

Academic Ethics Guidelines for Researchers by the Ministry of Science and Technology

Amended on October 20, 2014

- 1. Basic attitude of the researchers:** Researchers shall ensure that the research process (including research conception, implementation, and presentation of results) are conducted in an honest, responsible, professional, objective, stringent, and righteous manner while respecting the rights of the research subjects, and shall also avoid any conflict of interest.
- 2. Research misconduct:** The scope of improper conduct of research covers a wide area. These guidelines are mainly concerned with the primary issue of violations of academic ethics, namely : fabrication, falsification, plagiarism, duplicate publication of research results, improper citations, illegal or inappropriate means is used to influence the scientific review of the paper, and listing the name of improper authors.
- 3. Collection and analysis of research data:** The researcher shall, to the greatest extent possible, collect and analyze research data or figures in an objective manner. The researcher may not fabricate or falsify data or subject them to selective processing. Any required raw data processing shall be disclosed completely to prevent misleading the reviewers. Researchers shall refer to the research contents to describe the methodology and results, and shall not make any interpretation or deductions that are baseless and unrelated to the truth.
- 4. Proper preservation and filing of research records:** Researchers shall ensure that their work are capable of being verified and repeated

by others, and shall clearly, accurately, objectively, and comprehensively record all research methodologies and data. Raw data shall be retained properly for a reasonable period of time.

5. **Publication and sharing of research data and outcomes:** After having the opportunity in finalizing relevant priorities, researchers shall be promptly and openly share research data and results. Any data collected by using the state's research grants and funding shall be openly shared with other academic groups to use.

6. **Acknowledgment of the contribution of others:** Where data or opinions provided by other parties were used, the researcher shall respect the intellectual property rights of the said parties, cite their sources, and avoid misleading others with respect to the originality of these data or opinions. Any substantial use of contents generated by other parties without proper citation and in a way that misleads the reviewers on the originality of the said contents shall be regarded as plagiarism. The following lists 4 supplementary points for this section:

a. Where the plagiarism is not concerned with the core contents of the research, such as background, general description of research methods, or where the plagiarism consisted of improper citations that does not mislead reviewers on the originality of the paper, the established rules of the field of research shall be used to determine the severity of such acts.

b. Failure to comply with academic rules or non-stringent citations may be a result of the author's negligence. Such acts shall be self-regulated by the academic community (or the related academic

department of the Ministry can send official letters to rectify this issue). Although such acts may not necessarily be penalized by the Ministry, they shall be avoided where possible, and authors shall be familiar with academic rules and the proper methods of citation.

c. Research conducted by multiple individuals and published on the same paper can be regarded as the research outcomes of each individual. However, where research is conducted by multiple individuals were published separately (where multiple papers use the same research data but analyzed using different methods or perspectives), the contribution of other individuals shall be specified (for example, citing the source of the research data). Uncited data may be suspect of misleading.

d. Jointly published papers, joint applications of research projects, integrated research projects and sub-projects can all be regarded as joint works (whether in whole or in part). Citations of joint works will not be regarded as plagiarism. If common rules adopted by the specific field require that papers authored by students under a professor's instruction to be jointly published, the instructing professor may be regarded as the co-author of the paper. When citing such papers, however, the student's contribution shall be acknowledged.

7. **Constraint on self-plagiarism:** Research projects and papers shall not plagiarize the author's works that have already been published. Research projects shall not include research where the results have already been published. Authors shall not conceal research results that

they have already published or attempt to mislead reviewers on their contributions or originality. The severity of self-plagiarism shall be based upon whether the plagiarized contents are the core contents of the work, and whether the plagiarized contents are misleading or exaggerates the original contribution of the paper. The following lists the two supplementary points for this section:

- a. Certain works shall be regarded as the same work (conference papers or research results presentations that are later published in a journal) and not be regarded as plagiarism. Research projects and result reports shall not be regarded as formal publication, and would not require self-citation. Where conference reports are not regarded as a formal publication in the field, self-citation is not required as well.
 - b. Publication of identical research results in different languages may, according to the characteristics of the field of research, be regarded as papers written for different readers. However, the published paper shall also specify the original paper. Failure to specify the original paper while listing it in the bibliography is a clear attempt to mislead that these two papers are independent research with their respective results, leading to double counting of research results. This act shall be avoided, but enforcement shall be carried out independently by the academic group.
8. **Avoiding multiple submissions** : Multiple submissions (paper or research project) will result in repeated reviews and inefficient use of reviewing resources, and shall be avoided accordingly. Research

projects shall avoid using identical contents to repeatedly apply for research grants. The search project shall specify multiple applications for different sources of funding and grants. If all funding and grants have been acquired and if the contents supported by the grants are repeated, the researcher shall select one of these to conduct the research. Research contents that are related but separated shall be specified accordingly.

9. **Responsibility of co-authors:** Co-authors shall provide significant and substantial academic contribution (such as the conception and design of the research, data collection and processing, data analysis and interpretation, and writing of the research paper) before they may be listed for the paper. According to the principle of joint responsibility, co-authors shall be responsible for the corresponding contents in the paper within a reasonable scope. In other words, any co-author listed in the paper shall be responsible for the part that they have contributed.

10. **Constraint on peer review:** Researchers may not carry out any illegal or improper acts to influence the peer review process of the paper. When researchers participate in peer review processes, they shall maintain confidentiality and provide a prompt, impartial, and stringent review, and shall comply with the principles of recusal for conflicts of interest. Any research data acquired during the review process shall not be disclosed or used in their own research without prior agreement.

11. **Recusal for conflicts of interest and disclosure:** Researchers shall

disclose any information that may affect the research project or reliability of the review process in order to comply with the principle of recusal for conflict of interest.

12. Report of research misconduct: Where any fabrication, falsification, plagiarism, or other conduct of research that violates academic ethics has been found by the researcher, the said researcher is responsible to report these violations to the relevant competent authorities.

13. Handling of research misconduct: Institutions, publishers, and professional organizations related to academic research shall establish a comprehensive mechanism for the handling of any action that research misconduct. Such violations shall be handled promptly, impartially, professionally, and confidentially. Care shall be taken to provide proper protection and confidentiality of the whistleblower.

14. Responsibilities of academic institutions for academic ethics: Academic institutions shall promote awareness for academic ethics amongst their researchers in order to maintain the quality of research results and the high standard of ethics required of the academia .

References:

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