

# Incorporating Web into Household Panel Surveys: Challenges and Opportunities

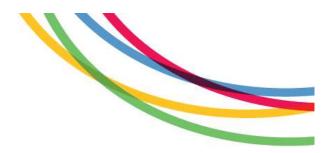
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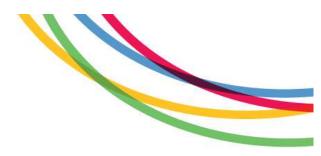
An initiative by the Economic and Social Research Council, with scientific leadership by the Institute for Social and Economic Research, University of Essex, and survey delivery by the National Centre for Social Research.

# **Overview**



- 1. Understanding Society: The UK Household Longitudinal Study
- 2. Possible Uses of Web Interviewing
- 3. Key Features / Constraints / Opportunities
- 4. Development, Testing, Plans

# **UKHLS: Introduction**



- A study of the socio-economic circumstances and attitudes of 100,000 individuals in 40,000 households
- Funded by UK Economic and Social Research Council (ESRC)
  + government partners
- Run by the Institute for Social and Economic Research (ISER)
- Survey work currently contracted to National Centre for Social Research (NatCen)
- Annual interviews
- Fieldwork started in January 2009

# **UKHLS Study Design**



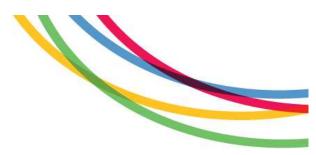
- Base is a nationally-representative sample of addresses;
- All members of private households at those addresses at time of wave 1 are sample members;
- Individuals followed as they move;
- Births to sample mothers become sample members;
- A longitudinal sample of individuals representing the whole UK population, interviewed within a household context (see next slide).
- Following rules mean that the Understanding Society will remain representative of the UK population as it changes, nonresponse notwithstanding, and except for new immigrants to the UK.

# **UKHLS** Data Collection



- At each wave, data are collected from all sample members and all other members of the current household of sample members:
  - Households: household grid (any adult), household interview (the / either householder)
  - Individuals aged 16+: Individual interview, self-completion questionnaire
  - Individuals aged 10-15: youth self-completion questionnaire
- At periodic waves there may be additional data collection protocols, such as nurse-administered biomarkers

# **UKHLS Fieldwork Design**



- 12 month intervals between interviews
- Continuous fieldwork over a 24 four month period for each wave, with monthly samples
- Year 1 of Wave (*n*+1) simultaneous with Year 2 of Wave *n*
- CAPI interview at waves 1 to 4
- (Self-comp was paper at waves 1 & 2, CASI from wave 3)
- Mixed mode from wave 5 see later
- 20% CAPI interview sample at all waves

# **Possible Uses of Web Interviewing**

- As a prime mode for all main instruments: mixed mode design
- As a secondary mode for main instruments, e.g. for nonresponse follow-up only
- As a prime mode, but only for certain instruments, e.g. for youth self-completion questionnaire
- For additional instruments, e.g. between-wave surveys

# Web in Mixed Mode Designs

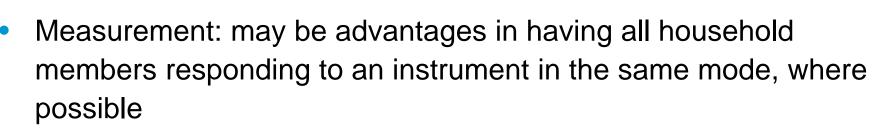


- Independent mixing of modes between waves, in order to minimise costs;
- Independent mixing of modes between waves, in order to maximise response;
- Dependent mixing of modes within waves, in order to minimise mode variation within households;
- Dependent mixing of modes between waves, in order to minimise mode variation within individuals over time;



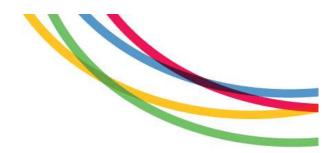
- Cost;
- Co-operation (rates and bias);
- Measurement.

## Key Feature 1: Multiple Respondents per Household



- Costs: potential savings likely to be greatest with a sequential MM design almost independent between household members; but savings will be small unless a whole household can avoid F2F
- Co-operation:
  - likely to be advantageous for mode of approach for remaining household member(s) to be conditional on mode of interview of other household member(s);
  - contact mode for an individual need not depend on contact information for that individual;
  - mode of approach interacts with household/individual level

## Multiple Respondents per Household II



• Web Usage as a constraint on cost saving

	1-person hhd %	2-person hhd %	3+ -person hhd %
All regular web users	45.9	44.7	25.0
Some regular web users	0.0	32.1	60.5
No regular web users	54.1	23.2	14.5

(UKHLS wave 2 year 1, 2010)

# Key Feature 2: Dependency of Instruments within a Household

- Effectively, individual instruments require household grid to have been completed first
- We want only one individual to complete the grid and household q're, and we do not know in advance which individual it will be
- Managing these constraints requires real-time dependency between the instruments
- In a mixed-mode context, this dependency must work across all mode combinations
- Developing a web version of the re-enumeration grid is particularly challenging: correctly identifying all leavers and joiners and applying household definition is crucial and in F2F relies heavily on interviewer probing

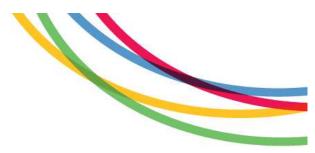
## Key Feature 3: Longitudinal Survey I



Challenges:

- Measurement: Key analysis variables are micro-level measures of change: some could be particularly sensitive to mode variation within individuals over time
- Co-operation: May be difficult to convert respondents back to a preferred mode once they have participated in a different mode
- Cost: Cost functions are almost independent of the longitudinal aspect of mode-mix

## Key Feature 3: Longitudinal Survey II



Opportunities:

- Each wave provides an opportunity to collect mode-specific contact details (email addresses, phone numbers)
- Previous wave data can be used to predict mode preferences and mode-specific response propensities

### **Development and Testing**



Test of mix of telephone and F2F in Spring 2009 (IP2) – with focus on logistics, costs and co-operation

Test of mix of web and F2F in Spring 2012 (IP5) – with similar focus

No empirical test of measurement issues



# **Telephone/F2F Test**

(Lynn, Burton & Uhrig 2010)

Three treatments (w2):

- A) Face to face interviewing
- B) Telephone interviewing, but revert to FtF if any person in the hhd cannot be interviewed by phone
- C) Telephone interviewing, and revert to FtF only after completing as much interviewing as possible by phone

Treatment is crossed with the incentive experiment.

Outcomes of interest: Response rates, composition (bias), field cost. To be weighed up against issues of possible differential measurement error and instrument design.

## Telephone/F2F Test: Household Response

	CAPI %	Mixed mode (early transfer) %	Mixed mode (late transfer) %	Total %
Complete household	61.4	49.8	53.5	54.9
Partial household	15.5	20.0	18.0	17.8
Productive household	76.9	69.8	71.5	72.7
Non-contact	5.9	6.5	4.1	5.4
Refusal	15.5	18.5	16.9	16.9
Other non- response	1.8	5.4	7.6	5.1
n	513	519	521	1561

NCRM/SRN Symposium, British Academy, 3-11-2011

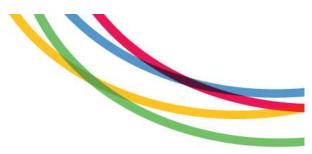
# Web / F2F Test I



Random allocation of households to treatment 1 or 2:

- 1: All fieldwork F2F (contact attempts, household interview, all individual interviews);
- 2: Primary mode web with F2F as fall-back mode; further experimentation at individual interview stage....
- All sample members will be sent an advance letter with an unconditional incentive, but in group 2 the letters will differ depending on household status, web use and possession of an email address

# Web / F2F Test II



- To wave 4 respondent householders who are regular web users (RWU): Letter includes URL to survey and does not mention possibility of CAPI interview.
- To spouses/partners of wave 4 respondent householders who are RWUs: Letter does not include URL and does not mention CAPI.
- To wave 4 respondent householders who are not RWUs: Letter includes URL to survey but mentions possibility of CAPI interview.
- To spouses/partners of wave 4 respondent householders who are not RWUs: Letter includes URL and mentions CAPI.
- To all other persons aged 16+: Letter does not include URL but mentions possibility of web interview and says that URL will be sent once the household questionnaire has been completed.

If an email address is known, the letter will be sent by email too .

# Web / F2F Test III



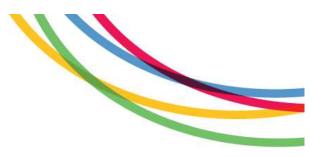
- If RWU, two reminder emails after 2 days and 4 days.
- If email address for spouse/partner, that person gets same series of emails with 2 day delay
- Three days after the last reminder, if grid not completed, household will be transferred to F2F.
- Once one person starts grid, it will be "locked" so that second person cannot enter it. If break-off, next entry will go straight to next unanswered question and reversing will not be possible

# Web / F2F Test IV



- Person completing grid will be routed immediately to the household questionnaire and then their individual questionnaire.
- Household questionnaire will remain an active instrument for each household reference person/spouse/partner until one completes it, when it will then become invisible to all.
- Completion of the grid by web will trigger the individual interviews for each person, with letters/emails to each.
- In group 2 households who complete the grid F2F, interviewers will attempt all individual interviews during the same visit. They will also try to confirm/collect email addresses for all household members

## Web / F2F Test V



- After the visit at which the grid is completed, households in which not all members have been interviewed will be randomly allocated to one of two groups:
- Web only phase, after which individuals who have not completed their interview will be transferred to F2F.
- F2F phase, during which web is also open, followed by a final web-only phase.

# Web / F2F Test VI



- For households allocated to web at the individual interview stage, there will be a second postal mailing once the grid is completed (regardless of mode of completion of the grid), to all hhd members who did not complete the interview on the same contact as the grid was completed:
- The mailing will include the URL for the individual interview and incentives for completing the web survey.
- A copy will be sent by email if we have an email address, including a link to the q're.
- Postal mailing is both to maximize the number of web respondents (including among those for whom we do not have valid email addresses) and to administer the incentive.

# Web / F2F Test VII



- Email reminders for individual web q'res.
- Web respondents who break off before reaching the 'partial interview' marker will be sent a reminder email/mailing thanking them for their responses so far and asking them to complete the remainder (with URL).
- After 7 weeks, there will be a four-week reissue phase. In group 1, all reissues will be F2F. In group 2, reissues will be F2F if first individual approach was (mainly) by web, and by web if the first individual approach was F2F. Reissues will include soft refusals and non-contacts.
- In addition, individuals who responded by web and broke off before the 'partial interview' marker will be reissued F2F. Web surveys broken off after the 'partial interview' marker will be accepted as partial interviews





	HH grid first appr.	HH grid follow- up	HH grid mode complet- ed		Individual first approach	Individual follow-up	1 week for re- allocati on	Conver- sion
*	WEB	F2F	WEB	* *	WEB	F2F		F2F
			F2F	* *	WEB	F2F		F2F
					F2F	F2F		WEB
*	F2F	F2F	F2F		F2F	F2F		F2F

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1. randomization

#### 2. randomization

# For more information:



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