

# Code of Responsible Scientific Behaviour

Psychology Research Institute, UvA, draft revision 4 2019

Researchers within the Psychology Research Institute of the University of Amsterdam are obliged to follow the regulations on responsible scientific conduct outlined by the VSNU (Association of Dutch Universities) and the UvA. In addition, researchers are required to adhere to the following points:

1. Ethical Committee and participants

For all students and staff members, before a study is implemented, permission of the Ethical Committee is required. The application includes a description of the design, participants, procedures, and methods. Participants are asked to complete a so-called *informed consent* form and have the right to stop their participation in the experiment at any point. Meanwhile, there exists a behavioural code in the LAB that explicitly outlines the obligations of the participant. At the end of the experiment participants are informed about the research goals (*debriefing*). Data and informed consent forms need to be stored at least 10 years after data collection is completed as specified in the Data Storage Protocol. Permission of the participant is required for researchers to provide access to data or confidential information to third parties. Personal information that could be linked to the participant should not at any point be related to the identity of the participant. All research follows the European General Data Protection Regulation (GDPR).
2. Lab Regulations

Researchers who conduct research in Building D (LAB) are required to follow the regulations of the LAB with regard to getting participants, registration, and payment. This also applies to researchers who conduct online research using the LAB subject pool. (see LAB rules and regulations document).
3. Data storage, management, & sharing

Researchers need to comply with the Data Storage Protocol UvA Psychology. To secure safe data storage and make data accessible and replicable, data need to be stored at 2 separate locations. The names of the responsible researchers need to be mentioned in the application to the Ethical Committee. The data-storage contains raw data as well as working data. A document that contains step-wise procedures of analyses reported in the respective article needs to be included as well. Research data that was collected for and materials of a published research project should preferably be made public and shareable with other researchers, unless these include confidential information, or in case data is used in the near future for additional publications.
4. Authorship order

Only those persons who provided a substantial contribution to the content of the manuscript should be included in the list of authors (APA regulations). Guest and ghost authorships are not acceptable. Within our institute it is common to mention PhD students as a first author in case it concerns their doctoral work. The promoters and supervisors can then be included as a 2nd, 3rd etc. author. It is recommended that articles include a section Author Contributions that lists the contributions of the authors to the work, if not already required by the journal. Purposeful ignoring and not referring to contributions of additional authors is considered improper behavior related to plagiarism.
5. Plagiarism & Self-citation

Researchers have to comply with the ‘Netherlands Code of Conduct for Research Integrity 2018’ (Plagiarism), and the ‘[Advisory memorandum correct citation practice of the KNAW](#)’ (Selfcitation).

6. Mentorship & Supervision

As stated in the Netherlands Code of Conduct for Scientific Practice by the VSNU, scientific activities should be performed scrupulously, but scrupulousness also applies to relations among scientific practitioners and with students. In particular, the education of young scientists requires binding standards for mentorship and supervision. While the main responsibility of supervisors is guiding the academic progress of their trainees, supervisors should assist their trainees in becoming independent researchers and take responsibility for the future scientific generation by ensuring the quality of research and teaching in the future. Researchers should follow the recommendations specified in the UvA Psychology Mentorship and Responsibility of Future Scientific Generations document.

7. Impartiality and Independence

In science, there are ample opportunities for potential conflicts of interests to arise. These can be personal, academic, political, commercial or financial – but have in common that they can corrupt science. Staff members are expected to act with integrity in every aspect of their work as researcher, reviewer, editor, and teacher. They should be impartial and independent from commissioning or interested parties, from ideological or political pressure groups, and from economic or financial interests. Conflicts of interest should be reported in publications and on staff members' UvA profile page under Ancillary activities. They should not publish in journals or present at meetings, which are considered predatory because they accept papers/presentations without proper peer review or editorial control for their own profit.

8. Societal Responsibility

Researchers should be honest in their communication not only to other scientists, but also to the general public, e.g., through the media. Researchers should not stretch the implications of their results beyond the scope of the study or make their scientific results appear too favorable.

In addition, it is recommended that researchers adhere to the following points:

9. Scientific Transparency

It is highly recommended that researchers follow one of two approaches: preregistration or cross-validation. Both approaches ensure that transparency, accountability, and truth finding have the highest priority, and prevent questionable research practices. With preregistration, researchers stipulate their hypothesis and analysis plan in advance of data collection, tying their hands and letting the empirical chips fall where they may (Pierce, 1883). The theoretical advantage of preregistration is that it sharpens the distinction between two complementary but separate stages of scientific inquiry: the stage of generating hypotheses (i.e., exploratory research) and the stage of testing hypotheses (i.e., confirmatory research). By respecting this distinction, researchers inoculate themselves against the pervasive effects of hindsight bias and confirmation bias (e.g., Nuzzo, 2015). Another approach to the relationship of confirmatory and exploratory analysis is cross-validation. In such an analysis the data is split in two parts (this can be either at the level of participants or trials). The first part of the data is used for abduction/exploratory analysis, that is finding the best explanation for the observed data. Also, this data can also be used to optimize the pre-processing and processing steps often used in computational modelling and/or the analysis of EEG and fMRI data (by using k-fold crossvalidation). Next the developed hypothesis, with the selected processing pipe-line is tested, in a confirmatory way, on the second part of the data. Compared to pre-registration it provides transparency to the individual researcher about the status of the exploratory research by adding a confirmatory step, at the cost of having to acquire more data.

#### 10. Co-Pilot Approach

Errors in statistical analyses are common and are of a varied nature. For example, analyses may not fit the type of data, intended analyses may have not been carried out adequately, results may not have been reported adequately, or results may not have been interpreted adequately. Such errors may be less likely if four, instead of two, eyes are involved in analysis and reporting, the so-called co-pilot approach to data analysis. It is highly recommend that researchers follow a co-pilot approach at the UvA Psychology department. A co-pilot approach may decrease the likelihood of errors in data-analysis, thereby increasing the likelihood that conclusions are supported by the data, which in turn facilitates scientific progress.

#### 11. Confidential advisers

A researcher or policy maker is responsible for how science is conducted an in particular with regard to behavior of fellow researchers. Sexual intimidation, bullying, aggression, violence, stalking and discrimination are not acceptable behaviors under any circumstances and will not be tolerated. It should be acknowledged that differences in hierarchy, for example doctoral students versus their supervisors, make it more difficult to report improper behavior. For this purpose, two confidential mediators within our institute are available for questions and advice. These persons are: Prof. Dr. Maurits van der Molen ([m.w.vandermolen@uva.nl](mailto:m.w.vandermolen@uva.nl)) and Dr. Dylan Molenaar ([d.molenaar@uva.nl](mailto:d.molenaar@uva.nl)).

Please note: To file an official complaint you need to contact the counselor of the University of Amsterdam. Information on how to contact them can be found here:

<http://student.uva.nl/en/content/az/confidential-adviser-for-undesirable-behaviour/what-to-do/what-to-do.html>