

Audio Computer-Assisted Self-Administered Interview (ACASI)

What Is ACASI?

The audio-computer-assisted self-administered interview, or ACASI, standardizes survey administration across a variety of settings and maximizes responses to highly personal and sensitive questions. ACASI builds on over a decade of work related to computer-assisted interviewing systems (computer-assisted telephone interviews, CATI; computer-assisted personal interviews, CAPI; and computer-assisted self-administered interviews, CASI).

ACASI is designed as a self-administered questionnaire on a computer. The computer displays the text of each question and its answer alternatives while presenting a prerecorded interviewer's voice, which reads these to the respondent, who listens privately through headphones. Respondents answer by touching the appropriate response option on the computer monitor.

Westat is a leader in this touch-screen version of ACASI, which capitalizes on the straightforward natural tendency to point to the chosen answer.

Advantages of an ACASI Questionnaire

Maintains privacy. ACASI maintains privacy; no one except the respondent can hear the questions. Moreover, ACASI has been shown to increase the reporting of sensitive behavior such as drug use, offenses, and mental health problems.^{1,2} In general, behaviors closer in time to the interview are considered more sensitive to report. With an ACASI,



respondents may be more likely to report current behaviors or activities (drug use, victimization) that they might not report to an interviewer.

Requires little skill and has high interest value.

ACASI works well even when respondents have limited computer and reading skills and is preferred over other methods for its interest and ease of use.³

1 Tourangeau, R., & Smith, T.W. (1998). Collecting sensitive information with different modes of data collection. In M. Couper, R.P. Baker, J. Bethlehem, C. Clark, J. Martin, W.L. Nicholls II, and J.M. O'Reilly (Eds.), *Computer Assisted Survey Information Collection*. New York: John Wiley & Sons, pp. 431-454.

2 Moum, T. (1998). Mode of administration and interviewer effects in self-reported symptoms of anxiety and depression. *Social Indicators Research*, 45, 279-318.

3 O'Reilly, J.M., Hubbard, M.L., & Lessler J.T. (1994). Audio and video computer assisted self-interviewing: preliminary tests of new technologies for data collection. *Journal of Official Statistics*, 10:197-214.

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Reduces length and complexity of training.

ACASI can reduce the cost of a survey in several ways. ACASI reduces the length and complexity of training field staff. Since the ACASI instrument is self-administered, field staff only need sufficient training on the instrument to be able to answer participants' most likely questions. At the same time, during the ACASI development, interview designers do considerable work to ensure that all items are readily understood by the respondent population, so participants' questions are kept to a minimum.

Reduces interviewer burden. ACASI methodology reduces interviewer burden, since it is readily adapted to group administration. Multiple interviews can be completed in a single session with a small group of respondents. The amount of cost savings depends on the number of interviews that are feasible in a single session, which varies with the survey context.

Increases data quality. Use of ACASI technology increases data quality. It reduces respondent error by restricting respondents' answers to allowable ranges and by ensuring correct navigation through the questions (following appropriate skip instructions), since these are automatically specified by the program. Moreover, having the computer "read" the questions aloud permits even respondents with poor literacy skills to self-administer the interview with a high level of accurate comprehension.

Identifies inconsistent responses during the interview. ACASI methodology can automatically identify inconsistent answers and ask the respondent to reconcile these before completing the interview. This prevents data problems and provides for greater standardization of the interview than can be achieved through the person-to-person format. Inconsistent answers can also trigger interventions by study field staff when necessary.

Speeds data collection and preparation. ACASI methodology facilitates electronic transmission of data from the field to the home office and eliminates the need for data cleaning and keying.



Sample Studies Using ACASI

Westat has developed and used ACASI in a number of surveys that involved sensitive questions, including:

○ **Survey of Youth in Residential Placement (SYRP).**

In the SYRP, sponsored by the U.S. Department of Justice's Office of Juvenile Justice and Delinquency Prevention (OJJDP), Westat designed an ACASI to survey youth in juvenile justice custody. ACASI's unique combination of features (touch screen, audio, and visual capacities) allowed youth with a wide range of reading abilities to participate. ACASI also provided privacy in small group sessions and allowed strong anonymity for the survey answers, delinking survey responses from an identifiable youth and even from a specific facility. By administering the ACASI in small groups of up to 10 youth, the SYRP obtained completed interviews from a nationally representative sample of more than 7,000 youth in about 10 weeks.

○ **The National Survey of Youth in Custody (NSYC).**

The NSYC, sponsored by the Bureau of Justice Statistics, will generate national estimates of the rate of nonconsensual sexual contact among youth in juvenile justice custody and develop facility-level estimates of the rate in larger juvenile facilities, a substantial challenge to survey measurement. To prevent any observer from inferring which youth report victimization by noting the length of their interview session, Westat designed the NSYC ACASI to encompass two surveys: the primary study on sexual assault and an alternative survey

that focuses on drug and alcohol use. The ACASI program randomly assigns youth to one survey or the other at the outset of their session. It also inserts drug and alcohol questions to ensure that all youth stay in the interview session for approximately the same length of time. Westat is interviewing more than 10,000 youth in almost 200 juvenile facilities with this system.

- **Evaluation of the National Youth Anti-Drug Media Campaign (NYAMC).** Under contract to the National Institute on Drug Abuse, Westat evaluated the NYAMC. The media campaign was implemented by the Office of National Drug Control Policy and was designed to discourage youth from drug trial and use. Westat selected the national area probability samples of approximately 8,100 youth and 5,600 parents for in-person household interviews concerning drug use. The interviews used a combination of ACASI and CAPI methods. Interviewers administered the CAPI portion and then turned the laptop over to the respondent to answer the sensitive questions in the ACASI format.
- **Evaluation of the Illinois Subsidized Guardianship Waiver Demonstration.** In this study, approximately 6,840 children in foster care or permanent settings were selected for study. CAPI and telephone methods were used in interviews with the caregivers, and ACASI was used with children ages 9 through 18. Administering the ACASI was so simple that the study successfully used field staff assistants to do this, instead of more highly trained interviewers. The use of headphones and small screen made it possible for these assistants to administer the ACASI to a child in a family home while a more highly trained interviewer administered the CAPI to the caregiver. ACASI's privacy also increased the likelihood that children would answer sensitive questions related to issues such as risky behaviors and spanking, and its audio support avoided literacy problems for poor readers.
- **The Co-Occurrence of Spousal Violence and Child Maltreatment: Gender, Parenting and Child Outcomes.** Westat, as a subcontractor to the University of New Hampshire, helped develop the Multidimensional Neglectful Scale—Child Report for a grant sponsored by the National Institute of Child Health and Human Development, the OJJDP, and the National Institute of Mental Health. Two versions of the scale were developed: one for youth ages 6 to 9 years old and one for youth ages 10 to 15 years old. The ACASI system was well-suited even for the younger children.
- **The Role of Power and Control in Intimate Partner Violence Perpetration.** This study explored the psychological correlates of intimate partner violence perpetration in a sample of men adjudicated for domestic violence offenses in the Dallas County Court in Dallas County, Texas. The study focused on demographic variables, substance use, attachment to family of origin, attitudes toward violence, and conflict resolution. Westat and its subcontractor, Southern Methodist University, used ACASI to conduct the interviews during the offenders' initial probation counseling sessions. The results were used to better understand the additive contributions of theories of intimate partner violence perpetration and to guide the development of effective treatment programs.
- **Mass Media and Adolescent Sexual Health Study.** As a subcontractor to the School of Journalism and Mass Communication at the University of North Carolina, Chapel Hill, Westat collected data for one of the first population-based investigations of the link between teens' exposure to sexual content in the media and their sexual beliefs and behaviors. The project included two surveys—one on media use and one on sexual beliefs and behaviors. Westat developed the survey as an ACASI health questionnaire and achieved a 90-percent response rate on the baseline sexual health survey, completing 1,075 in-home interviews with youth. Westat conducted a followup survey with youth and achieved a response rate of 95 percent. The results indicated the extent to which different sexual styles and patterns of media use are related to risky sexual behavior.

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