Perception of Research Integrity on Taiwan University Campuses: A Comparison of Administrators, Faculties, and Students

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Outline

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• Promotion of Research Integrity in Taiwan: The Golden Triangle
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Why Research Ethics Matters?

Big high-profile cases happened...

2014

2016

2018
Why Research Ethics Matters?

In addition to researchers, about 55,000 master students and 3,500 doctoral students become Taiwan research “newbies” each year.

- **Awareness**: Are they aware of the responsibility to uphold research integrity in their research context?
- **Readiness**: Are they ready to follow RI principles/guidelines and engage in responsible conduct of research?
- **Knowledge & Skill**: Do they understand how to use research data decently, in a legal and ethical manner, then put it into practice?
Promotion of Research Integrity in Taiwan: The Golden Triangle

Administrative Policies/Regulations/Requirements

Institutions’ Management

Research Integrity

Researchers’ Education and best practice
Research Objective

To understand the *changes and differences in perception* of university stakeholder groups involved in RI at various levels

- since Taiwan national-level RI educational program was launched in 2014 (i.e., Center for Taiwan Academic Research Ethics Education, [http://ethics.moe.edu.tw](http://ethics.moe.edu.tw)).

- since the government authorities have revised their RI-related policies and requirements in 2017.
Research Method

A 23-item, 5 point Likert scale questionnaire was developed. Three RI aspects were explored (by exploratory factor analysis, EFA):

(a) Administrative policy/requirement (α=.865)
   e.g., Compared to three years ago, my institution has a better RI educational mechanism now.

(b) Campus-wide attention/awareness (α=.917)
   e.g., Compared to three years ago, campus communities are more willing to openly discuss RI-related issues.

(c) Personal recognition/efficacy (α=.887)
   e.g., Compared to three years ago, I have better abilities to judge whether an RI-related issue is ethically acceptable or not.
Research Participant

The questionnaire was sent to 5 different groups:

(1) Vice Presidents for Academic Affairs (VPAAs) \( (N = 116; 67.05\%) \) and
(2) Vice Presidents for Research (VPRs) \( (N = 112; 64.74\%) \)

of 173 universities/colleges in Taiwan;

(3) Purposive sampled RI administrative staff (AS) \( (N = 160) \),
(4) Purposive sampled faculty \( (N = 301) \), and
(5) Purposive sampled graduate students \( (N = 933) \)
Research Results (1 of 5)

Perception Differences Among Groups

- VPAAs
- VPRs

Graduate Students
Faculty
AS

Administrative Policy/Requirement
Campus Attention/Awareness
Personal Recognition/Efficacy
Research Results (2 of 5)

Group Differences in Aspects of RI Perception

- Administrative Policy/Requirement
- Personal Recognition/Efficacy
- Campus Attention/Awareness

VPAAs
VPRs
AS
Faculty
Graduate Students
# Research Results (3 of 5)

<table>
<thead>
<tr>
<th>Aspects</th>
<th>Groups</th>
<th>VPAAs (G1) (N = 116)</th>
<th>VPRs (G2) (N = 112)</th>
<th>AS (G3) (N = 160)</th>
<th>Faculty (G4) (N = 301)</th>
<th>Graduate students (G5) (N = 933)</th>
<th>Post-hoc Games-Howell</th>
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<tbody>
<tr>
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<td>M</td>
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<tr>
<td>Administrative policy/requirement</td>
<td>4.47</td>
<td>0.51</td>
<td>4.47</td>
<td>0.52</td>
<td>4.19</td>
<td>0.59</td>
<td>G1, G2 &gt; G3 &gt; G4, G5</td>
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<td>Campus-wide attention/awareness</td>
<td>4.15</td>
<td>0.56</td>
<td>4.14</td>
<td>0.61</td>
<td>4.01</td>
<td>0.60</td>
<td>G1, G2 &gt; G4</td>
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<td>G1 &gt; G5</td>
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<tr>
<td>Personal recognition/efficacy</td>
<td>4.57</td>
<td>0.43</td>
<td>4.57</td>
<td>0.58</td>
<td>4.34</td>
<td>0.49</td>
<td>G1, G2 &gt; G4, G5</td>
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<td>G1, G2 &gt; G3 &gt; G5</td>
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</tbody>
</table>
Research Results (4 of 5)

• Senior administrators (VPAAs and VPRs) and junior administrators (ASs) have relatively high perception across the three aspects.

• Faculty and graduate students have relatively low perceptions of RI administrative policy/requirement and campus-wide attention/awareness.

• All five groups demonstrated high recognition of RI issues and high efficacy to practice RI at an individual level.
Research Results (5 of 5)

- Senior administrators have **stronger senses** of administrative policy/requirement and self-recognition/efficacy than those of junior administrators, faculty, and students.
- Senior administrators also have **higher perceptions** of RI campus-wide attention and awareness than those of faculty and students.
Conclusion

• University administrators, especially those senior ones, have fully perceived the change in the three studied aspects in the past three or more years.

• Faculty and students may not strongly sense the changes.

• Administrators need to continue the promotion of RI on campus with the ultimate goal in fostering RI and good research practice.
Future Study

• We will conduct an identical study every three years in order to explore the potential changes of research cultures and integrity among Taiwanese universities.

• We will improve the current sampling method (e.g., stratified) to enroll more faculty and students for the survey.
Thanks for your listening!

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