

# Potential Pitfalls of On-line Platforms

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# Background

1. My bias:
  - vast majority of my audit research involves practitioners in controlled experiments
2. My emphasis here is audit JDM research but my concern about a potential lack of control relates to all areas
3. JDM audit research faces some difficult issues:
  - topics studied are dictated by data availability e.g. KAMs/CAMs
  - participants are even harder to get
  - some migration of researchers to other areas due to ease of data collection
4. Huge variation in on-line platforms:
  - e.g. Mturk to on-line platform with University alumni categorized by degree/graduate year

# Two Separate Issues Related to Present On-line Platforms

1. Experience/knowledge of participants
  - Do we need experienced participants?  
(see Libby, Bloomfield and Nelson 2002; Peecher and Solomon 2001)
2. Potential issues of experimental control
  - Less knowledge about participants
  - Additional information may be consulted
  - Working independently?
  - Dropout rate
  - Control of extraneous variables (e.g. multi-tasking)

# Therefore Researchers Should Ask Themselves

- Are experienced professionals required?
  - If yes, what on-line platforms provide these participants and provide adequate experimental control
  - If no, consider the advantages / disadvantages of using controlled experiments with students versus on-line platforms

# Comparisons between Alternatives

	Controlled	Mail	Qualtrics / Website	Mturk
Researcher knowledge of participants	Very High	Generally High	High	Low
Time spent known	Yes	No	Yes	?
Work independently	Yes	Likely	Likely	?
Multi-tasking	No	?	?	Likely
Dropout rate	Very Low	Low ?	Very Low	High
Contamination	Very Low	Very Low	Very Low	Very High

# Is There a Problem

*In a small apartment in a small town in northeastern Mississippi, Sarah Marshall sits at her computer, clicking bubbles for an online survey, as her 1-year-old son plays nearby. She hasn't done this exact survey before, but the questions are familiar, and she works fast. That's because Marshall is what you might call a professional survey-taker. In the past five years, she has completed roughly 20,000 academic surveys. This is her 21st so far this week. And it's only Tuesday.*

(Source: 'The Internet's hidden science factory', J Marder and M Fritz 2015)

Potential solutions: attention checks; manipulation checks

# Some Potential Problems with Mturk and Similar Approaches

- Do we really know who is completing the study?
- Are the participants contaminated by previous studies?
- Is there less care in the design, i.e. penalties for re-running an experiment are less?
- What is pilot testing and how many pilot experiments are run before the final experiment?
- Manipulation check failures?
- Much of the audit JDM research is motivated around benefits for auditors and the PCAOB. Will it have an impact?

# Affect of New On-line Platforms on JDM Audit Research

- Some trends I don't like:
  - a growing belief that getting experts is impossible
  - access to easy participants is driving the research agenda away from audit processes
  - we are seeing a greater number of perfect experiments and possibly expectations of perfect experiments



# Publication Perspective

- Space in the top journals is limited and there is a lot of competition
- What is the comparative advantage of your paper over other papers:
  - interesting issue
  - choice of variables examined
  - strong design
  - appropriate participants
  - interesting result

# Conclusion

- The right on-line platforms have great promise for:
  - multi incremental experiments
  - opportunity to both address task effects and multi-period effects
- Considerable thought needs to go into developing experimental controls to convince others of the benefits
- Hopefully, we can move forward with some of the new innovative platforms suggested by the other panelists