
Designing Unbiased Surveys for HCI Research

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Abstract

Surveys are a commonly used method within HCI research. While it initially appears easy and inexpensive to conduct surveys, overlooking key considerations in questionnaire design and the survey research process can yield skewed, biased, or entirely invalid survey results. Fortunately decades of academic research and analysis exist on optimizing the validity and reliability of survey data, from which this course will draw. To enable the creation of unbiased surveys, this course demonstrates questionnaire design biases and pitfalls, provides best practices for minimizing these, and reviews different uses of surveys within HCI.

Author Keywords

Surveys; User Experience; Research Methodology; Questionnaire Design; Questionnaire Biases

ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

Course description

Attendees to this course will gain a practical understanding of high-quality questionnaire design and the potential negative consequences of lower-quality surveys. The course will demonstrate common questionnaire biases and pitfalls while providing best

practices on how to minimize such biases [1, 2, 3, 4, 5]. This course also discusses the role of survey research within HCI by highlighting common applications and by examining frequently used standardized questionnaires measure usability and other aspects within HCI.

The course will combine lecture material with relevant real-world examples; however, a major portion of the course will be dedicated to a group activity during which attendees will apply the learned material to reviewing and revising example survey questions. Attendees will come from a variety of roles in academia and industry, either new to surveys or somewhat experienced but interested in the latest advances, with a common goal of creating unbiased and actionable surveys themselves; however, no formal prerequisites are required.

Instructor backgrounds

Hendrik Müller (Mueller) is a senior user experience researcher at Google, Inc. currently in Sydney, Australia. He leads user research for Google Drive, supports Google Docs, and previously worked on Google Health and several other products. Hendrik received his master's degree in Human-Computer Interaction from the Georgia Institute of Technology in Atlanta, USA, in 2007.

Aaron Sedley is a senior user experience researcher at Google, Inc. in Mountain View, focused on tracking and analyzing user attitudes via surveys. He currently leads survey research within Search. Prior to joining Google in 2003, Aaron held research positions with New York Times Digital, Young & Rubicam, and the Carnegie Endowment for International Peace. He earned a

bachelor's degree in Government from Wesleyan University in 1995.

Elizabeth Ferrall-Nunge is a user research lead at Twitter, Inc. in San Francisco, where she manages research for Revenue. Previously, she was at Google, where she worked on several different product areas, including Local +Pages for Businesses, Local Business Center, Google Maps Mobile, My Maps, and Reviews. Elizabeth received her bachelor's degree in Human-Computer Interaction and Computer Science from Carnegie Mellon University in 2007.

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