**PDW title: Experimental design 101: How to design successful experiments in management research**

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**Note:** \* indicates organizers

**Why is PDW necessary?**

In recent times, experimental designs have garnered renewed and increased attention in management research (Hsu, Simmons, & Wieland, 2017; Podsakoff & Podsakoff, 2019; Van Witteloostuijn, 2015) since Colquitt’s (2008) call for more laboratory experiments in the *Academy of Management Journal (AMJ)*. However, many management scholars have received limited training in experimental designs, as exemplified by the under-appreciation of and general misunderstandings surrounding experimental designs (Podsakoff & Podsakoff, 2019). As a result, management scholars also face great challenges in designing and conducting experimental research, as well as publishing their research with experimental designs. Therefore, this PDW aims to enhance participants’ skills in experimental design in management research. Our four expert speakers will share their insights, experiences and practical knowledge using examples and challenges they encountered in conducting experimental research.

**Language:** English

**Intended participants:**

This PDW is designed for participants who have basic knowledge about experimental research, such as having taken introductory experimental design classes or having some experiences in using this method but still lacking confidence in designing experiments independently.

**Admission:**

There are no requirements for registration. However, a registration is needed so that we can plan ahead to cater to participants (e.g., size of the room).

**Learning objectives:**

Participants will:

1. Understand the roles and purposes of experiments in advancing management research;
2. Understand why mistakes threaten the rigor of experimental research, and learn from published examples how to avoid these mistakes;
3. Learn some basics on conducting field experiments; and
4. Learn from existing examples where cultural priming techniques have been applied in management research.

**Session structure:** 120 minutes in total

1. **Opening remarks** by PDW organizers (5 minutes)
2. **Presentations by four experienced scholars:** 100 minutes (20 minutes + 5 minutes of Q&A x 4 speakers)

* Roles and purposes of experiments in management research: Examples and inspirations (Presenter: Associate Professor Roy Chua)
* Common mistakes and challenges in conducting experiments in management research (Presenter: Assistant Professor Zhi Liu)
* Bring reality to the lab and bring lab to the reality: how to increase the validity of your experimental design and some basics about field experiment (Presenter: Assistant Professor Ke Michael Mai)
* Priming culture: The practice and implication in management research (Presenter: Associate Professor Chi-Ying Cheng)

1. **Q&A from audience:** 15 minutes

**Presentation details:**

1. **Roles and purposes of experiments in management research: Examples and inspirations (Presenter: Associate Professor Roy Chua, Singapore Management University)**

Experiments are increasingly common in management research. This presentation explores the roles and purposes of using experiments to advance theory and practice in management research. I will share some examples from my own and others research and highlight areas of inspirations.

*Learning objectives:*

1. Understand the roles and purposes of experiments in advancing management research
2. Learn ways that experimental designs can be incorporated in management research
3. Appreciate and learn from existing published examples where experiments are used
4. **Common mistakes and challenges in conducting experiments in management research (Presenter: Assistant Professor Zhi Liu, Peking University)**

Conducting experiments is challenging for some typical management students who are not trained to use the methodology. This presentation shares my personal experiences and my observations of common mistakes and mis-perceptions of experiments, and difficulties of designing experiments to examine workplace phenomenon such as leadership, team and HR decision making. I will also discuss how to address these issues.

*Learning objectives:*

1. See examples of mal-implementation of experiments in management research
2. Understand why the mistakes threaten the rigor of the study
3. Learn from published examples how they avoided the mistakes
4. **Bring reality to the lab and bring lab to the reality: how to increase the validity of your experimental design and some basics about field experiment (Presenter: Assistant Professor Ke Michael Mai, National University of Singapore)**

Experiments are studies using some type of random procedure, which determines for each participant whether they receive a treatment versus no treatment or a comparison treatment. Through random assignment the researcher can causally attribute recorded outcomes to treatments or manipulations. Despite the benefit of identifying the causal relationship, the generalizability of experiment has been questioned, especially in the management field, in which we would like to bring implications to the managers via our experimental findings. In this talk, I would like to highlight the ways to bring the naturalistic manipulation into the experiment to enhance the validity of the manipulation, and also bring the experiment to the more naturalistic setting, i.e., the *field*.

*Learning objectives:*

1. Understand the importance of experiments in management research and the potential generalizability issue
2. Learn how to conduct lab research on management topics using manipulation and outcome measurement with high validity
3. Learn some basics on conducting field experiments
4. **Priming culture: The practice and implication in management research (Presenter: Associate Professor Chi-Ying Cheng, Singapore Management University)**

Culture is an essential topic in management. However, how to conceptualize and measure culture remains a challenging issue in management research. To address the causal relationship of culture and individual behavior, priming technique has been applied to investigate cultural impact. I will provide an overview of priming as a method for measuring culture. I will use examples from my own and other’s research to illustrate the types of cultural priming and the implications on management research.

*Learning objectives:*

1. Understand different ways of measuring culture
2. Learn different cultural priming techniques
3. Learn from existing examples where cultural priming techniques have been applied in management research

**References:**

Colquitt, J. A. (2008). From the editors publishing laboratory research in AMJ: A question of when, not if. *Academy of Management Journal*, *51*(4), 616-620.

Hsu, D. K., Simmons, S. A., & Wieland, A. M. (2017). Designing entrepreneurship experiments. *Organizational research methods, 20*(3), 379-412.

Podsakoff, P. M., & Podsakoff, N. P. (2019). Experimental designs in management and leadership research: Strengths, limitations, and recommendations for improving publishability. *The Leadership Quarterly, 30*(1), 11-33.

Van Witteloostuijn, A. (2015). Toward experimental international business: Unraveling fundamental causal linkages. *Cross Cultural Management: An International Journal, 22*(4), 530-544.