

AUDIO COMPUTER-ASSISTED SELF-INTERVIEWING (ACASI)

Population Council researchers and information technology specialists have developed software for interviewees responding to sensitive questions. Audio computer-assisted self-interviewing (ACASI) provides greater privacy and confidentiality than answering aloud in face-to-face interviews.

A person using an ACASI computer hears prerecorded questions through headphones and presses color-coded numbers on a keypad or hand-held computer screen to answer them. Laptop, touch-screen Netbooks, and hand-held computers can be used. If a laptop is used, it can remain open to allow the respondent to read the question along with the voice in the headphones, or it may be closed for complete privacy. In addition, graphics may be imported to overcome language barriers. Council researchers have found that most participants quickly learn how to use the interview program and prefer the computer over face-to-face interviews.

Research demonstrates effectiveness of ACASI

Evaluation of ACASI provides strong evidence of the benefits of computerized interviewing for reporting of sensitive behavior. Council researchers, in collaboration with Brazilian colleagues at the Centro de Saúde Escola Dr. Alexandre Vranjac, Barra Funda (CSEBF) health center, conducted a randomized experiment comparing the reporting of risky behaviors in computerized versus face-to-face interviews. This study—involving over 800 women in a low-income area of São Paulo who were receiving care and treatment at CSEBF—found that those interviewed using the computer were significantly more likely to report high-risk sexual activities, for instance a greater number of lifetime and overlapping sexual partners, as well as less condom use. ACASI respondents were also more likely to reveal that they and their partners had recently used alcohol or drugs, behavior often associated with high-risk sexual activity.

Further investigation by the Council and in three studies by the Microbicide Trials Network (MTN) will continue to assess the degree to which greater privacy evokes greater candor in respondents.

ACASI is a valuable new tool for researchers, who need the most accurate information possible in order to draw valid conclusions. There is every reason to expect that ACASI will lend itself to adaptation for many fields, as its use for various reproductive health and microbicide studies demonstrates.

At the MTN, Council personnel are providing ACASI software for ongoing and future clinical trials. At two sites in Malawi, identical interviews—one face-to-face, one ACASI—were conducted with the same participants to see whether and how much answers differ. HIV-negative women participating at sites in India and two in the United States will use ACASI throughout another study.

The Council has also conducted an experiment evaluating face-to-face versus computerized interviewing at three clinical trial sites in South Africa. The study assessed the accuracy of participants' self-reported compliance with the agreed-to behavior called for by the study. It also investigated the reporting of sexual and other risk behaviors, and collected various STI biomarkers for validation of accuracy.

ACASI updates

The Council will redesign and further develop its current-generation software operating on tablet computers and Windows PDA hardware devices to operate on touch-screen Netbooks. In addition to developing software that can be used on the new hardware devices, the Council will create an administrative component to assist users to implement new surveys without the need for IT support and programming. This latter component will allow easier adoption of the Council's software for research projects requiring computerized survey interviewing. These technology enhancements will assist the Council in creating a next generation product that will serve the needs of researchers at the Council and at other institutions.

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