Video Interviewing: An Overview

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1. Background

1.1 Why Video-Mediated Interviews?

When face-to-face data collection is required, video-mediated interviewing appears to be an effective alternative to in-person data collection, since it's also face to face. It allows interviewers to help with difficult response tasks, like cognitive assessments. It enables data to be collected from members of remote populations, like those deployed in the military or those with security or privacy concerns. It reduces or eliminates interviewer travel costs. It promotes completion (Hupp et al., 2021) and reduces straightlining when compared with self-administration (Conrad et al., 2023), and it promotes the same levels of rapport between the respondent and interviewer that are observed in in-person interviews (Sun et al., 2021).

1.2 Respondent Considerations

But not all respondents have access to video communication, potentially leading to coverage errors (Schober et al., 2020). To do a video interview, one needs a stable internet connection and a device with a working camera and microphone, and they must be willing (Schober et al., 2023) and comfortable enough with using video. In 2021, Pew reported that 81% of U.S. adults have used video to talk with others and that those with more education are likely to make frequent video calls. These data are from early in the COVID-19 pandemic and presumably have increased since then.

On the other hand, having video as a communication mode might improve access in some cases, like for those who might be too shy to ask an interviewer to speak up but could easily turn up the volume in a video interview to better hear the question.

1.3 Early Visions of Video Communication

Video communication was first conceptualized in the 1870s by Bell Labs. The first video call (by Bell Labs), was a one-way audio and video call that President Hoover made to New York in the late 1920s.

The 1930s saw early prototypes of two-way calls in Germany and New York. Bell Labs debuted the picture phone at the 1964 World's Fair.

Video communication began appearing in popular culture around this time. In the 1968 movie *2001: A Space Odyssey*, Dr. Heywood Floyd (in a space station) goes into the picturephone booth and inserts his credit card to pay for the video call to his daughter, who is on the Earth. In the early 1960s, prior to the World's Fair, *The Jetsons* debuted, with video calls envisioned as one-to-one communication, much like a telephone call. In season 1, episode 10, they anticipated telemedicine, with Jane calling the doctor to evaluate Elroy, who says he is too sick to go to school.

1.4 Current Use

There is interest in the use of video in data collection operations. Several projects in the United Kingdom, Europe, Australia, and the United States have incorporated video in some capacity in their recent data collections. Research Strand 3 of the Survey Futures initiative in the United Kingdom is dedicated to investigating video interviewing further. There is an international video interviewing special interest group through the National Centre for Research Methods Survey Data Collection Network in the United Kingdom. There is an upcoming special issue of the journal *Methods, Data, Analyses* on the topic of

video interviewing for collecting survey data that is scheduled for publication in early 2025, and there was an American Association for Public Opinion Research webinar on video survey interviews in 2022.

1.5   Vocabulary

What was originally called videoconferencing, is now more commonly referred to as video communication, video calls, or video meetings.

I do *not* advocate the use of four-letter acronyms with a "C" for "computer assisted," like CAVI for computer-assisted video interview. All video communication involves a computer, which *mediates* the communication more than *assists* an interviewer. These acronyms made sense when the shift from paper to computerization occurred. The assumption now should be that a computer is being used.

I distinguish live video interviews from a mode in which video recordings of interviewers reading questions are embedded in online questionnaires.

I use live video interviews to mean live, two-way communication and use in person for what has been historically referred to as face to face. I do this, since both modes are face to face and don't provide enough detail in describing the interaction.

2.   Design and Implementation

2.1   Sample and Recruitment

One potential option for recruiting respondents is cold calling, although there are likely challenges with assembling a sampling frame. There are also questions as to how effective this recruitment method might be. Unsolicited contact, like inviting a household via an address-based sample, is at the moment unlikely to be productive (Hupp et al., 2021). The invitation to video interviews needs to be in another mode, like email, in person, or telephone.

A second option is having the respondent self-schedule in advance. It's a good idea to obtain contact information, such as a phone number or email address, so it can be used to remind the respondent of when their appointment is, and it provides the interviewer with other methods in which to contact the respondent if they are having technical issues when trying to join or during the interview.

The third option is an on-demand approach, where there are interviewers on standby waiting to do a video interview. The American National Election Studies tried this during its 2020 data collection and found that it's feasible but inefficient.

Video interviews seem well suited for longitudinal panel studies in which there is already trust with the survey organization, and the possibility to instruct a respondent on the use of video and to check or test connections during earlier in-person visits.

2.2   Scheduling

You'll want to develop a strategy for reminding the respondent of their appointment. Conrad and colleagues (2023) implemented a strategy where the respondent was first reminded the day prior to the appointment, then 2 hours prior to the appointment time on the day of the interview, and 5 minutes after the appointment time if the respondent had not joined the meeting.

The respondent received either an email, text message, or both depending on the information they provided when scheduling the appointment. Each message contained the meeting link and a link to reschedule the appointment. The 5-minute late message was triggered by the interviewer from within the

management system. The message mentioned that the interviewer would remain in the meeting for 10 minutes. Based on evidence from studies in other modes and our own experience with video interviews, we suspect that the scheduling approach may work better for participants who have already agreed to participate in an ongoing study than for newly invited sample members to a cross-sectional study.

2.3 Breakoffs

We have evidence that those who start a video interview are likely to finish (Hupp et al., 2021). Figure 1 depicts breakoffs using data from the Conrad et al. (2023) study. The x-axis is the question where the breakoff occurred, and the y-axis is the proportion of cases remaining. The green line represents live video interviews, the red line represents web surveys, and the blue line represents prerecorded video—a web survey with a video of an interviewer asking the questions.

Figure 1. Breakoffs
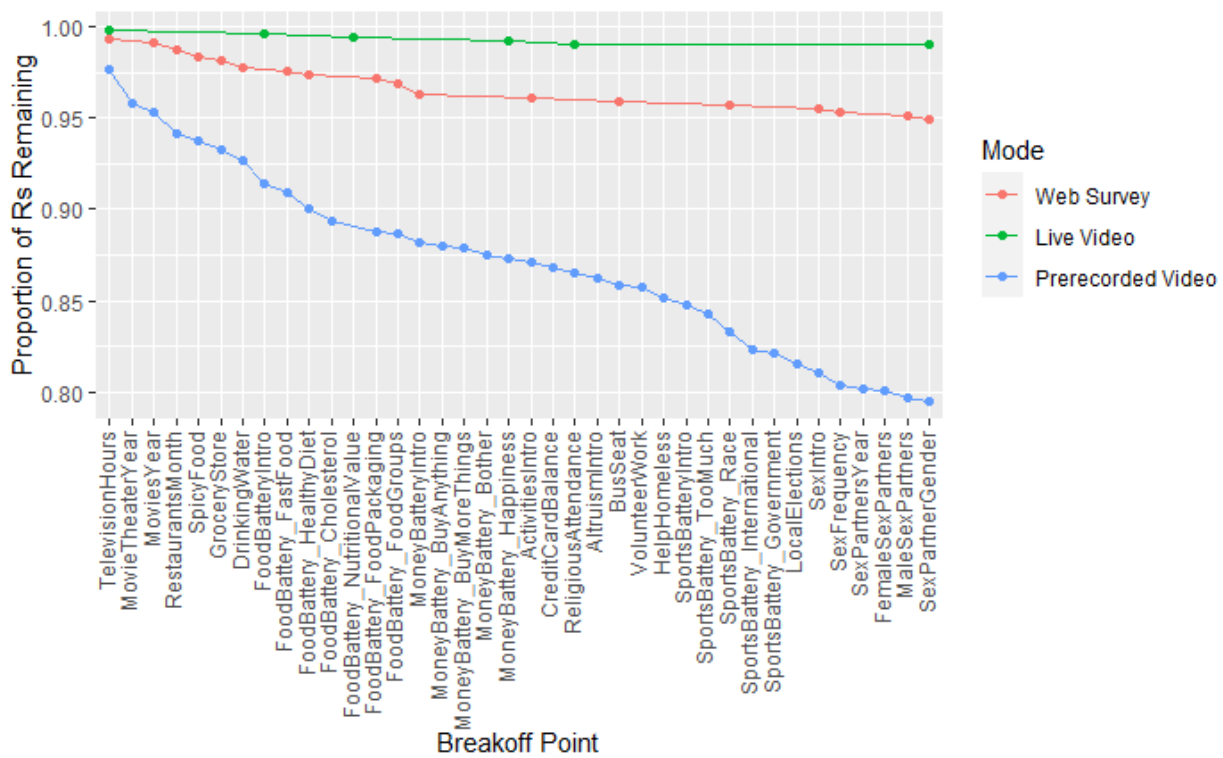
We see that once participants were recruited into the live video mode, there were very few breakoffs, especially compared with the two types of web surveys, perhaps due to the presence of a live interviewer. This is encouraging, although those live video breakoffs that did occur were due to technical issues (not present in other modes).

3. Data Quality

Looking at data quality, there are two published studies that have examined this. The first is a lab study conducted by Endres and colleagues (2022) that compared data quality in live video, web, and in-person interviews. The second is field study by Conrad and colleagues (2023) that compared data quality between live video, web, and prerecorded video.

Both studies found that most satisficing behaviors are less common in live video than in a web survey, with rounding being the exception, much like in in-person interviewing where there is greater time pressure than during a self-administered, relatively asynchronous web survey.

Table 1. Data Quality

Data Quality Measure	Endres et al. (2022)	Conrad et al. (2023)
Length of open responses	Live video > Web	
Straightlining	Live video (marginally) < Web	Live video < Web
Missing data	Live video < Web	Live video < Web
Rounding		Live video > Web
Disclosure	Live video < Web	Live video < Web

Endres and colleagues (2022) found no data quality differences between in-person and live video interviews. Conrad and colleagues' (2023) findings are analogous to published comparisons of in-person and web.

- *Straightlining*: is less prevalent in in-person interviews than in web surveys (Heerwegh & Loosveldt, 2008).
- *Disclosing sensitive information*: there is more socially desirable responding in in-person interviews than in web surveys (Heerwegh, 2007).
- *Rounding*: is greater in in-person interviews than in web surveys (Liu & Wang, 2015); this is attributed to there being greater time pressure in in-person interviews than in web surveys.

4. Interviewer Effects

It's possible that as much as interviewers in in-person interviews are known to introduce error variance, that is, to create interviewer effects, live video interviewers may introduce interviewer error. West and colleagues (2022) examined this and report that interviewer variance is low overall, with IICs less than 0.02. They didn't have an in-person group to compare to, but this suggests that live video interviewers introduce no more variance than is typical in an in-person interview.

5. Discussion

Scheduling a meeting seems to be the norm, compared with the cold calling model. There are options depending on the project design. The respondent can be offered a self-schedule option where they are sent a link and they select a time that works for them, or have an interviewer schedule a video interview at the conclusion of a prior in-person interview.

Video interviewing needs to be easy for the respondent. Implementing a "one-click" solution where it utilizes the browser rather than having the respondent download or install specific software apps they may be unfamiliar with will be key. Having one platform that is browser based rather than having the respondent choose the platform they are the most comfortable with will also limit the burden on the survey organization from having to support multiple platforms and purchasing operating system–specific equipment.

Video is more likely to succeed when it is offered as a choice in a single interview, rather than the lone choice, or as a follow-up to an in-person interview, like in the American National Election Studies.

Some studies have been screen sharing content for things like showcards, but there are products where other content can be shared, such as sharing a self-administered questionnaire with the respondent to allow them some privacy when answering sensitive questions. More methodological work is needed to

understand how various video interviewing features—things like turning the camera off or turning survey control over to the respondent when responding to sensitive questions—impact implementation and data quality in video interviews.

6. References

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