**Appendix**

**Google-based search strategy and screening**

Our team carried out the following [steps of a systematic review](https://library-guides.ucl.ac.uk/systematic-reviews/stages):

1. **Clarifying the problem, defining the research question and its boundaries, and setting out criteria for studies to be included in the review.** This information, along with a plan for carrying out the review, should be presented in a protocol. While the safeguarding of study participants is the primary aim of existing ethics guidelines, this paper argues that this “do no harm” principle should be extended to include research staff. Particularly, we aimed for a gap analysis, which builds on previously identified ethical challenges (Steinert et al., 2021) to assess to which extent those are covered by existing guidelines. While we did not formally register a protocol, we defined a search strategy ex ante as stated below.
2. **Identifying studies, including selecting appropriate sources and searching for studies.** Our team conducted a systematic review of guidelines available on the internet based on google searches. For this purpose, our team created a search string, which included keywords related to (i) guidelines/ethical principles, (ii) ethical challenges and (iii) specific lighthouse organizations in the field of primary data collection. Table 2 below presents the different search terms we used along with the number of hits, which resulted from this search on this particular date. Table 2 also reports the number of google results sites checked, which usually covers 10 webpages per site.
3. **Screening and selecting the studies, collecting and presenting the data from the studies, and/or describing the methods and findings of the studies using a structured approach.** We asked the involved research assistants to review results sites until a saturation was reached and webpages were repetitive. The process of the web search included a pre-screening by research assistants, which covered following aspects: (i) the date of publication, (ii) the category of challenges mentioned in the guidelines, and (iii) the type of the institution issuing the guideline. Based on this pre-screening, the authors reviewed the guidelines, restricting the analysis based on (i) guidelines published after the year 2000 and (ii) challenges, which we cover in the main body of our paper.
4. **Appraising the relevance and quality of each study, which may involve assessing the risk of bias.** Our team did not differentiate across (iii) types of institutions, since readers may find guidelines closer to their focus (research or policy/practice) more relevant. Likewise, we did not apply a risk of bias analysis because readers’ focus may affect which biases are relevant.
5. **Analysing and synthesising the data from the studies to answer the research question, which may, or may not, involve a meta-analysis.**We applied a gap analysis, which compares previously derived challenges to solutions stated in the guidelines.
6. **Assessing reporting biases.** Analogously to (4), certain biases may be of different relevance depending on the application of the guidelines.
7. **Presenting results.** We present the gaps and challenges in a concise way in the main body of the paper and decided to provide a more detailed overview on specific solutions in Appendix Table A2.
8. **Interpreting results and presenting conclusions.** We discuss results in a specific section, focusing on the identified gap, and provide conclusions to guide further guideline development.

**Table A1 - Overview of google-based search strategy**

|  |  |  |  |
| --- | --- | --- | --- |
| **Keywords/ Search terms** | **Number of Hits** | **Google results sites checked (~10 per site)** | **Date** |
| Guidelines security field research | 258.000.000 | 4 | 6/3/2019 |
| Ethical challenges Field research | 151.000.000 | 3 | 6/3/2019 |
| "Guideline" Protection researcher | 18.900.000 | 6 | 6/19/2019 |
| Ethical Guidelines field researcher | 312.000.000 | 6 | 6/19/2019 |
| Ethical Guidelines | 189.000.000 | 4 | 6/19/2019 |
| Safety Guidelines Field researcher | 358.000.000 | 8 | 6/19/2019 |
| Safety Guidelines researcher | 50.500.000 | 8 | 6/19/2019 |
| Guideline research development countries | 386.000.000 | 5 | 7/2/2019 |
| Protection field researcher | 61.700.000 | 8 | 6/27/2019 |
| Protection researcher in the field | 68.700.000 | 6 | 6/26/2019 |
| Ethical Guidelines | 189.000.000 | 3 | 6/26/2019 |
| Guideline WHO "Field" "researcher" | 6.540.000 | 3 | 6/3/2019 |
| Guideline European Commission | 202.000.000 | 5 | 5/18/2019 |
| Guideline European Commission researcher | 37.300.000 | 4 | 6/26/2019 |
| Guideline GIZ field researcher | 791.000 | 3 | 6/26/2019 |
| Guideline BICC researcher | 4.460.000 | 2 | 6/26/2019 |
| Guideline DEVAL researcher | 28.900.000 | 3 | 6/26/2019 |
| Guideline managing stress | 54.700.000 | 5 | 7/2/2019 |
| Guideline Bill& Melinda Foundation field researcher | 1.090.000 | 4 | 7/2/2019 |
| Guideline DFG protection researcher | 491.000 | 3 | 6/26/2019 |
| Guideline Deutsches Evaluierungsinstitut field researcher | 991 | 2 | 6/26/2019 |
| Guideline UNHCR researcher | 561.000 | 7 | 7/4/2019 |
| Guideline UNHCR field researcher | 690.000 | 9 | 7/4/2019 |
| Guideline protection humanitarian work | 14.500.000 | 10 | 6/19/2019 |
| Guideline JPAL researcher | 44.000 | 6 | 7/2/2019 |
| Guideline IPA researcher | 1.750.000 | 3 | 7/2/2019 |
| Guideline DFID researcher " protection" | 969.000 | 6 | 7/2/2019 |
| Guideline UN FAO researcher | 8.440.000 | 4 | 7/2/2019 |
| Guidelines ethical challenges fieldwork | 4.690.000 | 11 | 6/27/2019 |
| Guideline security risk field researcher | 158.000.000 | 9 | 5/18/2019 |
| Guideline GIGA institute researcher | 429.000 | 6 | 7/2/2019 |
| Guideline Center of global Development | 512.000.000 | 3 | 7/2/2019 |
| Guideline Unicef researcher | 770.000 | 4 | 6/3/2019 |
| Guideline researcher KFW | 67.400 | 3 | 7/2/2019 |
| Guideline how to protect researcher | 12300000 | 12 | 5/18/2019 |
| Ethic research standard | 324000000 | 2 | 7/17/2019 |
| Ethic research standard safeguard | 31900000 | 2 | 7/17/2019 |
| Ethic research standard field research | 243000000 | 2 | 7/17/2019 |
| Ethical procedure field researcher | 279000000 | 7 | 7/18/2019 |
| Ethical procedure field researcher "guidelines" | 18500000 | 6 | 7/18/2019 |
| Ethical standards scholars | 33800000 | 3 | 7/18/2019 |
| Ethical guidelines "JPAL" | 16600 | 7 | 7/25/2019 |
| "JPAL" protection of researcher | 149000 | 4 | 7/25/2019 |
| Guidelines field research in hazards environment | 62600000 | 5 | 7/25/2019 |
| Field Researcher in development countries guidelines | 360000000 | 3 | 7/25/2019 |
| "JPAL" standard protection researcher | 18700 | 3 | 7/25/2019 |
| Field researcher in developing countries guidelines | 124000000 | 6 | 7/25/2019 |
| Field research ethic\* guideline | 54.300.000 | 8 | 7/25/2019 |
| Field researcher standard safety | 449000000 | 6 | 7/25/2019 |
| Field researcher guideline mental health | 236000000 | 5 | 7/25/2019 |
| Field researcher psychological first aid | 93700000 | 3 | 7/25/2019 |
| codes of conduct researcher ethic\* | 27100000 | 7 | 7/25/2019 |
| Ethical standard researcher KfW | 16900 | 3 | 7/25/2019 |
| Ethical procedure field researcher | 206.000.000 | 4 | 7/25/2019 |
| Principle ethical "guideline" field researcher | 13.300.000 | 6 | 7/25/2019 |
| University guideline ethic\* researcher | 99.000.000 | 8 | 7/25/2019 |
| Principles ethic\* OECD researcher | 2.620.000 | 7 | 7/31/2019 |
| Principles ethical UNDP researcher | 696.000 | 3 | 7/25/2019 |
| Principles ethical Max Plank Gesellschaft researcher | 2.810.000 | 3 | 7/25/2019 |
| "IPA" principle ethic\* researcher | 1.660.000 | 3 | 7/25/2019 |
| "3ie" principle ethic\* researcher | 1990000 | 3 | 7/25/2019 |
| "EGAP" principle ethic\* researcher | 3750 | 3 | 7/25/2019 |
| "UN FAO" principle ethic\* researcher | 13800 | 3 | 7/25/2019 |
| "USAID" principle ethic\* researcher | 329000 | 6 | 7/31/2019 |
| Principle ethic\* researcher "USAID" | 624000 | 8 | 7/25/2019 |
| Principle ethic\* field researcher "IPA" | 914000 | 6 | 7/29/2019 |
| Standard ethic\* "JPAL" | 12100 | 6 | 7/29/2019 |
| principle ethic\* field researcher "3ie" | 11900 | 7 | 7/29/2019 |
| Principle ethic\* researcher "3ie" | 11600 | 7 | 7/29/2019 |
| Principle ethic\* researcher "EGAP" | 4080 | 5 | 7/29/2019 |
| Principle ethic\* care field researcher | 95000000 | 3 | 7/29/2019 |
| Standard principle "field" "Researcher" protection | 34500000 | 9 | 7/31/2019 |
| Principles standard ethic\* Freie Universität Berlin | 425000 | 4 | 7/31/2019 |
| FU Berlin principle Standard ethics research | 2370000 | 4 | 7/31/2019 |
| University guidance how to protect field researcher | 202000000 | 11 | 7/31/2019 |
| Safety guidance researcher | 106000000 | 8 | 7/31/2019 |
| Standard ethic\* guidance "Center of global Development" | 75100 | 4 | 08/01/2019 |
| Standard Guidance "Bill &Melinda Gates Foundation" | 641000 | 5 | 08/01/2019 |
| Principle standard ethic\* IFAD | 93100 | 4 | 08/01/2019 |
| Principle standard ethic\* reseacher "IFAD" | 78200 | 7 | 08/01/2019 |
| Principle standard ethic\* researcher "FPRI" | 5130 | 8 | 08/01/2019 |
| Ethic\* guidelines field researcher "FPRI" | 8420 | 5 | 08/01/2019 |
| Principle standard ethic\* "World Food Programm" | 184 | 4 | 08/01/2019 |
| Guidelines safeguard "World Food Programm" | 441000 | 3 | 08/01/2019 |
| Protection field researcher "World Food Programm" | 1120 | 4 | 08/01/2019 |
| Guideline "IFAD" researcher | 408000 | 9 | 08/07/2019 |
| Guideline "Center of global Development" field researcher | 13 | 2 | 08/07/2019 |
| Ethic\* Guideline "field" "researcher" | 13300000 |  | 08/07/2019 |
| Guideline ethic\* KAS | 576000 | 5 | 08/14/2019 |
| Guideline ethic\* "Konrad Adenauer Stiftung" | 25100 | 4 | 08/14/2019 |
| Guideline ethic\* "KAS" field researcher | 287000 | 5 | 08/14/2019 |
| "KAS" field researcher protection | 1730000 | 5 | 08/14/2019 |
| Safety guideline "KAS" field researcher | 1200000 | 5 | 08/14/2019 |
| Principle ethic\* researcher "KAS" | 154000 | 4 | 08/14/2019 |
| Field researcher guideline "KAS" | 660000 | 6 | 08/14/2019 |
| Guideline ethic\* FES | 24200000 | 5 | 08/14/2019 |
| Principle ethic\* researcher "FES" | 919000 | 5 | 08/14/2019 |
| Safety guideline "FES" field researcher | 1550000 | 6 | 08/14/2019 |
| Field researcher guideline "FES" | 710000 | 4 | 08/14/2019 |
| "FES" field researcher protection | 2650000 | 6 | 08/14/2019 |
| Field researcher guideline health | 259000000 | 10 | 08/14/2019 |
| Field researcher guideline employment | 293000000 | 11 | 08/14/2019 |
| Field researcher guideline condition | 218000000 | 10 | 08/14/2019 |
| Field researcher work condition | 248000000 | 11 | 08/15/2019 |
| Field researcher guideline gender | 128000000 | 1 | 08/15/2019 |

**Overview on Challenges and Solutions**

In the main part of the paper, we highlight pertinent gaps in safeguarding research staff. Yet, our analysis also revealed that guidelines suggest a comprehensive set of solutions for the most common challenges. Table A2 summarizes those per ethical challenge and provides examples how guidelines provide solutions to address them.

**Table A2: Challenges and Solutions mentioned in reviewed Guidelines**

|  |  |
| --- | --- |
| **Challenges** | **Solutions** |
| Physical safety | * Travel risk assessment (for all staff) and field safety plan, including exit plan (European Commission, 2004; United Nations, 2006; University of Texas at Austin, 2010; CARE International, 2014; Tennessee Tech, 2017; University of California, 2019; CUREC, 2017) * Informed consent of all team members on safety plan / options to voice concerns on unsafe research (University of Toronto, 2011; CUREC 2017; ) * Health insurance for whole team (Tennessee Tech, 2017) * Proper information flows (detailed travel itinerary; local and home contact for emergencies) (United Nations, 2006; CARE International, 2014; Tennessee Tech, 2017) * Buddy system for field visits and proper planning if working exceptionally alone (University of Bristol, 2012; Tennessee Tech, 2017; University of Melbourne, 2020) * Knowledge about local environment (diseases; dangerous animals; climate/extreme weather; political stability and violence) (University of Texas at Austin, 2010; Tennessee Tech, 2017; University of California, 2019) * Safe housing and travel (CARE International, 2014) * First aid (package) and proper vaccination (University of Texas at Austin, 2010; Tennessee Tech, 2017) * Proper clothing (University of Texas at Austin, 2010; University of Toronto, 2011) * Digital precautions: clean mobile phone, social media (UNESCO/Reporters without borders, 2015) * Training on adequate behavior during violent attacks, including de-escalation (European Commission, 2004; CARE International, 2014; J-PAL, 2022; UNESCO/Reporters without borders, 2015) * Proper accountability principles/command chains (European Commission, 2004; United Nations, 2006; University of Toronto, 2011) * Armed escorts if needed (European Commission, 2004) * Guidelines around socially appropriate alcohol consumption (ISS, 2016) * Guidelines around healthy consumption of alcohol (Dart Centre, 2007) * Alcohol as a ‘hazard’ (University of Otago, 2006; WHO, 2011b) * How stress causes increased alcohol consumption (Antares Foundation, 2012) * How good staff care protects against excessive alcohol consumption (IASC, 2014) * Peer-base support models for excessive alcohol consumption (UNHCR, 2013) * Hard line on not consuming alcohol or non-prescription drugs on fieldwork (University College Dublin, 2015) * Don’t drink and drive (University of Melbourne, 2020) * Implications for insurance under the influence of alcohol (European Commission, 2004) * Guidelines for PSEAH (UKCDR, 2019; World Food Programme, 2018) sexual misconduct (Oxfam, 2020), sexual relationships with those involved in research (ASA, 2018) and exploitative sexual relationships (APA, 2017) * STIs as a health risk (ISS, 2016) |
| Working conditions | * Fair wages and full information about work tasks (CUREC, 2017; TRUST, 2018) * No coercion in the relationship between international and local staff (CUREC, 2017) * Employment of local staff through reputable companies if possible with adequate insurance and working conditions (CUREC, 2017) * Adequate insurance cover in place for university staff (University College Dublin, 2015), provision of travel insurance for all researchers, including local staff (CUREC, 2017; University of Oxford, 2020) * Roles and responsibilities of research staff at all levels is clarified and everybody is aware of duty of care (University College Dublin, 2015) * Required permissions are obtained (University College Dublin, 2015) * Respect local rights and regulations (GIZ, 2019) * Stress management tools and strategies (WHO, 2011; Antares Foundation, 2012) * Complaint and feedback mechanisms (TRUST, 2018) * Zero acceptance for corruption or bribery (TRUST, 2018) * Ensure that breaks from work are taken (University of Otago, 2006) |
| Emotional wellbeing | * Regular debriefing during and after field visits (J-PAL, 2022; University of Bristol, 2012; World Health Organisation, 2001) * Frequent supervision (Inter Agency Standing Committee, 2014) * Option to consult with external mental health therapists (also remotely) and mental health first aid training for all supervisors (UNHCR, 2013) * Option to withdraw from project without prejudice and opportunity to discuss in private with project lead (World Health Organisation, 2001) * Adequate preparation before field trip through factsheet and workshop to prevent culture shock and vicarious (secondary) trauma (University of Oxford, 2020) |
| Intersectional identities | * Understand prevailing prejudices, local customs and local laws in advance (Prior-Jones et al., 2020) * Institutions should provide anti-discriminatory, allyship and bystander training (Anadu et al., 2020) * On field trips, BIPOC students could be paired with white field allies. Self-awareness of one’s own privilege can encourage people to become strong allies (Anadu et al., 2020) * Before travelling, discuss incidents that could occur in the field and how to minimise risks (Anadu et al., 2020) * Document all hostile encounters that team members face (Anadu et al., 2020) * LGBTQI+ researchers must think about the risk posed by their actual and perceived identity and/or sexuality, and how to minimise risks (ISS, 2016) |
| Role conflicts | * Raising safeguarding concerns about research participants that may be detrimental to the research (DfID, 2016) * The safety of the respondents and the research team is paramount and should guide all project decisions (WHO, 2001) * Avoiding undue intrusions (ASA, 2018) * Protecting the welfare of research participants (Government of Canada, 2018) * Protecting the mental health of staff (University of Otago, 2006; Oxfam, 2020) * Psychological First Aid (WHO, 2011b) or psychological support for participants (Social Research Association, 2013) * It is an ethical duty to ensure the safety of research participants and team (IASC, 2014) * Guidelines around serving society, avoiding discrimination and exploitation (ASA, 2018) * Tensions between research and duty of care in humanitarian emergency situations (University of Oxford - Wellcome Centre Ethics + Humanities 2020). * The dignity, safety, and well-being of informants and local colleagues should always have precedence over the goals of the project (AAG, 2009; WHO, 2017; Trust, 2018) * Deployment of field teams should be built on the principles of liberty, reciprocity and solidarity (WHO, 2016) * Clear communication guidelines for research staff to manage expectations (J-PAL, 2022) |
| Feelings of guilt | * Feelings of guilt as a symptom of poor mental health (UNHCR, 2013; IASC, 2014)   or PTSD (Antares foundation, 2013) or stress (“Am I the only one who cares” ISS, 2016)   * Observational guilt (Dart Centre, 2007) * Guilt of leaving family (Dart Centre, 2007) |
| Sexual harassment | * Familiarise yourself with local laws and customs regarding relations between men and women (Prior-Jones et al., 2020; UNESCO/Reporters without borders, 2015) * Respect local dress codes and cover up with layers of loose-fitting clothes (UNESCO/Reporters without borders, 2015) * Familarise yourself with risks related to sexual violence and harassment in the fieldwork location (ISS, 2016) * How to respond when threatened with sexual aggression (ISS, 2016) * Reduce risk through measures such as avoiding being alone in high-risk areas and carrying a whistle (ISS, 2016) |
| Power imbalances | * Training sessions on power relations between local and international staff (Inter Agency Standing Committee, 2014) * Determine in advance (e.g. study protocols) shared authorship and copyright (Inter Agency Standing Committee, 2014; KFPE, 2018) * Develop data policy (KFPE, 2018) * Clarify roles and rights of research partners for all phases of project in advance, e.g. through ToRs (Association of Social Anthropologists of the UK and the Commonwealth, 2011; KFPE, 2018; COHRED, 2016) * Develop joint research agenda (Swiss Commission for Research Partnerships with Developing Countries, 2018) * Aim for long-term and institutionally-backed research partnerships and alliances e.g. set up MoUs and plan sequence of projects within larger programmes (KFPE, 2018) * Aim for contracting at institutional, not individual level (COHRED, 2016) * Insist on mutual capacity enhancement (KFPE, 2018) * Negotiate fair financial contributions taking into account LMIC financial possibilities, rely on existing contracting guidelines, and provide realistic and equitable allocations to overhead costs for all partners (COHRED, 2016) * Establish structures to solve conflicts and follow up with abusive behaviour in a timely manner and guarantee of anonymity of affected person (World Food Programme, 2018; KFPE, 2018) |
| Political context | * Assure that one is not required to compromise professional and scholarly responsibilities as a condition of being granted research access. (Association of Social Anthropologists of the UK and the Commonwealth, 2011) * Need to withstand political repression to disclose information sources (Association of Social Anthropologists of the UK and the Commonwealth, 2011; Social Research Association, 2003) |
| Tensions with respect to ethics reviews | * Ethical approval both from home and host country (Trust, 2018) |