PERCEPTIONS OF RESEARCH MISCONDUCT AT AMERICA’S TOP 100 UNIVERSITIES: PRELIMINARY RESULTS FROM A LARGE SURVEY-BASED PROJECT

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Survey Content

Research Misconduct
- Data Fabrication, Data Falsification, Plagiarism, Authorship Fraud, Publishing Fraud, & Grant Fraud

Conditions & Causes
- Stress and Strain, Low Sanction Risk, Low Self-Control, & Social Learning

Prevention & Remedies
- Formal Sanctions (professional and legal), Informal Sanctions (peers), Ethics Training, & Reducing Pressures
Sampling

Social Sciences
- Sociology
- Psychology
- Economics

Natural Sciences
- Physics
- Chemistry
- Biology

Applied Sciences
- Business
- Medicine
- Engineering
Sampling
Mixed-Mode Strategy

Online Survey
- October/November 2016 (n = 67, 3 follow-up emails)
- November/December 2016 (n = 84, 3 follow-up emails)
- January/February 2017 (n = 89, 3 follow-up emails)
- February/March 2017 (n = 71, 3 follow-up emails)

Mail Survey
- Fall 2016 (n = 146, 3 waves)
- Spring 2017 (n = 143, 3 waves)
## Sample Characteristics (N = 600)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Mean or %</th>
<th>Rank or Branch of Science</th>
<th>Mean or %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (in years)</td>
<td>55.47</td>
<td>Assistant Professor</td>
<td>24.3%</td>
</tr>
<tr>
<td>Male</td>
<td>69.2%</td>
<td>Associate Professor</td>
<td>24.7%</td>
</tr>
<tr>
<td>Racial/Ethnic Minority</td>
<td>17.2%</td>
<td>Professor</td>
<td>38.5%</td>
</tr>
<tr>
<td>Experience (in years)</td>
<td>22.60</td>
<td>Distinguished</td>
<td>12.5%</td>
</tr>
<tr>
<td># Refereed Publications</td>
<td>68.80</td>
<td>Natural</td>
<td>36.8%</td>
</tr>
<tr>
<td>U.S. Citizen</td>
<td>90.3%</td>
<td>Social</td>
<td>34.3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Applied</td>
<td>28.8%</td>
</tr>
</tbody>
</table>
Research Question

Are criminogenic conditions in one’s field related to the perceived frequency of research misconduct?
“Charging a grant for work that was not performed.” (6-items; α = .82)

“Creating data from a study that was never actually conducted” (5-items; α = .86)

“Submitting a paper for publication that is under review at another journal.” (5-items; α = .74)

“Deleting data so that a desired outcome is found” (6-items; α = .86)

“Giving someone authorship credit who did not make a substantive contribution.” (6-items; α = .79)

“Using another author’s exact language without giving appropriate credit” (6-items; α = .77)
Perceived Criminogenic Factors

- Stress and Strain
  - “There is a lot of pressure to publish one's work in high impact journals”
  - 5-items
  - $\alpha = .64$

- Low Sanction Risk
  - “Insufficient censure for research misconduct by the university”
  - 3-items
  - $\alpha = .77$

- Low Self-Control
  - “Researchers prefer to take shortcuts”
  - 6-items
  - $\alpha = .75$

- Social Learning
  - “Researchers learn they can get away with research misconduct”
  - 4-items
  - $\alpha = .61$

The introductory statement presented in this section of the survey read: “On a scale from 1 to 3, please indicate how well each of the following describes conditions in your field . . .” The closed-ended response set ranged from 1 (Not Very Well) to 3 (Very Well).
<table>
<thead>
<tr>
<th></th>
<th>Data Fabrication</th>
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<th>Plagiarism</th>
<th>Authorship Fraud</th>
<th>Publishing Fraud</th>
<th>Grant Fraud</th>
<th>Overall Research Misconduct</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stress and Strain</strong></td>
<td>.095</td>
<td>.127*</td>
<td>.097</td>
<td>.118*</td>
<td>.081</td>
<td>.111*</td>
<td>.135*</td>
</tr>
<tr>
<td><strong>Low Sanction Risk</strong></td>
<td>.200*</td>
<td>.250*</td>
<td>.267*</td>
<td>.165*</td>
<td>.202*</td>
<td>.228*</td>
<td>.285*</td>
</tr>
<tr>
<td><strong>Low Self-Control</strong></td>
<td>.244*</td>
<td>.252*</td>
<td>.225*</td>
<td>.178*</td>
<td>.181*</td>
<td>.258*</td>
<td>.286*</td>
</tr>
<tr>
<td><strong>Social Learning</strong></td>
<td>.366*</td>
<td>.394*</td>
<td>.287*</td>
<td>.263*</td>
<td>.264*</td>
<td>.344*</td>
<td>.399*</td>
</tr>
</tbody>
</table>

* $p < .01$ (two-tailed test)
Moving Forward

- Additional Research
  - Congruence between perceived causes of research misconduct and beliefs about prevention/remedies
  - IRB violations in the social and applied sciences
  - Future vignette-based survey on research misconduct and willingness to report wrongdoing
Thank You!

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