#### **Ethical Framework of Research**

#### 1. PREAMBLE

The Ethical Framework of Research shall formulate the basic rules of ethical behaviour of researchers and their conduct in research on the basis of generally recognised ethical standards common in this area in developed countries. In preparing this framework document, the foreign codes of ethics, charters and other documents as well as the ethical principles of good practice in the Czech Republic were taken into account. Experts from a range of institutions listed in the introductory part were substantially involved in its development and influenced with their comments both the content and scope of the document concerned. In particular, the fragmentation of results for the purpose of achieving a higher number of publications was stressed not to be ethical.

The document is for recommendation purposes only and should be inspiring and play an updating role in drawing up and amending codes of ethics or similar documents for research carried out at higher education institutions, the Academy, or other research institutions.

#### 2. FUNDAMENTAL ETHICAL PRINCIPLES OF RESEARCH

- 1) Research freedom and responsibility
- II) Respect for opinion plurality and tolerance
- III) Respect for human dignity and autonomy at research
- IV) Transparency
- v) Solidarity and cooperation in research
- VI) Usefulness and not causing damage, every risk of research must be balanced by its benefit

#### 3. ETHICS AND THE RESEARCHER

The purpose of this chapter is to support the development of desirable standards of conduct of researchers, and thus to prevent any conflicting situations between individual researchers or between researchers and third parties (such as publishers, research administrators, and so forth), conflicts of interests, disputes about authorship and, last but not least, to help improve relationships between the research community and society. Furthermore, the following text deals with publications and publishing. Although it is not explicitly stipulated below this document always takes into account scientific documents which are often reviewed or, when having been published, quoted by other authors (see section 3.3.).

#### 3.1. The researcher:

- a) shall be accountable, on the basis of his/her professional knowledge, for correctness and objectivity of his/her research (including studies and literature reviews, proposing and carrying out experiments, observing and publishing the acquired results);
- b) shall reject any managing or advisory role in research management (including participation in expert advisory bodies of a funder), administration and/or funding research if there are justified profound concerns that personal, scientific, professional, financial or any other activities could result in a conflict of interests, and thus could affect his/her objective views, competencies and decision making abilities when executing such functions;
- c) shall share his/her research results with other members of the relevant research team;
- d) shall not use scientific and/or scientific and pedagogic academic degrees provided that to obtain them he/she submitted and used documents which were probably acquired in contradiction to ethical principles<sup>1</sup>;
- e) shall neither cover non-ethical conduct in his/her environment (see also point k) of Section 3.5.), nor seek for pretences to disguise his/her violation of ethical principles of research;
- f) shall, as a member of expert boards (scientific councils/boards, expert advisory bodies, and so forth), adhere, in his/her decision making and voting in professional matters, exclusively to professional opinions;
- g) shall cooperate with ethical commissions <sup>2</sup> when meeting their assignments.

# 3.2. Authorship and co-authorship of a publication is a possession of a researcher who has met a minimum of the following conditions:

- a) has written a part of the manuscript;
- b) substantially and professionally he himself/she herself or as a team member has contributed by intellectual activities to a creative process leading to the required results and/or to the publishing of results of activities in a monographic publication, scientific periodical press, miscellany or through any other media;
- c) has drawn up a draft strategy of research or gathered and selected the data the research is essentially based on, and as a consequence he/she by a decisive manner contributed to achieving the published results of such research;
- d) has merged in a higher unit a different theoretic basis and thus considerably affected the quality of the published results of such research;
- e) has elaborated a conceptual model, proposed the manner of evaluation, has been involved in the analysis of data or interpretation of results which substantially contributed to the scientific value of the publication concerned;.

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<sup>&</sup>lt;sup>1</sup> This point was completed by several comments arising from the circulation of a document for comments. Such comments refer to cases published in Aula, Vol. 13, No. 1 p. 52, which outlined the difficulties to resolve some matters concerning the area of scientific and pedagogical academic degrees by a legal manner which means that implementation of fundamental ethical principals in this area is even more important.

<sup>&</sup>lt;sup>2</sup> In compliance with the National Policy of Research and Development of the Czech Republic in 2004–2008, in particular paragraph 117, establishment of ethical commissions in institutions involved in research is assumed. Chapter 4, mainly recommendations contained in paragraph b) thereof, deals with the establishment of ethical commissions/committees.

## 3.3. The researcher as an author or co-author of a publication<sup>3</sup>:

- a) shall not commit plagiatorism<sup>4</sup> always when quoting another author he/she shall refer to the information source and when summarising findings of another author the researcher shall express the original ideas in good will and without conscious deformation;
- b) shall also quote essential works which do not confirm his/her presumptions and interpretation of results;
- c) if he/she finds a substantial error in his/her published data, he/she shall adopt the corresponding steps to correct errors in the publication concerned, such as issuing an erratum or any other corrective text, withdrawing the publication from print or taking other appropriate measures;
- d) shall not uselessly draw up redundant publications<sup>5</sup> and shall not fragment research results into more academic papers to the detriment of their quality and good arrangement of the data;
- e) shall not obtain quotations of his/her works through the agreement of several authors on mutual quotations of their work.

#### 3.4. The researcher in a role of a manager and teacher:

a) shall select his/her colleagues and students for the work in research on the basis of unbiased assessment of their intellectual character and, in some cases, also creative preconditions;

A publication (an academic paper) according to Wikipedia – the free encyclopaedia (http://en.wikipedia.org/wiki/Scientific\_paper) is an academic work that is usually published in an academic journal. It contains original research results or reviews existing results in a respective area. Such a paper will only be considered valid if it undergoes a process of peer review by one or more referees (who are academics in the same field) in order to check that the content of the paper is suitable for publication in the journal. Only substantial intellectual contribution to the results of the published research qualifies researchers for being included among authors. Mechanical activities (such as lab work, input of data into a database, administration) are not sufficient reasons for authorship. Neither persons solely to honour them or to show kindness nor superiors who otherwise do not satisfy conditions for authorship should be included among authors. If there are justified reasons, the aforementioned scholars may be included in "thanks section".

<sup>5</sup> The majority of authors of academic papers or research publications are researchers or scholars from higher education institutions, institutes of the Academy of Sciences of the Czech Republic and other research institutions involved in different fields. As a number of publications is an important criterion for researcher's appraisal and plays an important role in career promotion on the basis of decisions taken by the Certification Commission, researchers and scholars are naturally motivated to publish the largest possible number of articles. Unfortunately, such motivation can lead to problematic unethical publication of redundant articles which differ from already published works of the same authors only by minimal text modifications and usually contain the same data (although in different breakdown or different units, and so forth). The name, abstract and the sequence of authors differ in the "redundant" publication only minimally from the original work. An extreme case of a redundant paper is a duplicate of an original work of the same author.

Later development of results included in miscellanies from conferences and pre-prints (which might also be short information) into a regular academic paper is not considered to be a redundant publication.

Publication of similar (i.e. redundant) articles may be excused, in terms of ethics, merely if the author may be convinced, and his/her opinion is justified, that it is in the interest of the reader. Such a reason may be an extension of the audience (for example language mutations). In this event publication of similar information should be made after the agreement of both (or more) publishers.

Publication of similar (i.e. redundant) articles can be tolerated in the event that the author sent his/her manuscript to a publisher who for a long period of time made clear that he/she had not accepted and would not probably accept this work (for example the publisher did not communicate with the author). Therefore the author offered his/her work to another publisher although the work was, after all, accepted in both publishing houses and was published twice.

In general, writing redundant texts is condemnable since it delays publishing original articles. Reviewers, who take this work as an honour and write their reviews without claiming any remuneration, are unnecessarily overloaded.

- b) shall share his/her knowledge, skills and principles of good conduct in research;
- c) shall place an emphasis on teaching students and shall request the same from his/her subordinates:
- d) shall develop independent critical thinking of students and shall respect their right for free expression of their opinions of the research concerned;
- e) shall include students and subordinates among authors of a publication if their creative work contributed to the results published thereof;
- f) shall support research and publication activities of his/her subordinates and students as well as their further qualifications;
- g) shall not accept, within his/her scope of responsibilities, a researcher demonstrating unethical conduct in the position which enables such a researcher to influence students by direct teaching, educating or by research work itself;
- h) shall consistently sanction unethical conduct of his/her subordinates and students that he/she is responsible for;
- i) shall correctly apply the legal provisions regulating relationships when executing dependant work for research.

#### 3.5. The researcher as an assessor, reviewer, evaluator, or objector:

- a) shall, when being requested, review or evaluate activities personally;
- b) shall take the necessary steps to clarify data in a draft publication where there is a justified opinion that the data was falsified or otherwise modified;
- c) shall approach a review or any other assessment by adequately trusting the submitted data and does not delay a review or other assessing procedures by redundant requirements;
- d) shall not extend an assessment of research work for the purpose to achieve advantages for him/herself or for any third parties;
- e) shall not develop an opinion which could be influenced by his/her personal interest or shall point out this fact in advance;
- f) shall not use data contained in the draft publication for any other purpose than that for developing a review and shall not provide it to any third parties;
- g) shall refrain from other conscious conflicts of interest, not expressly stated above;
- h) shall develop an expert opinion concerning only the area he/she is specialised in;
- i) shall state a clear opinion in his/her expert review;
- j) shall not, when developing his /her expert opinion, succumb to external pressures which could, in any manner, affect the grounds of the content of his/her opinion;
- k) shall not cover his/her own unethical conduct or unethical conduct of others when developing an objecting opinion or reviewing (or any other evaluation or assessment <sup>6</sup>);
- 1) shall assess, when evaluating a draft grant project, the research objective or any other proposal for research within a reasonable scope of costs covered from public funds;
- m) shall respect confidentiality and protection of intellectual property contained in evaluated papers.

#### 4. ETHICS AND INSTITUTIONS INVOLVED IN RESEARCH

Research institutions adopt their own codes of ethics which are based on the general principles of ethics in research but they also contain specific ethical rules for the respective research area. Whilst maintaining freedom of research activities these institutions should oblige their members and employees to adhere to relevant ethical rules. Research institutions should adopt principles for discussing cases of alleged unethical conduct (including the

<sup>&</sup>lt;sup>6</sup> It is also applicable for decisions made by different collective bodies of assessors.

definition of cases of unethical conduct, specification of a legitimate manner of how such cases will be discussed, specification and enforcement of sanctions). The conduct which displays signs constituting the reasons to believe that the ethical principles stipulated herein or in other generally recognised relevant ethical standards were violated can be considered to be allegedly unethical.

The management of scientific institutions carrying out research are responsible for creating the environment where researchers are stimulated to achieve the highest possible standard of their work.

#### Research institutions are recommended to:

- a) draw up and adopt their own codes of ethics arising from general principles of scientific work and generally valid ethical principles<sup>7</sup>;
- b) establish, according to the organisational structure of an institution, an Ethical Commission or more Ethical Commissions monitoring how ethical principles and rules are adhered to and dealing with particular cases of incorrect conduct and violation of ethics of research work<sup>8</sup>;
- c) determine whether the Ethical Commission has been established for the whole institution or for its part only;
- d) disclose provisions of the Ethical Commission and the list of their activities;
- e) pay attention to expertise, integrity and a high level of research ethics of the Ethical Commission's members, expert advisory bodies of a funder and other relevant bodies and to ensure public access to their professional curricula vitae and overview of their publications and other professional activities (however, when doing so, Act No. 101/2000 Coll., on the Protection of Personal Data and on the Amendment to Some Other Acts, amended and consolidated, must be respected),
- f) take into account that any high level of expertise cannot constitute the reason for exceptions from ethical standards;
- g) prevent conflicts of interest, in particular by excluding any biased objector and by requesting Chairs as well as members of assessment commissions or other decision-making bodies to sign the statement on their impartiality;
- h) at the beginning of each research project, identify possible conflicts of interest and eliminate them since research objectivity can be influenced or challenged by possible links of research to sponsors, customers, and so forth;
- i) support equal integration of junior researchers into research teams;
- j) ensure equal opportunities for job applicants;

k) include into the code of ethics the concerned relevant issues of employment that the European Charter for Researchers deals with<sup>9</sup>;

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<sup>&</sup>lt;sup>7</sup>Content and details are appropriately stated in Chapter "Moral and Ethical Aspects of Research and Development" in the Set of Documents of Working Groups used to develop the National Policy of Research and Development of the Czech Republic published by the Council for Research and Development in 1999, pp. 139-148, available on http://www.vyzkum.cz/FrontClanek.aspx?idsekce=612#att.

<sup>&</sup>lt;sup>8</sup> Where, due to objective or technical reasons, it is not reasonable to establish a permanent Ethical Commission then an ad hoc Ethical Commission will be set up to discuss particular cases of incorrect conduct and violation of research work ethics.

<sup>&</sup>lt;sup>9</sup> The European Charter for Researchers and a Code of Conduct for the Recruitment of Researchers - Recommendation of the European Commission of 11 March 2005, C (2005) 576 includes the following areas: recognition of the profession, non-discrimination, career development, value of mobility of a researcher, development of the stimulating environment, stability and permanence of employment, funding and salaries, access to research training and continuous development, access to career advice, rights of intellectual property and co-authorship, gender balance, management supervision, research and teaching, evaluation/appraisal system

- 1) not tolerate in the decision-making and assessing bodies operating within the institution concerned persons who cover up, ignore or enable unethical conduct;
- m) respect confidentiality and protection of intellectual property;
- n) cooperate transparently and without any conflict of interest with the private sector;
- o) care about adherence to ethics when funds for research are distributed;
- p) cooperate with the general public and state administration bodies, to provide information on research objectives in the institution, on its methods and possible environmental or other risks arising from such research.

#### 5. TYPICAL EXAMPLES OF ETHICS VIOLATIONS

- Obtaining financial means for a certain purpose or other funds for research and development in a fraudulent manner (presenting of non-existing qualifications, providing incorrect information of previous results and practice, creating false and deformed "image" of results, and so forth);
- fabricating and falsifying results of research and their presentation;
- infringing intellectual property rights or manipulating such rights by stating parts of texts or facts published by other authors without references to them or without thanking them;
- intentional incorrect interpretation of results of reviewed studies, observations or experiments;
- presenting fictitious results as results of observations or experiments;
- selective choice of data, in particular leaving out some data with the aim to support presumed hypothesis, and so forth;
- intentional incorrect interpretation of results of creating deformed conclusions for special purposes on the basis of incorrect interpretation;
- such behaviour towards colleagues or subordinates which is conducted with the aim to influence results of their research (a discussion on certain research is not meant by this):
- intentional presentation of results of other researchers in an incorrect and slanted manner;
- presenting him/herself as an author or co-author without significantly contributing to gather, interpret or process research results;
- not including authors who substantially contributed to research and, on the other hand, listing names of researchers who were not involved in research or publication either at all or only minimally;
- negligence when carrying out research;
- unauthorised obtaining of personal data during research by pretending that it is not personal data (for example combination of data in a questionnaire and application for completing personal data in an annex to an anonymous questionnaire);
- inappropriate treatment of confidential and sensitive information;
- making copies of a design and/or software without previous consent.

of subordinates, complaints and appeals, participation in decision-making bodies, working conditions and strategies for recruitment.

## 6. ETHICS OF ACQUIRING INFORMED CONSENT IN RESEARCH INVOLVING HUMANS

If personal data is used within research involving humans it is necessary to acquire the informed consent of persons involved. Decific conditions for using such data in research or research related activities are stipulated by law.

#### 6.1. Acquiring Informed Consent for Research

When acquiring informed consent the participants of research are provided with information by a responsible researcher on:

- a) the purpose of research, its expected duration and course;
- b) the right of participants to later refuse to participate in research and consequences of such rejection;
- c) serious unpredictable factors which may affect the willingness to participate in research, such as potential risks (of all kinds), inconvenience or negative effects;
- d) benefits arising from the research in question;
- e) the extent of confidentiality in research and utilisation of its results;
- f) remuneration for participating in research;
- g) an information point for inquiries concerning research and rights of people involved in it.

At the same time participants must be given an opportunity to ask questions and receive answers to them.

#### 6.2. Exemption from Informed Consent for Research

A researcher shall not be obliged to require informed consent for research only if there are lawful reasons and the research will not cause any damage, inconvenience or other harm, and it shall include:

- a) concealment of some aspects of sociological or psychological research and some other types of research (educational methods, health care) for an indispensable time (see letters a), d) or f) in Section 6.1.);
- b) study of educational methods and classroom management;
- anonymous questions, natural observations and research of archives for the disclosure of which does not constitute a legal or any other threat (loss of reputation, property or employment of a research participant).

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<sup>&</sup>lt;sup>10</sup> Involved persons provide informed consent for research involving human beings. This subject is solved by the Convention of Human Rights and Biomedicine which came into effect in the Czech Republic on 1 October 2001.

Act No. 101/2000 Coll., on the Protection of Personal Data and on the Amendment to Some Other Acts, as amended

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