Video survey interviews: Recruiting, data quality, and respondent experience

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Today's Webinar

- Introduction & Background (Andrew)
- Design & Implementation (Andrew)
- Recruitment & Participation (Kallan)
- Data Quality & Respondent Experience (Fred)

Why Video-Mediated Interviews?

- Might be an effective alternative to in-person (FTF) especially when in-person is not feasible (e.g., a pandemic, safety or health concerns)
- Reach remote populations when FTF “required”
- Eliminate iwer travel costs
- Promote motivation & engagement (Holbrook, Green, & Krosnick 2003) compared to self-administration
- Promote rapport between respondent and interviewer (Sun, Conrad, & Kreuter 2021)

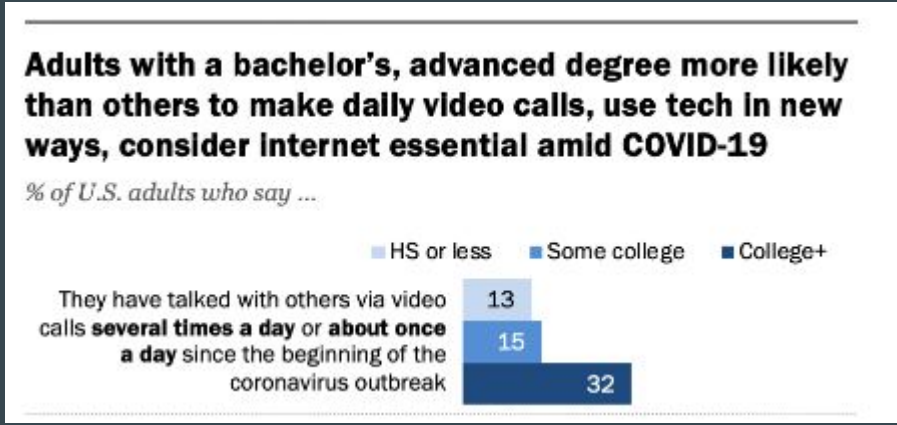
Respondent Considerations (1)

- Not all (potential) respondents have access to video communication leading to coverage error
  - Need a stable internet connection
  - Need a computer or mobile device with a working camera and microphone
  - Must be willing and comfortable (enough) with using video
- Should a study restrict it's population to those who meet the above criteria?
  - Scientific questions: might coverage or nonresponse bias estimates?
  - Ethical: Is it fair to exclude those without the necessary resources (connection or equipment) or burden respondents who are uncomfortable with using video
- Access may be improved in some cases
  - Those who need sensory assistance might find advantages using video (e.g., can turn up the volume or seeing the interviewer speak (compared to a phone interview)

Respondent Considerations (2)

- 81% of U.S. adults have ever used video to talk with others

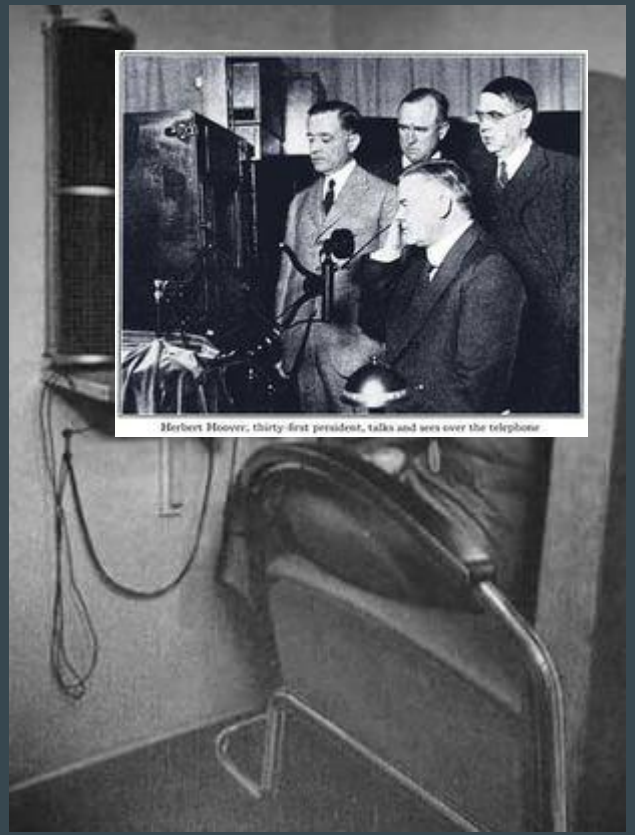
- Those with more education are likely to make frequent video calls



(Pew Research Center, 2021)

Video Communication Anticipated Long Before Available

- Idea first proposed in the late 1800s! (Bell Labs)
- First video call, was a one-way audio and video call with President Hoover
- Early prototypes 1930s (Gegensehn-Fernsprechanlagen = Visual Telephone System)



Early visions of video communication (1)

Early visions of video communication (2)

Early visions of video communication (3)

Early visions of video communication (4)

Two Models of Contact (implicitly) Imagined

1. Video-telephone
    - Cold call
    - Keypad for dialing phone number
    - Residential and public (video phone booths)
2. Remote meeting
    - Probably scheduled ahead of time
    - Often more than 2 parties
    - Primarily in corporate settings

Remote meeting model has largely won

- With the arrival of Skype (and iChat for Macs) and more recently Zoom, Microsoft Teams, and other platforms, the remote meeting model has become dominant*
- Scheduling a meeting enables the population who can click a link in an email invitation and install a video app to participate in a survey interview
  - i.e. they do not need to be users of a platform prior to being contacted
  - there may be some undercoverage due to insufficient technical skill, but this is increasingly getting smaller
- Cold calling is not really an option
- FaceTime is an exception, being very closely tied to voice telephony; cold calling is possible, although this platform covers only iOS users

*cold calling was possible with Skype and iChat but in our experience not typically used

Today's Webinar: Scope

- Focus on live video interviews to collect data in quantitative research
  - We do not include qualitative research (where video has been used longer)
- Use of video interviewing in this type of research is still new
- Relatively little production experience
- Relatively little methodological evaluation so far
  - Some conceptual discussion before current platforms existed (Anderson, 2008)
- Today's webinar will raise issues more than prescribing well-established, best practices
- Drawing from an experimental study we carried out, as well as findings and experiences from other studies using live video interviewing

Today's Webinar: Vocabulary

- Video conferencing => video communication, video calls, video meetings
- We do not advocate the use of four letter acronyms with a "C" for "Computer assisted"
  - All video communication now involves computers
  - which *mediates* the communication more than *assist* an interviewer
- We distinguish live video interviews from a mode in which video recordings of interviewers reading questions are embedded in online questionnaires
- We use "Live Video interviews" or just "video interviews" to mean live, two-way communication
  - distinguished from in-person interviews
  - both are face-to-face

Design & Implementation

Design Considerations for Live Video Survey Interviews
https://doi.org/10.29115/SP-2020-0014

Video Platform

WhatsApp

Messenger

FaceTime

Skype

Hangouts

Zoom

Meet

Microsoft Teams

GoToMeeting

Webex

Video Platform

- Which platform(s) should be used?
- Single platform
  - Simpler for the survey organization (easier to provide support and train the interviewers)
  - Respondent may be unfamiliar with
  - Respondent may need to download an app to use
    - Challenges downloading and installing
- Multiple platforms
  - Reduces barriers to participation (e.g., respondent might prefer to use the platform they are most comfortable/familiar with)
  - Burden on survey organizations to provide necessary equipment to interviewer (e.g., an Apple product for FaceTime when Windows devices are used for data collection)
  - Increases burden on interviewers (being trained on multiple platforms, and providing broader technical support for multiple platforms)

Interviewers

- Which interviewers should be used?
- Video interaction is more similar to an in-person interview than to voice-only interaction
  - Respondent and interviewers can see each other's facial expressions
- Survey organizations should provide guidance on:
  - Dressing appropriately (especially if interviewer usually does phone interviewing)
  - Is it ok to take a break, eat , take a drink, or address a family interruption?
  - Handling respondents distractions
  - Assisting with respondent technical problems

Contacting and scheduling (1)

- Cold calling
  - Challenges assembling a frame with the necessary information (e.g., usernames, or FaceTime phone numbers)
  - Seems unlikely to be effective since most respondents probably will be unwilling to accept an incoming video call from an unknown person.
- Self-scheduling by the respondent in advance
  - Obtain phone number or email address for appointment reminders
  - Develop a strategy for reminding respondent of appointment
    - Conrad et al., 24 hours prior, 2 hours prior, 5 minutes after
  - May work better with those who have already agreed to participate in an ongoing study than for newly invited sample members in cross-sectional studies (e.g., McGonagle and Sastry, 2021)
- Having interviewers available on-demand during designated times

Contacting and scheduling (2)

- Keeping interviewers productive when the respondent does not show for the appointment
- Interviewer specific link vs. interview (meeting) specific link
- Impact of new features

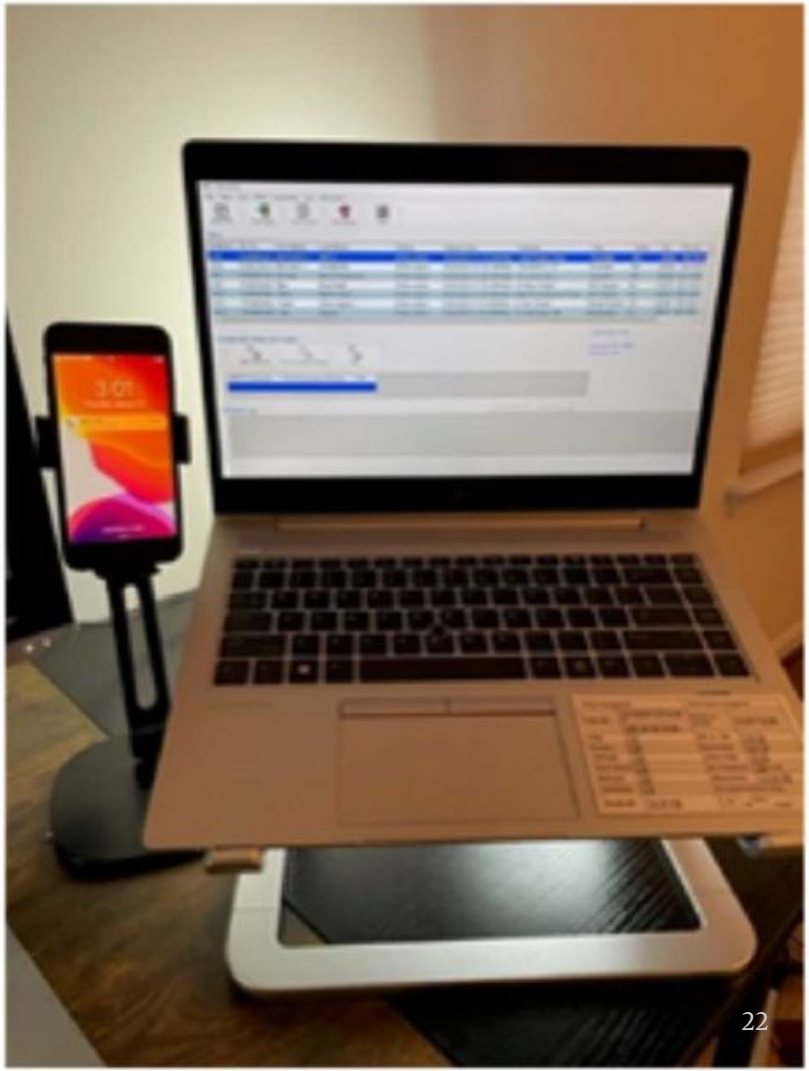
Screen configuration (1)

B: Interviewer's view

Screen configuration (2)

- Multiple screens (either multiple monitors or devices)
- May be dependent on:
  - Content sharing and the display on the respondents device
  - Which staff (centralized or decentralized) are being used
  - Equipment differences between centralized and decentralized

(Steiger et al.,, AAPOR2022)



Interviewer's visual background and environment

- The interviewer is going to have a background, real or virtual, if their camera is on
- Develop guidelines for what backgrounds are acceptable
- Interviewers should be cognizant of what is in the background
- May be unintended consequences from seemingly benign items in the background (real or virtual)
- Interviewer's environment could lead to unexpected distractions (e.g., a dog barking, family members interrupting
- Use common sense with backgrounds!

Ethics

- Medical situations during the interview
- Mandatory reporting laws
  - What if the interviewer sees something happen in the background that the respondent may be unaware of, or the respondent is in danger?
- Is recording for quality control purposes practically and ethically feasible?
- To what extent do existing in-person protocols need to be adjusted, including language on consent forms related to the

Recruitment & Participation

Models of Recruitment

- Cold (video) calling
- Invitation in another mode
  - Address-based sampling
    - ISSP 2019 (Jonsdottir et al., 2021)
    - Conrad et. al. pilot
  - Email invitations
    - ANES + on-call interviewers (Guggenheim et al., 2021)
  - Online panels
    - Conrad et al.: CloudResearch and Michigan Clinical Health Research (MICHR)
  - In-person/telephone screenings
    - ESS (Hanson & Ghirelli, 2021)
- The fewer steps, the better?

Probability Samples

- Address-based sampling has low response rates in any mode, but perhaps even lower for live video surveys (Conrad et al. ABS pilot - <3% response rate)
- When respondents from probability samples are recruited via telephone or in-person before a video interview is scheduled, results seem to be better (Hanson, 2021)
- Pre-video interview screening may be a barrier to completed video interviews, especially when respondents have little familiarity with the study

Opt-in Online Panelists

- Online panelists may be accustomed to a certain type of survey, so live video may be substantially more burdensome than the surveys in which they typically participate
- Still, with the right incentives, this may be a promising route, especially if potential Rs are clear on what is expected of them in the survey mode

In-Person Panelists

- In longitudinal studies, in-person interviewers have already built rapport with respondents, so response rates are less likely to decrease with a shift to video
  - 1970 British Cohort Study (Cole et al., 2021) - 73% response rate in live video pilot (N=44)
- Live video is much *less* burdensome than in-person medical studies, so respondents accustomed to participation in such studies may embrace live video alternatives
  - Conrad et al. - MICHR panelists were eager to participate
  - Endres et al. - community research pool

Response Rate across Recruitment Sources (Conrad et al.)

Improving Sample Composition - Jonsdottir et al.

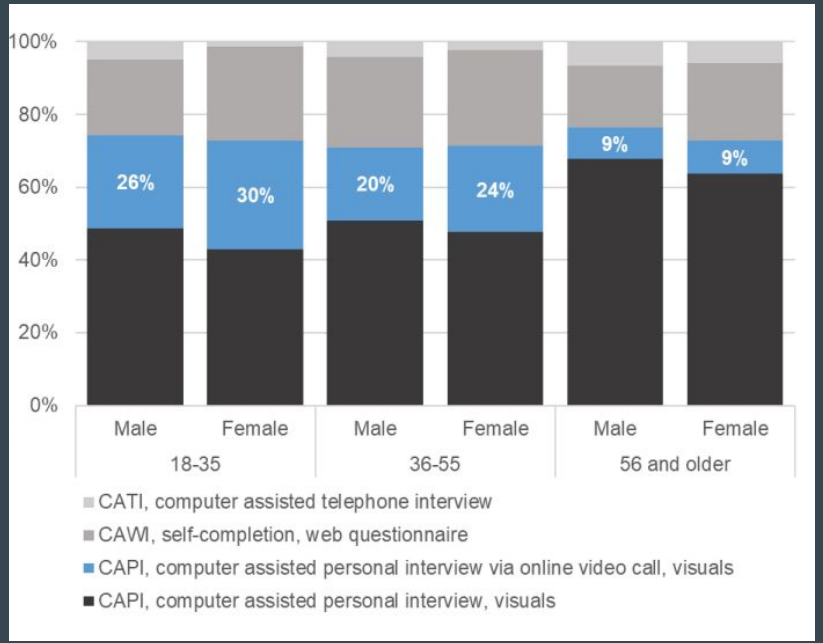
International Social Survey Programme (ISSP) in Iceland

When employing mode choice, video calls were more popular for:

- Younger people
- Females (20% vs. 17% of males)
- Respondents with a university degree

Similar satisfaction scores with in-person and video interviews

(*Not* experimental evidence, and those choosing video fluctuated with rising/falling COVID-19 cases)

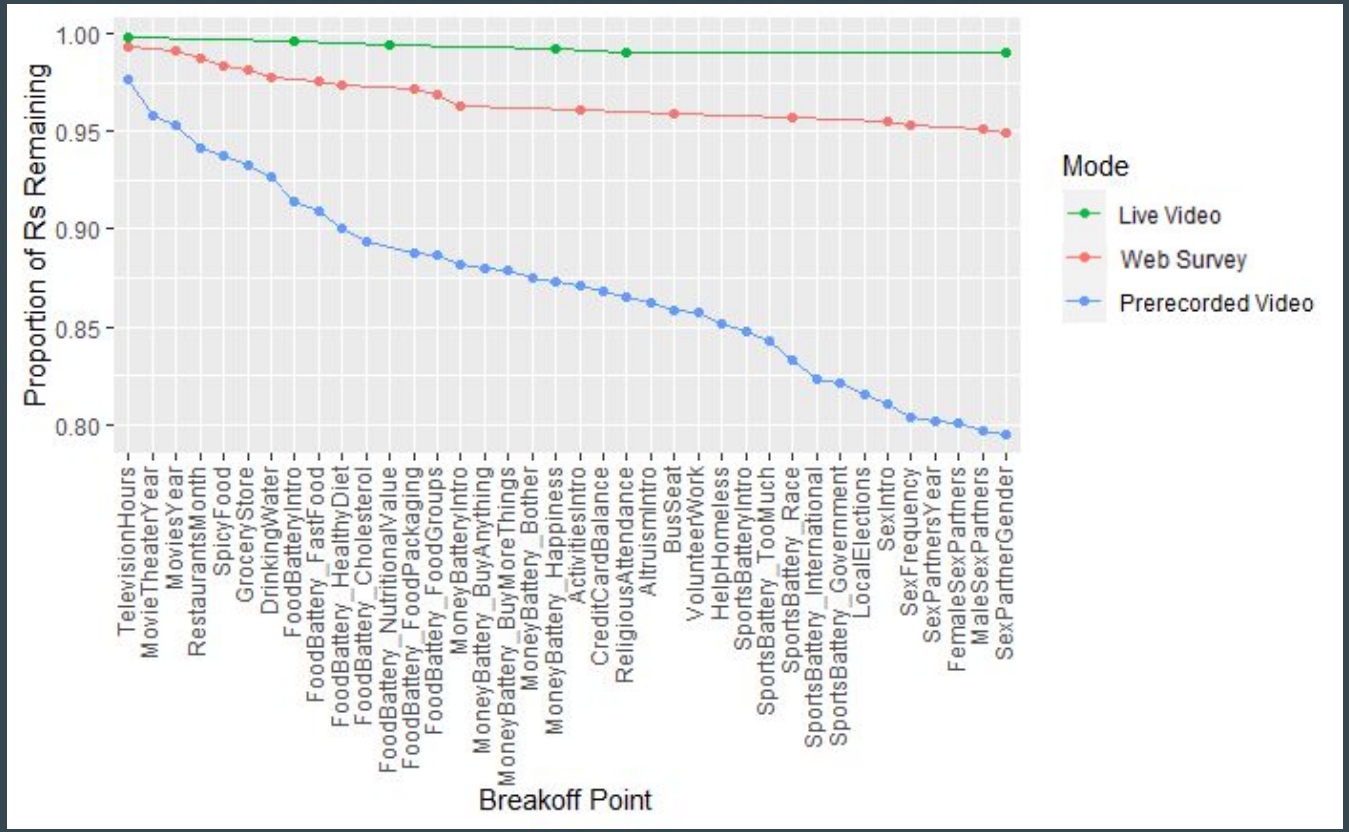


(Jonsdottir et al., ESRA 2021)

Other Practical Participation Experience

- European Social Survey (Hanson & Ghirelli, 2021)
  - Initial contact made in-person or via telephone, interview conducted in-person or via live video call
  - Helpful alternative to in-person interviews in the event of fluctuating health concerns
- American National Election Studies (Guggenheim et al., 2021)
  - Video Conversion Team offered alternative video platforms, increased incentive -- video alternatives not enticing, incentive led to eventual NR conversions
  - Representativeness of respondents differed from in-person
    - Video participants were more educated
    - Video participants were more likely to be Democrats

Breakoffs (Conrad et al.)



Live Video Interviews Longer than Web Surveys, Shorter than Other Modes

	Web Survey	Telephone	Live Video	In-person	Prerecorded Video
Conrad et al.	5.9	--	9.5	--	11.3
Jonsdottir et al.	53	59	60	61	--

Data Quality & Respondent Experience

Data Quality

- Compared to Web Survey questionnaires (self-administered), Live Video interviews (interview-administered) should result in:

1. Less satisficing
   - Interviewer keeps *R* motivated, engaged, and on-task
2. Less disclosure of sensitive information (more social desirability)
   - Interviewer's social presence triggers impression management

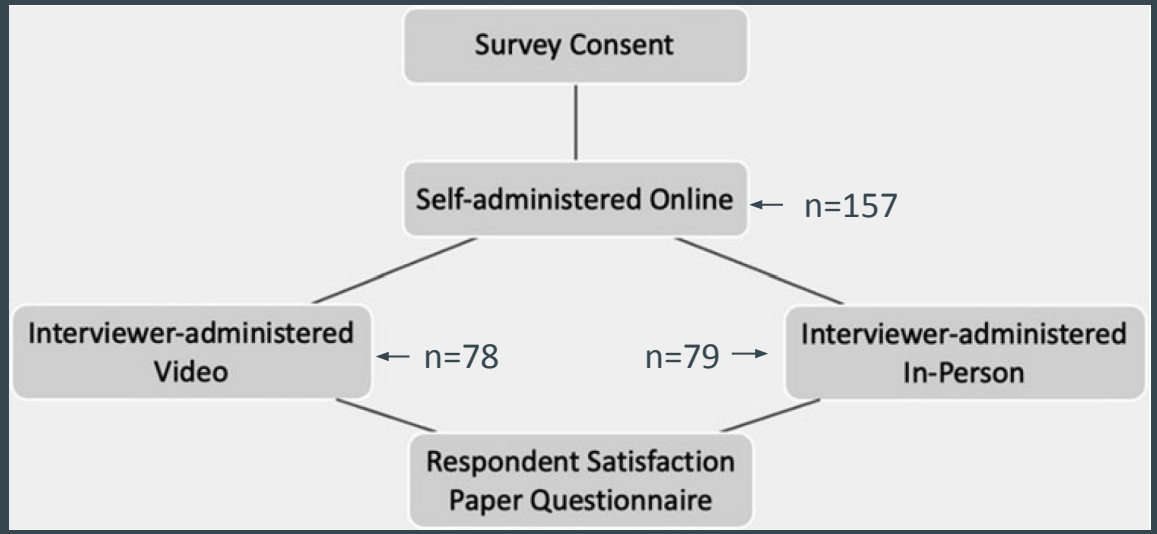
Data Quality & Respondent Experience (2)

- Two studies (to our knowledge) have examined data quality in Live Video Interviews:

1. Endres, Hillygus, DeBell, & Iyengar (2022): compared data quality in
   a) Live Video to Web
   b) In-person (FTF) to Web
   c) Live Video to In-person (FTF)

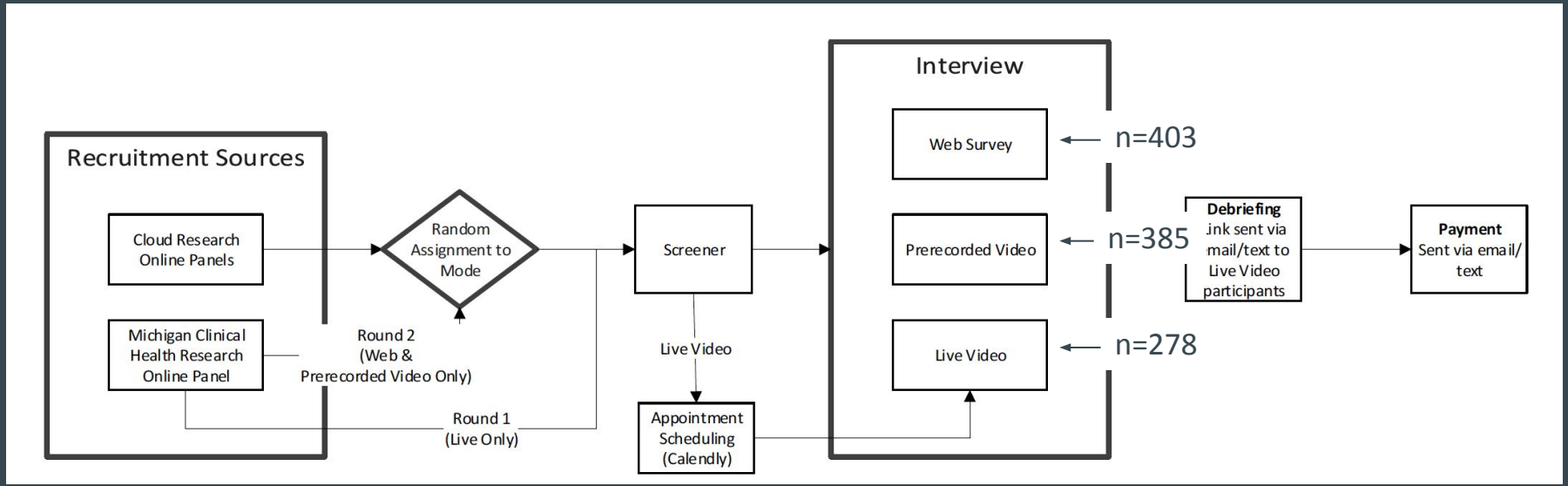
2. Conrad, Schober, Hupp, West, Larsen, Ong & Wang (in press): compared data quality in
   a) Live Video to Web
   b) Prerecorded Video to Web
   c) Live Video to Prerecorded Video

Endres et al. study design



Lab experiment: All participants first in Web (Self-administered Online) then in either Live Video (Interviewer-administered Video) or In-Person interviews

Conrad et al. study design



"Field" experiment: Respondents screen in and randomly assigned to Web, Prerecorded Video or Live Video (the latter after self-scheduling an interview)

Effect of Live Video Interviewing on Satisficing

- Most satisficing behaviors less common in Live Video than in a textual Web Survey

	Endres et al. (2022)	Conrad et al. (in press)
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

- Pattern for rounding attributed to greater time pressure in a live interview than self-administered, relatively asynchronous mode

Effect of Live Video on Disclosing Sensitive Information

- Less disclosure in Live Video than Web Survey
- Endres, et al. (2022)
  - Feeling thermometer: Warmer (higher) scores toward 4 or 6 groups in Live Video than Web
  - Attitudes toward immigration: In 3-item battery, fewer negative attitudes in Live Video than Web
- Conrad et al. (in press)
  - Overall (12 items): less sensitive (more socially desirable) responses in Live Video than Web
  - Specific items: fewer reports of not voting, not volunteering, and visiting a pornography site in Live Video than Web

How Similar is Data Quality in Live Video and In-Person Interviews?

- Endres, et al. (2022)
  - No differences between In-person and Live Video on any questions!
- Comparisons of data quality in In-person interviews and Web surveys are analogous to comparisons of data quality in Video interviews and Web surveys reported by both Endres et al. and Conrad et al.
  - Straightlining: less prevalent in In-person interviews than Web (Heerwegh & Loosevelt, 2008)
  - Disclosing sensitive information: More socially desirable responding in In-person interviews than Web Surveys (Heerwegh, 2007)
  - Rounding: greater in In-person interviews than Web surveys (Liu & Wang, 2015); attributed to greater time pressure in In-person interviews than Web

Interviewer Effects

- It's possible that much as interviewers in In-person interviews are known to introduce error variance, i.e., to create interviewer effects, Live Video interviewers may introduce interviewer error
- West, et al. (2022) examined this in the Conrad et al. (in press) data and report that interviewer variance (IICs) was low overall, with all IICs less than 0.02
- Not possible to compare these IICs to those for In-person interviews (none were conducted in this study), but suggests Live Video interviewers introduced no more variance than is typical in In-Person interviews

Respondent Subjective Experience

- Endres, et al. (2022)
  - No differences between In-person and Live Video on any measures of experience *except more reports of honest reporting in Video*
- Conrad, et al. (in press)
  - Higher satisfaction on 5-point scale with Live Video (4.7) than Web Survey (4.3) experience
  - 59% reported that they “thoroughly enjoyed” their interaction with the interviewer (4.4)
  - Very “comfortable” (81%) and “connected” (89%) with the interviewer
  - When asked to compare privacy of Live Video interview just completed to hypothetical In-person interview, 23% reported “more private” (75% reported “the same”)
- Possible ”protective barrier” – mediation of Live Video may reduce interviewer’s presence giving *R*s license to candidly report sensitive information

Summary: Data Quality and Respondent Experience

- Across two experimental studies, compared to textual Web Survey, Live Video interviews lead to
  - less satisficing, except more rounding (attributed to greater time pressure)
  - less disclosure (greater social presence of interviewer)
  - greater satisfaction with the experience
- Live Video and In-Person interviewing seem to produce very similar results
- Endres et al: “results ... point to the comparability of video and in-person interviewing, so should be reassuring to those looking to transition an in-person time series project.”
- Possibility of more privacy (protective barrier) and, thus, more honest responding in Live Video than in In-person interviews

Technical Problems Are Relatively Rare

- Guggenheim et al. (2021) (ANES): interviewers mostly (79-87%) reported frequency as “None” for following problems
  - Audio
  - Video
  - Connectivity
  - Zoom
- Conrad et al. (in press): more than half respondents self-reported no technical problems; when problems were experienced, most common were
  1. Interrupted speech (*I* and *R* talk at same time): 18%
  2. Video and audio out of synch: 17%
  3. Trouble seeing clearly what was on screen: 18%
  4. Distorted or muffled speech: 14%
  5. No audio: 14%
- Of these, most “resolved themselves” most of the time (78-69% of time); “No Audio” (44% of time)

Device Prevalence by Mode

- Steiger et al. (2022) (Westat) designed the interviewer configuration to optimize/maximize display on respondent's smartphone
  - Anticipating that at least some respondents will participate by smartphone

- Conrad et al. (in press) observed different proportions of computers versus smartphones in Live Video and Web Survey
  - Live Video: More respondents participated in interview on a computer (67%) than smartphone (32%)
  - May reflect preference for larger screen and/or time to choose a device before scheduled interview
  - Web Survey: Even split between computer (47%) and Smartphone (47%)
  - May reflect device on which sample members followed the link in the invitation, initiating data collection, i.e.., no time – and maybe no reason – to choose a device

Possible Future of Video Interviewing

- Mixed mode surveys/respondent mode choice
- Online panels
- CASI-like (no camera) implementations
- Self-view on or off
- Prerecorded video

Thank you!

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Questions?

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