

## **The StudyResponse project: A Description and Evaluation of Using Standing Panels of Participants for Psychological Research**

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StudyResponse Technical Report Number 13006  
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The Internet offers researchers a chance to overcome some of the limitations of more traditional research designs (e.g., using undergraduates as participants) by allowing researchers to identify and solicit participation from a variety of populations (Stanton & Weiss, 2002). One such resource that has been developed to aid researchers to solicit participants is the StudyResponse project. In my own research I have used the standing panel of participants in three separate studies. Each study was survey based and StudyResponse easily accommodated my need for data collection. This is a report describing my use of the panel and the effectiveness of the StudyResponse.

### *Study 1: Development of the Workplace Cognitive Failure Scale*

Three studies were conducted to develop and validate the Workplace Cognitive Failure Scale (WCFS; see Wallace, & Chen, 2002). In Study 2, two samples were used to increase the generalizability of the results: (1) A student sample and (2) a working sample consisting of full-time employees staffed in a variety of occupations (e.g., production, construction). The working sample consisted of 323 participants that were recruited over e-mail using StudyResponse. Data collection for the working sample was web based and completed in a single session. Each participant followed a hyperlink embedded in a recruitment e-mail to a secure website where the survey was located. The sample consisted of 220 females with 88% being Caucasian, 4% African-American, 4% Asian-American, 2% Hispanic, and 2% other or non-disclosed. The average age of the sample was found to be 37.3 (SD = 10.6).

Each participant completed several questionnaires: WCFS, trait cognitive failure, state anxiety, on-task behavior, role-overload, safety behavior (i.e., safe and unsafe behaviors), and micro-accidents.

Results of the study supported all expectations. The most interesting finding was found when examining the data from the employees via StudyResponse. The WCFS was designed to be a context specific measure of cognitive failure in the workplace and StudyResponse allowed me to gain information from full time employees. The findings with regard to the full time employees were more interesting because the hypothesized relationships were much stronger in this sample than the student sample. StudyResponse allowed me to identify full time employees and solicit information from them in a much

timelier fashion than trying to gain access to multiple organizations. I consider this to be a big plus of using StudyResponse.

*Study 2: Personnel application blanks: Persistence and knowledge of legally inadvisable application blank items*

This study examined the content of employment applications and the knowledge of Human Resource (HR) professionals and job applicants concerning application blank items over 2 studies (see Wallace & Vodanovich, in press). In Study 2 data was obtained from StudyResponse participants by asking them to identify potentially problematic application blank items. Participants were selected from StudyResponse based on their employment status. For this study 1000 fulltime employees were sampled. This sample was divided into two samples (i.e., 250 HR, Management & 750 full time employees) based on information provided by the participants. Each participant received an e-mail containing basic information regarding the study. Those choosing to participate followed a link to a website where the study was located.

After completing the study, participants were redirected to a web page that thanked them for their participation and were given directions to inquire about the results of the study if they desired to do so. As suggested by StudyResponse, a monetary prize was raffled off to increase motivation to participate.

A final sample of 683 individuals participated in the study. The potential applicant sample, labeled as such because they do not work in personnel jobs (i.e., human resources, administration) consisted of 513 individuals (response rate of 68.4%). The applicant sample had a mean age of 36.12 with a 12.26 standard deviation. Of the sample 127 were male. Minority status of this sample is as follows: African American (7.4%), Asian (2.3%), Hispanic (1.4%), 'other' or not disclosed (2.7%) with 86.2% being Caucasian. The HR sample ( $n = 124$ ; response rate of 49.5%) had a mean age of 36.36 with a standard deviation of 10.74 and consisted of Caucasians (83.1%), African-Americans (8.9%), Hispanics (3.9%), Asian (3.2%) and 'other' or did not disclose (1%). Additionally, the sample contained 71.3% females. HR participants were identified by asking participants to indicate their employment position.

This study demonstrated that HR professionals' awareness of potentially legally problematic application blank items is better than applicants as well as identifying certain group differences (e.g., race).

The key benefits of using StudyResponse for this study were: (1) speed of data collection and (2) access to numerous full time employees, including HR workers.

*Study 3: Confirmatory Factor Analysis of the Boredom Proneness Scale: Evidence Construct Validity and Measurement Invariance Across Cultures*

This study was designed to assess the factorial validity of all proposed factor structures that have been presented via exploratory factor analytic methods using confirmatory factor analysis (CFA) in LISREL (Jöreskog & Sörbom, 1993). Additionally, it was designed to test the measurement invariance of the final accepted CFA model across cultures. Specifically, it was designed to assess the measurement invariance across Americans and Australians. StudyResponse offers access to not only Americans, but also to multiple nations and ethnic groups. Such a study would have taken considerable cooperation between researchers on two continents, but StudyResponse allowed me to forgo this costly step by providing electronic contact with such individuals. While this study is currently being written up for submission, the total sample consisted of 1342 with 152 reporting that they were Australian.

The key feature of StudyResponse to highlight from this study is the connectivity of researcher to participant. In other words, StudyResponse allowed me to collect data in a timely and inexpensive fashion from participants all over the world. I have yet to see any other method or tool besides the Internet that enables such ease of multi-cultural data collection.

#### *Evaluation of StudyResponse*

StudyResponse has allowed me to collect more data in a shorter amount of time than I had previously thought possible. Two of the 3 studies described above have been presented at national and international conferences, while one (i.e., Wallace & Vodanovich, in press) has been accepted for publication. It appears that the scientific community is opening up to the idea of Internet data collection methods. The major benefits of the panel that I have personally identified I believe to be major benefits to many social science researchers. First, the time and speed of data collection is phenomenal. Once a person has designed a web page for data collection, a researcher might have his/her data in a working week. Secondly, the sample that is provided by StudyResponse is diverse and provides access to thousands of employees (something that is highly valuable for many I/O Psychologists). Third, the panel of participants at StudyResponse consists of various cultures and ethnic groups. Cross-cultural researchers could greatly benefit from using the panel. One downfall of the panel is its high percentage of females as participants. However, to overcome this slight limitation, a researcher can select from over 40000 participants to try and gain equality of gender (and race) for his or her sample.

In summary, StudyResponse has proved to be a valuable tool for my own research. I encourage others to use the panel as well as sign up as a participant.

## References

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\* These three studies were completed while the author was at the Georgia Institute of Technology.