

27-30 September 2021

UNECE

Expert Meeting on Statistical Data Collection

# EXPERIMENTAL TESTING OF VIDEO-MEDIATED INTERVIEWING IN OFFICIAL STATISTICS

CLAUDIO CECCARELLI, GABRIELLA FAZZI, MARCO FORTINI AND SERENA LIANI

Istat | Data Collection Central Directorate

# Video-Mediated Interviewing

---

“ The increase in use of live video calls and meetings during the pandemic – at least among members of the public who have access to the technology and sufficient connectivity – makes it particularly timely to consider whether and when live video interviews might plausibly substitute for in-person survey data collection today ”

Schober et al. 2020



## Video-Mediated Interviewing (VMI)

Carried out via video-conferencing system by an interviewer  
Synchronous, remote interaction, both verbal and non-verbal

---

## A pilot study of the Italian Population Census on a small sample of respondents via VMI

---

### Goals

Analysing respondent propensity to participate  
Monitoring interviewer and respondent interaction  
Studying the effect on survey quality of different interview settings

---

### Sampling design

8 municipalities and about 120 households in each municipality  
3/4 street numbers among the ones already involved in 2019 Population Census  
selected from each of the municipalities

---

### Evaluation methods

2019 Census administrative data, paradata and data  
Interviews' live observation  
Questions about VMI for respondents and for interviewers  
Interviewer debriefing

---

# Data collection

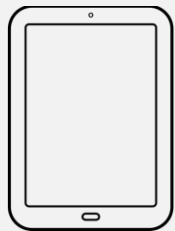
---



List and Calendar app for managing and scheduling the VMIs  
2019 Census web questionnaire  
Limesurvey form for recording any household contacts



Advance letter  
Three contact attempts at the household home  
Household phone number or e-mail address if available



Android tablet  
Screen shared in half of the scheduled interviews  
Proxy interviews were allowed

# A single platform

---

- ✓ GDPR compliant
- ✓ License already available
- ✓ Calendar app with automatic e-mail sending
- ✓ Stable connection
- ✓ No registration needed

- ✗ App downloaded needed on smartphone
- ✗ Virtual background not available for Android tablet
- ✗ Webcam turned off with the screen sharing



# Response rate

Source: Census paradata

## ASSIGNED HOUSEHOLDS, INTERVIEWS AND RESPONSE RATE BY MUNICIPALITY

	Households	Interview	Response Rate
Brescia	109	58	53%
Bologna	115	32	28%
Milano	144	10	7%
Palermo	132	7	5%
Torino	120	16	13%
Udine	137	45	33%
Venezia	112	15	13%
<b>Total</b>	<b>869</b>	<b>183</b>	<b>21%</b>

For 169 households we registered the reasons for refusal

40% due to the interview mode

60% due to lack of time or interest

# Response propensities

Source: administrative data, paradata, 2019 data, debriefing

LOGISTIC MODEL: households who participated vs. households who refused the interview (370 households)

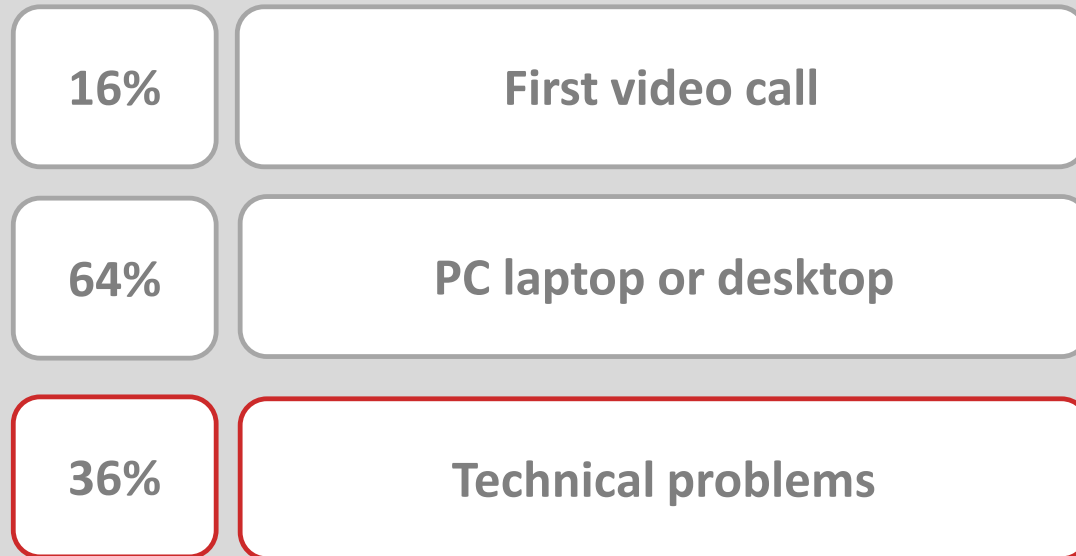
	Estimate	Std. Error		zvalue	p
(Intercept)	-0,58	0,42	-1,40	-1.397	0,16
Age 60-85	0,35	0,26	1,36	1.358	0,17
Age >85	0,46	0,39	1,16	1.161	0,25
<b>Non native</b>	<b>-1,37</b>	<b>0,37</b>	<b>-3,66</b>	<b>-3.658</b>	<b>0,00</b>
Female	-0,12	0,23	-0,50	-0.495	0,62
Num.comp>2	0,39	0,28	1,39	1.391	0,16
<b>Household with minors</b>	<b>0,55</b>	<b>0,28</b>	<b>1,96</b>	<b>1.959</b>	<b>0,05</b>
2019 sample	0,35	0,41	0,85	0.845	0,40



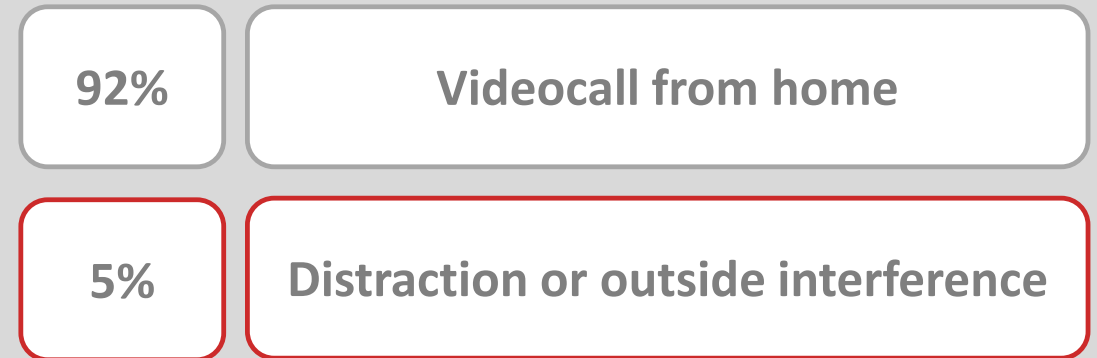
# Digital skills

Source: Census questionnaire, contact sheet

## From respondents...



## From interviewers...





# Screen sharing

Source: contact sheet, interviewer debriefing and live observation

72% of the interviews with the screen sharing of the questionnaire

## ADVANTAGES

Fluidity and speed at managing the interview

More attentive respondents

## DISADVANTAGES

Excessive interview pace

Long negotiation process

*This lady, over 60, connected for the first time via smartphone, and she surprised me because she said: "With the sharing of the screen and with this modality I think I was also more attentive compared to the old interview" (Marianna, Brescia)*

*For the interviewer it creates more attention, the interviewees feel more comfortable seeing the screen, they check what we put and once he even corrected me (Gaetano, Palermo)*

# Interview interaction

---

“

In video-mediated interviews, the interviewer and the respondent **can see and talk to each other**. The interviewer is able to provide **real-time feedback** to the respondent.

The respondent is fully aware of the presence of a live interviewer on the other side of the computer screen who is probably monitoring his or her response behavior. Here, the **social norms** that are applied to face-to-face interviews may apply to video-mediated interviews, resulting in **similar response behaviors** across the two modes.

Respondents of video-mediated interviews may feel **more engaged or connected than those in telephone interviews** due to a greater sense of social presence. This may lead to higher completion rates and better data quality.

Sun et al. 2019

”

# Interview interaction

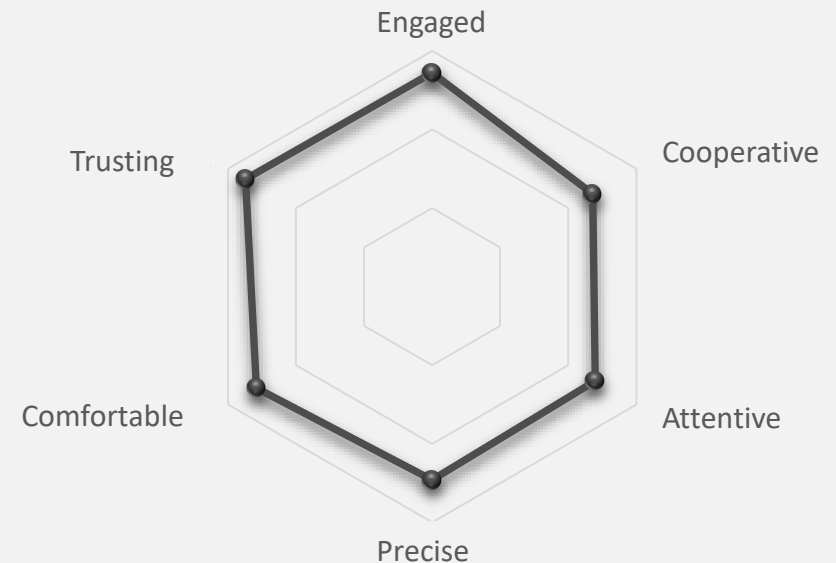
Source: contact sheet, interviewer debriefing and Census questionnaire

The video call almost completely cancel all those signals of non-verbal communication: looking into the person's eyes, the empathy you have when you are in person in front of another. Yes, I can see the frame with the face while I read the questionnaire on the tablet. I can see it, but it is tiny, and then it is distant, then maybe the video is not so clear... let's say that, in my opinion, all those aspects are not perceived so much (Giovanna, Turin)

How comfortable did you feel during the interview (scale 1-10)?

9.4

Rate the interaction you just experienced between you and your interviewee (scale 1-7)



# Pace

Source: observation, interviewer debriefing



In some interviews, interviewers proceed too quickly

The interviewers tell, especially in the first interviews, of a sort of '**anxiety to end the interview**', for the desire not to keep the interviewee connected for too long, also for fear of technical problems.



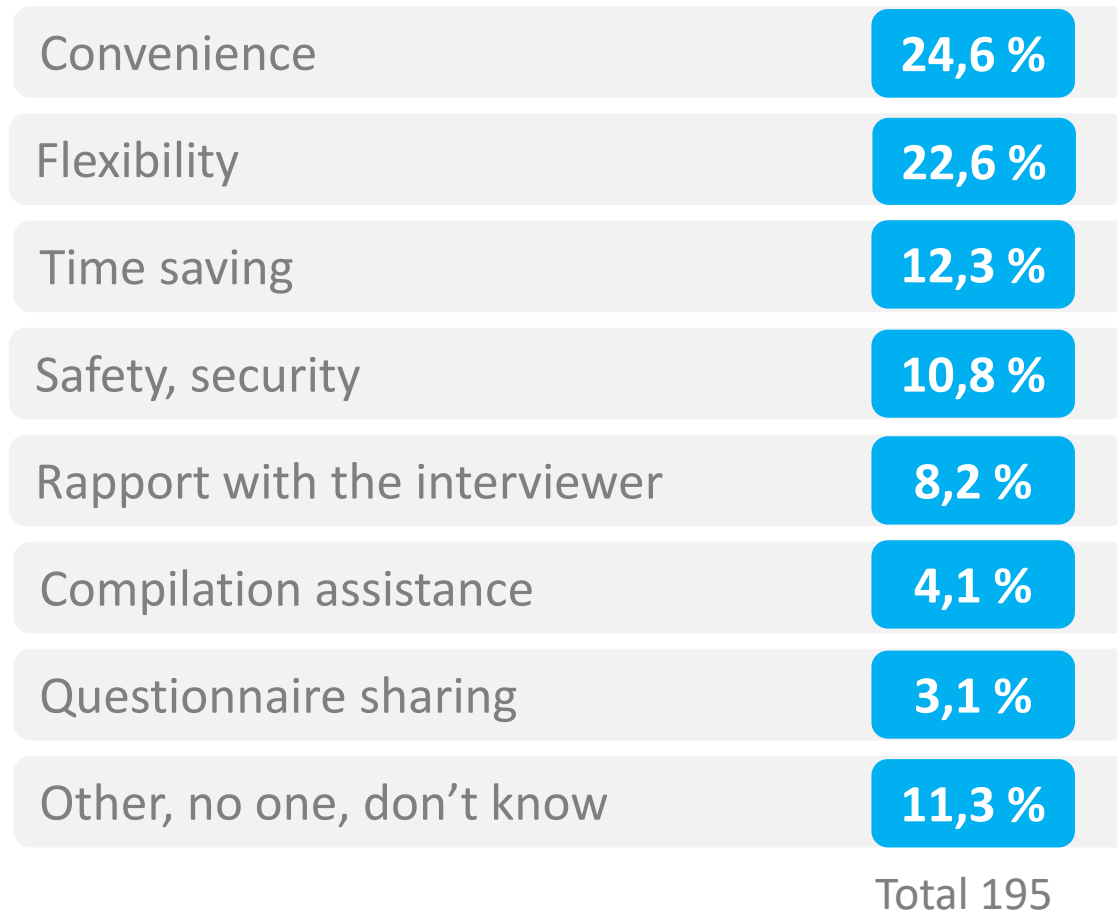
Silences during conversations can feel awkward

Screen share can be helpful: «a few seconds of silence ... are not likely to be problematic if a respondent can see the interviewer is busy recording an answer» (Holbrook et al, 2003)

# Positive aspects of VMI

Source: contact sheet, debriefing and questionnaire

## Respondent



## Interviewer



*I've been told by several people that this thing of not going home since the sanitary emergency ... this gentleman who told me several times: he had an elderly mother, taking people home was not a feasible thing in terms of health, so he definitely preferred the video call (Gaetano, Palermo)*

# Final remarks

---

This was only the first experience with VMI in Istat. We need to get more experience before using VMI in surveys

## What we have learned

- We have gained some experience on technical tools and their implementation in standard survey conditions
- We learned how organization of local field offices react to VMI mode
- We got preliminar insight on survey participation propensity by households
- Behaviour of interviewers, respondents and their interaction

## What we still need before implementing VMI as a standard survey procedure

- More evidence (another pilot study, on Labour Force Survey, is under thought)
- More experience (use of platforms other than Teams can be considered)
- Measure of mode effect (appropriate study design to assess any bias induced by the survey mode)

# References

---

Holbrook A. L., Green M.C. & Krosnick J. (2003), “Telephone Versus Face-to-Face Interviewing of National Probability Samples with Long Questionnaires”, *Public Opinion Quarterly*, LXVII, pp. 79-125.

Sun H., Conrad F. G., & Kreuter, F. (2019), “The relationship between interviewer-respondent rapport and data quality”, *Journal of Survey Statistics and Methodology*, 0, 1–20

Schober, M. F., Conrad, F. G., Hupp, A. L., Larsen K., Rene Ong A., & West B.T. (2020) “Design Considerations for Live Video Survey Interviews” *Survey Practice* 13 (1): 1-11. <https://doi.org/10.29115/SP-2020-0014>.

McKinlay J., Terry T., Heman-Ackah R. and Price M. (2013) “Video Interviewing: An Exploration of the Feasibility as a Mode of Survey Application” *Survey Practice* 6 (1): 1–5. <https://doi.org/10.29115/sp-2013-0001>.

# thank you

MARCO FORTINI | [fortini@istat.it](mailto:fortini@istat.it)

CLAUDIO CECCARELLI | [ceccerell@istat.it](mailto:ceccerell@istat.it)

SERENA LIANI | [serena.liani@istat.it](mailto:serena.liani@istat.it)

GABRIELLA FAZZI | [gabriella.fazzi@istat.it](mailto:gabriella.fazzi@istat.it)