



6th Framework Programme - Priority 2 "Information Society Technologies"

"HUMAN centred design for Information Society Technologies"

Proposal n° 507 420

Contract n° 507420



CDV, v.v.i.
Lisenska 33 a
636 00 Brno, Czech Republic
<http://www.cdv.cz>

Code of Ethics of HUMANIST

Deliverable 7 of Task Force 2

Reference: **2CDV-070121-E1-DA**

Confidentiality Level: Public

Rev.	Issuing date	Pages	Written by	Visa	Verified by	Visa	Approved by	Visa
A	21/12/2007	20p.	Karel Schmeidler, Jiří Vašek, Emil Drápela	V	Thomas Troglauer (DTF) Christine Turetschek (FACTUM)	V		
Modifications: Creation of the document								
Modifications:								

Table of Contents

1 Introductory provision 3
2 The HUMANIST Code of Ethics..... 13

1 Introductory provision

1.1 Ethical code in behavioural research

All basic ethical principles for research have to be preserved in each study with human subjects. These three basic principles are:

- Respect for persons (individuals should be treated as autonomous agents, and second, that persons with diminished autonomy are entitled to protection)
- Beneficence (individuals must not be harmed, possible benefits for individuals should be maximized and possible harms should be minimized)
- Justice (a fair distribution of the burdens and benefits resulting from the research should be found)

1.2 Informed consent

An opportunity to decide what shall and what shall not happen within the research has to be given to all subjects - participants of the research up to the way they are capable. The subject should sign the informed consent when he/she is provided with all relevant information about the research, when there is a valid conviction, that the subject correctly comprehends all these information and when the participation of the subject on the research is on a voluntary base.

As mentioned implicitly in the text above, the informed consent should contain three following elements: information, comprehension and voluntariness.

- Information – a subject should be provided with sufficient information about the research; this information include research procedure, their purposes, risks, anticipated benefits and a statement offering the subject the opportunity to ask questions and to withdraw at any time from the research.

Nevertheless, providing all information to the subject may sometime jeopardize the intent of the research or influence the research outcome

(results validity); e.g. this may happen when the research includes some form of surprise or unexpected event.

In all cases of research involving incomplete disclosure, such research is justified only if it is clear that (1) incomplete disclosure is truly necessary to accomplish the goals of the research, (2) there are no undisclosed risks to subjects that are more than minimal, and (3) there is an adequate plan for debriefing subjects, when appropriate, and for dissemination of research results to them. Information about risks should never be withheld for the purpose of eliciting the cooperation of subjects, and truthful answers should always be given to direct questions about the research. Care should be taken to distinguish cases in which disclosure would destroy or invalidate the research from cases in which disclosure would simply inconvenience the investigator.

It is therefore possible to inform the subject about the real purpose immediately after completing the research procedure. another way to preserve the ethical principles is to let the subjects to decide, if they want to continue in the research in spite of lacking knowledge about some issues of the research.

- Comprehension – The researchers should be assured that the information provided to the subject is well comprehended and the subject understands it. Hence, the manner and context in which information is conveyed is as important as the information itself. It is necessary to adapt the information provision to the subjects' intelligence, rationality, mature and language. Any information even the most complicated one can be provided in a way, which is comprehensible for any subject. The comprehension therefore highly depends on the researcher's ability to present the information in a suitable way.

If necessary (for subjects who are incompetent to decide for themselves), a third party involvement is possible. The third parties chosen should be those who are most likely to understand the incompetent subject's situation and to act in that person's best interest. The person authorized to act on behalf of the subject should be given an opportunity to observe the research as it proceeds

in order to be able to withdraw the subject from the research, if such action appears in the subject's best interest.

- Voluntariness – The participation of the subject on a research must be on a voluntary base. This element of informed consent requires conditions free of coercion and undue influence. Coercion occurs when an overt threat of harm is intentionally presented by one person to another in order to obtain compliance. Undue influence, by contrast, occurs through an offer of an excessive, unwarranted, inappropriate or improper reward or other overture in order to obtain compliance. Also, inducements that would ordinarily be acceptable may become undue influences if the subject is especially vulnerable.

Unjustifiable pressures usually occur when persons in positions of authority or commanding influence, especially where possible sanctions are involved, urge a course of action for a subject. A continuum of such influencing factors exists, however, and it is impossible to state precisely where justifiable persuasion ends and undue influence begins. But undue influence would include actions such as manipulating a person's choice through the controlling influence of a close relative and threatening to withdraw health services to which an individual would otherwise be entitled.

1.3 Assessment of risks and benefits

The assessment of risks and benefits presents both an opportunity and a responsibility to gather systematic and comprehensive information about proposed research. For the investigator, it is a way to examine whether the proposed research is properly designed. For a review committee, it is a method for determining whether the risks that will be presented to subjects are justified. For prospective subjects, the assessment will assist the determination whether or not to participate.

The Nature and Scope of Risks and Benefits – The assessment of risks/benefits is in a very close relation to the principle of beneficence, just as the moral requirement that informed consent be obtained is derived primarily from the principle of respect for persons.

The term – risk – refers to a possible harm occurrence. However, when expressions such as "small risk" or "high risk" are used, they usually refer (often ambiguously) both to the chance (probability) of experiencing a harm and the severity (magnitude) of the envisioned harm.

The other term – benefit – is used in a reference to the positive value related to the research and its possible positive impact on health or welfare.

The risk/benefit assessments are concerned with the probabilities and magnitudes of possible harm and anticipated benefits.

Many kinds of possible harms and benefits need to be taken into account. There are, for example, risks of psychological harm, physical harm, legal harm, social harm and economic harm and the corresponding benefits. While the most likely types of harms to research subjects are those of psychological or physical pain or injury, other possible kinds should not be overlooked.

The Systematic Assessment of Risks and Benefits –

- It includes systematic, no arbitrary analysis of risks and benefits, which means assessment of information about all aspects of research, and to consider alternatives systematically; the justifiability of the research has to be taken in to account on the first place.

The method of ascertaining risks should be explicit, especially where there is no alternative to the use of such vague categories as small or slight risk. It should also be determined whether an investigator's estimates of the probability of harm or benefits are reasonable, as judged by known facts or other available studies.

Assessment of the justifiability of research should reflect at least the following considerations:

- (1) Brutal or inhumane treatment of human subjects is never morally justified.
- (2) Risks should be reduced to those necessary to achieve the research objective; consider if the use of human subjects is really essential.
- (3) When research involves significant risk of serious impairment, review committees should be extraordinarily insistent on the justification of the risk.
- (4) When vulnerable populations are involved in research, the appropriateness of involving them should itself be demonstrated.
- (5) Relevant risks and benefits must be thoroughly arrayed in documents and procedures used in the informed consent process.

1.4 Selection of Subjects

Within this component of ethical code the justice ethical principle is relevant. Justice is relevant to the selection of subjects of research at two levels: the social and the individual.

- The individual justice means, that the selection, recruitment and treatment of all participants in a research is identical.
- Social justice means that a distinction is made between various social groups, as there is a difference between their ability to bear burdens of research and appropriateness of placing further burdens on already burdened persons; research should therefore consider the relevance of involvement of some specific groups (use adults before children, health before ill, etc.)

1.5 Application of the three principles on the simulation based behavioural research

Due to the technology progress, especially in the informatics domain, it is possible to substitute potentially dangerous studies in the real environment with the safe studies in the virtual environment on simulators. Such methods are commonly used in many researches, as they do not constitute danger of being injured for tested subjects. The main reason for using simulators in behavioural research is to study issues, which cannot be studied in the real environment or if such research in real environment would have taken too much effort. Substitution of instrumented vehicle studies with simulator studies can be performed up to certain level and such substitution is never perfect or applicable for all researches.

The potential risks of simulation-based environment should be taken into account when performing research on a simulator.

Simulator sickness

Always use simulator sickness questionnaire in order to prevent the simulator sickness of the subject

When it is necessary to perform the experiment in spite of the person potentially experiencing simulation sickness, such person should be informed about the issue thoroughly and the experimental situation should be stopped immediately when the person is not feeling well (symptoms of simulation sickness are being apparent)

Ethical problems

Subjects must not be exposed to ethically problematic situations ((breaking existing social norms, self-portrait of the personality, producing shame, shyness, and embarrassment)

1.6 Application of the three principles on the instrumented vehicle based behavioural research

Studies with the instrumented vehicle are being used to study behaviour of subjects in the real environment. The danger constituted by driving in the real environment is understandable. Today's road environment is not safe any more and each error might be penalized by an injury or death. Hence, the basic problem of all instrumented vehicle studies is to balance the benefits of the study and the potential risk exposure of the tested subjects.

- Minimisation of danger

Always try to minimize the danger of subjects; consider the possibility of substitution of some driving tasks with similar/same tasks in the virtual environment on the simulator

Subjects must be kept informed about all tasks they will perform during the experimental drive

- Driving record

Always gather additional driving history data from the subjects, as it is possible that they are scared of some situations, they do not feel well being observed while driving etc.; this can cause a lot of problems/risks during the experimental drive

- Emphasis on safe driving

Subjects must be always informed that their attention should be concentrated on the safe performance within the primary driving tasks on the first place and that any other secondary tasks are additional and must not be performed under unsafe conditions

If experiment requires, then secondary driving control over the vehicle is highly advised

Vehicle instrumentation

If possible, following measures for the vehicle instrumentation reflecting principles for in-vehicle systems design should be met:

- The vehicle instrumentation should not interfere with the primary driving tasks and should not affect the safe driving
- The system should be located and fitted in accordance with relevant regulations, standards, and the vehicle and component manufacturers' instructions for installing the systems in vehicles
- No part of the system should obstruct the driver's field of view as defined by applicable regulations
- No part of the physical system should obstruct any vehicle controls or displays required for the driving task
- Visual displays that carry information relevant to the driving task and visually intensive information should be positioned as close as practicable to the driver's forward line of sight
- Visual displays should be designed and installed to reduce minimize glare and reflections
- Systems with visual displays should be designed such that the driver can complete desired task with sequential glances that are brief enough no to adversely affect driving
- Where appropriate, internationally agreed upon standards or recognized industry practice relating to legibility, icons, symbols, words, acronyms, or abbreviations should be used. Where no standards exist, relevant design guidelines or empirical data should be used
- Available information relevant to the driving task should be timely and accurate under routine driving conditions
- The system should not produce uncontrollable sound levels liable to mask warnings from within the vehicle or outside or to cause distraction or irritation
- The system should allow the driver to leave at least one hand on the steering control

- The system should not require uninterruptible sequences of manual/visual interactions
- Driver should be able to control the pace of interactions with the system (with specific exceptions)
- The system's response following driver input should be timely and clearly perceptible (if not interfering with the study design)

2 The HUMANIST Code of Ethics

The HUMANIST Code of Ethics formulates the basic principles of ethical behaviour of research workers and their acting within research, based on generally accepted ethical standards common in this field. The Code of Ethics of HUMANIST - WCE Research Worker shall be binding for research workers involved in common projects. The Ethical Committee consisting of HUMANIST shall supervise observance of the Code of Ethics - WCE experienced staff. This Committee shall deal with particular cases of improper behaviour and breach of the research work ethics.

2.1 General principles of research work

- A research worker shall exercise his or her profession to the benefit of individuals and the society, respecting people's personality, life and health. A research worker shall be impartial, respecting the clients and observing ethical principles within his or her field of activity.
- A research worker shall ensure protection of information achieved in relation to the research activity. He or she shall not disclose the facts learned during the performance of his or her job.
- A research worker shall not introduce any cultural, racial, social, class or ethnic prejudices into the research.
- A research worker shall not use his or her professional relationship for any personal, religious, political, ideological or other interests.
- A research worker, as a member of expert panels (scientific boards, professional advisory bodies, etc.), shall adhere exclusively to the expert point of view in his or her decision-making and voting in specialized issues.
- A research worker shall refuse any managerial or advisory function in research management, administration or funding, if there is justified concern that personal, scientific, professional, financial or other activities would pose a risk of

conflict of interest, thus influencing his or her objectivity, competency or decision-making capacity while holding given office.

- A research worker shall co-operate with the Ethical Committee of HUMANIST-WCE within performance of its tasks.

2.2 Research methods

- A research worker shall be responsible for the selection of research topics and methods used within the research, analysis and processing of results.
- A research worker shall be responsible for accuracy and objectiveness of the research carried out and shall be aware of limits of the research methods used.
- A research worker shall be obliged to ensure tests, diagnostic aids and records of examination against access of unauthorised persons without appropriate education and to prevent their misuse.
- While using diagnostic techniques, a research worker shall respect the client's right to have the nature and purpose of such techniques explained using reasonable language, unless a prior exception have been agreed upon from this rule. If explanation is given by other workers, the research worker shall specify the procedure to ensure correctness of such explanations.
- A research worker is aware that the results of tests may loose their value in the course of time and that they do not provide a full picture of the person examined.
- While publishing the findings and results of a certain issue, a research worker shall be fully responsible for their completeness and possibility to verify them and shall not be biased in their interpretation.

2.3 Publishing of findings and results

- A research worker may be stated as an author or co-author of a publication if he or she:
 - a) wrote a part of the manuscript
 - b) designed the research strategy
 - c) acquired and determined the data on which the research is substantially based
 - d) connected various theoretical bases into a superior unit, thus substantially influencing the quality of the published research findings or processed a conceptual model
 - e) proposed assessment, participated in data analysis or interpretation of results, which substantially contributed to the scientific value of the publication
 - f) by mental activity contributed to the creative process leading to the resulting work.
- A research worker shall abstain from plagiarism; whenever quoting other authors, he or she shall refer to the information source. While summarising the findings of another author, he or she shall express the original thoughts bona fide and without deliberate misrepresentation.
- In a publication, a research worker shall acknowledge the scientific contribution of his or her predecessors and colleagues to the examined issue, to which he or she directly relates.
- A research worker shall also quote significant works which are not in line with his own findings and conclusions.
- Shall a research worker discover a significant error in the published data, he or she shall undertake appropriate measures, e.g. print errata or other correction.

- After publishing the findings, a research worker shall store all primary data and documentation of substantial results, for a period usual in given discipline, unless other obligations or regulations prevent him or her therefrom.
- A research worker shall not divide the results and findings unnecessarily into several publications, to artificially increase the number of works.
- A research worker shall not acquire quotations of his or her own work by an agreement of several authors on mutual purposeful quotations of their works.
- A research worker shall share the research results with other members of the research team.
- A research worker shall not use scientific and scientific-pedagogic titles, which he or she acquired by submitting or using materials demonstrably acquired in breach of the ethic principles.

2.4 Assessment, review, evaluation and critic activities

- A research worker shall review or undertake other assessment activities delegated to him personally. He or she shall approach assessment with reasonable trust in the data submitted.
- A research worker shall not delay assessment unnecessarily.
- A research worker shall not prepare an opinion, if the conclusions could be influenced by personal interest.
- A research worker shall approach preparation of expert opinion only from the field of his specialization.
- A research worker shall not use the data stated in the publication draft for other purpose than preparation of the review. He shall avoid wilful conflicts of interest.
- A research worker shall state a clear expert opinion.

2.5 In respect to oneself

- A research worker shall ensure, keep and develop his or her professional competency, be aware of and keep within the limits of his or her own competency.
- A research worker shall support education and professional development of his or her subordinates, in particular PhD students.
- A research worker shall keep critical attitude to his or her own knowledge and results as well the results of his colleagues and shall be open for discussion and relevant arguments.

2.6 In respect to colleagues

- A research worker shall assess his or her colleagues based on the results achieved and treat them fairly; he or she shall not require activities from them that belong to his or her own duties and shall not require anything inadequate in relation to their abilities and possibilities.
- A research worker shall convey verbally and by his or her own example his or her knowledge, skills and principles of good behaviour in science.
- A research worker shall support growing qualification of students and subordinate research workers as well as their research and publication activities and international contacts and shall include them among authors of a publication, if they creatively contributed thereto.
- A research worker shall not defend and cover behaviour which is in breach of ethical principles. He or she shall act against unethical and unsuitable use of scientific findings. He or she shall not find excuses to cover his or her own mistakes against the principles of research ethics.
- A superior worker shall not tolerate subordinates who cover, overlook or enable unethical behaviour.

2.7 In respect to research participants

- A research worker shall make a clear and honest agreement with research participants, which shall precede their participation, and clarify the obligations and responsibilities of everybody. Such an agreement should usually be in writing. Participants shall be informed of the research purpose, its anticipated duration and progress, risks, annoyances and negative impacts related to the research, benefits related to participation in the research, remuneration for participation in the research and an option to terminate their participation in the research at any time. A research worker shall be obliged to keep all promises and liabilities resulting therefrom.
- A researcher shall inform all participants on all points of the research which might influence their willingness to participate and explain all other points about which the participants may ask.
- The methodological requirements of the study may suggest the necessity of non-disclosure or falsehood. Before performing such a study, the researcher shall have special responsibility: to determine whether the use of such methods is justifiable by the assumed scientific, educational or otherwise resulting values; to determine whether other procedures are at hand which would avoid the use of non-disclosure or falsehood; to ensure that the participants are provided with sufficient explanation as soon as possible.
- A research worker shall respect the freedom of an individual to refuse participation at any time or to withdraw from the research. The commitment to protect such freedom requires to think thoroughly and to consider the moment when the researcher is in the position of an authority or influences the participant. Such a position of authority includes particularly the situations where participation in the research is requested as a part of employment or where the participant is a student, client or staff of the researcher. The rights of the individual shall be superior to the researcher's need of finishing the research.
- A research worker shall protect the participant from physical and psychical discomfort, harm or danger which might occur due to resulting procedures. Shall an endangerment by such results exist, the researcher shall inform the

participant of such facts. Agreement reached with participants shall not limit their lawful rights and shall not reduce the researcher's legal liability.

- After the data has been collected, a research worker shall provide the participants with information on the essence of the study and try to defeat erroneous assumptions, which might occur. When scientific or human values justify withholding or non-disclosure of such information, the researcher shall take special responsibility for research monitoring and making sure that no harmful results threaten the participants.
- Where the research procedure shall result in undesirable consequences for an individual participant, the researcher shall be responsible for discovery and removal or correction of such consequences, including any long-term effects.
- Information about the research participant acquired during the research shall be confidential, unless agreed otherwise in advance. If there is a chance that other people might gain access to such information, this possibility, including the method of confidentiality protections, shall be explained to the participant as a part of the process leading to the acquisition of an informed consent with his or her participation.
- If the research participant is a minor, it is necessary to ask for his or her consent as well as a written consent of the next friend. Special attention shall be paid to the minors.

The present Code of Ethics shall come into force as of the date of its approval.

Sources of knowledge:

- APA guidelines
- British Psychological Ethical Guidelines
- Code of conduct by EFPA – European Federation Of Psychologists' Associations
- DRUID Programme: Ethics Manual
- Ethical code of Czech ministry of education and youth – MŠMT ČR
- Ethical Rules for International Arbitrators
- Etický kodex pracovníků CDV
- German Psychological Association
- Guidelines of Czech Association of Psychologists
- HUMANIST Ethical checklist
- medical ethical guidelines
- Psychological ethical standards of the German Psychological Association
- Sensation Project: Ethical and Legal issues
- No specific