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Hello, can you hear me?
Impact of speaker phones on response bias in COVID-19 phone surveys

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Hello, can you hear me?

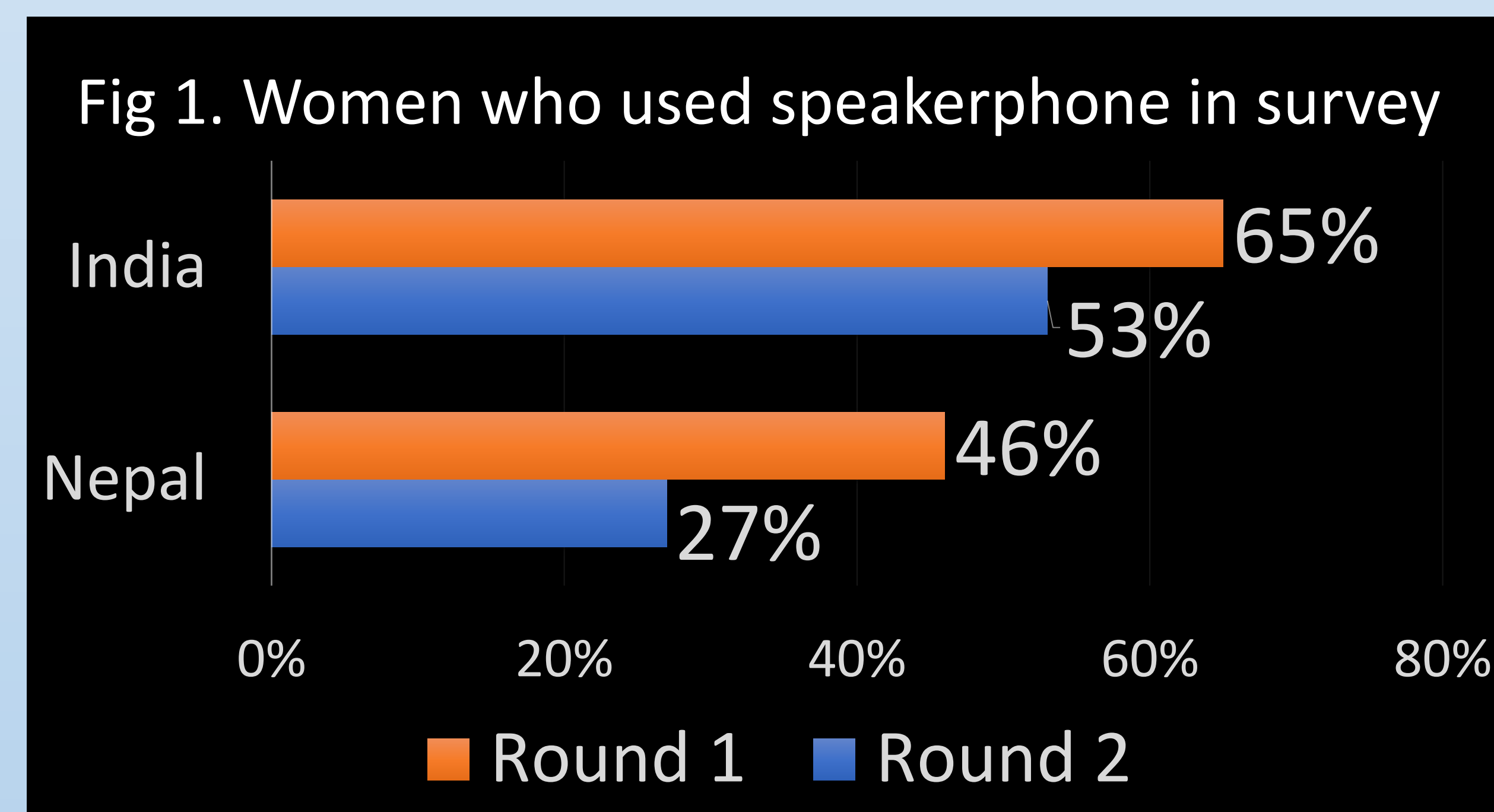
Impact of speaker phones on response bias in COVID-19 phone surveys

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BACKGROUND

- Presence of third party violates privacy & can impact responses to survey questions
- Impact on sensitive information exceeds that on non-sensitive one.
- Difficult to detect respondent's privacy in phone surveys → Unlike face-to-face surveys, one can't confirm privacy breach just by looking around or asking
- Phone survey use is increasing, especially during the pandemic → important to address privacy and response bias in phone surveys.



STUDY OBJECTIVES

- To demonstrate how use of speakerphone in phone surveys can serve as a way of privacy breach.
- To show how to ask for/measure speakerphone use indirectly
- To study what determines the use of speakerphone during a survey
- To see how speakerphone use/presence of third party can impact responses to sensitive and non-sensitive questions

SPEAKER PHONE & PRIVACY BREACH

- Putting the phone on speaker during a call, makes questions asked, & survey conversation audible to third parties.
- In order to allay suspicion, we asked the question on speaker use indirectly as below:



"I'm having a bit of trouble with the phone connection. Is the phone on speaker on your side? It's not a problem if it is, but I just need to adjust a setting if it is."

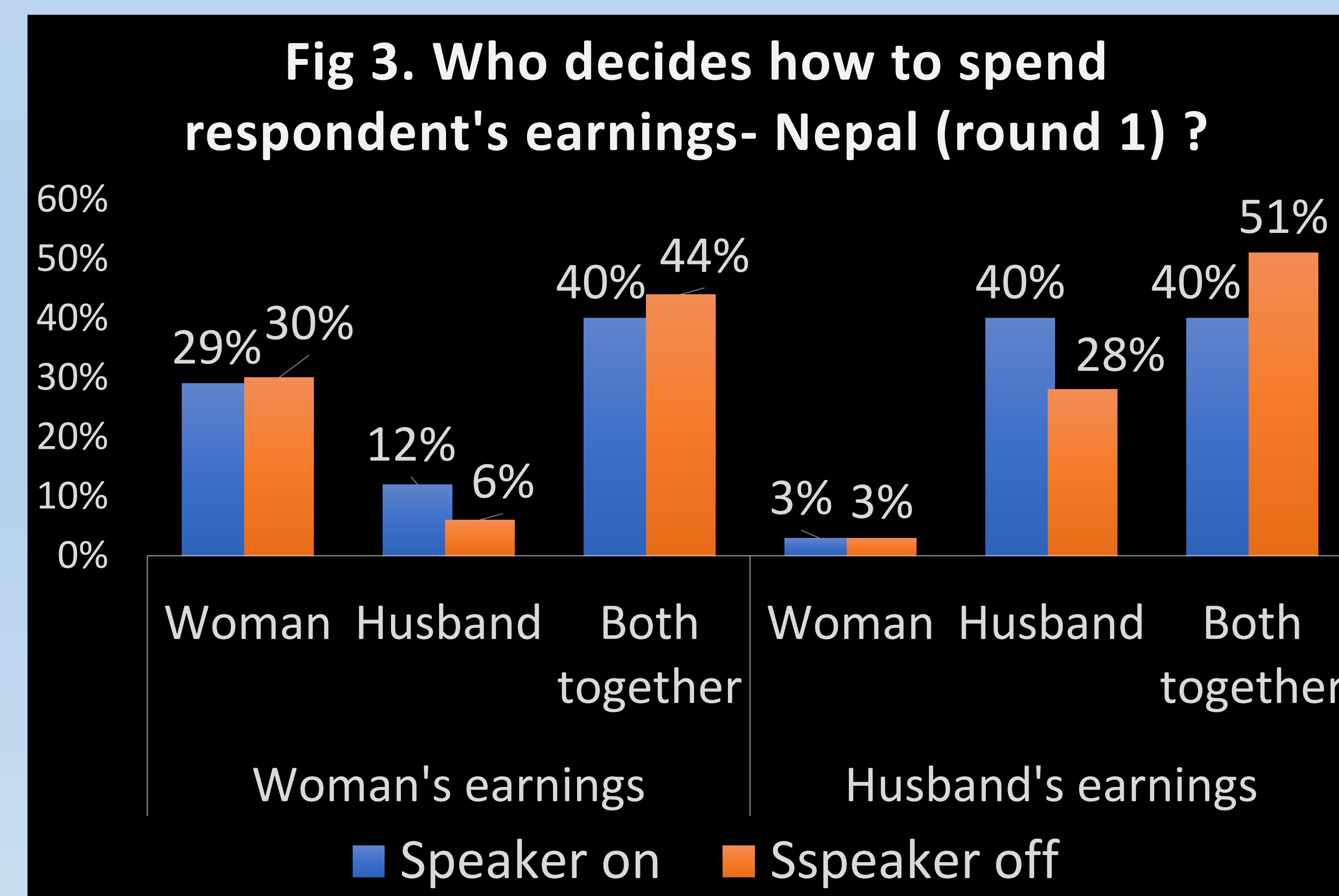
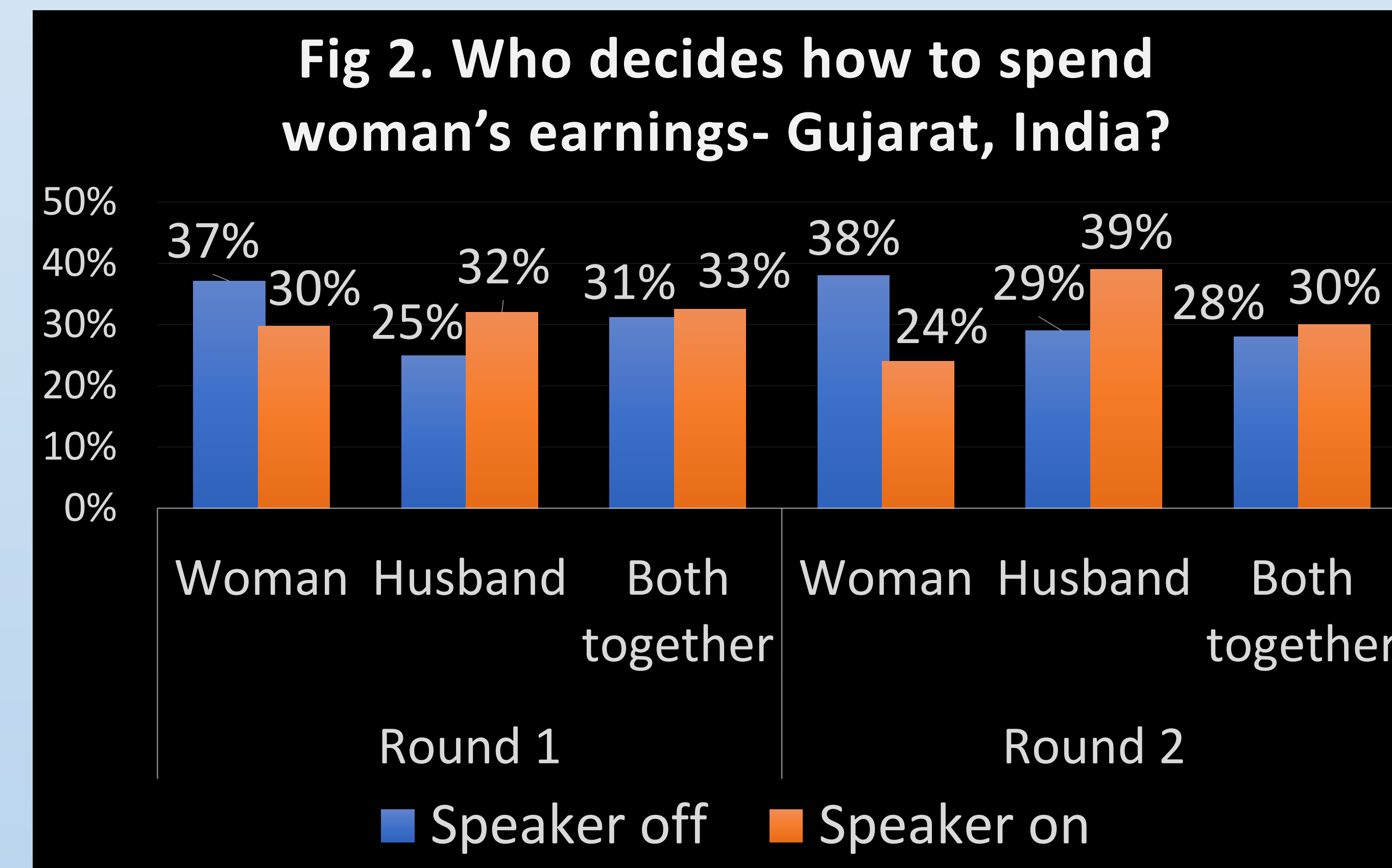
DATA & METHODS

- Two rounds of phone surveys in two countries each- India & Nepal
- India-** Surveys of self-employed women, N=627 in round 1, 567 in round 2
- Nepal-** Surveys of both male & female farmers. N=161 male & 421 female farmers in round 1, 155 male & 408 female farmers in round 2.
- Panel random effects model; linear probability and OLS regressions.
- Also, Propensity score matching conducted to study speakerphone impacts on responses on a matched sample.
- Impact assessed on agency of women over own-earnings and earnings of husband; time devoted on household care activities and coping strategies used to deal with COVID.

RESULTS

1. Determinants of speakerphone use

- Married women more likely to use speakerphone in both countries
- Negative impact of education in Nepal & positive impact of household head in India on speaker use.
- India: Having same enumerator survey in next round reduces likelihood of speaker use. This indicates the importance of trust.



2. Impact of speaker phone on responses

- Intra-household decision making-** Women under-report their agency over own income and income of spouse when speaker is on in both countries (Fig 2 and Fig 3).
- Women who are older & household heads more likely to have greater control over own & spousal income in both countries.
- Household care:** India- no impact of speaker. Women who are heads spend more hours on care; Nepal- Women underreport caring hours when speaker is on than when it is not. Also, more likely to report lesser caring hours than husband with speaker on. Aged women report lower caring hours for themselves & husband.
- Coping mechanisms to deal with income loss (use of savings, sale of assets, borrowing money, etc.):** No impact of speaker on these non-sensitive questions of crisis coping strategies in both countries.
- These results hold in both full sample and matched sample.

CONCLUSION

- An innocuous act of using speakerphone can be a potential source of privacy breach in phone surveys
- Responses on intra-HH decision-making might be biased by speakerphone use
- When directly asking for privacy is not possible, asking indirectly about speakerphone can be a viable proxy measure.
- Geographical factors play an important role in determining the sensitivity of questions and use of speaker.