Motivated Misreports to Sensitive Survey Questions

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There Are Many Ways to Arrive at an Answer: Lucky Guesses vs. Edited Responses

<table>
<thead>
<tr>
<th>ABILITY QUESTIONS</th>
<th>SENSITIVE QUESTIONS</th>
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<tbody>
<tr>
<td>• Competing Response Goals:</td>
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<tr>
<td>• Accuracy versus speed</td>
<td>• Honesty versus impression-management</td>
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<td>• Measurement:</td>
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<tr>
<td>• Knowledge and guessing</td>
<td>• Actual behavior and tendencies to</td>
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<td></td>
<td>enhance, hide, cheat,...</td>
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Single-Response Process

Probability of Correct Response

\[ P(\theta, b_i) \]
How do People Self-Enhance or Self-Protect? Retrieve-Edit-Select (R-E-S)

1. Retrieval of response.
2. Decision to “edit” or “not to edit” response.
3. Selection of response category:
   • if “Edit”, selection of more positive response category;
   • otherwise, selection of initial response category.
Identification of Editing Stage

• Self-enhancement/self-protection considerations can be enhanced or reduced:
  • threats, self-affirmation, privacy protection methods;
  • apply more to judgments of oneself and less to judgments of others; and
  • take time.
Did you cheat in your data analysis?

Multiple questions

Truth

Self-Protection: Retrieval and Editing Stages

Did you cheat in your data analysis?

"Yes" (Pr(θₚ)) → "Edit" (YES)

"No" (1-Pr(θₚ)) → "Do not Edit" (NO)

"Yes" (Pr(θₑ)) → "Edit" (NO)

"No" (1-Pr(θₑ)) → "Do not Edit" (NO)
Being truthful for small compliance violations

Tracelines of R- and E-Stages with Resulting Response Probability

Response probability

e.g., with research practices
How Familiar Are You with the Following Terms? (Life Science Knowledge Test)

Never heard of it | 0 | 1 | 2 | 3 | 4 | 5 | Very familiar | 6

- Sciatica
- Meta-toxin
- Meiosis
- Antigen
Overclaiming (Paulhus et al. 2003)

Please rate your familiarity with the term “meta-toxins”

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<th>Response</th>
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<tr>
<td>Never heard of it</td>
<td>Somewhat familiar</td>
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Real items: sciatica, meiosis, antigen,…
Made-up items: meta-toxins, bio-sexual, retroplex
1. Power manipulation increases “editing tendency”.
2. Moderators:
   • Need-for-Cognition scale and Knowledge measures are positively related to Retrieval stage.
   • Self-Deceptive Enhancement scale is positively related to Editing stage.
Over-Claiming Study

• 514 participants

• Two conditions
  1. Recall an event in which you experienced power.
  2. Recall an event in which you went shopping.

• DV: Rate familiarity with 12 real and 3 made-up Life Sciences items

• Moderators:
  o "Self-Deceptive Enhancement", "Need-for-Cognition", Knowledge test

• SDE Items:
  1. My first impressions of people usually turn out to be right.
  2. It would be hard for me to break any of my bad habits. (R)
  3. I don't care to know what other people really think of me.

• NfC Items:
  1. I would prefer complex to simple problems.
  2. I like to have the responsibility of handling a situation that requires a lot of thinking.
  3. Thinking is not my idea of fun. (R)
1. Sciatica is:
   - an anxiety-reducing drug
   - caused by the compression of nerves
   - a hormone
   - a protein
   - none of the above

2. Meiosis is:
   - a chromosome
   - a hormone
   - a type of cell division
   - a skin disease
   - none of the above

3. Antigen is:
   - a hormone
   - a protein
   - a disease
   - a virus
   - none of the above

4. Meta-toxins are:
   - produced by cancer cells
   - pain relievers
   - chemical agents
   - used to develop vaccines
   - none of the above

5. Bio-sexual
   - refers to the reproduction of plants
   - refers to non-chemical birth-control methods
   - refers to the passion for biology
   - refers to an account of someone’s sexual life
   - none of the above

6. Retroplex is:
   - a part of cell structures
   - a neck muscle
   - an involuntary movement
   - the inability to recall past events
   - none of the above
Power increases familiarity ratings
F(6, 507) = 4.2, p <.001
No interaction with item

More knowledgeable respondents show stronger familiarity effect under power (t(11) = 4.8, p<.001)

Results for 3 real and 3 fake items.
Need-for-Cognition associated with higher Familiarity Response for Real Items
Self-Deceptive Enhancement associated with higher Familiarity Response
RES Model: Retrieval Stage Effects

NfC associated with higher “Initial Familarity” for real items

SDE associated with higher “Initial Familarity” for real and fake items in Power Condition
RES Model: Editing Stage Effects

- SDE is positively related to Editing Probability in Power Condition
- No NfC effects (as predicted)
Measuring Motivated Misreports

• Single process models are too restrictive and unrealistic.
• R-E-S models try to capture stages preceding a response:
  • Initial latent response
  • Editing decision
  • Response category selection
• Editing stage can be
  • influenced separately via experimental interventions,
  • measured reliably, and
  • related to psychological measures to facilitate interpretation.