THE PREVALENCE AND IMPACT OF ACADEMIC MISCONDUCT ON SHORT-ANSWER TESTS
A STUDY IN PROGRESS

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INTRODUCTION & RATIONALE
Short answer tests are often used in 3rd & 4th year classes
✓ Test multiple levels of learning
✓ Produces original answers
✗ Labour intensive to grade
   -TAs often grade, faculty re-grading is permitted

Anecdotal evidence suggests students are performing academic misconduct (AM) by resubmitting altered tests for re-grading!

STUDY OBJECTIVES
1. Determine the prevalence and impact of AM on short-answer tests with a re-grade policy.
2. Identify how AM is being performed and the characteristics of those performing AM.

It was hypothesized that the prevalence of AM would be higher in:
- Tests written in pencil
- Males
- Weaker students
- Heavily weighted tests
- Subsequent tests throughout the semester

STUDY DESIGN
n = 2311 students enrolled in 11 courses
Scanned copies of Original Tests (OR) were compared to Re-grade Tests (RG)

All students
Test written Test marked by TAs/professor OR Scanned/Indexed OR handed back to students

Only students who resubmitted test for RG:
RG submitted to professor RG scanned & coded RG re-marked by professor RG returned to students
ANALYSIS

1. To determine the prevalence and impact of AM we looked at:
   i. Only questions asked to be re-graded by the student for
      assessment for alterations in text and addition of marks
   ii. Repeat offences (AM in more than one test)
   iii. Pre- and Post- re-grade marks

2. To determine the characteristics of those who perform AM we correlated those that committed AM with:
   i. The use of pen or pencil
   ii. How the student alters the original answer (alterations in
       text/addition of marks)
   iii. Sex
   iv. Overall grade

STUDY ETHICS

Research Ethics Board approved that Informed Consent was not required
- Instructors are permitted to monitor academic misconduct using the methods we employed
- No risk to the student, i.e. faculty not informed of AM cases, no names identified
- Level of academic misconduct would be underreported.

PRELIMINARY RESULTS:

1. PREVALENCE AND IMPACT OF AM
   i. The Prevalence

   The prevalence of AM is low relative to the number of subjects who wrote the test

<table>
<thead>
<tr>
<th>Test 1</th>
<th>Test 2</th>
<th>Test 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of ORs</td>
<td>403</td>
<td>347</td>
</tr>
<tr>
<td>Number of RGs (% of OR)</td>
<td>77 (19%)</td>
<td>96 (28%)</td>
</tr>
<tr>
<td>Number of Misconductees</td>
<td>20</td>
<td>12</td>
</tr>
<tr>
<td>% of Misconductees of RGs</td>
<td>26%</td>
<td>13%</td>
</tr>
<tr>
<td>% of Misconductees of OR</td>
<td>5%</td>
<td>3%</td>
</tr>
</tbody>
</table>
1. PREVALENCE AND IMPACT OF AM

ii. Repeat Offenders

<table>
<thead>
<tr>
<th>Number of incidences of misconduct</th>
<th>52</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Repeat vs. One-time offenders</td>
<td>9 repeat offenders</td>
</tr>
<tr>
<td>The number of subjects who performed misconduct</td>
<td>Four on Test 1 and 2</td>
</tr>
</tbody>
</table>

Therefore, due to repeat offences, there were 41 misconductees among all three tests.

iii. The Impact

<table>
<thead>
<tr>
<th></th>
<th>Test 1 (worth 10%)</th>
<th>Test 2 (worth 20%)</th>
<th>Test 3 (worth 30%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in mark (/30)</td>
<td>1.08</td>
<td>1.08</td>
<td>0.85</td>
</tr>
<tr>
<td>Change in mark (%)</td>
<td>3.58</td>
<td>3.6</td>
<td>2.83</td>
</tr>
<tr>
<td>Change in final grade (%)</td>
<td>0.36</td>
<td>0.72</td>
<td>0.85</td>
</tr>
</tbody>
</table>

NOTE: two subjects who performed AM in all three tests benefited 4 and 6% in their final grade.

1. PREVALENCE AND IMPACT OF AM

2. CHARACTERISTICS OF THOSE WHO PERFORM AM

i. Test Alteration

The majority of those who perform AM add text to their original answer:

- 67%
- 21%
- 10%
- 2%

2. CHARACTERISTICS OF THOSE WHO PERFORM AM

ii. Pen vs. Pencil

Not differences in prevalence of AM in those that use pen or pencil:

- 46% Pen
- 8% Pencil
- 46% Pen and Pencil
2. CHARACTERISTICS OF THOSE WHO PERFORM AM

iii. Sex differences

The majority of those who perform misconduct are female

*Class Distribution:
66% Female, 34% Male

iv. Overall Grades

The majority of those who perform academic misconduct have higher overall grades

DISCUSSION

1. The Prevalence and Impact of AM

i. Prevalence: What is the right number?
- # misconductees/ # total RG (13-26%)
- # misconductees/ # total OR (≤ 5%)
- 41/460 students (9%) enrolled in the class performed misconduct

ii. Impact: Could it be too much?
- Average benefit is low (<1%)?
- But, the two students benefited 4-6%

2. The Characteristics of those who perform AM
Can we truly profile those who perform misconduct?