QUALITATIVE INTERVIEWS IN HUMAN DIMENSIONS STUDIES ABOUT NATURE CONSERVATION

KVALITATIVNO INTERVJUVANJE NA PODROČJU RAZISKOVANJA DRUŽBOSLOVNIH VIDIKOV NARAVOVARSTVA

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ABSTRACT

Nature conservation research is increasingly concerned with the human component as with the ecosystem or species in focus. Natural scientists that are loyal to their education tend to favour quantitative methods. These methods are not necessarily the only and most suitable tools in human dimensions studies. The aim of this article is to describe the importance of quantitative and qualitative research methods in human dimensions studies pertaining to nature conservation, particularly interviewing. Differences between structured, semi-structured and unstructured interviews are explained and examples given. Additionally, some guidelines for conducting a qualitative interview are presented. Research scientists working with human dimension studies should be aware that nature conservation is a complex cultural problem and that complexity and creativity should therefore be recognized when addressing research methodologies.

IZVLEČEK

V naravovarstvenih raziskavah dobiva vse večjo težo človeška komponenta problematike, v primeri z ekosistemsko ali vrstno. Naravoslovci, zvesti svojemu formalnemu izobraževanju, pogosto favorizirajo kvantitativne metode naravovarstvenega raziskovanja, ki pa niso nujno edino in najprimernejše orodje za preučevanje družboslovnih vidikov varstva narave. Namen članka je opisati pomen kvantitativnih in kvalitativnih metod raziskovanja družboslovnih vidikov varstva narave, še posebej pa pomen kvalitativnega intervjuja. Pojasnjene so razlike med strukturiranim, delno strukturiranim in nestrukturiranim intervjujem ter podani primeri njihove uporabe. Poleg tega so podane tudi smernice za opravljanje kvalitativnega intervjuja. Znanstveniki, ki se ukvarjajo z družboslovnimi vidiki varstva narave, se morajo zavedati, da je varstvo narave kompleksen kulturni problem. Pri uporabi raziskovalne metodologije je zato potrebna določena mera ustvarjalnosti in razumevanja kompleksnosti problematike.

1. INTRODUCTION

Research scientists studying relationships between humans and wildlife or nature in general are often natural science researchers who realized that they cannot solve practical, usually very complex, conservation problems with the traditional natural science modes of thinking, measuring and reasoning. Researchers who publish papers in respected conservation

research journals usually try to make some effort to bridge the gap between disciplines, since nature conservation requires input from several scientific disciplines. These researchers are increasingly aware of the importance social studies play in addressing the problem and finding working solutions. Flyvbjerg (2006) believes that social science is problem driven rather than methodology driven in the sense that it employs those methods that best answer, for a given problem, the research questions at hand.

Natural scientists that are loyal to their education tend to favour quantitative methods. These methods are not necessarily the only and most suitable tools in human dimensions (HD) studies. The intent of this article was to make the reader familiar with research methods used in HD studies, primarily with interview techniques in qualitative research. Different research methods in HD studies were described and some examples given. We emphasized particularly the importance of qualitative interviews in studies concerning nature conservation. The term qualitative interview is often used to capture the different types of interview that are employed in qualitative research. Devetak et al. (2010) explained that qualitative empirical research is oriented towards examining individual cases (idiographic approach), and is mostly conducted as a study of one single case or a limited number of cases. Therefore, the techniques for data collection are adjusted to small scale analyses, enabling the researcher to become familiar with the social environment. Qualitative interviews tend to be far less structured than the kind of interviews associated with survey research (quantitative approaches). We presented and discussed different forms of qualitative interviews; unstructured interviews, semi-structured interviews, and focus groups. We also discussed positive and negative aspects of using interviews in qualitative research, and gave practical guidelines for preparing an interview and data analysis. The discussion was supported with examples from empirical research using different interview types in HD studies for wildlife and nature conservation.

2. RESEARCH METHODS IN HUMAN DIMENSIONS (HD) STUDIES ON NATURE CONSERVATION

There are many ways to obtain desired information, and research methods are different tools that scientists use to collect relevant information in order to test assumptions and draw conclusions. Many HD aspects of wildlife and nature conservation studies are focused on human attitudes (e.g. Bonneau *et al.* 2009, Hartter 2009), knowledge (e.g. Bonneau *et al.* 2009, Prokop *et al.* 2008, Torkar *et al.* 2010), values (e.g. Tell *et al.* 2007, Torkar 2009) and self-reported behaviours (e.g. Moore *et al.* 2008, Torkar 2009), rather than observations of field behaviours (e.g. Stedman et al. 2004, Lindsay *et al.* 2007, Marion *et al.* 2008) or indirect impacts (e.g. Igota et Suzuki 2008). This consequently influences research methods used in HD studies. The decision on which research method to use depends on many factors, such as population of interest, goals, available time and resources, literacy of population, etc. We presented the most common methods of data collection and some examples from HD studies. Interviews, especially structured and semi-structured, were discussed separately.

2.1 A QUESTIONNAIRE

Questionnaires are administered and answered without the assistance of an interviewer. They are sent by mail, e-mail, fax or personally delivered. Currently, those most frequently used in HD studies are mail (postal) surveys, where the respondent receives a questionnaire and introductory letter by mail. With questionnaires we collect peoples' beliefs, knowledge, values, attitudes, norms, self-reported behaviours, etc. An example of the instrument used in a Norwegian survey of attitudes toward large carnivores (Kaltenborn *et al.* 1999) was selected: [important sections are highlighted]

In addition to socio-demographic variables (age, gender, education, occupation) we included questions regarding the size of the local community, presence of pets in the household currently and whilst growing up, and whether the family had been involved in livestock production at the time the respondent grew up. Sheep farmers were also asked questions about the number of sheep they had, the proportion of total income from sheep husbandry, and how many sheep they had lost during the last five years. /.../ The respondents were also asked to report their opinions or estimates on the actual number of bears, wolves, lynx, and wolverines in Norway, as well as their opinions about whether the populations of the large carnivore species should be exterminated, reduced, maintained, or increased. Attitudes toward large carnivores were measured by means of 35 statements (items), where five response options existed (from 1: strongly agree to 5: strongly disagree).

2.2 CONTENT ANALYSIS

Content analysis or textual analysis is a methodology for studying the content of newspapers, television or radio reports, blogs, letters, leaflets, etc. It is frequently used to assess incidents concerning human-nature conflicts. Selection and analysis of documents depend first and foremost on the research goals. As an example we selected an article where authors analyzed newspaper coverage about human-cormorant conflict (Muter *et al.* 2009). [important sections are highlighted]

In January 2008, we conducted a content analysis of U.S. and Canadian newspaper coverage reporting on cormorants in the Basin. We searched Lexis-Nexis, an online periodical database, for all articles printed between 1978 and 2007 using the key words: "cormorant(s)," "double-crested cormorant(s)," and "Great Lake(s)." Articles did not have to focus primarily on cormorants in order to be included in our population. We included articles that discussed cormorants in a variety of contexts (e.g., angling, bird-watching, avian diseases, pollution) to better understand risk frame evolution. Articles that did not pertain to double-crested cormorants in the Basin were not included in the population. We also excluded congressional testimonies and transcripts that appeared in federal news services. We found 108 articles suitable for analysis.

2.3 EXPERIMENT

This is a method in which the researcher actively interferes in the research situation. The researcher deliberately introduces a variable and examines the impact of its actions. This method is not very frequently used in HD studies. We came across an interesting experiment measuring incidence of intentional vehicle-reptile collisions (Ashley *et al.* 2007). A decoy

snake, decoy turtle, Styrofoam cup or grease control line were individually placed on the centre line of the road to determine incidence of intentional vehicle strikes. Responses by drivers to reptiles on the road were categorized as those taken to (a) avoid a collision, (b) intentionally strike an animal that would not be run over in the normal course of travel, (c) rescue the animal or, (d) no change in direction/behaviour. In the experiment, the researchers had to ensure the safety of drivers, and they standardized the experiment by e.g. including only drivers without travel companions. Incidence of intentional vehicle-reptile collisions could instead be measured using a questionnaire or interview and asking people to self-report their behaviour. However, there is a reasonable doubt that the outcome would be the same. We expect that 1) people will not necessarily be honest and 2) intentional 'killers' will have a lower response rate than people who will try to avoid road kills due to conservation or ethical reasons.

2.4 METHODS IN CASE STUDY ANALYSIS

A multiplicity of data sources and numerous respondents are built into the study design, including interviews, focus groups, records, documents, secondary data, observation and survey data. It implements a combination of qualitative and quantitative methods. The case study is a necessary and sufficient method for certain important research tasks within the social sciences, and it is a method that holds up well when compared to other methods in the gamut of social science research methodology (Flyvbjerg 2006). As an example of how the method was used in HD studies, we selected a study entitled *Ecotourism and Conservation: Two Cases from Brazil and Peru* (Stronza *et* Pegas 2008). A quotation is taken from the description of Case Study 2: Ecotourism and rainforests in Peru (p.273). [important sections are highlighted]

We have been conducting research in Infierno since 1996, studying the dynamics of ecotourism activities, economic benefits, community participation, and conservation (Stronza, 1999, 2005, 2007). The goal was to understand how social and economic principles of ecotourism in this site are associated with conservation over time. The first author had lived in the region for 28 months during various periods of fieldwork in 1996-1999, 2002-2003, and 2006. The longitudinal research entailed gathering both qualitative and quantitative data on village life and interactions between the community and the company, and between local residents and tourists. Qualitative data comes from participant observation, field notes, key informant interviews, and focus groups. Quantitative data was compiled from surveys of tourists (n = 80) and semi-structured interviews with heads of households (n = 204, over various periods). Interviews generally lasted 2-3 hours and focused on socioeconomic characteristics of households and ecotourism-related changes in respondents' families, households, and community. Research began two years before the lodge opened, which enabled comparisons of baseline data with post-ecotourism data.

The use of case studies as a research methodology has grown in recent years because of the growing need for best practice in addressing human-nature relations. Rather than using samples and following a rigid protocol to examine a limited number of variables, case study methods involve an in-depth, longitudinal examination of a single instance or event: a case.

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3. INTERVIEW IN QUALITATIVE RESEARCH

3.1 QUALITATIVE VS. QUANTITATIVE INTERVIEWING

The use of qualitative and quantitative interviewing depends primarily on research goals/ problems. If we want to find out how frequently hunters see brown bears or hear grey wolves you do not need to conduct a deep, qualitative interview. These are matters that can be easily measured. But if you want to know how hunters feel about bears and wolves or why they became hunters, then qualitative interview is a better approach to start with, because these research questions cannot be answered quickly or briefly and coded easily. Qualitative study helps as describe the problem and it is essential for almost any further quantitative study.

In *quantitative interviews*, the approach is structured to maximize the reliability and validity of measurements of research questions or hypotheses. Exactly the same questions are posed to each individual of the population sample (Rubin *et* Rubin 2005). A quantitative interview is supposed to generate answers that can be coded and processed quickly, and analysed with parametric statistical methods and, most importantly, it allows generalization of the results to the whole population.

In contrast, *qualitative interview* has its emphasis on a more general formulation of the initial research ideas and on the interviewees' own perspectives. The data in qualitative research are gathered more in a verbal and visual rather than in a numeric form (Devetak *et al.* 2010). The qualitative interview seeks to describe the central themes in the life world of the subjects and seeks to cover both a factual and a meaning level (Kvale 1996). Rubin *et* Rubin (2005) describe qualitative interviews as conversations where the researcher gently guides the interviewee through an extended discussion. Each interview is unique and often more than

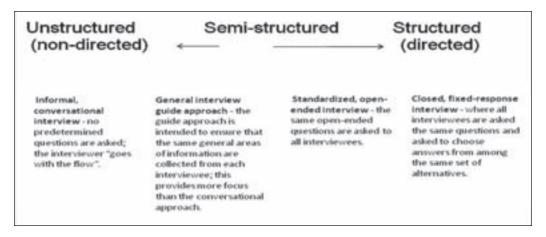


Figure 1: Structured, semi-structured and unstructured interviews (adopted from Valenzuela et Shrivastava 2008) Slika 1: Strukturirano, delno strukturirano in nestrukturirano intervjuvanje (privzeto po Valenzuela in Shrivastava 2008)

one interview is conducted with the same interviewee. The researcher wants rich, detailed answers; therefore interviews are far less structured than the kind of interviews associated with quantitative research. Unstructured interviews may also be useful as a follow-up for certain respondents to quantitative interviews and questionnaires.

In Figure 1, some basic differences between structured, semi-structured and unstructured interviews are displayed. The structured interview is a typical quantitative type of interview and the more we follow the line towards an unstructured interview the higher becomes the level of qualitative research elements. Examples of each type are presented below.

3.2 STRUCTURED INTERVIEW

Corbetta (2003) states structured interviews are "Interviews in which all respondents are asked the same questions with the same wording and in the same sequence". It would be ideal if questions can be read out in the same tone of voice so that the respondents would not be influenced by the tone of the interviewer (Gray, 2004). A structured interview is primarily a quantitative research method, but sometimes also used in qualitative studies as explained by Kvale *et* Brinkmann (2009). The strengths of structured interviews are that the researcher has control over the topics and the format of the interview. There is a common format, which makes it easier to analyze, code and compare data. Typical example of structured interviews used in survey research is telephone interview that require a short and clear answer or a choice between the answers given by a researcher. See an example of telephone survey (Tarrant *et al.* 1997) [important sections are highlighted].

Twelve hundred and twenty telephone interviews with household residents of the Southern Appalachians (SAs) were conducted during the summer of 1995 by the Human Dimensions Research Laboratory at the University of Tennessee. /... / Respondents were selected by asking for the individual in the household with the most recent birthday. Telephone numbers were generated using the random-digit dialling method. A quota sampling procedure was used to ensure an equal sample size (approximately 600) for both rural and urban residents. /.../Attitude toward wildlife species protection was assessed using an index of four statements [e.g. Land that provides critical habitat for plant and animal species should not be developed.] that were identified by fish and wildlife experts in the SAs region as being of critical importance to managers. A five-point "strongly agree" to "strongly disagree" scale, with a mid-point of "neither" was used.

Questions are usually very specific and often a fixed range of closed ended, pre-coded or fixed choice answers are given (in our example five-point scale of answers was used). There follows an example of telephone interview used by Wieczorek Hudenko *et al.* (2008), p.462: [important sections are highlighted].

A telephone survey was designed to assess the experiences and attitudes of residents in Westchester County./../ asked respondents: "Which one of the following statements best describes your feelings about coyotes in Westchester County?" **Response options** included: (a) I enjoy knowing coyotes are around, and I do not worry about problems coyotes may cause; (b) I enjoy knowing coyotes are around, but I worry about problems coyotes may cause; (c) I do not enjoy knowing coyotes are around and regard them as a nuisance; (d) I have no particular opinions about coyotes in Westchester County.

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In this example of structured telephone interview, four fixed choices of answers were given. This study shows some weaknesses in methodology that were probably influencing the outcome of the survey. The given answers are very long and the result, for that reason, could depend much on the researcher's ability to read clearly and for the interviewee to hear clearly and remember all four given options.

3.3 UNSTRUCTURED AND SEMI-STRUCTURED INTERVIEWS

Semi-structured and unstructured interviews are non-standardized and are frequently used in qualitative studies. These types of interviews are meant to get a general flavour of the discussed topic. For example, "Let's talk about how you started to be interested in nature and animals". After a while, when the researcher discovers a pattern, s/he might want to prepare a series of more specific questions (Merton *et al.* 1990) and repeat the interview with the same person. Researcher, using semi-structured or unstructured interviewing, strives to find out the whole variety of answers people hold about the researched topic and, for that reason, the sample size depends on the complexity of the researched topic. Qualitative interviews can be also narrower in focus, if a researcher is interested in a specific key question or situation that has occurred. For example, "What do you think about the incidence last week, when a female brown bear attacked a hunter trying to take a photograph of her young in a den?" In this case, semi-structured interviews can be used from the start of conversation. See an example of face-to-face semi-structured interview (Kaswamila *et al.* 2007) with some characteristics of qualitative research. [important sections are highlighted]

The questionnaire contained both open and closed end questions. **The open-ended questions gave respondents** an opportunity to express their views and to interact with the researcher. Respondents also answered questions related to household socioeconomic characteristics (i.e., gender, age), duration of stay in the village (years), average crop prices, and main economic activities. They were also asked to describe the types of human-wildlife conflicts, ways to mitigate HWC, types of common wild pests, and specific crops mostly affected by wild pests.

With the second example of using face-to-face interview we intend to emphasise some of the positive and negative aspects of using face-to-face interview (adopted from Dillman 2008). Palmer *et* Suggate (2004) investigated the development of UK children's ideas about certain distant places and environmental issues between the ages of 4 and 10 years. Due to children's early age literacy problem they were "forced" to use interviews as a method. They were aware that in order to examine children's knowledge, ideas and their explanations of the effects of environmental change, structured interview was not an option. [important sections are highlighted]

Each child was interviewed individually by a trained researcher. A series of photographs with key questions was used to promote discussions relating to the research agenda, i.e. the questions probed the children's understanding (accurate, partial and inaccurate) of the places and issues presented to them, their awareness of environmental issues and their developing understanding of short and long-term impacts of major changes in the two contrasting environments.

Six photographs were used to stimulate discussion, relating to two broad environmental issues, namely, rainforests

including deforestation and endangered species and polar environments including the effects of global warming on the poles. A brief example of an interview sequence follows:

What can you see here?' – picture of deserted polar landscape
What would it feel like in this place?' – hot or cold?
Where might this place be?'
Do you think anything can live here?' – animals, birds, people?

After showing and discussing other pictures (of polar bears and penguins), the general polar picture was reintroduced and the children were asked about the effect of possible warming:

What do you think would happen to the snow and ice if the weather here became much warmer? What would happen to the polar bears and penguins if the weather became warmer?

At all points, the children's understanding was probed with further sub-questions where appropriate; for example, if they had said that the snow would melt, they were asked what would happen to the snow when it melted, and so on. Throughout the interviews, regular attempts were made to find out the sources of the children's knowledge.

The tape-recorded interviews were transcribed and then analysed. The transcripts were read through carefully, several times in the first instance; a summary of the answers to the main (and key sub) questions being made for each one, and a list of possible categories of response drawn up. After extensive inter-judge discussion and trialling with a small sample, the list of categories of response to each main question was finalized. The groups or categories were defined to illuminate the difference between accurate, partial and inaccurate knowledge and between understanding short-term and longer-term impacts of environmental change.

The data are being analysed in a variety of ways including statistical means and qualitative descriptions of trends emerging from the interview transcripts (as presented here for the first time) and concept netting (on-going).

In this example we presented the *flexibility* of the face-to-face interview, which makes it so attractive and useful for complex and difficult cases. For example, the researchers were using sub-questions. It also provides opportunity for *visual and aural channels of communication* with respondents. In the example presented, researchers used cards with photographs (visual) to stimulate discussion. Palmer *et* Suggate (2004) also emphasised the importance of *well trained interviewees* (researchers) for good, and reliable, results. Alternatively, some negative aspects of interviewing should be mentioned. Interviewing, the transcription of interviews, and the analysis of transcripts are all *very time-consuming* and consequently also *expensive*.

3.4 FOCUS GROUPS

A special type of interview is a focus group. It is a commonly used qualitative tool in market research (Krueger 1994) and perhaps under-utilized in the study of natural resource-related issues (Minnis *et al.* 1997). The data collected in focus group sessions typically consist of tape-recorded group discussions between four to ten participants who share their thoughts and experience on a set of topics selected by the researcher (Morgan *et* Spanish 1984). Kitzinger (1995) emphasised that focus groups do not discriminate against people who cannot read or write and they can encourage participation from people reluctant to be interviewed on their own or who feel they have nothing to say. Some researchers have also noted that group discussions can generate more critical comments than interviews (Watts *et* Ebbutt 1987). On the other hand, the group interaction often leads to spontaneous reactions and reduces the interviewer's control of the situation (Kvale 1996). Focus groups allow the researcher to probe

the values and attitudes that underlie opinions expressed by participants (Krueger 1994). To illustrate the application of focus groups in HD research we used an example of communicating the role of hunting in wildlife management (Campbell *et* Mackay 2009). [important sections are highlighted]

A single moderator conducted the focus groups. A recorder kept notes on the discussions and the meetings were audiotaped with permission. The audiotapes were transcribed verbatim and a summary of each focus group discussion was prepared. Focus group proceedings were sent to participants for review and verification. The data were analyzed using a transcript-based analysis, ranging from an overall thematic summary to a detailed content analysis of taped recordings. Emergent themes are reported with emphasis on the key questions.

4. GUIDELINES FOR PREPARING A QUALITATIVE INTERVIEW

Lofland and Lofland (1995) suggest that interviewer should first ask him/herself the question "Just what about this thing is puzzling me?" This can be applied to each of the research questions s/he has generated or it may be a mechanism for generating some research questions (Bryman 2001). Interviewer should also consider "What do I need to know in order to answer each of the research questions I'm interested in?" This means that his/her questioning during the interview will need to cover the areas necessary to answer research questions. This means that, even though qualitative research is predominantly unstructured, it is rarely so unstructured that the researcher cannot at least specify a research focus (Bryman 2001).

Questions asked in qualitative interviews are highly variable. Kvale (1996) has suggested nine different types of question. Most interviews will contain virtually all of them, although interviews that rely on lists of topics are likely to follow a somewhat looser format.

Kvale's nine types of question and our examples of questions:

- 1. *Introducing questions*: "Please tell me about your interest in bird watching."; "Have you ever seen a moose?"; "Why did you go to the National Park?".
- 2. *Follow-up questions*: getting the interviewee to elaborate his/her answer, such as "Could you say some more about that?"; "What do you mean by that ...?"; even "Yeeees?"
- 3. Probing questions: following up what has been said through direct questioning.
- 4. Specifying questions: "What did you do then?"; "How did he react to what you said?"
- 5. Direct questions: "Do you have your opinion on the lethal control of large carnivores in Norway?"; "Are you happy with the way you and your husband were treated while visiting the Park's interpretation centre?" Such questions are perhaps best left until towards the end of the interview, in order not to influence the direction of the interview too much.
- 6. *Indirect questions*: "What do most people round here think of the ways Park rangers treat local people living in the park?", perhaps followed up by "Is that the way you feel too?", in order to get at the individual's own view.
- 7. Structuring questions: "I would now like to move on to a different topic".

- 8. *Silence*: allow pauses to signal that you want to give the interviewee the opportunity to reflect and amplify an answer.
- 9. *Interpreting questions*: "Do you mean that your opinion has changed because of the recent conservational actions?"; "Is it fair to say that what you are suggesting is that you don't mind having wolves in the area where you live, but when they are causing economical damage you should be compensated?"

Bryman (2001) and McNamara (2006) made a whole list of practical guidelines for conducting a qualitative interview. We have stressed those that we believe are the most important.

- 1. Before the interview it is important to explain the purpose of the interview to interviewee. It is important that interviewer doesn't take any position in the conflict researched unless this is a part of the plan research goal.
- 2. Interview should be tape-recorded. Tape-recording is important for detailed analysis required in qualitative research and to ensure that the interviewees' answers are captured in their own terms. Bryman (2001) suggests that one hour of tape takes five to six hours to transcribe. When taking notes, it is easy to lose the phrases and language used. Also, because the interviewer is supposed not to be following a strictly formulated schedule of questions of the kind used in structured interviewing, he or she will need to be responsive to the interviewee's answers so that it is possible to follow them up.
- 3. Interviewees often hesitate to participate because they don't know how much time it will take; therefore, it is important to indicate how long the interview usually takes.
- 4. Next, it is important to create a certain amount of order on the topic areas, so that the questions flow reasonably well. Interviewer must be prepared to change the order of questions during the actual interview, if necessary.
- 5. Ultimate goal of formulated questions in the interview must be to answer research questions. Interviewees often come from different social and educational background; therefore it is necessary to use a language that is comprehensible and relevant to the people interviewed.
- 6. At the beginning or the end of the interview it is also important to obtain information of a general kind, like name, age, gender, and a specific kind, like current employment or number of years involved in a group, because such information are useful for contextualizing people's answers.
- 7. An explicit way to finish the interview is by thanking the interviewee for cooperation and asking him or her if there are any further remarks that might be relevant to the topic or the interview process. This can lead to an emergent of a whole new area of information (Wengraf 2001).
- 8. After finishing the interview, it is important that interviewer makes notes about where the interview took place and how the interview went was interviewee talkative, cooperative, nervous, well-dressed/scruffy, etc.? Sometimes it is useful also to note other feelings about the interview and new ideas for future interviewing.

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5. CONCLUSIONS

The majority of researchers interested in human-nature interface problems see that working with people is crucial to achieving conservational goals. The conservational goals have changed in the last decades from concentrating specifically on the protection of wildlife to one in which human well-being is an important, and sometimes prime, concern (Bell 1987). Nature conservation requires input from several scientific disciplines and it is necessary that researchers have interdisciplinary knowledge about the problem they study. This change has led also to the development of a diverse range of methodological approaches in studies about conservation of nature. A combination of quantitative and qualitative approaches is necessary to tackle the complex issues of HD in nature conservation. In this article we reviewed different ways of getting reliable information - a questionnaire, content analysis, experiment, case study, structured interview, semi-structured interview, unstructured interview and focus group. Researchers, mostly those with natural science background, are often uncomfortable with using qualitative research methods like unstructured interview, because they are not skilled enough to use them or feel that these methods are not objective enough. All research runs the risk of introducing bias, and careful consideration is needed to assure that the obtained information/sample represents the population of the study. Researchers need to formulate models (conceptual and/or quantitative) on the function of the particular system of interest. Then we need data that can guide us in what models have the largest credibility, and should be used in policy and management. The results from qualitative interviews are important contribution to this process, especially in such urgent fields as finding conservation policies that ensure a sustainable use of the natural resources on the planet.

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7. POVZETEK

V prispevku obravnavamo pomen kvantitativnih in kvalitativnih metod raziskovanja družboslovnih vidikov varstva narave, še posebej pa pomen metode kvalitativnega intervjuja. Raziskovalne metode se razlikujejo v načinih pridobivanja potrebnih podatkov kot tudi v možnostih posploševanja le-teh na statistično množico. V prvem delu prispevka analiziramo različne raziskovalne metode glede na način zbiranja podatkov - anketiranje, vsebinska analiza, eksperiment, študija primera in intervju. Vsaka metoda je opisana in predstavljena s primerom iz naravovarstvene literature. V nadaljevanju pa se podrobneje posvečamo strukturiranemu, delno strukturiranemu in nestrukturiranemu intervjuvanju ter opredelimo razliko med cilji kvalitativnih in kvantitativnih raziskav. Kvantitativni intervju je delno ali v celoti strukturiran,

enaka vprašanja so zastavljena vsem intervjuvancem in ob ustreznem vzorčenju omogoča posplošitev rezultatov na celotno populacijo. Kvalitativni intervju je delno strukturiran ali nestrukturiran in bolj stremi k širšemu, poglobljenemu razumevanju konteksta obravnavanega problema kot pa k posploševanju zbranih rezultatov. Za navedene oblike intervjujev podajamo tudi primere raziskav iz naravovarstvene literature ter analiziramo njihove prednosti in pomanjkljivosti. V želji po pogostejši in ustreznejši uporabi kvalitativnih metod raziskovanja v naravovarstvu smo oblikovali smernice za pripravo in izvedbo kvalitativnega intervjuja. Smernice obsegajo podrobno razlago devetih tipov vprašanj, ki se uporabljajo v intervjujih, ter primere njihove uporabe. Dragocena so tudi priporočila za pripravo in izvedbo kvalitativnega intervjuja; od trenutka, ko navežemo prvi stik z intervjuvancem, pa do zaključnih zapiskov opazk po končanem intervjuju. Glavni izziv varstva narave je njegova kompleksnost, ki zahteva premostitev vrzeli med znanstvenimi disciplinami in standardnimi metodami raziskovanja. Izziv kompleksnosti varstva narave se kaže tudi v nujnosti kombinirane uporabe kvanitativnih in kvalitativnih metod raziskovanja družbenih vidikov varstva narave.

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