

A Large Scale Nation-wide Survey Indicates,
the Government Policy Is Important for Promoting
Research Ethics Education among Future Researchers.

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Background

- The Ministry of Education, Culture, Sports, Science and Technology (MEXT) of Japan has been implementing necessary measures pertaining to responses by universities and other research institutions regarding research activities, based on the “Guidelines for Responding to Misconduct in Research” (2006).
- However, because of frequently occurring cases of misconduct in research, the previous Guidelines have been revised based on recommendations (September 2013) of a taskforce and the findings (February 2012) of a committee.

Source: MEXT, “Overview of New Guidelines for Responding to Misconduct in Research,” 2014

The new Guidelines were adapted in August, 2014

Basic direction of revisions

- ◆ Formulation of New Guidelines initiated under a decision by MEXT Minister.
- ◆ In the past, there was a strong sense of leaving to the individual researcher the responsibility for avoiding misconduct in research; from now, measures will be strengthened by having universities and other research institutions assume responsibility for preventing misconduct in research.

Section 2 Initiatives for Preventing Misconduct

Provision of an Environment Discouraging Misconduct

- 1. Enhancing researcher integrity by conducting education on responsible research practices**
 - Universities/research institutions: Setting up the necessary organizational structure, such as appointing a RCR education officer, and providing regular RCR education to the wide range of personnel involved in research activities.
 - Universities: To ensure proper awareness of responsible practices by students, providing them with RCR education.
 - Funding organizations: Requiring all researchers taking part in research receiving competitive funding or other funding to take a RCR education program, and confirming their completion of such a program.
- 2. Preservation, disclosure of research data for fixed periods at universities and other research organizations**

Section 3 Responding to Specific Research Misconduct (clarification of management responsibilities of organization)

Applicable Types of Misconduct in Research(Specific Research Misconduct)

- Fabrication, Falsification, Plagiarism (Note: as before)

Providing and Disclosing Rules and an Organizational Structure in Universities, Research Institutions and Research Funding Organizations

- Provide and disclose appropriate rules (including investigation procedures and methods) for responding when specific research misconduct is suspected.
 - ◆ Clarification of the persons responsible for responding to research misconduct and defining their roles and scope of responsibility.
 - ◆ Ensuring confidentiality of the people involved, including complainants, and clarification of specific procedures.
 - ◆ Obligation to report to MEXT any investigations of specific research misconduct.

Receiving Allegation and Investigating Reported Cases of Specific Research Misconduct

- Procedures and methods from receiving allegation to Investigating reported case of specific research misconduct (preliminary investigation, formal investigation, findings, appeal filing, announcement of investigation results, etc.)
 - ◆ Setting, publicizing of contact point for receiving allegations, **handling consultations**.
 - ※ Possible to delegate the receipt of allegations to a firm outside the institution
 - ◆ Stipulating the approximate time limit for investigation at universities/research organizations.
 - ◆ Outside experts comprising at least half the members of investigative committees (those with possible conflict of interest excluded)
 - ◆ Should the investigating committee deem them necessary, opportunities for replication experiments under the direction and supervision of the investigation committee shall be ensured.
 - ◆ Appeals regarding the expertise of the investigation shall be considered with replacements of, additions to members, etc..

SUBJECTS and METHODS

The Ministry of Education, Culture, Sports, Science and Technology (MEXT) of Japan conducted a nation-wide survey during July-September of year 2015. Questionnaires were sent to 1,666 institutions, including all the universities, junior colleges, technical colleges, incorporated administrative agencies, as well as a few industrial laboratories.

1,604 (94%) of them responded, including all of the universities, junior colleges and technical colleges.

The Numbers of Subject Institutions and Response Rate

	# of Subject	# of Responder	Response Rate
National Public University	90	90	100%
Local Public University	86	86	100%
Private University	605	605	100%
Public Junior College	17	17	100%
Private Junior College	319	319	100%
Technical College	7	7	100%
Public Research Institution	100	92	92%
Independent Administrative Agency	83	77	93%
Private Industry	243	203	84%
Others	116	108	93%
Total/Average	1,666	1,604	97%

Among the institutions to which we sent questionnaires, all of the universities and colleges responded to those questionnaires.

METHODS (Cont.)

In addition, site visits were made to 9 institutions, which either receive large amount of governmental funds annually or recently experienced an incidence of serious misconduct.

METHODS (Cont)

- 1) Ethics education (17 Qs)
- 2) Data storage (4 Qs)
- 3) Established protocol for misconduct investigation (55 Qs)

Qs: Questions

Also included are 6 open-ended questions.

1) Ethics education: 17 Qs include

- #1. Do you have an established system to run the program for research ethics education?
- #7. Are the researchers with adjunctive appointment mandated to take research ethics course?
- #14. Are the graduate students mandated to take research ethics course?

2) Data storage: 4 Qs include

- #1. Do you have institutional rules for data storage and disclosure?
- #3. Are the researchers informed of the rules for data storage and disclosure?
- #4. How are the researchers informed of the rule of data storage and disclosure?

3) Established protocol for misconduct investigation:
55 Qs include

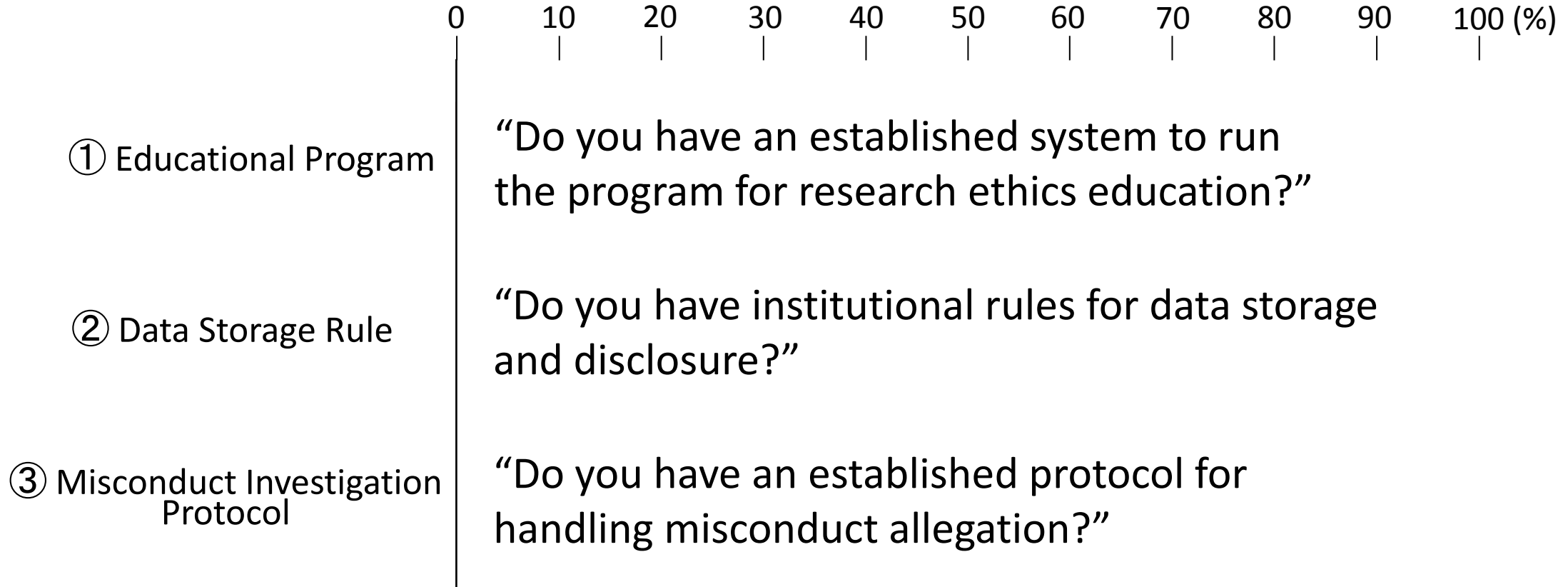
#1. Do you have an established protocol for handling misconduct allegation?

#7. Do you take up allegation by an anonymous person?

#22. Are you giving a chance to an incriminated researcher to rebut?

Universities vs. Junior Colleges

(Public and Private combined)



Background: Universities: Greater emphasis on research

Junior Colleges: Greater emphasis on teaching

Public vs. Private Institutions

0 10 20 30 40 50 60 70 80 90 100 (%)

① Educational Program

“Do you have an established system to run the program for research ethics education?”

② Data Storage and Disclosure Rule

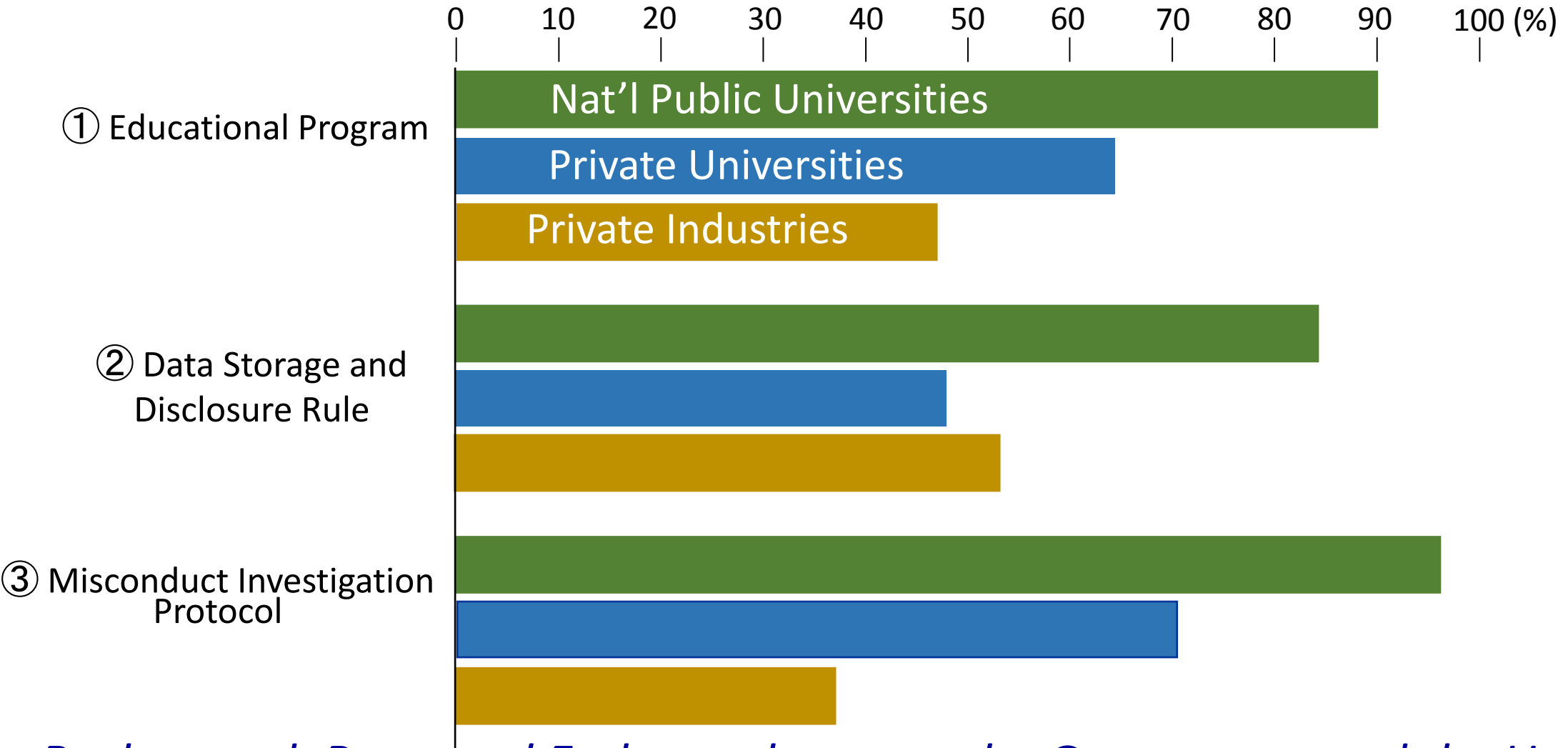
“Do you have institutional rules for data storage and disclosure?”

③ Misconduct Investigation Protocol

“Do you have an established protocol for handling misconduct allegation?”

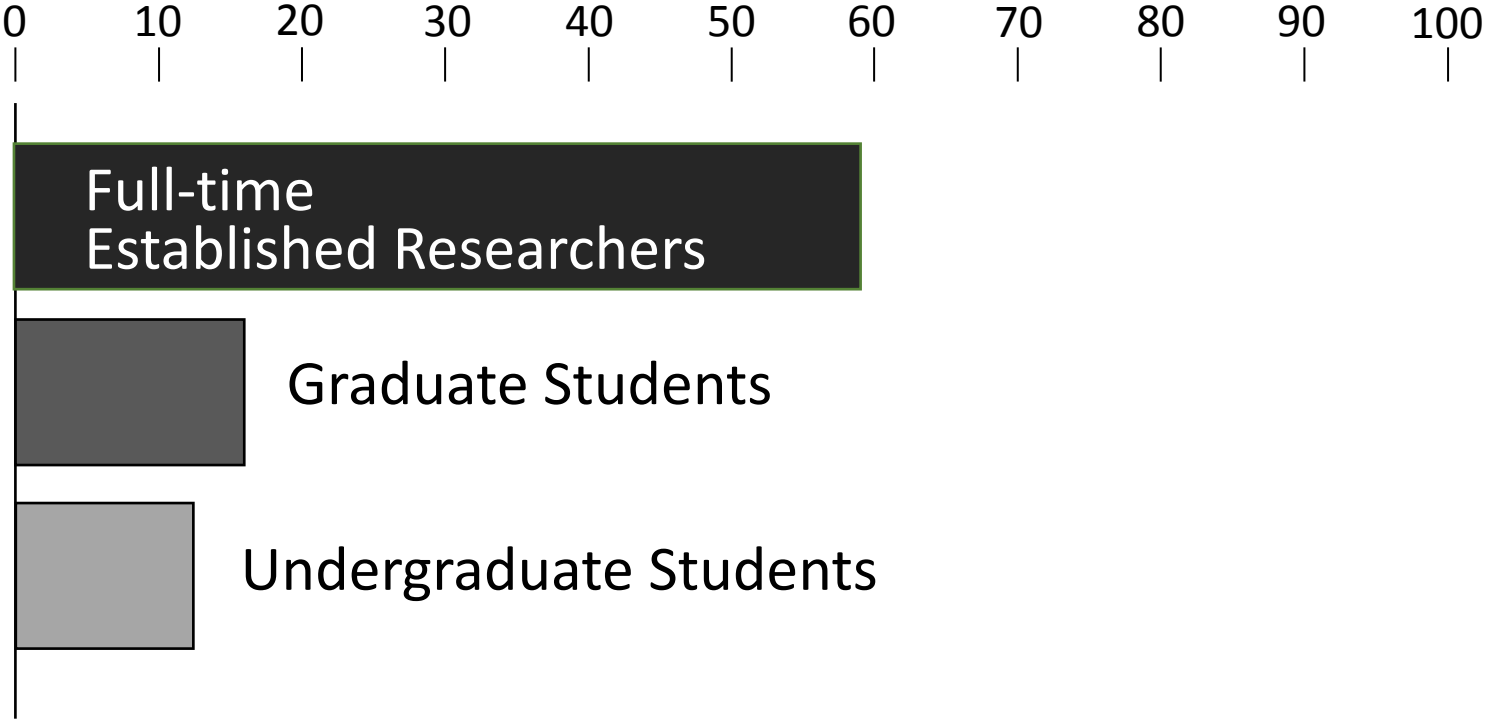
*Background: Personnel Exchange between the Government and the Universities:
Nat'l Institutions >> Private Institutions*

Public vs. Private Institutions



*Background: Personnel Exchange between the Government and the Universities:
Nat'l Institutions >> Private Institutions
Background: Private Industries: Less Dependent on Government Funds*

Who are mandated to take research ethics course?



The Government mandates institutions to provide researchers (not students) who receive government funds with research ethics education. This is a pattern opposite to that of US.

CONCLUSIONS

The results indicate that the degree of institutional effort to promote research integrity...

CONCLUSIONS (Cont.)

- 3) Moreover, the publicity of misconduct tends to drive institutional effort for research integrity, indicating an important role for mass media.

THANK YOU.