POPULATION COUNCIL
Ideas. Evidence. Impact.

PROJECT

Audio Computer-Assisted Self-Interviewing (ACASI)

PROJECT DETAILS ▼

Population Council researchers and information technology specialists have developed customizable interview software that safeguards privacy and improves standardization of data collected on sensitive topics.

The Issue

Effective policies and programs are built on accurate data. But when researchers ask questions face-to-face about sensitive topics —such as risky sexual behaviors—the possibility that respondents may not answer truthfully can be increased because of embarrassment or fear.

The Progress

The Council has created customizable software that provides greater privacy and confidentiality than face-to-face interviews and allows for standardization of the data collected. Called audio computer-assisted self-interviewing (ACASI), this technology allows respondents to listen to prerecorded survey questions through headphones and record responses using a touch screen or keypad. Respondents may simultaneously read the questions from a tablet screen, or they may close or hide the screen for complete privacy. The technology also allows for computer-assisted personal interviewing (CAPI) in which interviewers ask face-to-face questions, and responses are recorded using ACASI.

Studies comparing ACASI with face-to-face interviews indicate respondents are more likely to answer sensitive questions with greater candor when using ACASI. For example, respondents are more likely to touch the number 2 on a screen than say to an interviewer, "I had unprotected sex twice last week."

In addition to providing a way for respondents to answer sensitive questions honestly, using ACASI to collect data ensures that questions are asked the same way in each interview. Collected responses are automatically stored in a database, eliminating the need to manually input data, thereby reducing error and saving time and money.

ACASI devices can accommodate numerous types of questions and answers. Respondents can select Yes/No/Maybe, use a dialpad to respond, click on a graphic multiple times to indicate the number of times an event occurred, click on a calendar to describe behavior over a seven-day period, and so forth. The software also allows respondents to automatically skip irrelevant questions

and can confirm the consistency of survey responses. Recently, the software developers have added a feature that allows respondents to create a customized avatar that follows them through the interview process.

The software has been adapted to recognize 21 languages and dialects. It is available on a variety of platforms, including Windows-based laptops, touch-screen tablets, and Android smartphones and tablets to allow for more flexibility in research design in different environments.

ACASI has been used in field-based surveys, clinical trials, and studies, including school-based longitudinal studies of adolescents, microbicide research, and clinical trials of the Council's innovative one-year contraceptive vaginal ring.

The Impact

By ensuring standardization of interviews, privacy of interview responses, and the flexibility to reach even illiterate populations, the Council's ACASI software is improving the way data on sensitive behaviors are collected.

PRINCIPAL INVESTIGATOR

Stanley J. Mierzwa Director, Information Technology, New York

KEY STAFF (1)

Samir Souidi Enterprise Systems/Software Architect, New York

RESOURCES (18)

JOURNAL ARTICLE

Transitioning customized ACASI Windows.NET solution to Android Java on lower-priced devices and technical lessons learned

Authors: Stanley J. Mierzwa, Samir Souidi, Karen Austrian, Paul C. Hewett, Adan Isaac, Minyoi Maimbolwa, Chung Wu.

The Electronic Journal of Information Systems in Developing Countries

Publication Date: 2015

JOURNAL ARTICLE

Web-based, mobile-device friendly, self-report survey system incorporating avatars and gaming console techniques

Authors: Craig Savel, Stanley J. Mierzwa, Pamina M. Gorbach, Michelle Lally, Gregory Zimet, Samir Souidi, Adolescent Trials Network for HIV/AIDS Interventions.

Online Journal of Public Health Informatics

Publication Date: 2014

JOURNAL ARTICLE

Using biomarkers to assess the validity of sexual behavior reporting across interview modes among young women in Kampala, Uganda

Authors: Christine A. Kelly, Paul C. Hewett, Barbara Mensch, Johanna Rankin, Samuel L. Nsobya, Sam Kalibala, Pamela N. Kakande.

Studies in Family Planning

Publication Date: March 2014

RESEARCH PUBLICATION

Approaches that will yield greater success when implementing self-administered electronic data capture ICT systems in the developing world with an illiterate or semi-literate population

Authors: Stanley J. Mierzwa, Samir Souidi, Irene Friedland, Sarah A. Littlefield, Lauren L. Katzen, Craig Savel, Deborah Boccio, Saumya RamaRao.

Publication Date: 2013

JOURNAL ARTICLE

Effective approaches to user-interface design with ACASI in the developing world

Authors: Stanley J. Mierzwa, Samir Souidi, Irene Friedland, Lauren L. Katzen, Sarah A. Littlefield.

Interactions

Publication Date: 2013

VIEW MORE