Survey Research in IR Today: Using Literature and Theory to Guide Survey Design, Analysis, and Interpretation

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Matthew Grandstaff
and Karen Webber

**Louise McBee Institute
of Higher Education
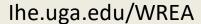UNIVERSITY OF GEORGIA**

Survey Research in IR Today

- Often a substantial task for IR professionals

- Important to provide student and staff attitudes, perceptions, use of services (if designed properly)

- Can be a good source of information for policy makers

- Can help position IR to be a valued member of the decision support team

Today's session

- Describe ways in which theory & existing research can improve survey design and analysis

- Draw on the experience of executing a longitudinal multi-institution survey

- Ask for your experiences and ideas

- Offer recommendations for good practices that are applicable for the future

Ihe.uga.edu/WREA

The WREA Project

- NSF-Funded multi-Institutional Grant to examine the effect of students' access to work-related experiential activities (WREAs)

- An important facet is geographic location

- Engineering and computer science students at six institutions in GA

- Mixed Methods design to examine perceptions and experiences from students, career center directors, employers, and company recruiters

  – Quantitative survey data from students in spring 2021 and spring 2022

  – Individual interview data from career center directors (2021) and sample of students (2022)

  – Focus group interviews with employers and company recruiters (2021 and 2022)

  – Observations of career fairs (online 2021 & 2022) hope in-person (2023)

- Because project is grant-funded, we had the luxury of working with an external survey center who would assist in the development and administration of the surveys

Incorporate Theory Throughout

1. Prior to Survey Design

2. Survey Instrument

3. Initial Analysis

4. Presentation of Results

See Jaeger et al. (2013). Putting theory to practice. *About Campus*, 11-15.

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Pre-Survey Design

- Familiarize yourself with the research findings on the topic

- Understand the ways that researchers have designed studies to address certain issues

- Use the existing research to identify gaps that your own study could potentially fill

- Pay attention to the use of theoretical frameworks

Briefly- Literature & Conceptual Framework

Before delving into the topics covered on the survey, we wanted to ensure that we explored literature on survey design

- Survey response rates are related to a number of factors including:
  - solicitation and distribution method (Dillman, 2000, Evangelista, Poon & Albaum, 2012; Suskie, 1996; Vannette & Krosnick, 2018)
  - incentives (Singer & Ye, 2013)
  - topic salience (Powers & Valentine, 2009)
  - survey fatigue (Porter, Whitcomb & Weitzer, 2004)
  - access to computer & Internet (Jaggars et al., 2021)

- All aspects of online surveys (invitation memo, reminder emails, survey appearance, date sent) play a role in how frequently students respond (Porter & Whitcomb, 2003)

Theoretical Framework – Intrinsic Motivation

- Drawing on Deci & Ryan's (1985) self-determination theory, we framed participation as an extension of a student's intrinsic motivation

- Students are expected to pursue opportunities that lead to personal growth and development. The motivation to do so lies not in external validation, but instead comes from the desire to achieve a stronger sense of self

- Due to intrinsic factors, students are more likely to respond to a survey that was presented as an opportunity to better understand the topic of our study (work-related experiential activities, WREAs) and the ways in which they are experienced by participants

Creating the Survey Instrument

- Using our study as an example, we drew on established literature and NACE career competencies
  - This creates a direct link during the analysis phase
- Connected with members of our advisory board (practitioners in the field) to ensure that the language of questions was consistent with terminology of the field

Initial Analysis

- Quantitatively, use research/theory to ensure appropriate methods during the analysis phase

- Survey weighting, descriptive statistics, and quasi-experimental design all should be traced back to relevant research

- Not only will this help you make sense of your results, but it enhances the validity of your study design

Results and Discussion

- The write-up of results is heavily dependent upon the researcher's ability to show how the study either expands on or runs counter to existing literature

- Discussion, implications of findings require using theoretical lens

Steps in WREA Survey Development and Administration

1. Survey (and total project) approved by IRB (at all 6 institutions)
2. Draft Instrument, reviewed by Advisory Committee
3. Instrument pilot tested
4. Worked with Survey Research Center to administer
5. Initial data analysis
6. Findings

Survey Distribution and Reminder Schedule

	Institution A	Institution B	Institution C	Institution D	Institution E
Initial Invitation	March 16	March 18	March 23	March 23	April 1
First Reminder	March 25	March 30	April 1	March 31	April 7
Second Reminder	March 31	March 31	April 7	April 8	April 13
Third Reminder	April 13	April 7	April 21	April 21	April 21
Fourth Reminder	April 21	April 15			
Fifth Reminder		April 21			
Survey Close	May 18	May 18	May 18	May 18	May 18

Survey Response Breakdown

	Institution A	Institution B	Institution C	Institution D	Institution E	Combined
Sample Size	2,300	8,211	520	112	127	11,270
Undeliverable	1	7	0	0	0	8
Adjusted Sample Size	2,299	8,204	520	112	127	11,262
Responses	307	1,084	56	6	20	1,473
Excluded	7	7	1	0	11	26
Valid Responses	300	1,077	55	6	9	1,447
Response Rate	13.0%	13.1%	10.6%	5.4%	7.1%	12.8%

Analysis Phase

- Mixed-methods design that also incorporates geospatial analysis

- Initial indications suggest that weighting was not necessary, but we were extensive in our testing to ensure that was consistent with literature and theory

- Descriptive statistics and regression models then included variables that we had planned for due to the use of research

Write-up of our Findings

- In presenting our work, we have been mindful of our audience

- Theory provides a way to focus

- Theory is helpful here in communicating your findings to diverse constituents
    - What does it mean to present to researchers vs. administrators vs. practitioners?

Findings

- 1,447 usable responses
- Some but generally few differences by gender, major, financial aid status
- Over half completed at least one WREA even though less than 20% said required
- Respondents participated in-person over remote WREAs
- Respondents perceived positive gains from WREA experience
- See paper on NACE competencies

Your Experiences with Survey Research

- When you design a survey, how do you incorporate literature/theory?

- If you don't do this, what are the biggest barriers?

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Good Practices For Survey Research in IR

- Understand the literature on survey research, consider relevant theory

- Be knowledgeable about the topic, research design, and analytic methods

- Consider Survey Format
  - Mode of delivery- internet access, accessible across phone & laptop
  - Wording - succinct length of survey, easily understood language

- Collaborate- work with different organizations/offices/etc. to allow access from multiple angles, know other open surveys

- Have a plan and then carry out accurate analysis and reporting

Questions? Comments?

- Matt   matthew.grandstaff@uga.edu
- Karen   kwebber@uga.edu

Thank you!

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