

# Selecting and Recording Voices for ACASI (Audio Computer-Assisted Self-Interviewing): Voice Characteristics and Other Considerations

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## Additional Collaborators at UWSC

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- Nora Cate Schaeffer
- Eric White
- Kate Golen
- Rob Schultz

## Brief description of ACASI

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- Audio computer-assisted self-interviewing
- Occurs during in-person interviewing
- Interviewer passes the laptop to the respondent
- Respondent (typically)
  - views pre-programmed question text
  - simultaneously hears pre-recorded voice reading the text through headphones
  - records response by pressing key that corresponds to answer
- Most commonly used for sensitive questions

## Advantages of ACASI (Turner et al. 1998a)

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- Typically yields higher reports of sensitive behaviors compared to CAPI (e.g., Tourangeau and Smith 1996) or paper-and-pencil questionnaires (e.g., Turner, Leighton et al. 1998)
- Overcomes literacy concerns
- Readily adaptable to multilingual interviews
- Takes advantage of computerization for questionnaire design
  - Some evidence that computerization is more important in improving data quality than audio (Tourangeau and Smith 1996)

# ACASI decision framework

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- Decisions have to be made about
  - Selecting the voice
  - Recording the voice
  - Implementing the voice

## Selecting the voice

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- Logistics of finding voice talent
  - Payroll
  - Long-term
  - Interviewing experience vs. other experience

## Selecting the voice

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- Respondents are repeatedly exposed to the same ACASI voice and may make inferences about the voice's
  - Demographic characteristics
    - Gender
    - Age
    - Race
    - Regional accent
  - Social characteristics

## Selecting the voice: Voice's gender

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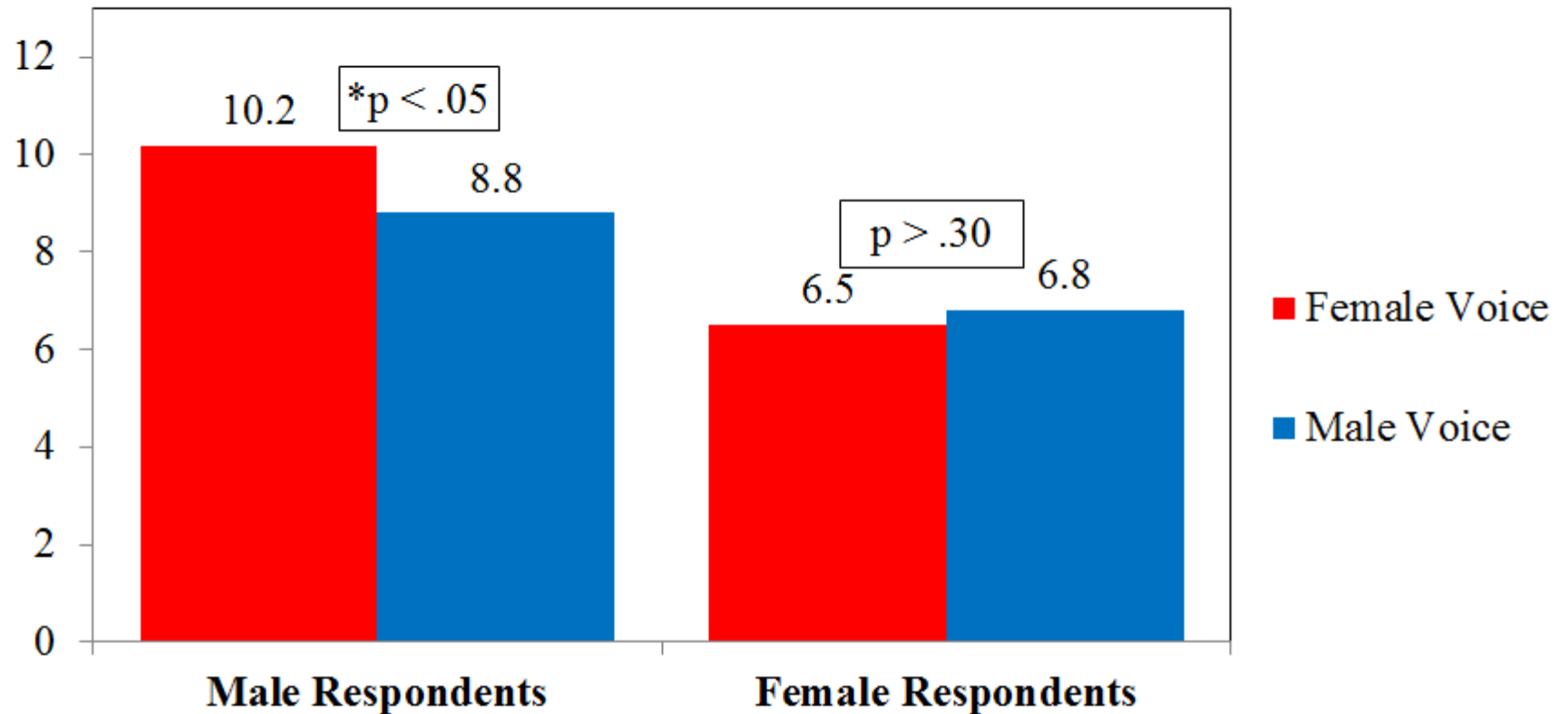
- Very little research examines the effect of the ACASI voice's gender on survey responses
- Interaction of question topic and voice characteristics
  - Respondents' own gender-based stereotypes, conversational norms, or identities brought to bear when responding (Tannen 1996; see also Schaeffer 2000),
  - Effect on how respondents answer the survey questions



## Gender-of-voice evaluation: Effect of voice's gender on reports about sensitive behaviors



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- Index summarizing number of questions respondent reported engaging in behavior more than “0 times”
- Voice's gender increased level of reporting about sensitive behaviors among the male respondents



# Gender-of-voice evaluation: Overview of study design

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- Web survey with embedded audio clips
- Raters
  - 56 telephone interviewers employed at UWSC (RR1 = 58%)
- Purpose of survey
  - “to learn about how people evaluate characteristics of voices”
- One male and one female voice
  - Presentation of the voices randomized
- Task
  - UWSC computers equipped with headphones; audio clip played for raters from within survey
  - Listened to one long question from ACASI section on threatening behaviors <1>  <2> 

# Gender-of-voice evaluation: Overview of study design

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- Raters asked to evaluate the voice's
  - Demographic characteristics
    - Gender
    - Race/ethnicity
    - Education attainment
    - Region of the country
    - Age
  - Social characteristics
    - Trustworthiness
    - Friendliness
    - Typicality
- Raters provided their own gender, age, race, region, and educational attainment

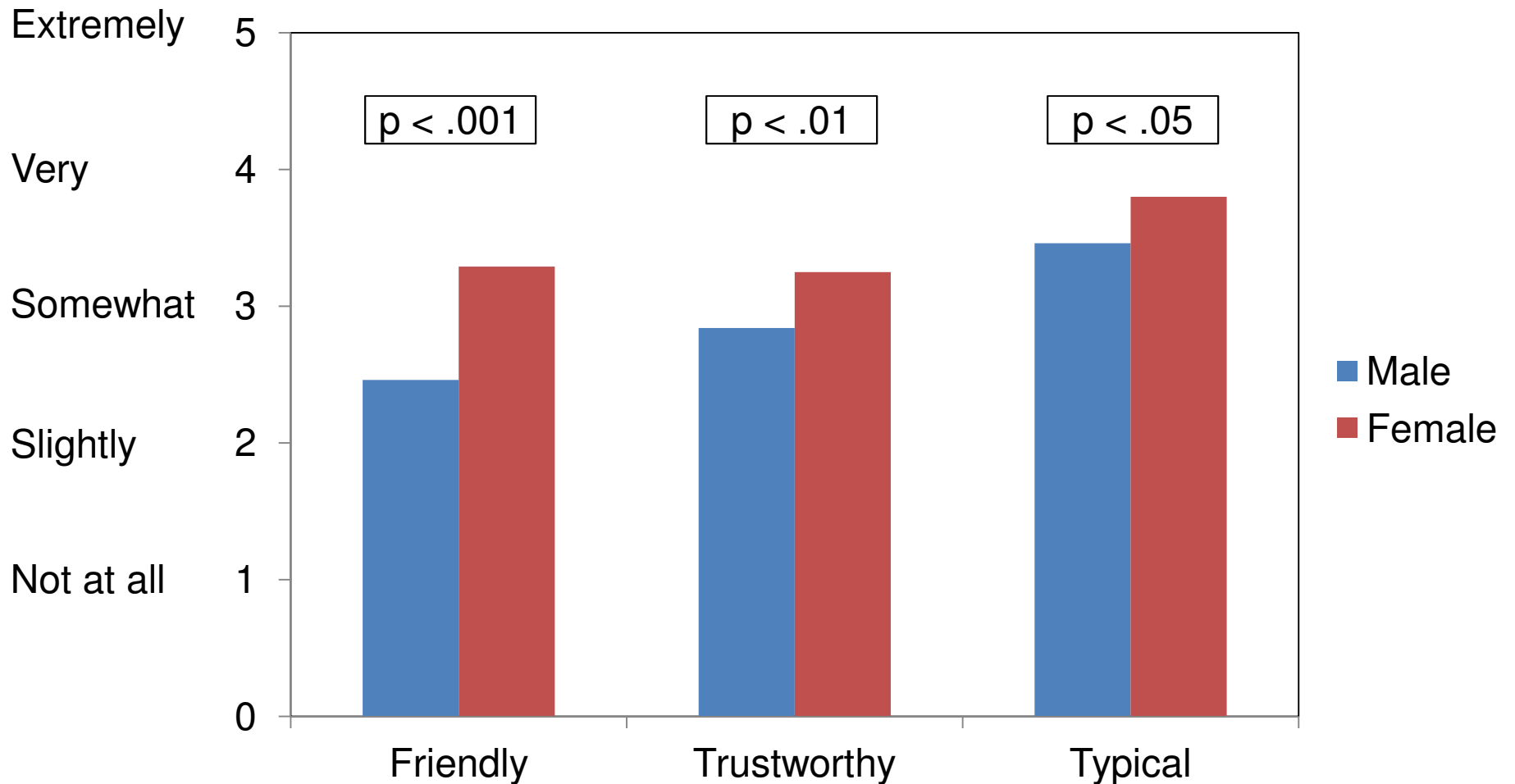
## Gender-of-voice evaluation: Results for demographics

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- 100% accuracy in rating the voice's gender
  - All raters accurately rated the male voice as male and the female voice as female
- No significant differences in raters' evaluations of the male versus female voice's
  - race/ethnicity
  - educational attainment
  - regional accent
  - whether voice sound like it was in its “early 20s”

# Gender-of-voice evaluation: Results for social characteristics

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# ACASI decision framework

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## Recording the voice: During the recording session

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- Real-time evaluation of voice during recording
- Coaching of voice talent during session
- Examples:
  - Upward intonation (question sounds like a question)
    - A , 
    - B , 
  - Proper pronunciation , 
  - Proper emphasis , 
  - Challenges with sensitive questions 
  - Pacing 
  - Objective tone (“abortion”; “hit your child”)

## Implementing the voice

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- When and how to offer audio (in addition to text)
  - Require that respondents listen to audio portion for each question and accompanying response categories
  - Allow respondents to turn the audio for all of the questions and response categories completely off
  - Allow respondents to turn the audio for any combination of the questions and response categories off



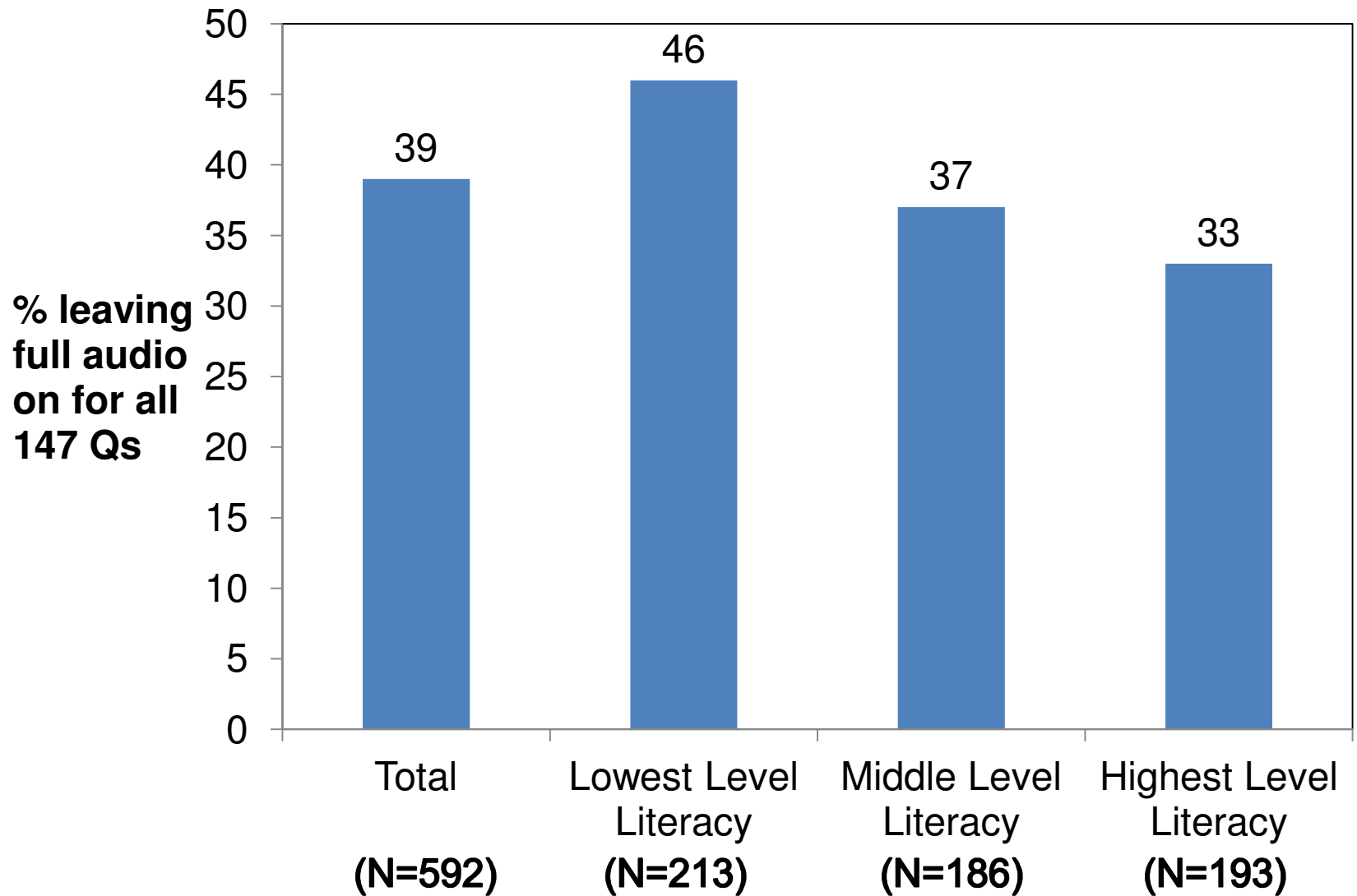
## Implementing of the voice: Summary of past literature

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- Audio seems to be preferred but does not have much of an effect on responses
- Audio+text vs. text only
  - Rated as easier to use and more interesting (O'Reilly et al. 1994)
- Audio+text vs. audio only
  - Rated more favorably than audio only (Rogers et al. 1996)
- No Rs turned the audio off in cognitive testing for NSAM & NHSDA (Turner, Forsyth et al. 1998)
- Very few differences for reporting about sensitive behaviors comparing text-only-CASI vs. audio+text-CASI (Couper et al. 2003; Tourangeau and Smith 1996)

# Implementing the voice: Results from MYA-4

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# Summary

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- Importance of carefully selecting the voice for a given study
- Conducting a voice characteristics evaluation
- Evaluation and coaching during recording session

Thank You!

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