

Changes of Research Ethics Consciousness of Researchers in Korea following Hwang's Scandal

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I think that **morality** has a **potent power** in our life.



- ❖ Professor at Seoul National University of Education
- ❖ SNUE Dean of Academic Affairs and Acting Chancellor(before)
- ❖ IRB Member of National Bioethics Committee , Ministry of Health and Welfare
Public Bioethics Committee
- ❖ **Director of Center for Research Ethics**(www.cre.or.kr)
- ❖ Secretary General of Korean University Council of Research Ethics
- ❖ Consultant for Ministry of Education 4th Research Ethics Advisory Committee
- ❖ A Founding Member of the Asia and Pacific Rim Integrity(APRI Network)



Outline

- ❖ Objective
- ❖ Introduction to Survey
- ❖ Results
- ❖ Conclusion and Discussion



Objective

- ❖ This study aims to analyze how awareness of research ethics among researchers after the Hwang scandal has changed
- ❖ This research is meant to be used as fundamental study for future research ethics establishment in Korea.

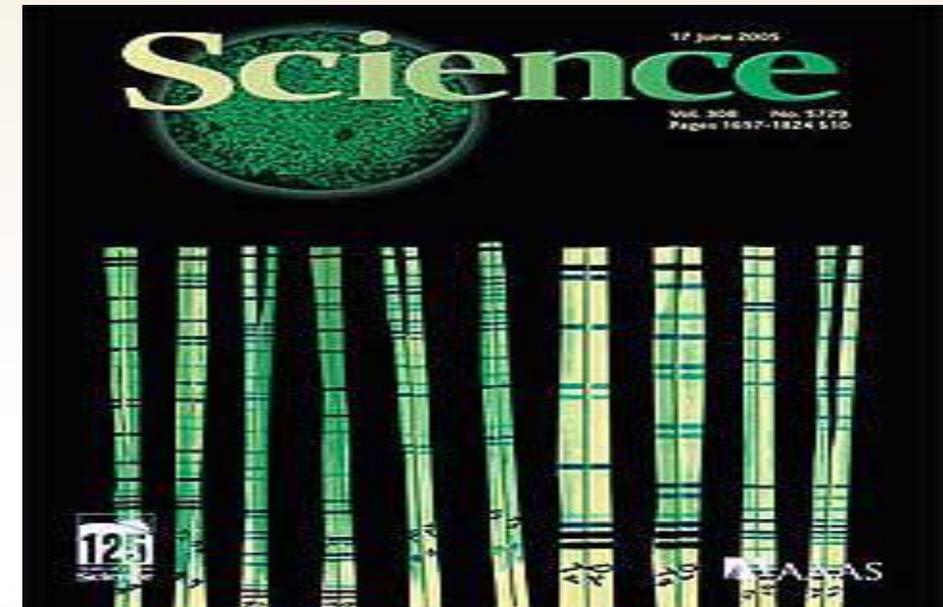


Dr. Hwang's papers on cloned hESC

- In 2004 & 2005, Dr. Hwang Woo Suck published papers in *Science* on hES cell lines using human eggs and somatic cells of various patients.
- International societies expressed concerns over the possible exploitation of women
- The majority of Korean society greeted his work with enthusiastic ovation, burying criticisms from the minority.

Evidence of a Pluripotent Human Embryonic Stem Cell Line Derived from a Cloned Blastocyst

Woo Suk Hwang,^{1,2*} Young June Ryu,¹ Jong Hyuk Park,³
Eul Soon Park,¹ Eu Gene Lee,¹ Ja Min Koo,⁴ Hyun Yong Jeon,¹
Byeong Chun Lee,¹ Sung Keun Kang,¹ Sun Jong Kim,³ Curie Ahn,⁵
Jung Hye Hwang,⁶ Ky Young Park,⁷ Jose B. Cibelli,⁸
Shin Yong Moon^{5*}



Hwang's Research Misconduct

- Korean prosecutor officer's report (2006) and Seoul National University's two reports (Seoul National University Investigation Committee)
- According to the two reports, Hwang's team violated many different principles of research ethics:
 - data fabrication
 - gift authorship
 - unethical procedures on human subjects
 - mismanagement of funds
 - exploitation of students and researchers



- 'Devil's means with Angel's End'(J.Y. Kim& K.B. Park, 2013)

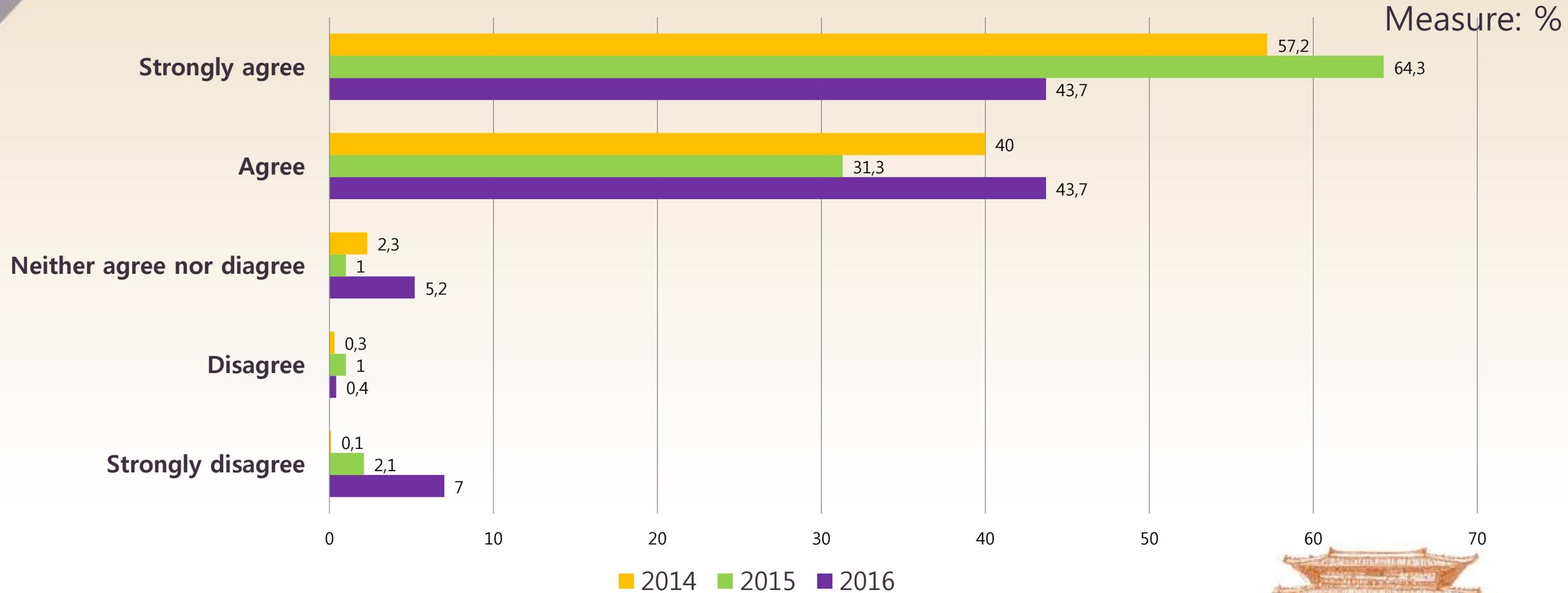


Data Collection

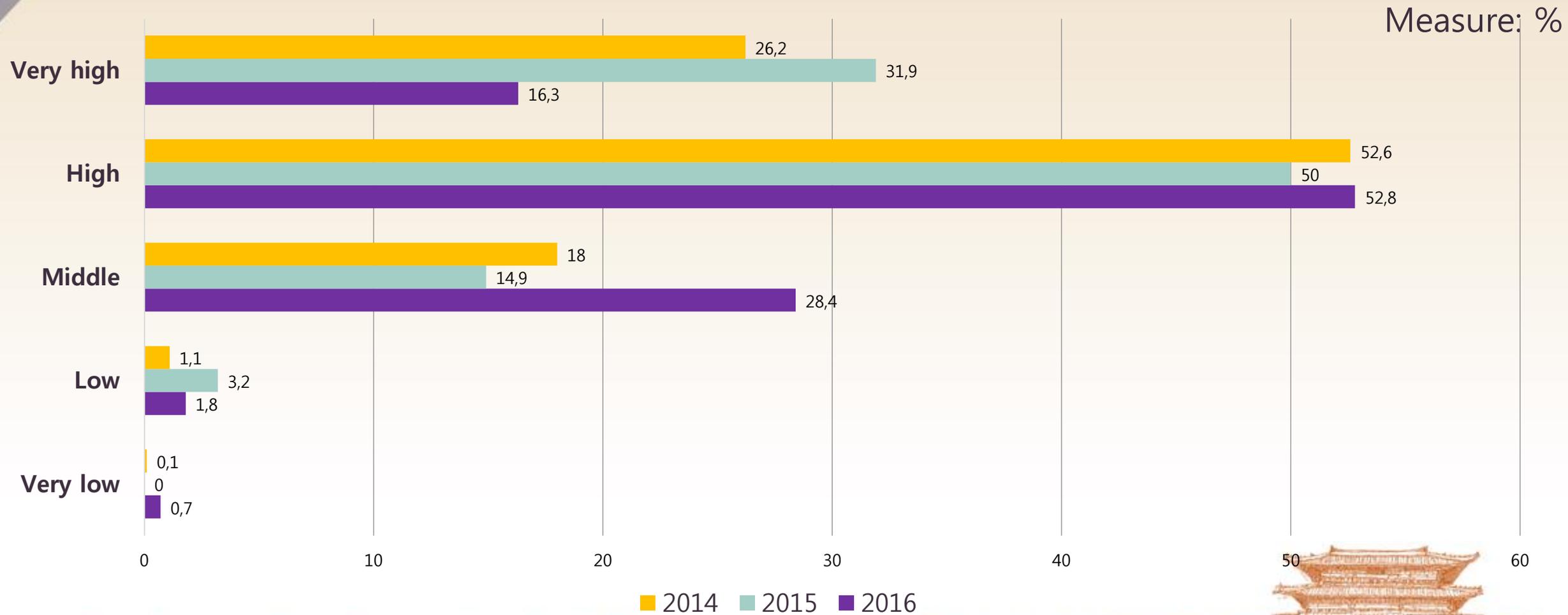
Year	2014	2015	2016
Methods	Online survey	Online survey	Online survey
Subject	2679 professors, students, and researchers across 169 4year universities.	107 professors across 201 4year universities (48 public univ. 156 private univ.)	458 professors across 201 4year universities (48 public univ., 156 private univ.)
Time frame	Feb. 25 – March 17 of 2014	May-June of 2015	March – June of 2016
Researcher	Injae Lee (SNUE)	Jeong Hee Kim (Korean University Education Council)	Jeong Hee Kim (Korean University Education Council)



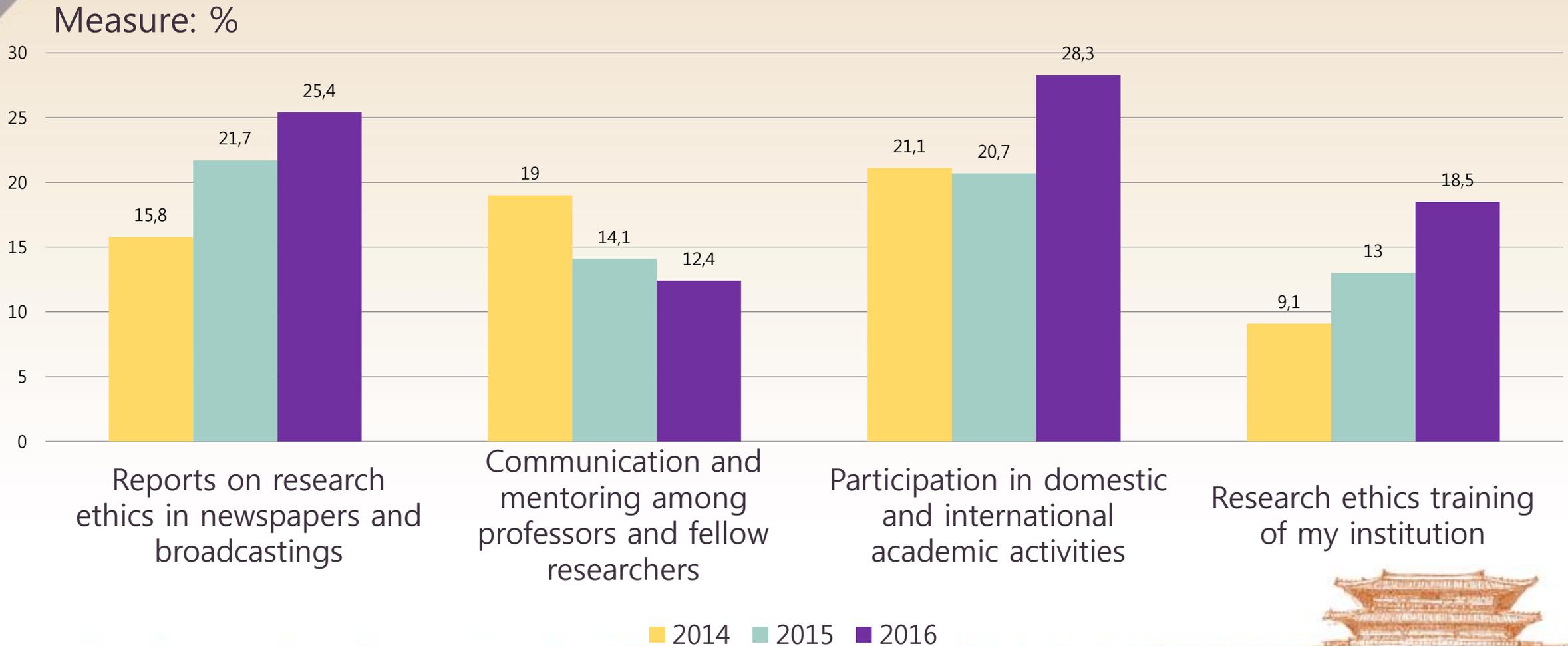
Do you agree or are you aware that practicing research ethics is important in conducting research?



How do you estimate your own research ethics level?



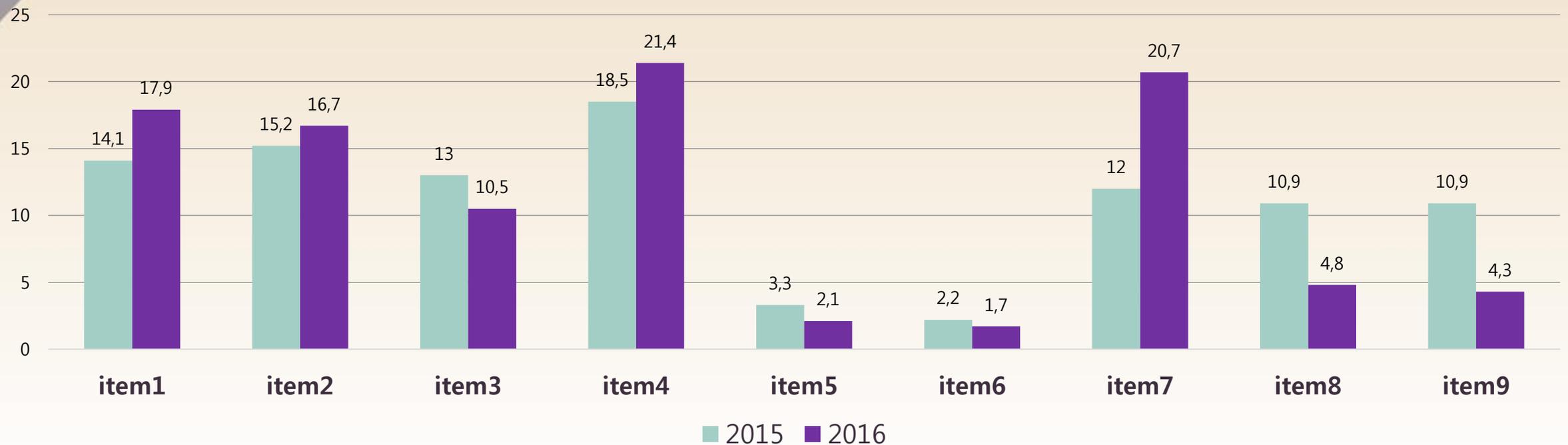
What are the major factors that affect your awareness of research ethics?



2014 2015 2016



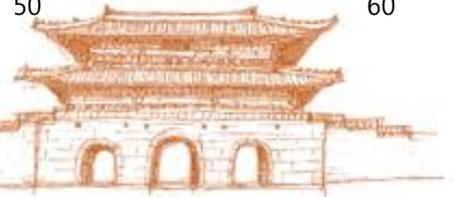
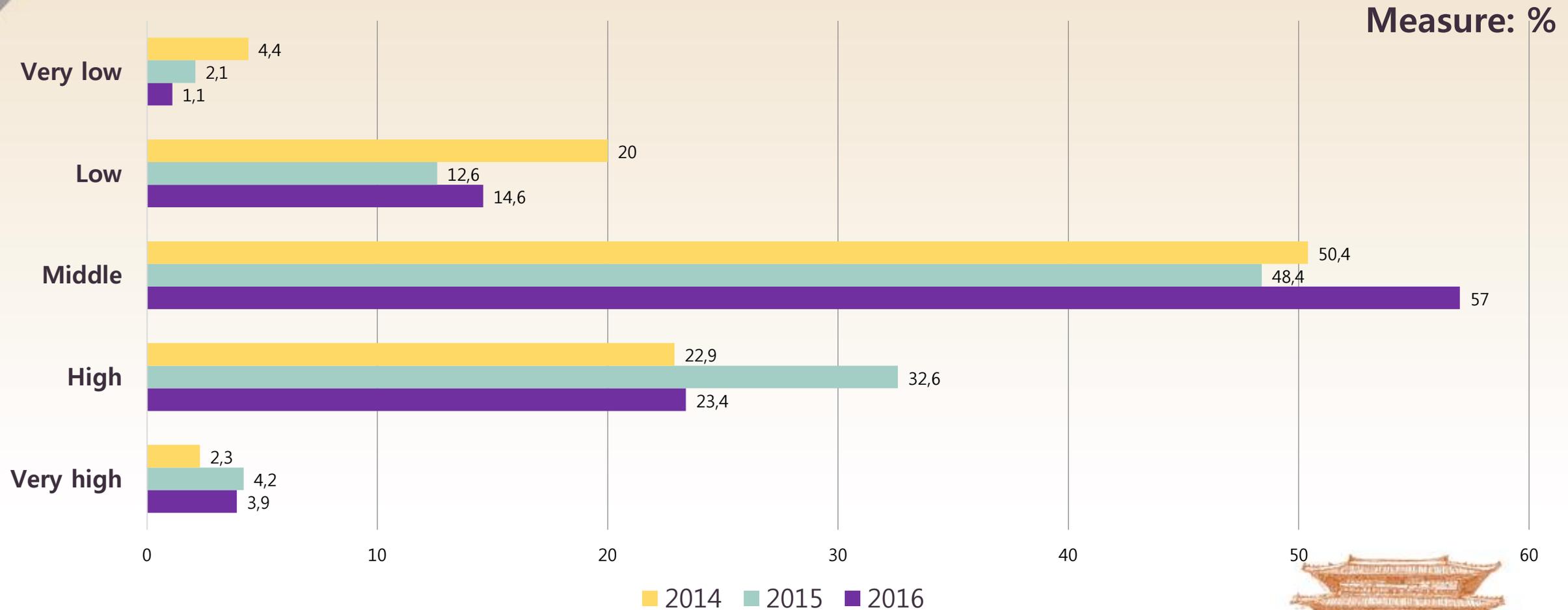
What are the major factors that affect your research ethics compliance level?



① research ethics training of my institution ② reports on research ethics in newspapers and broadcastings ③ communication and mentoring among professors and fellow researchers in their lab ④ participation in domestic and international academic activities ⑤ research ethics related information and discussion in internet ⑥ research ethics related books ⑦ research ethics guideline of government, university and acadmic association ⑧ a number of publication ⑨ etc

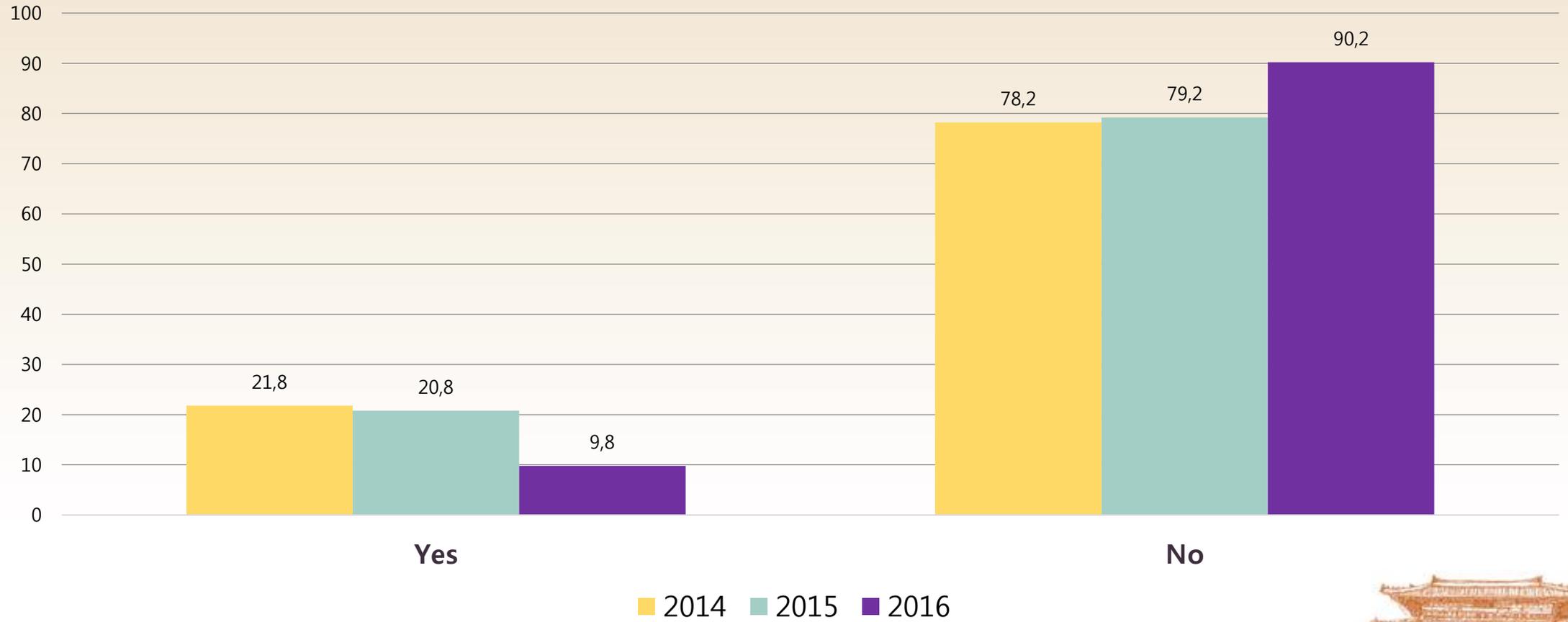


Assuming the developed research ethics countries' level as 100, in which level do you think our universities are?



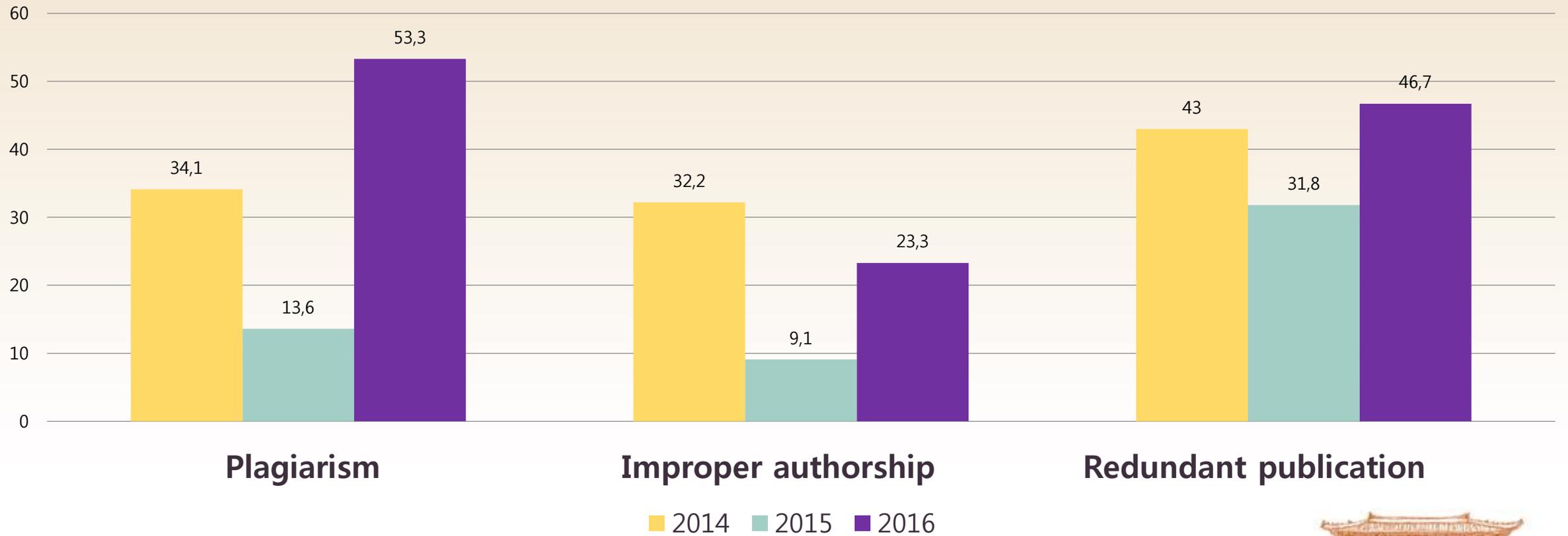
Have you worried about research misconducts or Questionable Research Practice(QRP) during the recent 2 years?

Measure: %



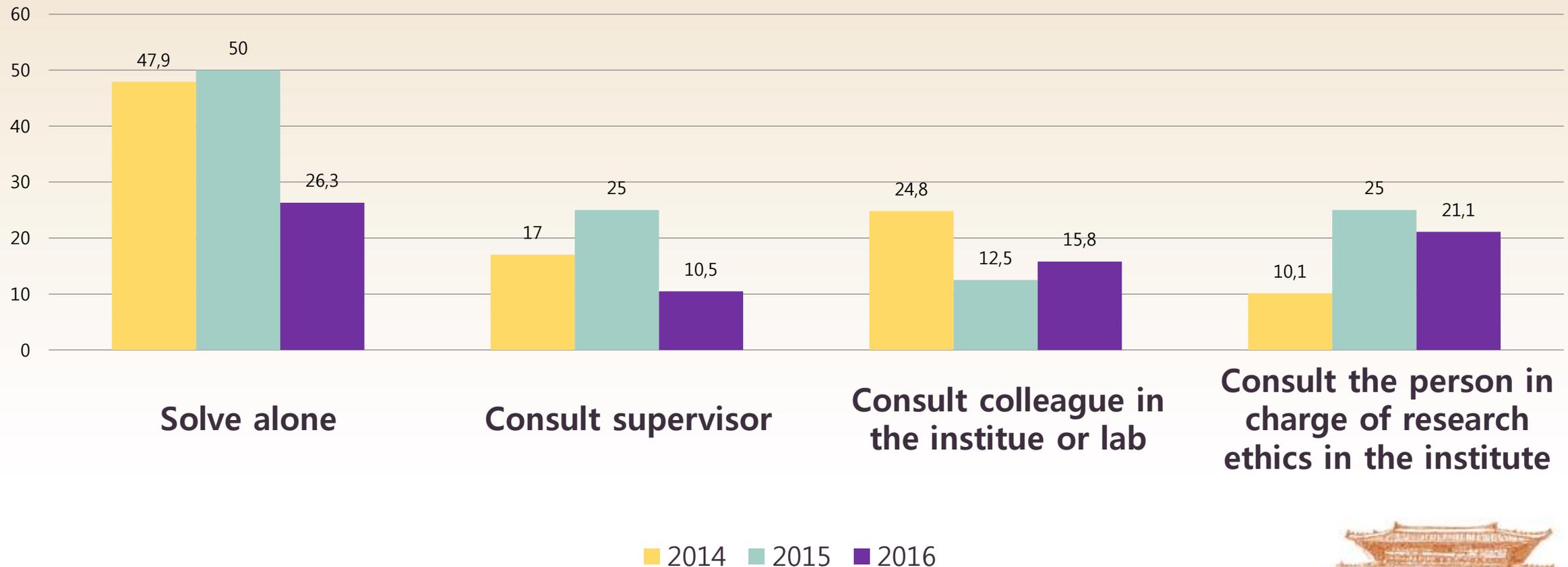
What is the most frequently experienced or observed research misconducts? (Multiple choice)

Measure: %



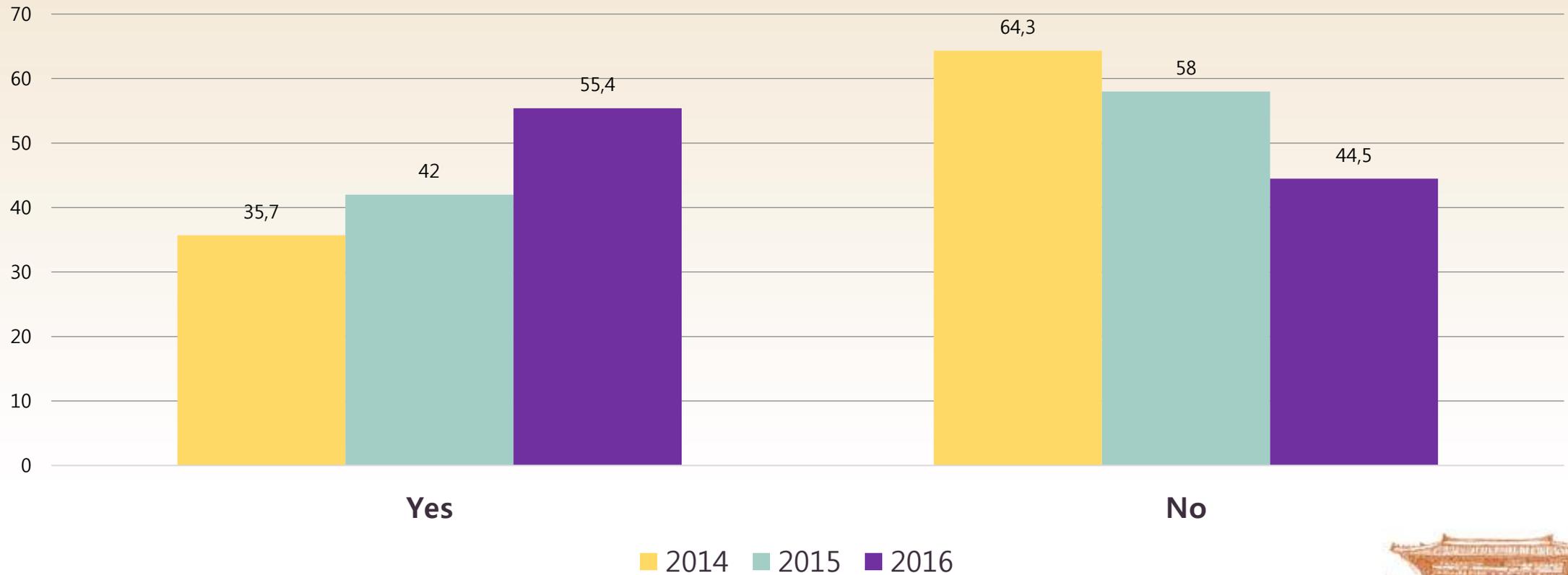
How do you address research ethics related concerns incurred during your research? (multiple choice)

Measure: %



Do you know how to report the perceived research misconduct?

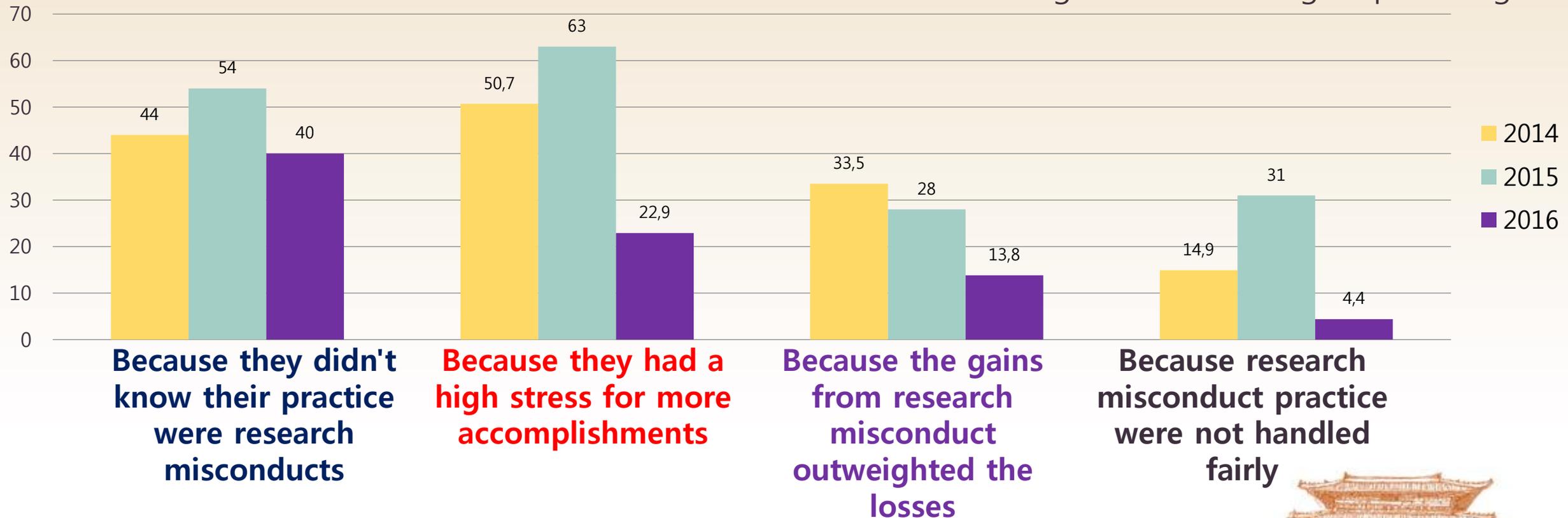
Measure: %



Why do you think researchers commit research misconduct or QRP? (Multiple choice)

Measure: %

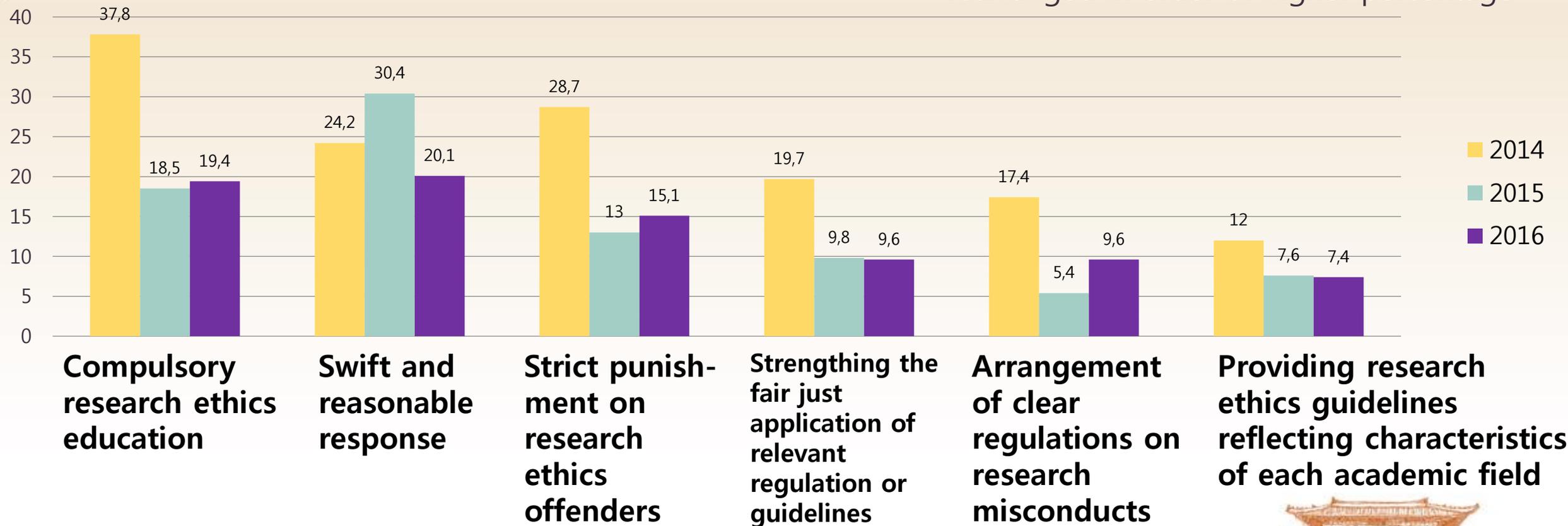
*rearranged in order of higher percentage



What do you think is the most appropriate measure to address the serious research ethical concerns you selected in previous questions? (Multiple choice)

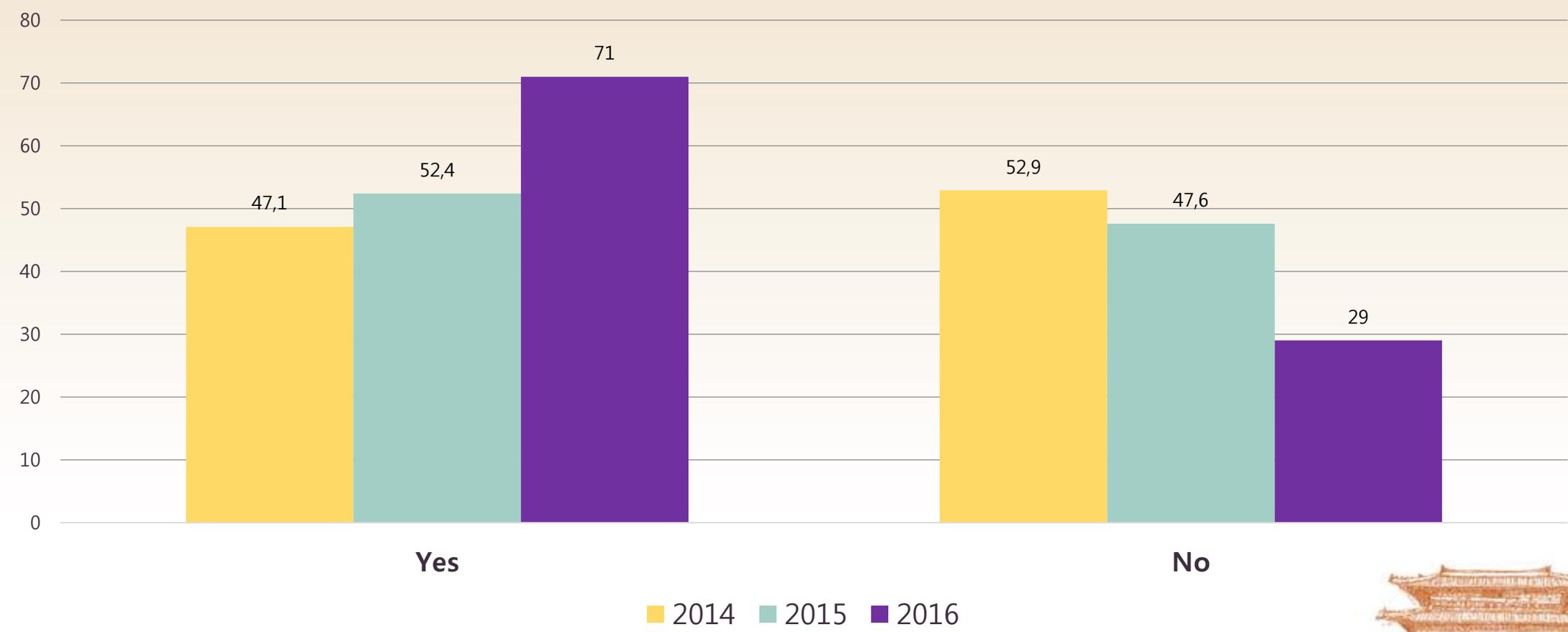
Measure: %

*rearranged in order of higher percentage

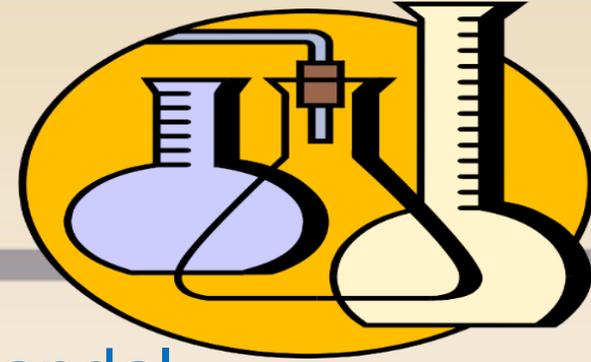


Have you recieved research ethics education during the recent 2 years?

Measure: %



Analysis and Results



- ❖ Increased interest taken in research ethics after Hwang scandal
 - effort and commitment by the government, university, and academic societies regarding research ethics guidelines
 - participation in education and training on diverse issues for research ethics
- ❖ diffusion of idea that RCR is important for individual and national competitiveness
- ❖ Increased interest in research misconduct reports and research integrity investigations



Tasks for Development of Research Ethics Awareness

- ❖ set an atmosphere of responsible research conduct (research culture)
 - dispel old erroneous thoughts that research misconduct is more profitable than compliance
 - ✓ true success and honor is borne from research ethics compliance
 - ✓ examine and spread cases of research ethics compliance



Tasks for Development of Research Ethics Awareness

- ❖ establish strong support system for responsible research
 - sustained and systematic research ethics education and training
 - ✓ Online/offline programs
 - ✓ Expand and make research ethics curriculum compulsory at the university and graduate level
 - ✓ Diversify research ethics education for instructor and faculty via Case based discussion etc
 - ✓ Provide customized educational text and documents depending on research ethics subtopic and subject
 - Operate a train the trainer program to foster research ethics experts





Thank you for your kind attention

Any Question?

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