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May 18, 2012
Survey respondents do not always pay close attention to questions

Some reasons for lack of attention include:

- Respondents may feel rushed.
- Respondents may have trouble understanding the questions because they are poorly constructed.
- Respondents may have poor reading skills.
- Respondents may not be taking the survey seriously.
- Respondents may be satisficing (Krosnick 1991), by giving the first acceptable response rather than the best response.

All of these causes add measurement error to surveys.
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Traditional attentiveness
- Clearly not paying attention to the question
- Examples include picking a suboptimal or impossible response

Attentiveness detected through Instructional Manipulation Check (IMC)
- Trick questions
- Respondents need to read every word to answer them correctly
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Detecting attentiveness and satisficing through the Instructional Manipulation Check (IMC)

- Oppenheimer, et al. (2009), *Journal of Experimental Social Psychology*
- Survey item starts with a standard question.
- Interjects with an instruction to **ignore the question they are about to see** and give a different response.
- Instruction typically requests that respondent give an answer that is nonsensical.
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We are interested in learning about your preferences on a variety of topics, including colors. To demonstrate that you’ve read this much, just go ahead and select both red and green among the alternatives below, no matter what your favorite color is. Yes, ignore the question below and select both of these options. What is your favorite color?

- Pink
- Red
- Green
- White
- Black
- Blue
Current findings on the IMC are mixed

- Berinsky, Margolis, and Sances (2011)
- People who do poorly on IMC measures are not necessarily “bad” respondents.
- Respondents “flow in and out of paying attention over the course of a survey.”
- Panel studies show moderate consistency of IMC performance over time.
- At a single point in time, IMC performance related to observed strength of experimental effects.
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Summary of findings from Wave 1

- Visual presentation of important items encourages respondents to read entire items.
- There are different types of attentive respondents:
  - People who are reading every word carefully (IMC).
  - People who are taking surveys seriously, even if they are not reading closely (Traditional).
- Both types of attentiveness have different consequences for the performance of survey experiments.
  - People who did well on IMC were clearly better readers.
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- Do respondents learn how to answer attentiveness questions?
- Is it useful or desirable to profile people based on attentiveness?
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  - 4 IMC attentiveness questions and 4 “traditional” attentiveness questions
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- Median LOI 18 minutes in Wave 1, 16 minutes in Wave 2
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Were single-wave respondents less attentive?

**IMC**
- Low: 13% Multiwave, 13% Single Wave
- Medium: 14% Multiwave, 16% Single Wave
- High: 74% Multiwave, 71% Single Wave

**Traditional Attentiveness**
- Low: 4% Multiwave, 7% Single Wave
- Medium: 23% Multiwave, 23% Single Wave
- High: 73% Multiwave, 71% Single Wave
Slight increase in performance in IMC items across waves
Larger increase in performance in Traditional items across waves
About 30% of respondents had changed attentiveness scores across waves.
Respondents assigned to one of two news treatments about a proposed KKK rally on the Ohio State campus

Treatment 1: Free Speech

Treatment 2: Safety Concerns

Respondents required to stay on article page for at least 20 seconds
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Ku Klux Klan Tests OSU’s Commitment to Free Speech
Published: May 2, 2011

How far is OSU prepared to go to protect freedom of speech? The Ku Klux Klan has requested a permit to conduct a speech and rally on the Ohio State campus during the Fall Quarter of 2011. Officials and administrators will decide whether to approve or deny the request in December.

Numerous courts have ruled that the U.S. Constitution ensures that the Klan has the right to speak and hold rallies on public grounds, and that individuals have the right to hear the Klan's message. In one confrontation last October in Chillicothe, Ohio, several bystanders were injured by rocks thrown by Klan supporters and protesters. Usually, a large police force is needed to control the crowds.

Opinion about the speech and rally is mixed. Many students, faculty, and staff worry about the rally, but support the group’s right to speak. Clifford Strong, a professor in the law school, remarked, “I hate the Klan, but they have the right to speak, and people have the right to hear what they have to say.”
Possible Ku Klux Klan Rally Raises Safety Concerns
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Can campus police prevent a riot if the KKK comes to town? The Ku Klux Klan has requested a permit to conduct a speech and rally on the Ohio State campus during the Fall Quarter of 2011. Officials and administrators will decide whether to approve or deny the request in December.

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Opinion about the speech and rally is mixed. Many students, faculty, and staff have expressed great concern about campus safety and security during the Klan rally. Clifford Strong, a professor in the law school, remarked, “Freedom of speech is important, but so is the security of the campus and the lives of its students.”
Respondents asked two questions after the article.

Do you think that O.S.U. should or should not allow the Ku Klux Klan to hold a rally on campus?

1. O.S.U. should allow the Ku Klux Klan to hold a rally on campus
2. O.S.U. should not allow the Ku Klux Klan to hold a rally on campus

Please rank the issues in order of importance based on how important it is to you when you think about whether or not O.S.U. should allow the Ku Klux Klan to hold a speech and rally on campus...

1. A person’s freedom to speak and hear what he or she wants should be protected
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3. Racism and prejudice should be opposed
4. Ohio State’s reputation should be protected
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News article strongly influenced willingness to allow rally

Respondents with the free speech treatment were 23% more likely to say the KKK rally should be allowed.
IMC: Attentive respondents showed somewhat stronger experimental treatment effects

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<th>N2</th>
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<td>173</td>
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<td>High IMC W1</td>
<td>14% p=0.219</td>
<td>46</td>
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- Green: Free Speech
- Red: Safety Concerns
Traditional: Attentiveness did not influence the size of the treatment effect.
News story had a 16% treatment effect on ranking important issues.

- Ranked Speech First: 57% Free Speech, 41% Safety Concerns (p<0.001, N=491)
- Ranked Safety First: 25% Free Speech, 40% Safety Concerns (p<0.001, N=509)
Ranking Speech by IMC: Only the least attentive had diminished treatment effects

- Low IMC Both: 48% Free Speech, 40% Safety Concerns (N=145, N=173)
- High IMC W1: 67% Free Speech, 47% Safety Concerns (N=46, N=36)
- High IMC W2: 61% Free Speech, 41% Safety Concerns (N=113, N=121)
- High IMC Both: 61% Free Speech, 44% Safety Concerns (N=187, N=179)

Treatment Effect:
- 8% Free Speech, p=0.175
- 19% Free Speech, p=0.107
- 20% Free Speech, p=0.003
- 18% Free Speech, p=0.001
Ranking Safety by IMC: Attentiveness did not influence ranking safety first

Treatment Effect

- 12% (p=0.023) for Low IMC Both
- 28% (p=0.005) for High IMC W1
- 17% (p=0.007) for High IMC W2
- 14% (p=0.004) for High IMC Both

Legend:
- Green: Free Speech
- Orange: Safety Concerns
Ranking Speech by Traditional: Treatment effects for ranking are weakest among the never attentive

- **Low Trad Both**: 41% Free Speech, 43% Safety Concerns (N=37, N=38, p=0.886)
- **High Trad W1**: 62% Free Speech, 38% Safety Concerns (N=40, N=27, p=0.067)
- **High Trad W2**: 59% Free Speech, 37% Safety Concerns (N=95, N=100, p=0.002)
- **High Trad Both**: 59% Free Speech, 44% Safety Concerns (N=319, N=344, p<0.001)
Ranking Safety by Traditional: Similar findings with ranking safety

Treatment Effect

- 4% (p=0.746)
- 17% (p=0.191)
- 20% (p=0.004)
- 16% (p<0.001)

- Low Trad Both: 32% (N=37) vs 29% (N=38)
- High Trad W1: 26% (N=40) vs 42% (N=27)
- High Trad W2: 25% (N=95) vs 45% (N=100)
- High Trad Both: 24% (N=319) vs 41% (N=344)
Summary

- Profiling on attentiveness may have a few advantages
  - Attentiveness fluctuates and often improves after multiple administration of items
  - Current attentiveness is a better predictor of treatment effects than past attentiveness
  - Having been attentive in the past may predict strength of treatment effects in the future

- Does the IMC help predict performance on survey tasks better than traditional questions?
  - Not necessarily
  - Wave 1 showed that IMC is a better predictor of reading comprehension tasks
  - IMC and traditional methods do equally well for “easy” reading experiments
  - IMC is more difficult and time-consuming to administer
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