#### PhD Forum: Experimental Research in Accounting and Auditing

Victor Maas, Amsterdam Business School, University of Amsterdam Steve Salterio, School of Business, Queen's University





#### Agenda and dramatis personae

- Experimental overview Steve and Victor
- Management Accounting experiments Victor
- Audit experiments Steve
- Financial accounting experiments Victor
- Questions and comments YOU









## What is an experiment?

Drawn from presentations made by: Bob Libby, Victor Maas, Mark Peecher, Steve Salterio and Ira Solomon





## **Definition – Positive Research**



 Scientific research is systematic, controlled, empirical and critical investigation of phenomena guided by theory and hypotheses about the presumed relations among such phenomena

(From: Kerlinger, F.N. *Foundations of Behavioral Research*).





#### **Experiment - A Definition**

- Phenomena (an individual or social process) is reproduced in controlled situations, and then various measurements are made of the phenomena, often measurements that could not be collected in natural setting.
  - Reynolds, P.D., A Primer in Theory Construction, 1987, p. 156.





## When should you do experiments?

• Theory:

a set of interrelated **constructs** (concepts), definitions, and propositions that present a systematic view of phenomena by specifying the **relations among variables** with the purpose of **explaining and predicting** phenomena (Kerlinger)





## **Remember this always**!!!

- Theory is generalizable!
- Experimental findings are NOT generalizable except via the theory!
- More "realism" in experiment <u>does not</u> increase generalizability unless context is theorized to have a role!





## How to do an experiment?

- Experimenter "manipulates" explicitly one or more variables and randomly assigns subjects to various groups.
- The groups receive different combinations of the variables ("treatments") and one group may receive no explicit treatment (control group).







## Don't use experiments if:

- Goal is to identify parameter size
- Goal is to identify "real world" degrees of association
- Explore a topic where there is no or very limited theory to guide investigation





## **Advantages of Experiments**

- Allow for strong casual inferences (as opposed to associations)
- Focus on factors of theoretical interest
- Disentangle effects of extraneous factors
- Internal validity is king!!!

-Hence, we will study predictive validity





## **Features of Experiments**

- Manipulation of independent variables
  - Ensure manipulation's effectiveness
  - Manipulate construct of interest
- Control extraneous variables
  - random assignment (less self-selection)
  - hold specific factors constant
  - measure specific factors (e.g., covariates)







#### **Final Predictive Validity Question**

- What is the point?
  - Does it generalize?
  - -ls it interesting?
  - Are the findings new to anybody?
  - What has the paper added to the body of knowledge?





## **Psychology and Economics based Experiments**

Attribute	Psychology- based	<b>Economics-based</b>
<b>Repeated trials</b>	Often not	Usually yes.
Incentives	Often not; flat \$, accountability	Usually yes. Performance- based
Deception	Usually not. Last resort.	Rare.
Formal script	Doubtful but?	Yes.
Unit of analysis	Individuals or teams	Often market behavior





#### Key questions in experimental management accounting

- 1. How does management accounting affect superior subordinate relationships?
- 2. How does management accounting affect cooperation and competition among peers?
- 3. How does management accounting facilitate economic decision-making?







#### Top 5 Under-researched Areas for Audit Experiments



- 1. The intersection of the organization and the individual meso OB research in auditing
- 2. Understanding interactions between auditors and client staff beyond negotiation
- 3. Understanding effects of regulatory scrutiny on auditor decisions, judgments and planning
- 4. Expanding consideration of incentives beyond economic incentives
- 5. The context dependent effects on critical audit judgments associated with the new auditor's report





#### Key questions in experimental financial accounting

- How do regulations and the incentives, individual characteristics and social environment of managers and accountants affect reporting choices?
- 2. How do these factors and the reporting choices made -affect investors' and analysts judgments and decisions?







#### Over to you!







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#### For more wit and wisdom from Steve

Read Steve's blog at





#### www.morebysteve.wordpress.com



