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Research ethics: Assuring anonymity at the individual level may not be sufficient to protect research participants from harm

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1 The recent special edition of *Biological Conservation* on Conservation Crime provided an
2 opportunity to reflect on the growing use of specialised methods for asking sensitive
3 questions in conservation. Such tools, including the Randomised Response Technique (RRT),
4 are increasingly used to investigate rule breaking in conservation for example, hunting of
5 protected species, use of illegal fishing gear, or other wildlife crimes. Expanding the
6 anonymity principle of social surveys, where information which could be used to identify a
7 single person is not collected, or is encoded or removed to protect individual privacy, these
8 specialized methods provide research participants with levels of protection greater than
9 simple guarantees of anonymity by replacing a proportion of responses with “noise” using a
10 randomising device with a known distribution. For example, when studying illegal hunting, a
11 stack of cards may be provided to the participant, half displaying a number from a known
12 probability distribution and half blank. A card is selected in private and never revealed to the
13 researcher, the respondent then either reads out the number on the card or, if a blank card is
14 selected, answers a sensitive question e.g. *‘How many x did you kill?’*. Thus, truthful answers
15 cannot be distinguished from those prescribed by the randomising device, but the researcher
16 can obtain an unbiased estimate of the mean prevalence of a sensitive behaviour in the
17 population by correcting for the introduced noise. These approaches increase respondents’
18 willingness to answer honestly improving validity of data on sensitive subjects, and crucially,
19 make it impossible to directly link incriminating data to an individual (Nuno and St John
20 2014).
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29 The latter is important from a research ethics perspective. Ethics guidelines stipulate that
30 researchers must secure free, prior informed consent from participants and emphasise that
31 *‘...researchers should not harm the safety, dignity or privacy of the people with whom they*
32 *work... or who might reasonably be thought to be affected by their research’* (Code of Ethics
33 of the American Anthropological Association 2009). At the individual respondent level,
34 specialised questioning techniques make a useful contribution as sensitive information is
35 never linked to an individual. However, this does not automatically mean that no harm will
36 come to respondents or others, for example those residing in the same locality, as a
37 consequence of studies deploying such methods. A number of recent studies (some co-
38 authored by some of us) have used RRT to protect individuals, but have reported statistics
39 such as the proportion of households in a named village involved in illegal hunting (Conteh et
40 al 2015) or the proportion in an area who have consumed protected species (Randriamamonjy
41 et al 2015). It is easy to see how such data could be used by a management authority in a way
42 which harms those in the study areas, for example if villages are targeted for anti-poaching
43 enforcement.
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51 A number of regulations from governments and funding bodies require research institutions
52 to demonstrate their ability to review and monitor research with ethical implications. This is
53 most commonly achieved by establishing research ethics committees mandated to protect the
54 rights and well-being of research participants, ensure lawful research practices, and to
55 manage and mitigate the risks arising from research. However research submitted to
56 conservation journals comes from diverse institutions governed by different rules and
57 standards, and some, especially research done within NGO settings or in institutions with
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1 limited awareness of social research ethics, may not have clear guidelines on conducting
2 ethically robust research involving human participants. Conservation journals therefore have
3 a critical role to play in encouraging best practice with respect to conducting ethical research
4 and there are a number of steps that they can take to promote ethical practice: (1) provide
5 ethics guidelines for conducting research with human participants and/or their data; (2)
6 require an ethics statement in articles containing social data; (3) ensure submitted papers
7 reporting research on human subjects are scrutinized with the same rigour as those involving
8 animals to ensure papers with dubious ethical standards are not accepted (this can include
9 explicitly requesting reviewers to consider the ethical implications of submitted manuscripts).
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14 Those of us conducting scholarly research on illegal or otherwise sensitive behaviours, have a
15 responsibility to safeguard our research participants. The result of the research may well be
16 that enforcement of environmental rules is increased, but we should ensure that those
17 involved in our research are not disproportionately impacted by the increased enforcement.
18 There are clearly difficult decisions to be made - research methods must be transparent and
19 sometimes information about the location of the research is important for the interpretation of
20 the results. There is no simple answer about where the balance lies between transparency in
21 research and protecting participants. However it is clear that the conservation science
22 community, and conservation journals, need to think harder about this issue than perhaps has
23 been happening so far.
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