forest stands with high species diversity are located primarily in areas unfavourable for agriculture, mainly mountainous or swampy. Due to its unique nature, almost 80% of the forest area is shielded by various forms of nature protection, including about 99,000 hectares in the European Ecological Network Natura 2000 (BDL, 2019).

Due to its agricultural nature, the areas within the range of the Radom RDSF are sparsely urbanized. The largest urban centers include Radom (population 217,800), Kielce (pop. 196,000), and Ostrowiec Świętokrzyski (pop. 69,000). The Radom RDSF's forest areas are rich in cultural heritage monuments. First of all, there are many material remains related to human activity, including cemeteries, remains of settlements, exploitation and production activities, military activities, and historical buildings (BDL, 2022).

Due to the ongoing pandemic, an online survey was conducted from July to September 2020. A link to the survey, created on the Webankieta platform, was made available on social networks such as Facebook, Instagram, and Twitter, as well as on the websites of the forest districts comprising the Radom RDSF. Each forest district had a so-called 'liaison officer', usually an employee of the district, who, on his/her days off, outside of his/her professional duties, forwarded the link to the survey to all persons interested in forest recreation in the region. In the questions we emphasised that we wanted answers on issues relating to these specific forests and the region in which we were conducting our research.

In the first stage respondents provided information on their gender (female, male), age (18-34 years, 35-54 years, ≥55 years), level of education (primary, secondary, tertiary), place of residence (rural area, small town with up to 15,000 inhabitants, medium town with 15,000-100,000 inhabitants, large town with more than 100,000 inhabitants), number of children in the family, satisfaction with the standard of living, a distance of the place of residence to the forest and frequency of visits to forests.

In the second stage respondents evaluated importance of cultural heritage protection as a function of forest. They were asked to assign one of five possible answer choices, ordered according to a Likert scale that takes into account five degrees of appreciation (very important, important, moderately important, not very important, irrelevant).

Method. A logistic regression (LR) model was used to profile visitors in terms of differences in perception of the CH function. LR determines the probability that the dependent variable takes the value 1, provided that the explanatory variables (x_1, x_2,..., x_k) take certain values. In order

to evaluate cultural heritage protection we used the Likert values assumed that Y=1 for the very important and important assessments, and Y=0 for moderately important, not very important and irrelevant assessments,

The following formula gives a logistic model with one explanatory variable:

$$P(Y=1|x_1,x_2,...,x_k)=\frac{e^{\beta_0+\sum_{i=1}^{k}\beta_i\cdot x_i}}{1+e^{\beta_0+\sum_{i=1}^{k}\beta_i\cdot x_i}} \tag{1}$$

where:

Y – dependent variable,
x_i – independent variables,
β_0 – intercept,
β_i – coefficient of variable x_i,
e – base of the natural logarithm.

If we logarithm both sides of equation 1, we get the logit form of the logistic regression model represented by the following formula:

$$logitP=\beta_0+\sum_{i=1}^{k}\beta_i\cdot x_i \tag{2}$$

The logit form of the model given by equation 2 is commonly used in research due to the intuitive, simple interpretation of the right-hand side of the equation as a linear function.

The following socio-demographic characteristics of the respondents were taken as potential explanatory variables: gender, age, education level, place of residence, financial status, having children, and frequency of forest visiting. All variables were of binary type (1-0), taking the value '1' if the attribute was specific to the respondent or '0' if the respondent did not have the attribute. For example, the gender characteristic was described by a single variable, 'woman', while 'man' was taken as the reference value described by the free expression. The variable 'woman' took the value '1' if the respondent was a woman or the value '0' if the respondent was a man. In the case of traits adopting one of several compartments (*e.g.*, place of residence), a dummy variable x_1= rural area, x_2= small town, x_3= medium town was assigned to the individual compartments, always leaving one compartment as the reference value of this trait (here rural area) reflected in the free expression. A step-wise approach was used to build the multivariate model. In the first step, a model with one independent variable was drawn up and checked if it differed significantly from the model with only the free expression. In the next steps, further variables were added, and their significance was checked; if the variables turned out to be insignificant, they were removed from the model. The significance of the model parameters was checked using the Wald test.

In a logistic regression model, the odds ratio (OR) is an important parameter besides the regression coefficients and their statistical significance. Odds are the ratio of the probability that an event will occur (*e.g.*, CH will be identified as important) to the probability that the event will not occur (CH is considered unimportant). The odds ratio is the ratio of the chance S (A) of an event occurring in group A (*e.g.*, woman) to the chance S(B) of that event occurring in group B (man).

$$OR_{A\times B}=\frac{S(A)}{S(B)} \tag{3}$$

OR=1 means that the chance of considering CH to be important is the same in the group of women as in the group of men; OR>1 means that in the first group (women), the recognition of

CH as being important is significantly higher than in the second group (men). Conversely, OR<1 means that in the first group (women) the recognition of CH as being important is less than in the second group (men).

In the case of a logit form of the model with multiple variables, we use the following formula to determine the odds ratio:

$$OR_{A\times B} = e^{\sum_{j=1}^{k}(X_{Aj}-X_{Bj})\beta_j} \tag{4}$$

OR, similar to regression coefficients, is assessed based on an estimate, so it is important to assess the significance of this parameter.

The impact of individual respondent characteristics on perceptions of cultural heritage (CH) was investigated in two stages: first, using a univariate model, individual socio-demographic characteristics were analysed separately, then characteristics that proved statistically significant were used in a multivariate model describing their combined impact on CH perceptions.

Results

General socio-demographic characteristics of respondents. A total of 1,402 respondents participated in the survey, including 655 women (46.7%) and 747 men (53.3%) (Fig. 1). Respondents aged 31-40 were the most numerous group (31.1%). Respondents aged 18-30 accounted for 27.8% of respondents, those aged 41-50 (24%), and those aged 51 and over 17.1% of respondents. Urban residents were the most numerous group. The study involved 807 city dwellers (57.6%), of whom 18.6% of the respondents came from small cities (up to 15,000 inhabitants), 23.2% from medium-sized towns (15,000-100,000 inhabitants), and 15.8% from large cities (over 100,000 inhabitants). 42.4% of respondents came from rural areas. The vast majority of respondents had a university degree (64.6%). Secondary education was held by 32.0% of respondents, and those who finished with a primary education made up only 3.4% of respondents. The most numerous group were respondents with children (62.1%), of which two children in the family were declared by 47.4% of respondents, three and more children by 14.7% of respondents. Most respondents (63.9%)

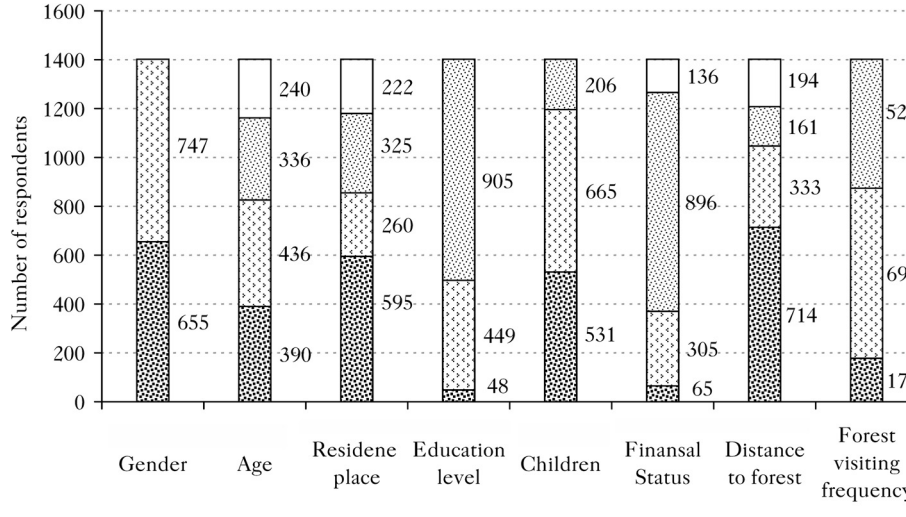

Fig. 1.
Demographic characteristics of respondents

considered their material standard of living satisfactory, 21.8% as not very satisfactory, 9.7% as fully satisfactory, and 4.6% as unsatisfactory. 51% of respondents lived within 3 km of the forest, 23.7% lived between 3 and 6 km, and 11.5% lived between 6 and 10 km from the forest. The remaining respondents (13.8%) declared that they lived more than 10 km from the forest. Most respondents (49.6%) declared that they rest in the forest several times a week, 37.7% declared that they rest in the forest several times a year, and 12.7% of respondents rest in the forest every day.

MODELLING THE PERCEPTION OF CULTURAL HERITAGE PROTECTION AS A FUNCTION OF THE FOREST. The individual impact of each socio-demographic characteristic on perceived importance CH is described by the parameters of univariate logistic regression models (Table 1). Gender feature consist of two classes: 'man' and 'woman'. The first class (man) was adopted as the reference level for parameter β=0 and OR 1. A positive sign of the parameter β_1=0.264 means that the variable 'woman' represents a factor that increases the likelihood of evaluating CH as important. The probability values p=0.0151 and the Wald statistics χ^2=5.92 confirm the statistical significance of this variable. The value of the odds ratio OR=1.302 means that, on average, women considered CH as important 30% more often than men (reference level).

The reference level in the model with the variable 'age' was the first age group (18 to 30 years). The remaining three groups were independent dummy variables of the model. The intercept parameter β_0=–0.5245 has a negative sign, which means that the low age of the respondents (18--30 yr.) is a factor decreasing the probability of the CH perception as important. This is also confirmed by an odds ratio <1 for the intercept (OR=0.5918), indicating that people aged 18 to 30 are, on average, 40% (1-0.5918) less likely to consider CH important compared to other age groups. Positive values of β coefficients for variables representing higher age groups and corresponding OR values greater than 1 indicate that the perception of CH as important increases with age. In the second age group (31-40 years), the parameter β_1 and OR are statistically insignificant (p=0.2559, Wald's χ^2=1.29), while in the third and fourth groups, their significance was confirmed (p=0.0095, and p=0.0145 respectively). The odds ratio values are 1.482 and 1.503, respectively, meaning that people aged 41-50 and over 50 are 48% and 50% more likely to consider CH as important, respectively.

Table 1.
Univariate logistic regression models of cultural heritage perception

Feature	Variable class	Coefficient	p-value	Wald's χ^2	Odds ratio
Gender	intercept	–0.4323	0.0001	33.30	0.649
	woman	0.2640	0.0151	5.92	1.302
Age	intercept	–0.5245	0.0000	25.01	0.5918
	31-40 yr.	0.1628	0.2559	1.29	1.177
	41-50 yr.	0.3934	0.0095	6.74	1.482
	>50	0.4077	0.0145	6.00	1.503
Education level	intercept	–1.2130	0.0004	12.47	0.297
	secondary	0.8205	0.0216	5.29	2.272
	high	0.9889	0.0048	7.98	2.688
Financial status	intercept	–1.1192	0.0001	15.07	0.327
	satisfactory	0.8468	0.0039	8.34	2.332
Frequency of forest visiting	intercept	–0.5270	0.0000	34.25	0.590
	a few times a week	0.3481	0.0021	9.5004	1.416

In the model explaining the influence of education level, the reference is people with primary education. The negative value of the coefficient with the intercept β_0=–1.2130 indicates that low education level has a negative effect on the assessment of the CH importance. The high level of confidence (p<0.001) and Wald's χ^2 values (12.47) confirm that the effect of education only on a primary level is highly statistically significant. The perception of CH as important increases with the increase in the level of education. People with secondary education are more than twice (OR=2.272) as likely to consider CH as very important and those with higher education are 2.7 times more likely (OR=2.688).

Financial status turned out to be an important feature explaining the perception of CH. For the adopted reference level 'dissatisfied', the value of OR=0.327 indicates that dissatisfied citizens are, on average, 67% less likely to consider CH as important. The statistically high significance of the influence of this feature is confirmed by the high value of Wald's χ^2=15.07 and p<0.001 for the intercept. The other group of respondents is more than twice as likely to consider CH important, with the OR value for satisfactory being 2.332.

The frequency of visits to the forest is also a feature that significantly differentiates the perception of CH. Compared to those who visit the forest several times a year (reference level), people visiting the forest several times a week are 42% (OR=1.416) more likely to consider CH important.

The distance from the place of residence to the forest and the family situation (children) turned out to be statistically insignificant features (at the significance level of p<0.05) on the perception of CH as a very important forest service.

At the next stage, a multi-factor logistic regression model was built, considering all the characteristics of the respondents that turned out to be statistically significant in the single-factor models presented above (Table 2).

The value of the coefficient βi indicates the influence of the variable 'i' on the probability of CH assessment as a important function of the forest. This allowed us to rank the analyzed characteristics according to the following order: education level has the greatest influence (β=0.813 and 0.992 for those with secondary and higher education, respectively) followed by satisfaction with the standard of living (0.625), then frequency of visits to the forest, (0.368), age (0.296 and 0.408), and gender (β=0.302).

The obtained multivariate model allows for the profile of people most often indicating CH as important to be defined as follows: women with a secondary or higher education, aged over 40, who consider their material status satisfactory and visit the forest several times a week. In contrast, the least likely to indicate CH as important was a man aged 18-40, with a primary education, visiting the forest several times a year and assessing their material status as unsatisfactory.

Table 2.

Multivariate logistic regression profile model of people who consider cultural heritage as important

Variable	Coefficient	Standard error	p-value	Wald's χ^2	Odds ratio
Intercept	–2.330	0.442	0.000	27.725	0.097
Gender = woman	0.302	0.111	0.006	7.475	1.353
Age 41-50 yr.	0.296	0.132	0.026	4.990	1.344
Age >50	0.408	0.153	0.008	7.166	1.504
Education = secondary	0.813	0.367	0.027	4.917	2.255
Education = high	0.992	0.363	0.006	7.455	2.696
Visiting forest = weekly	0.368	0.115	0.001	10.269	1.444
Financial status = satisfactory	0.625	0.302	0.038	4.294	1.869

Discussion

The main objective of our research was to determine to what extent the fact that forests protect cultural heritage is relevant to society. The inclusion of a socio-cultural approach to the identification and management of ecosystem services is crucial to avoid errors caused by the lack of social requirements and to effectively link ecosystem services to human well-being (Martín-López *et al.*, 2012; Garrido *et al.*, 2017; Mensah *et al.*, 2017). Cuni-Sanchez *et al.* (2019) consider that socio-cultural evaluation of ES using research methods from the social sciences (*e.g.*, surveys, interviews) makes it possible to make stakeholders central to the research (Orenstein and Groner, 2014). Cultural resources are important for the development of ecotourism and heritage tourism. According to Vena-Oya *et al.* (2021) cultural and heritage tourism has become the fastest-growing segment in the tourism industry. This is probably because, as Tilden (2019) argues, humans are always – consciously or subconsciously – looking for their place in the natural world and among other humans, even if time and space separate them. Cultural values in forests, battlefields, archaeological sites, ancient ruins, and historical monuments help people satisfy this need. Appreciation of these sites leads to their protection and, thus, the protection of the entire forest ecosystem.

A survey questionnaire was used in the study. It is a popular research tool that studies the expectations and preferences of tourists and visitors of naturally valuable areas. This study covered a very wide group of respondents to make the results as reliable as possible. The online survey was chosen, which has undoubted advantages, especially if you want to reach a very large group of respondents, but also disadvantages – mainly that it is difficult to reach older people who tend to use technology and the internet less. The low participation of older people may be related to the fact that the research tool was an online survey.

According to the CBOS report (Feliksiak, 2018), internet use in Poland is widespread among the youngest respondents and those aged 25-34. The vast majority of respondents aged 35 to 44 are also online. Nearly half of Poles aged 55-64, and three-quarters of the oldest (aged 65 and over) remain offline. The survey covered primarily people with a university education, which is definitely related to the fact that the largest number of internet users are among this group of society (Feliksiak, 2018). Generally, in Poland, the number of internet users is the lowest in rural areas and the largest in cities with 500,000 inhabitants and more (Feliksiak, 2018), which again translates into the dominant position of city dwellers in our research.

Many previous social studies (Martín-López *et al.*, 2012; Allendorf and Yang, 2013; Mensah *et al.*, 2017) confirm that gender is an important predictor of activities broadly related to environmental protection.

Also, the place of residence can be a factor on the basis of which the importance of specific functions of the forest can be predicted. Concerning the function of the forest, which is the 'protection of cultural heritage', it was found that among the inhabitants of large cities (over 100,000 inhabitants) the percentage of people convinced that this is a very important function was the highest compared to the inhabitants of smaller cities or rural areas. Similar results can be found in the report on social research titled 'Poles towards heritage' (2017), which shows that the awareness of the importance of cultural heritage is the highest among residents of cities over 200,000 and cities up to 50,000 and lower among residents of rural areas and cities of 50,000-200,000. Hochmalová *et al.* (2022) also draws attention to the cultural context of the place of residence. Research have shown that in the group of rural residents, the percentage of respondents convinced of the increased importance of the function of the forest, which is the 'protection of cultural heritage' increased more in the last ten years than in the case of other respondents – city dwellers. This may

be because the cultural heritage of non-urbanized areas, including forests, has become increasingly visible in the media. In the era of universal globalisation, there is also a growing need to preserve and nurture regional identity, which is the essence of a specific society and region. Regional identity manifests in emotional attachment to a given place – a region, a unique section of space (Plit, 2011). Many authors (*e.g.* Zarycki, 2000; Burdzik, 2013) point out that awareness, understanding, and the need to cultivate cultural distinctiveness are increasing among local communities, and there is a renaissance of regional cultural differences and strengthening of local traditions and pride. The increase in awareness of the need to protect cultural heritage in forests is fostered by various types of educational activities carried out by foresters, often in cooperation with local governments and local social organizations. Research by He *et al.* (2018), which showed that rural residents highly value cultural services, especially local culture and ecotourism, seems to confirm these assumptions.

Results of research also clearly indicates the role of education and the level of education in the perception of the importance of individual forest functions, which is also confirmed by the research of Martín-López *et al.* (2012). Similarly, Tolvanen *et al.* (2020) proved that the respondents' education level most often impacted the marked values for pleasant sites. Beautiful scenery, versatile species assemblages, and culture and history were typically marked by respondents with a university background. The most highly educated people are likelier to perceive heritage as important (Report, 2017). The emotional attitude towards heritage depends on the level of knowledge and education (Chabiera *et al.*, 2017). The type of knowledge the stakeholders possess (*i.e.*, experiential or experimental) is also important (Lewan and Söderqvist, 2002; Lamarque *et al.*, 2011). Allendorf and Yang (2013) found that people with a university education are almost 2.5 times more likely to see the benefits of ecosystem services than people without an education.

The results of this study has shown that the importance of the forest ecosystem service 'protection of cultural heritage' increases with a higher level of wealth of respondents. There are many studies supporting this finding. For example, Acharya *et al.* (2021) found that the willingness to pay for all regulatory and cultural services is shaped mainly by economic status, distance from forests, household income, and size.

The other socio-demographic characteristics considered in this study were not relevant to perceptions of the importance of the discussed forest function of protecting cultural heritage. Although other studies, *e.g.* Meo *et al.* (2015), show that older people assign a higher value to infrastructure facilities, this was also true for historical and religious sites.

Only preferences were investigated and no specific behaviours toward heritage sites was tested. From Tolvanen *et al.* (2020): 'In our survey, many visitors indicated cultural history as a value for pleasant places, but we found no relationship between heritage sites and respondents' actions or values. Although there are hundreds of cultural heritage sites in the study area, they are small in size and generally not marked in the landscape. A similar situation exists with archaeological sites, which are not always clearly visible (Antrop, 2005). Information about them may reside in scientific data that is not publicly available. In this study, heritage sites may not be a specific target for visits, but they can become potential targets if properly marked and maintained.

Conclusions

The survey showed that the perception of 'cultural heritage protection' in forest areas should be considered with a specific socio-economic group in mind, with a specific demographic profile and economic status. This means that the evaluation of ecosystem services in forest areas was affected by such characteristics of respondents as gender, age, education, and financial status.

With the globalization of the world, the cultural value of these heritages, representing the spirit and wisdom of an entire nation of people, is becoming increasingly important. This is a great asset that could potentially be destroyed and forgotten if unwisely developed. Moreover, it could directly leave a negative impact on the environment and the socio-economic development of the area and the nation as a whole. Understandably, when communities try to promote local heritage without proper regulation and professional assistance, it can easily damage the site and potentially degrade cultural heritage values. Therefore, government officials and the community must collaborate on cultural sites and heritage.

Authors' contributions

Conceptualization – E.J. and J.B; methodology – E.J. and J.B.; software – M.W and S.Z.; validation – M.W. and K.U.-B.; investigation – S.Z and K.J.; writing-original draft preparation – E.J and J.B.; writing-review and editing – E.J. and J.B.; supervision – K.U.-B. and K.J.

Conflicts of interest

The authors declare no conflict of interest.

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STRESZCZENIE

Ochrona dziedzictwa kulturowego jako funkcja lasu w opiniach dorosłych Polaków

Ochrona dziedzictwa kulturowego jest jedną z funkcji pełnionych przez lasy. W artykule dokonano oceny postrzegania ochrony dziedzictwa kulturowego oraz określono profil społeczno-demograficzny osób uznających ochronę dziedzictwa kulturowego za bardzo ważną funkcję lasów. Materiał badawczy stanowią wyniki badań ankietowych prowadzonych na terenie RDLP w Radomiu. W badaniach wzięło udział łącznie 1402 respondentów, w tym 655 kobiet i 747 mężczyzn. Obszar RDLP w Radomiu położony jest w środkowo-wschodniej części Polski i obejmuje rozległe oraz zróżnicowane obszary: od dolin rzecznych i terenów równinnych, poprzez wyżyny, po góry.

W celu określenia profilu osób postrzegających ochronę dziedzictwa kulturowego za bardzo ważną funkcję lasu zastosowano model regresji logistycznej. Wpływ poszczególnych cech respondentów na postrzeganie dziedzictwa kulturowego badano w 2 etapach: najpierw analizowano odrębnie poszczególne cechy społeczno-demograficzne przy użyciu modelu jednoczynnikowego, a następnie cechy, które okazały się statystycznie istotne, wykorzystano w wieloczynnikowym modelu opisowym opisującym ich łączny wpływ na postrzeganie tej funkcji lasu. Jako potencjalne zmienne objaśniające przyjęto następujące cechy społeczno-demograficzne respondentów: płeć, wiek, poziom wykształcenia, miejsce zamieszkania, status finansowy, posiadanie dzieci i częstość odwiedzania lasu (ryc. 1).

Uzyskane wyniki wskazują, że kobiety średnio o 30% częściej w porównaniu do mężczyzn uznawały ochronę dziedzictwa kulturowego za bardzo ważną (tab. 1). Wraz z wiekiem wzrasta postrzeganie ochrony dziedzictwa kulturowego jako bardzo ważną cechę: osoby w wieku 41-50 lat średnio o 48% częściej uważają tę funkcję lasu za bardzo ważną, natomiast w wieku powyżej 50 lat o 50%. Wraz ze wzrostem poziomu wykształcenia rośnie postrzeganie dziedzictwa kulturowego jako bardzo ważną funkcję. Osoby ze średnim wykształceniem ponaddwukrotnie częściej w porównaniu do osób z wykształceniem podstawowym uważały tę funkcję za bardzo ważną, a osoby z wykształceniem wyższym 2,7 razy częściej. Status finansowy okazał się istotną cechą wyjaśniającą postrzeganie dziedzictwa kulturowego, przy czym osoby zadowolone ze swojego statusu materialnego ponaddwukrotnie częściej uważają tę cechę za bardzo ważną w porównaniu do osób uważających swój status materialny za niezadowalający. Odległość miejsca zamieszkania od lasu oraz sytuacja rodzinna (posiadanie dzieci) okazały się cechami statystycznie nieistotnymi. Osoby najczęściej wskazujące ochronę dziedzictwa kulturowego jako bardzo ważną funkcję lasu to kobiety z wykształceniem średnim lub wyższym, w wieku powyżej 40 lat, które oceniają swój status materialny jako zadowalający i odwiedzają las kilka razy w tygodniu (tab. 2). Z kolei osoby, które

najrzadziej wskazywały ochronę dziedzictwa kulturowego jako bardzo ważną, to mężczyźni w wieku 18-40 lat, z wykształceniem podstawowym, odwiedzający las kilka razy w roku i oceniający swój status materialny jako niezadowalający. Wyniki badań wskazują, że postrzeganie ochrony dziedzictwa kulturowego na obszarach leśnych powinno być rozpatrywane z uwzględnieniem określonej grupy społeczno-ekonomicznej, o określonym profilu demograficznym i statusie ekonomicznym.