

IAHAIO Minimum Research Standards – Key Messages

1. This document reflects new minimum standards for non-invasive research involving humans and/or animals, i.e., studies on human-animal interaction (HAI), including animal-assisted services (AAS) and the human-animal bond (HAB). The content addresses four core themes:
 1. Research design and methodology
 2. Ethics and welfare
 3. Collaboration
 4. Open science and dissemination
2. These standards offer a theoretical and practical contribution, i.e., are unique because:
 1. Unlike existing standards or guidelines, address **both humans and animals**
 2. Were **co-created** with the active cooperation of global international partners
 3. Consider **academia, practice and education as equivalents**, and are targeted across domains
3. Studies on human-animal interaction (HAI), including animal-assisted services (AAS) and the human-animal bond (HAB), are increasing. There is a need to understand HAI, including a need to recognize when AAS and the HAB are truly effective. Evaluation of outcomes is a particular issue given the nature of HAI, e.g., animals and their unstandardized behaviors, and their variety of practical applications. Hence, there is a strong need for high-quality research that empirically evaluates the psychological, social, and biological aspects of HAI, grounded in both theory and practice, i.e., taking a scientist-practitioner approach. **These new, interdisciplinary IAHAIO Research Standards are the first standards worldwide that assist in that endeavor, assuring that research is done properly and ethically, considering human, non-human and environmental actors –applying a one-welfare approach – resulting in valid, applicable outcomes.**
4. High-quality research designs may include an experimental (i.e., test group including an intervention or manipulation) and a control group (i.e., comparison group) but may also include case studies without a control group. **Some designs address fundamental research questions, whereas other designs are applied and focus more directly on practice, i.e., applying a scientist-practitioner perspective.** Depending on the research question, certain designs may be favored over others. Importantly, interpretation of the results and the resulting conclusions should be applicable for, and tailored to, the chosen methodological choices.
5. AAS are multidisciplinary/interdisciplinary services characterized by high professionalism and training: **Research on AAS requires collaboration between multiple disciplines, including practical and theoretical knowledge.** It is important to consider national and/or international standards when conducting research on AAs, including their scope of application, definitions, and the requirements for people and animals involved.

6. AAS involve humans and animals: Research must consider all sides of the interaction, especially in terms of safeguarding the well-being of those involved. **Keeping the health and well-being of those involved – directly and indirectly – must be at the core of research protocols, and considered this extensively and clearly through risk assessment.** This includes informing participants of the research objectives, procedures, and their right to withdraw.

7. Research requires rigor: Clear research question(s), hypothesis and protocol must be formulated, taking into account critical factors such as participant recruitment and sample number. **Given the inherent complex nature of AAS, deviations from the protocol can happen and may be necessary. Consider these aspects in research protocols to ensure intervention/service fidelity, and clearly report study limitations.**

8. All the steps in AAS research should consider ethics: **From the beginning – including developing the research design – consider the ethics of the research by taking a cost-benefit perspective.** Important questions include: Is this necessary? Who will benefit? What risks are there for everyone involved?

9. Theoretical advancement of the field of HAI means understanding AAS and HAB's mechanisms, deepening our understanding of HAI, including diverse human-animal interactions and relationships. **This work includes looking with care for and at new paradigms in human and animal well-being.** Connect, disseminate, share your successes and failures with other researchers, practitioners and educators to help them in their work.

10. **Not all animals are suitable for AAS in general, and not all animals are always suitable for a specific type of AAS, or indeed for any types of AAS.** The well-being and welfare and comfort of the animals should always be paramount and animals showing signs of stress, discomfort or unsuitability for AAS should not be forced into these roles, either temporarily or permanently. Such requirements for animals in AAS are essential to ensure the well-being and safety of the animals, the people with whom they interact, and others.

11. **Transdisciplinary collaboration is essential in research on AAS.** Preferably, research teams include various research backgrounds spanning domains of expertise (e.g., human psychology, animal well-being, veterinary science). Moreover, researchers should be willing and able to collaborate with professionals from a range of disciplines such as veterinary science, psychology and education.

12. Animals included in AAS should have a friendly temperament that fits the specific AAS. The animals should be comfortable in a variety of social situations and environments and should not display aggressive or fearful behavior. **No animal can be tested at one particular point in time as a basis for understanding its general temperament to be considered as suitable for a diverse range of AAS.** Assessment should be tailored to the AAS and carried out or supervised by a veterinarian, behaviorist or ethologist with experience and/or certifications.