Research Project

3R-sTrategies and Harm-benefIt analysis

Third-party funded project

Project title 3R-sTrategies and Harm-benefIt analysis
Principal Investigator(s) Gaab, Jens ;
Co-Investigator(s) Blattner, Charlotte ; Elger, Bernice Simone ;
Project Members Azilagbetor, David Mawufemor ; Cajiga Morales, Rosa Maria ;
Organisation / **Research unit**
Departement Psychologie / Klinische Psychologie und Psychotherapie (Gaab)
Departement Psychologie / Abteilung Clinical Child and Adolescent Psychology
Department
Faculty of Psychology
Project start 01.09.2022
Probable end 28.02.2026
Status Active

Background: The law requires scientists to argue that the 3Rs (replacement, reduction, refinement) have been maximized, i.e. that the same benefits could not have been achieved with lower impact on animal welfare. Guidelines developed by the Swiss Academies of Arts and Sciences explain how scientists need to fill in the required forms and to carry out harm-benefit-analysis (HBA). The guidelines refer to the instrumental and goal-related necessity of experiments, the classification of harms, as well as to the "legitimate interests of society" defined by Art. 137 of the Animal Protection Ordinance. Whether a particular experiment is acceptable is typically evaluated on a case-by-case basis and needs to be approved by a cantonal animal ethics committee (AEC). The Swiss guidelines don't provide specific orientation (e.g. concrete case examples) which types of balancing of interests or cut-off points are considered acceptable.

International studies show considerable inconsistency as to how AECs and their individual members evaluate animal protocols. As long as inconsistencies remain poorly understood and opaque, they can be a source of decreased confidence of society in the decision-making process. Studies have shown that limited openness surrounding animal research undermines public trust. Transparency, on the contrary, improves public perceptions. A broader discussion of cases will bring transparency to the context of public debate and advance ethically sound, consistent decision-making.

Objectives and methods:
1. Identify strategies designed to improve consistency of research project evaluations and assess critically how they integrate the 3Rs with HBA: Carry out a literature review and ethical analysis on decision-making aids that have been proposed (I) to evaluate and integrate multiple-stakeholder views in decision-making and (II) to promote systematic, accountable practice for HBA by AECs. As these aids - discourse or metric models - have been predominantly developed in the EU or North America, we will examine to which extent they are useful and appropriate in the Swiss legal and administrative context.

2. Obtain novel Swiss comparative qualitative and quantitative data on how and why the public (using clickworkers, n=1000) and relevant stakeholders (see 2a.) make decisions concerning ethical acceptability of a selection of realistic and concrete animal experiments by putting them in the hypothetical role of AEC members that decide on acceptance or rejection of these experiments and making them explain the reasons for their decisions. The cases will be first evaluated by an expert "gold standard" (ethicists and scientists).
2a. Understand factors that influence decision making (role and understanding of the 3Rs, weighing of

interests, emotional or other psychological factors, influence of decision-aids identified in 1.) and test decision tipping points by using a convergent parallel mixed methods design (questionnaires, focus groups, participatory multiple-criteria decision analysis [MCDA]). We will compare decision making of the public with that of groups that are likely to benefit (patients, n=200), and actors involved in animal research and its ethical approval (100 junior and 100 senior scientists, 50 AEC members and cantonal administrators); 800 students (psychology, biology, pharmaceutical sciences) from 4 universities (Basel, Lausanne, Fribourg, EPFL) are included to test the influence of teaching interventions.

2b. Use these insights into the decision-making process to identify barriers to appropriate 3R and HBA understanding and implementation in different stakeholder groups.

2c. Develop innovative methods of teaching (e.g. mock AEC settings involving students as AEC members integrating different decision-aids resulting from step 1., see above) and test the influence of teaching on decision making.

3. Combine results from 1. and 2. to foster participatory decision making. The aim is to promote increased knowledge and transparent dialogue in different stakeholder groups in Swiss society about consistent ways to implement the 3Rs and weighing of interests, based on empirical findings and related to concrete cases. Assemble a collection of case examples (made available online) where arguments of the gold standard are explained and compared to findings from the empirical surveys.

Importance and benefits: This interdisciplinary project fills a highly important theoretical and practical research gap concerning decision making about which animal experiments are ethically acceptable. It is of high value for several national and international academic debates, as well as of direct practical value for Swiss stakeholders as it advances not only understanding of the 3Rs and HBA, but also their implementation. By putting participants in the role of hypothetical AEC members the empirical part functions as participatory educational intervention that increases transparency and ethical reflection in Switzerland.

Financed by

Add publication

Add documents

Specify cooperation partners