Data collection methods in rural tourism in the eyes of respondents

Abstract. The aim of this study was to verify the reliability and user-friendliness of some of the most popular ways of collecting information from respondents. The article provides a synthetic review of the use of various research methods and techniques, which is supplemented by results of the author’s own survey of 280 people who visited guest farms in rural areas of Mazowieckie province in 2019. The respondents found online and paper-based surveys the most user-friendly method while they rated telephone interviews as the least user-friendly. Asked to assess the reliability of data collection techniques, the respondents considered covert observation and mystery shopping to be the most reliable, while the telephone interview was regarded as the least trustworthy. The assessment of the user-friendliness and reliability of different data collection methods and techniques varied by gender, age and the level of education. It can be expected that insights from the study can help to improve the methodology of rural tourism research.

Keywords: research, research methodology, rural tourism, research results, reliability

JEL Codes: A1, D9, R2

* Warsaw University of Life Sciences – SGGW (Poland), Institute of Economics and Finance, Department of Tourism, Social Communication and Counselling, e-mail: agata_balinska@sggw.pl, orcid.org/0000-0002-8777-9955.
1. Introduction

In empirical sciences, research methods are typical and reproducible methods of collecting, processing, analysing and interpreting empirical data, which are used to obtain the maximally (or optimally) justified answers to the research questions [Nowak 2012: 22].

Rural tourism is a popular research area studied from the perspective of various scientific disciplines. Like other types of tourism, rural tourism is a multifaceted phenomenon, which poses a challenge for scientists conducting research. The problem of researching rural tourism is not only associated with the ambiguous nature of the phenomenon itself but also from the multitude of interpretations of the term. As S. Nowak notes, when formulating a research problem, new concepts should be created using appropriate rules [Nowak 2012: 22]. The significance of concepts and definitions in science has also been stressed by Ch. Frankfort-Nachmias and D. Nachmias [Frankfort-Nachmias, Nachmias 2001: 42-50]. Based on the research experience of the author of this article, the following observations can be made regarding the use of the term “rural tourism”. Firstly, it is quite freely applied by entrepreneurs and is often used interchangeably with the term “agritourism”, which is also a significant problem for researchers exploring this phenomenon. Secondly, even among researchers there is often a great deal of liberty regarding the definition of the term, which is adjusted to meet the needs of specific research areas and objectives. The existing literature provides numerous overviews of definitions of rural tourism. For the purpose of this article, the author assumes that the proper definition of rural tourism should integrate the perspectives of supply and demand in tourism. Consequently, from the perspective of tourism supply, rural tourism is a form of activity undertaken by the local community, which aims at the rational use of natural, cultural and housing resources as well as the human capital in order to create an original and comprehensive offering of recreational services for tourists and visitors [Balińska 2016: 102]. Seen from the demand side, rural tourism is a form of spending leisure time in rural areas with an agricultural function, either individually or in small groups, while showing respect for the natural and cultural assets of the area [Balińska 2016: 102].

The aim of the study described in the following part was to verify the user-friendliness of selected research methods and techniques in the area of rural tourism. The following research questions were formulated:

1. Which research methods and techniques did respondents consider the most user-friendly and which the most reliable?
2. What were the reasons for not participating in empirical research?
The following research hypothesis was adopted: the most reliable method of obtaining information about tourists’ satisfaction with the use of rural tourism facilities is a direct interview while the most user-friendly one is an online survey.

The empirical study was conducted using a paper-based questionnaire. The survey involved a purposive sample of 280 tourists taking rural holidays in Mazowieckie province in the summer season 2019. Every fifth tourist of family of tourists arriving at particular agrotourism farms was selected for the sample.

The survey questionnaire consisted of 7 main questions (two open-ended questions, three multiple-choice questions and two with a 7-point Likert scale) and the demographic part. The Likert scale was used in the question regarding the user-friendliness of individual research methods and techniques (i.e. how comfortable respondents participating in the study) and in the question regarding their credibility (i.e. to what extent is the information obtained in a given way true of respondents’ natural behaviour).

The author was motivated to conduct the survey after many years of research experience. While collecting information in various research projects, responding tourists indicated that they were too often asked to complete a survey or take part in an interview. They complained that it often took too much time, interfered with their leisure, that the questions were hard to understand, too personal, etc. Unlike travel agencies and hotels, rural tourism facilities do not operate as part of one booking system. Owners of these facilities rarely even have a database of their guests’ contact details, which makes it difficult to obtain information from tourists. Moreover, data should be collected so as not to disturb the other guests while trying to ensure their maximum reliability.

The collected data were subjected to qualitative and quantitative analysis. The existence of correlations between selected variables was checked using Spearman’s rank correlation coefficient, Man-Whitney U test, Kruskal-Wallis test.

2. Research methods in rural tourism

The adopted definition and research perspective also affect the selection of research methods. W. Alejziak argues that the lack of universal methods, techniques and measures, makes it difficult to measure and scientifically verify many tourism phenomena [Alejziak 2003: 234]. This also applies to rural tourism. The most popular research method in this field is the diagnostic survey method involving questionnaires, interviews and (usually participant) observation. Nowadays, survey studies are increasingly supported by the Internet, including online survey templates available on various platforms. Similarly, interviews are increasingly often conducted indirectly, by phone, via e-mail or on commu-
nication platforms. Both techniques (called methods by some researchers) are very popular and widely analysed in literature [Jemielniak (ed.) 2012; Konecki 2000; Mazurek-Łopacińska (ed.) 2005; Kolny, Kucia, Stolecka 2011; Anuszeswska 2011]. Observation is a method of gathering primary data, involving intentional perception and conducted according to a predetermined plan [Mazurek-Łopacińska 2005: 143]. Although, as observed by Ch. Frankfort-Nachmias and D. Nachmias [2001: 223], social sciences grow out of observation”, it is still used as an additional technique that provides supplementary data to those collected through interviews and questionnaires. It is also a good instrument for collecting data needed to create a research tool for interviews or questionnaires [Angroino 2010]. Many researchers use this technique as the main source of information, e.g. K. Szymańska [Szymańska 2017: 27-40; Glabiński 2016: 47-64]. Observation can be conducted in an overt or covert way, but its usefulness is undoubtedly greater when it is structured rather than when it is unstructured.

There are also other methods that can be applied in studies focusing on rural tourism, such as mystery shopping or focus group interviews. Mystery shopping is a fairly popular way of checking customer service standards in chain outlets (hotels, restaurants, cafes, etc.). Although it is mainly used in the business context, it is becoming increasingly popular with scientists [Kruczek, Cieszkowska 2017: 47-60; Mazurkiewicz-Pizło, Pizło 2018: 112-125]. Focus group interviews also have been adapted for scientific purposes. A focus group interview is a research technique in which researchers collect information in the process of cooperation and interaction between participants in a group [Lisek-Michalska 2013: 16]. A focus group typically consists of 5 to 12 people. The method is used primarily in market research to collect information about consumer products.

As more and more research services are available online, customer satisfaction surveys are also, to a greater or lesser extent, supported by the Internet. Its role in research has grown so much that is now often referred to as ‘netnography’ [Kozinets 2012].

After analysing existing studies on rural tourism, the following strands of research can be identified:

1. Tourism supply and conditions for its development.
2. Tourism attractiveness of villages and rural areas (also investigated at different levels of administrative division, e.g. communes1).
3. Tourism demand (real and potential) and its determinants.

The aforementioned areas are explored by means of various research methods. Table 1 presents selected examples of the most popular research methods. The most popular research technique is a questionnaire survey. Its popularity is

---

1 A commune (Pol. gmina) represents the lower level of Local Administrative Units (formerly NUTS 5 level).
Data collection methods in rural tourism in the eyes of respondents

Justified primarily by the speed of data collection, ease of saving and analysing data, and its relatively low cost. Researchers often use Internet platforms, which offer interesting solutions for the construction of questionnaires and tools for data analysis (e.g. Survio, Profitest). Some studies are based on official statistics, although this source is rather limited regarding rural tourism.

3. Research results

In the survey conducted for the purpose of this study, respondents were classified by sex, age and education. Women accounted for 58.5% of the sample; five age groups were distinguished: 18-25 years – 10.0%, 26-35 – 26.4%, 36-45 – 23.2%, 46-55 – 21.8% and 56+ – 18.6%. The majority of respondents had higher education (63.9%), with the rest of the sample represented by people with secondary (22.5%) and primary or vocational education (13.6%). All respondents in the sample had previous experience of using rural tourism services. Only 16.1% of

<table>
<thead>
<tr>
<th>Research area</th>
<th>Research methods</th>
<th>Selected studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply</td>
<td>Questionnaire</td>
<td>M. Dębniak, M. Tkaczuk [1997], A. Breliński [2015], A. Balińska [2016], L. Przeborska-Sokobiej [2015]</td>
</tr>
<tr>
<td></td>
<td>Interview</td>
<td>A.M. Dudoń [2018], P. Christoua, R. Sharples [2019]</td>
</tr>
<tr>
<td></td>
<td>Case study</td>
<td>M. De Rosa, G. McElwee, R. Smith [2019]</td>
</tr>
<tr>
<td>Attractiveness</td>
<td>Questionnaire</td>
<td>S. Bernat [2012]</td>
</tr>
<tr>
<td></td>
<td>Analysis of secondary data</td>
<td>M. Drzewiecki [1992], J. Poczta [2012], He S. et al. [2019]</td>
</tr>
</tbody>
</table>

Source: own research.
them reported having taken a countryside holiday only once. The largest group (48.9%) had taken rural holidays three times, 27.1% – twice, and 7.9% – four times or more.

The questionnaire also included a question about the frequency of respondents’ participation in empirical research. 37.9% indicated they took part in such surveys several times a year, 22.1% – once every few years, 15.7% – at least once a month. The remaining respondents had never participated in a study, either because they had refused to take part (12.5%) or because they had never been approached with such a request (11.8%).

It turned out that women’s frequency of participation significantly higher than that of men (Mann-Whitney U statistic = 2.57314, $p = 0.00589$). There was no statistically significant correlation between age or education and the frequency of participation in empirical research.

Figure 1 shows respondents’ answers to the question about situation in which they were most often asked to take part in a survey. The biggest group (42.5%) reported receiving such requests after using booking.com online service and after using a household appliances repair service. The purpose of those surveys was to measure customer satisfaction. No respondent indicated being asked to participate while staying at an agritourism farm or in other tourism accommodation, which could mean either that they had indeed never received such a request or that they had not realized that they had participated in one, which is possible in the case of covert observation or an unstructured interview. The latter possibility is supported by the fact that as many as 58.6% of respondents admitted that at end of their stay in agritourism accommodation, the hosts asked about their satisfaction. Such conversations were not, however, interpreted as a measurement of customer satisfaction. In addition, 10.7% of respondents admitted they had been asked to complete a questionnaire when visiting an agritourism farm but those

![Fig. 1. Situations in which respondents were asked to take part in empirical research](image)

$N = 212$, respondents could indicate more than one answer

Source: own empirical research.
surveys were conducted by university students cooperating with farm owners in order to do research for their dissertations.

The following question addressed the reasons why respondents declined to participate in empirical research (Fig. 2). Most of the respondents refused to take part in surveys because they thought they were too time-consuming. Interestingly, this reason was given significantly more often by women (Mann-Whitney $U = 2.35741, p = 0.004698$).

Table 2 shows the results obtained in response to the question about the user-friendliness and reliability of different research methods in the context of their possible application in the area of rural tourism.

The respondents considered online surveys to be the most user-friendly, followed by paper-based surveys. Telephone interviews were found to be the least user-friendly. In the opinion of respondents, the most reliable research methods included covert observation and mystery shopping. Telephone interviews were considered the least reliable way of obtaining information from customers.

Based on the values of Spearman’s rank correlation coefficient, the frequency of participation was found to be positively correlated with the user-friendliness rating of online surveys (Spearman’s Rho = 0.28317, $p = 0.03617$) and mystery shopping (Spearman’s Rho = 0.34015, $p = 0.03080$) and with the reliability of direct interviews (Spearman’s Rho = 0.16985, $p = 0.02470$).

There were statistically significant differences between the following socio-demographic variables and respondents’ assessment of user-friendliness of the

---

**Fig. 2. Reasons why respondents refuse to participate in surveys**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>The survey was time-consuming</td>
<td>55</td>
</tr>
<tr>
<td>Nobody made such proposal</td>
<td>30</td>
</tr>
<tr>
<td>Such surveys are useless</td>
<td>15</td>
</tr>
<tr>
<td>The researcher did not make a good impression</td>
<td>12</td>
</tr>
<tr>
<td>Questions were too complicated</td>
<td>10</td>
</tr>
<tr>
<td>No reason for collecting data given</td>
<td>10</td>
</tr>
<tr>
<td>Questions were too personal</td>
<td>3</td>
</tr>
</tbody>
</table>

$N = 68$. Respondents could indicate more than one answer.

Source: own empirical research.
following research methods in the context of their possible application in rural tourism:

- Women rated the friendliness of paper-based surveys significantly higher than men (Mann-Whitney U test = 2.98761, \( p = 0.004803 \)), while men rated the friendliness of online survey significantly higher than women (Mann-Whitney U test = 2.78166, \( p = 0.04344 \)).

- Better educated respondents rated online surveys significantly higher than less educated ones (Kruskal-Wallis H test = 4.10502, \( p = 0.04496 \)).

- Younger respondents rated online surveys (Kruskal-Wallis H test = 6.015082, \( p = 0.0494 \)) and focus group interviews (Kruskal-Wallis H test = 4.02458, \( p = 0.0494 \)) higher than older people.

A statistically significant difference was also found between some socio-demographic variables and the assessment of the reliability of the analysed research methods:

- Women rated the reliability of mystery shopping (Mann-Whitney U test = 2.59699, \( p = 0.0317 \)) and covert observation (Mann-Whitney U test = 2.68200, \( p = 0.03803 \)) higher than men.

- Men rated the reliability of online surveys higher than women did (Mann-Whitney U test \( Z = 2.75712, p = 0.0498 \)).

- Better educated respondents considered online surveys to be more reliable compared to those with lower education level (Kruskal-Wallis H test = 4.10502, \( p = 0.04496 \)).

Table 2. Respondents’ assessment of research methods in terms of their user-friendliness and reliability

<table>
<thead>
<tr>
<th>Research methods</th>
<th>Comfort/ User-friendliness</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Median</td>
</tr>
<tr>
<td>Online survey</td>
<td>5.35</td>
<td>6</td>
</tr>
<tr>
<td>Paper-based survey</td>
<td>4.73</td>
<td>5</td>
</tr>
<tr>
<td>Direct interview</td>
<td>3.90</td>
<td>4</td>
</tr>
<tr>
<td>Telephone interview</td>
<td>2.89</td>
<td>3</td>
</tr>
<tr>
<td>Focus group interview</td>
<td>3.12</td>
<td>3</td>
</tr>
<tr>
<td>Overt observation of clients/employees</td>
<td>3.54</td>
<td>4</td>
</tr>
<tr>
<td>Covert observation of clients/employees (e.g. using a camera)</td>
<td>3.50</td>
<td>3</td>
</tr>
<tr>
<td>Mystery shopping</td>
<td>4.11</td>
<td>4</td>
</tr>
</tbody>
</table>

Answers were given on a 7-point Likert scale, with 7 representing the highest rating.

Source: own empirical research.
Data collection methods in rural tourism in the eyes of respondents

$p = 0.0483$) and the difference in ratings was similar for focus group interviews (Kruskal-Wallis H test $= 2.587594$, $p = 0.0459$).

- Younger people assessed online surveys (Kruskal-Wallis H test $= 3.02474$, $p = 0.04664$), and mystery shopping as more reliable compared to older respondents, while the reverse was true for direct interviews (Kruskal-Wallis H test $= –2.2018$, $p = 0.04138$).

4. Discussion and conclusions

Rural tourism is a field where researchers primarily rely on survey data. Some survey techniques, such as certain types of observation or interviews, are so discrete that respondents may not realize that they are participating in a study. The research hypothesis put forward at the start was partially confirmed. The respondents considered paper-based surveys (mostly women) and online survey (especially men, better educated and younger respondents) to be the most user-friendly research technique. Covert observation and mysterious shopping were found to be the most reliable ways of obtaining information (the latter was more often indicated by women). Glabiński [2016] also draws attention to the high reliability of information obtained through observation. His study shows that observation provides information that quantitative methods cannot provide. The credibility of information obtained through mystery shopping is reported by Kruczek [2017], who emphasizes the speed and relatively low costs of using this method.

Some variation was also seen in the assessment of the reliability of online surveys, mystery shopping, direct interviews and focus groups interviews. The credibility of surveys is also highlighted by Krok, who notes that surveys should be prepared very carefully in order to ensure that the collected information is reliable [Krok 2015].

Another thing to consider are factors that discourage people from participating in surveys. The author’s findings in this respect are consistent with the reasons given by other authors [Nowak 2012; Frankfort-Nachmias, Nachmias 2001; Jemielniak 2012]. The most important causes of such reluctance are the time required to complete questionnaires and the belief that surveys are useless. The last reason is a call for reflection, as is a very high dispersion and fragmentary nature of research conducted in the field of rural tourism. This situation could change if there is more genuine collaboration between scientists from various research centres and more cooperation between research institutions and business practitioners.

The following recommendations can be formulated on the basis of the study:

1. Studies should be conducted using several research methods should rely on the experience of entrepreneurs (e.g. the mystery shopping method).
2. The choice of research methods should be made taking into account respondents’ sex or age. Use of different data collection methods with women and men or young and old respondents can improve the response rate.

3. Researchers should choose methods that are not too time-consuming, because long surveys discourage potential respondents.

4. Research methods that do not involve the conscious participation of respondents (mystery shopping, covert observation) are a valuable source of information. They can be treated as additional (accompanying) techniques.

References


Balińska A., 2016, Znaczenie turystyki w rozwoju gmin wiejskich na przykładzie obszarów peryferyjnych wschodniego pogranicza Polski, Warszawa: Wydawnictwo SGGW.


Brelik A., 2015, Dobra publiczne na obszarach wiejskich jako czynnik rozwoju działalności agroturystycznej na Pomorzu Zachodnim, Warszawa: Wydawnictwo Naukowe PWN.


Metody gromadzenia danych w turystyce wiejskiej w opinii respondentów

**Streszczenie.** Celem badań było zweryfikowanie wiarygodności i przyjazności wybranych, najbardziej popularnych sposobów pozyskiwania informacji od respondentów. Dokonano syntetycznego przeglądu zastosowania różnych metod i technik badawczych. Zaprezentowano też wyniki własnych badań sondażowych zrealizowanych na próbie 280 osób wypoczywających w obiektach turystyki wiejskiej w woj. mazowieckim. Badania wykazały, że najbardziej przyjazna w ocenie respondentów była ankieta internetowa i papierowa, a najmniej przyjazny – wywiad indywidualny przeprowadzony przez telefon. Za najbardziej wiarygodną respondenci uznaли obserwację ukrytą i tajemniczego klienta, a za najmniej wiarygodną – wywiad telefoniczny. Płeć, wiek i poziom wykształcenia były zmienną różnicującą ocenę przyjazności i wiarygodności poszczególnych metod i technik badawczych. Uwzględnienie w badanych nad turystyką wiejską wiarygodności i przyjazności stosowanych metod i technik powinno przyczynić się do doskonalenia warsztatu badawczego.

**Słowa kluczowe:** badania, metodyka badań, turystyka wiejska, wyniki badań, rzetelność

---

**Copyright and license:** This article is published under the terms of the Creative Commons Attribution – NoDerivatives 4.0 International (CC BY-ND 4.0) License, https://creativecommons.org/licenses/by-nd/4.0/