The Generations & Gender Programme: Life History Summary Tables

Testing summary tables in the life history questions of the UK GGS

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1. Introduction

Event history data was traditionally collected in cross-sectional and longitudinal surveys by asking respondents retrospective questions regarding status changes (e.g., transitions and events) that occurred in the time since the last interview (Wieczorek et al., 2020). These events could be related to fertility history, partnership history, contraception use, housing, employment history and other events. Collecting and reconstructing these retrospective events provides valuable information to researchers in examining patterns of these events (e.g., long-term fertility trends, dynamic partnerships, employment histories), which can then be analysed using quantitative methods such as event history analysis or survival analysis to understand the interconnections between these events to important life outcomes, such as quality of life or health.

Since the information is reliant on retrospective reports, collecting event history data can be subject to recall bias. For instance, respondents may not report events or episodes, leading to omission, underreporting or overreporting of events. Telescoping may also occur where respondents may report an event occurring more recently or more remotely than when it actually occurred (Bernard et al. (1984), Eisenhower et al. (2004), Sudman & Bradburn (1973)).

Researchers have argued that using event history calendars (EHCs) or life history calendars (LHCs) can help improve data quality by stimulating the recall of past events and enable the participant to mentally relate to the dates of the specified events (Belli, 1998). EHCs or LHCs were pioneered by (Freedman et al., 1988) and have historically been used in social survey research to examine key events that have occurred throughout an individual’s life course (Glasner et al., 2015). These calendars typically consist of time-line based visual recall aids that incorporate multiple types of retrieval cues. For example, the calendars typically show a horizontal display of a reference period divided into smaller time periods, and use temporal anchors in the shape of important public or personal events. Based on a visual timeline, respondents are able to relate events to each other and detect gaps and inconsistencies in reports (van der Vaart, 2004). For example, landmark events can be used as temporal anchor points to which respondents can relate other events (e.g., national holidays). Evaluations of using calendars in offline surveys show that calendar instruments can improve data quality regarding completeness and consistency compared to data collection by means of questions lists (Engel et al., 2001; Glasner & van der Vaart, 2009).

Studies have also found that LHCs are useful for collecting more or more precise reports about sensitive information, in topics such as youth sexual behaviour (Clark & Mathur, 2012; Luke et al., 2011) and intimate partner violence (Yoshihama et al., 2005). These studies found that LHCs improved data quality by increasing the number of reports about sensitive data. In addition, studies also found that LHCs reduce social desirability bias, i.e., a bias when participants provide answers they think will make them seem more favourable to the interviewer (Clark & Mathur, 2012). Clark and Mathur (2012) argue that LHCs are suitable for sensitive topics because they place life events into broader contexts (e.g., life trajectories, relationship histories) and reduce potential embarrassment about answering specific questions.

However, LHCs are typically administered offline i.e., in face-to-face or computer-assisted telephone interviews (CATI) which may or may not be useful as surveys move to online data collection (Belli et al., 2007). In the UK, there has been a big shift to online data collection in social surveys (Maslovskaya et al., 2022). On the one hand, online surveys can provide anonymity when participants respond to sensitive topics. On the flipside, online surveys can be time consuming as participants struggle to navigate the survey without an interviewer, especially when providing responses in large and gridted calendars (Wieczorek et al., 2020). This may lead to challenges already prevalent in mobile web surveys, such as raising the risks of break-offs, i.e., ending the survey before completion (Mavletova & Couper, 2015; Mittereder & West, 2022;
Peytchev, 2009), satisﬁcing, i.e., participants not providing honest answers to ﬁnish the survey quickly (Krosnick, 1991), or speeding through the survey (Baker et al., 2010; Conrad et al., 2017; Zhang et al., 2014).

The GGS is a fairly long questionnaire, which takes approximately 45 minutes to complete, on average (Rijken, 2022). Previous evidence about the GGS in other countries have shown that break-off rates vary across countries, and diﬀer by participant characteristics (Emery et al., 2022; Rijken, 2022). Using the 2018 GGP pilot study, Emery et al. (2022) found that although break-off rates were favourable compared to other surveys that are half as long as the GGS, break-off rates varied by country; as low as 10% in Croatia, and as high as 20% and 22% in Germany and Portugal respectively. The authors also found that break-off rates were higher on smartphones compared to laptops/PCs, and higher amongst respondents with lower education. Using the pilot web surveys from GGS-II in Norway, Denmark, Estonia, Hong Kong, and Czech Republic, Rijken (2022) found that break-off rates were as low as 17% in Czech Republic and as high as 43% in Norway. In early ﬁndings, Rijken (2022) showed that women were more likely to complete the questionnaire. However, respondents with more children and more ex-partners are less likely to complete the questionnaire, as well as respondents aged 30-49 compared to those aged 18-29.

There are a handful of studies which examine the effectiveness of LHCs in online surveys with inconclusive ﬁndings (Glasner et al., 2015; Morselli et al., 2016; West et al., 2022). Some studies ﬁnd that LHCs online can improve data quality, while others ﬁnd little diﬀerences in quality, and little improvement in break-offs. Glasner et al. (2015) conducted a ﬁeld study to examine whether using calendar visual aids (e.g., domain time lines) or landmark events, or both, can improve data quality in web surveys. The authors found that visual feedback improves participant recall on diﬃcult to remember events, but landmarks did not aﬀect data quality, nor did these instruments improve break-off rates. Morselli et al. (2016) compared the use of an online calendar survey to an online conventional survey, and found little diﬀerence in completeness and improvement in data quality, except that responses from the calendars were slightly more precise. Conversely, West et al. (2022) examined whether using a self-administered calendar using the Blaise software (online survey adaptable to PC, smartphone and tablets) helped improve data quality on contraceptive use and sexual activity. Comparing their calendar to the gold-standard national face-to-face survey on fertility behaviours in the USA, the authors found that respondents using self-administered EHCs were signiﬁcantly more likely to report use of multiple diﬀerent contraceptive methods and sex without contraception.

In this study, our aim was to use a technique called ‘cogability testing’ (Wilson & Dickinson, 2021) to examine whether the introduction of a summary table enables us to improve data collection on life history data. Cogability testing is a technique that combines cognitive interviews (Beatty & Willis, 2007) with user testing (Couper, 2000), techniques used to test new online survey questions. Since the GGS surveys can be displayed on several modes, some of which have small screens (e.g., mobile phones), we piloted what we term ‘life history summary tables’ instead of requiring respondents to answer within a calendar timeline directly. After answering a set of life history questions, we prompted the participant with a summary of their responses in the form of a table, which orders their responses chronologically. We piloted the summary table to examine whether the prompt would help the participant check and correct their dates and responses, to improve data accuracy, and data quality.

Findings from the cogability testing contribute evidence towards two main survey issues. First, we examine the effectiveness of using life history summary tables to improve accuracy of responses in key life events, which are typically subject to recall error and social desirability bias. This is especially relevant for the main content of the survey, which is interested in complex fertility and partnership transitions in modern UK society. Second, we test the use of this table in an online survey which can be accessed via a computer,
tablet, or smartphone, adding to the scant evidence about the effectiveness of summary tables using the Blaise software.

We found that the summary tables did not improve data quality, and instead, respondents raised concerns about data privacy and safety, with one respondent requesting that their data be withdrawn from the study. Note however, that these findings are based on a small sample size and not generalisable. Based on these preliminary findings, we did not include the summary tables in the full UK GGS-II survey. Before using summary tables for these type of life events in online social surveys, we recommend testing the summary tables on a larger-scale. Despite this limitation, these findings from the cogability tests can help future researchers pilot other ways to incorporate summary tables in future surveys, especially in environments where web surveys may become more prevalent. This report discusses the findings of these tests in detail, and provides recommendations for future research interested in collecting retrospective event history data.

2. Survey and methods

2.1. The UK Gender and Generations Survey

The Generations and Gender Survey (GGS) is one of the main outputs of the Generations and Gender Programme (GGP), an international Research Infrastructure. Over the past 20 years, the GGP has collected survey data in 25 countries in Europe and beyond. The GGP has recently launched a new round of surveys, called GGS-II, to understand how families have been changing over the past several decades. A Consortium Board has developed the instrument and fine-tuned the data collection methods. The central hub, based at the Netherlands Interdisciplinary Demographic Institute (NIDI), has coded the survey into Blaise software, using Blaise 5 (adaptable to a laptop, desktop PC, tablet, or smartphone).

The University of Southampton has received funding from the Economic and Social Research Council (ESRC) to conduct the first wave of the GGS in the UK. The UK GGS sampled individuals aged between 18 and 59 to collect information about early adulthood and mid-life experiences. Additionally, the UK GGS aims to capture the complexity of family formations and to understand how relationships and fertility have been changing through major events such as the COVID-19 pandemic and Brexit.

The ESRC grant includes funding to undertake methodological work on the GGS survey to provide insights into the accuracy of online data collection and to allow for design improvements to the survey. In implementing the methodological work, the University of Southampton contacted NatCen about conducting a redesign of the questionnaire. Following discussions between collaborators, three strands of development were proposed. Firstly, the GGS questionnaire would be re-designed and programmed to improve the user experience. Secondly, methods to prevent data entry errors would be tested, including range checks on dates. Finally, summary tables which highlighted inconsistent dates, would be programmed within the survey and tested. Here we discuss the key findings from the cogability user testing using the UK GGS.

2.2. Main aim of the summary tables

A summary table was developed to help people recall dates, check for consistency between dates given in the partnership and fertilities section (see the list of questions in Appendix A). Within the cogability testing, the aim was to check that the routing of life event questions into the summary table was working as expected, to establish whether participants were able to edit any incorrect dates within the table, and to assess the general usability of the table.
In addition, the cogability testing was conducted to explore if any aspects of the survey, particularly within the life histories or fertility sections, could lead to missing data or participants dropping out of the survey, which would result in high break-off rates.

2.3. Cogability testing

Cogability testing is a term used by survey practice which combines two types of testing: cognitive interviews and usability testing in online surveys (Wilson & Dickinson, 2021). The UK Office for National Statistics (ONS) has also recently started using the term (ONS, 2022).

Cognitive interviewing emerged in the 1980s as interdisciplinary research between survey methodologists and psychologists, known as the cognitive aspects of survey methodology (CASM), used to examine how respondents understand and interpret survey questions (Beatty & Willis, 2007). Cognitive interviewing refers to a set of techniques used to understand the survey participants’ mental process in reaching an answer to survey questions, often based on the CASM model by Tourangeau (1984). The model investigates four cognitive stages: 1) how participants understand and interpret survey questions, 2) how they recall information that applies to the question, 3) the judgements they make as to what information to use when formulating their answers, and 4) the response mapping process i.e., the mapping of the answer by the respondent to the categorical responses provided in the survey. This is an important technique to examine whether the participants’ interpretation of survey questions is consistent with the intended meanings of the survey questions, to provide valid interpretations of the responses to the data user. The interview findings help inform researchers how to identify problems with question wording and design.

In addition, we were interested in testing the usability of the summary table. Usability is a design perspective that focuses on the users (e.g., survey respondents) of the system (e.g., computer), typically applied in human-computer interaction since the rise of computer-assisted interviewing. It includes measurable outcomes such as time taken to complete a task, number of errors made, ease of learning, and so on (Couper, 2000). Usability testing is, as the name suggests, a pre-testing technique used to examine how survey respondents interact with the survey. It is particularly advantageous when there are no best practices available, such as in this study where the Blaise code survey can be applied to smartphones, tablets, and laptops or computers (Geisen & Bergstrom, 2017).

Two methods were used in the cogability testing: ‘think aloud’ and ‘verbal probing’. The ‘think aloud’ interviewing method starts with the interviewer typically reading the survey question to the participant, who answers it out loud, adding any thoughts or opinions that came up while formulating the answer (Willis, 2005). Advantages of the ‘think aloud’ approach is that it provides unbiased feedback, and is generally easy for the interviewer and participant to learn. ‘Verbal probing’ is a technique where the interviewer asks the participant targeted questions (probes) about either the survey content, or functionality (Geisen & Bergstrom, 2017). This technique’s aim is to understand how participants interpret the survey design, and to obtain insight about participants’ experiences interacting with the survey. It also enables the interviewer to explore a specific issue or usability problem more deeply.

Probes were designed to ensure that specific aims were achieved through the survey:

- To check the new summary table. To gather participants thoughts on this, and to check that people can edit incorrect dates as a result of the summary.
- To establish reasons for missing data and/or break offs in life histories and fertility sections.
2.4. Sampling and recruitment

Cogability testing interviews are qualitative in nature in that they rely on in-depth interviewing with small but purposively selected samples. In this project we deliberately recruited groups with more complex relationship and family histories in order to establish how well existing GGS questions work for these groups. We also set a quota to ensure we included people who were less digitally confident to ensure the question worked well with this group. In total, 12 interviews were conducted with participants. To be eligible to take part in these cognitive interviews, participants had to be aged 18-59. In addition, they must have met at least one of the following four criteria:

- They had cohabited with two or more partners/spouses during their lifetime
- They had three or more children (including biological children, adoptive children, or step-children)
- They had children with multiple partners (again, including biological children, adoptive children, or step-children)
- They were currently co-residing with their parents or living in the parental home\(^1\)

Participants were able to meet more than one criterion, with groups not required to be mutually exclusive. In addition to the above criteria, the sample was also split across genders, age groups and self-reported digital confidence. Some participants were asked to complete the questionnaire using a larger screen device (e.g., a laptop or desktop PC). Others were asked to complete the questionnaire using a smaller screen device (e.g., a smartphone or tablet).

Propeller Field, a third-party recruitment agency, conducted the recruitment process contacting people from a named sample file of potential participants. Potential participants were screened by recruiters via telephone and informed about the purpose of the interview (See Appendix B for screening questionnaire). During screening, participant details were collected and double-checked at the start of each interview. A confirmation email consisting of a zoom link and joining instructions was emailed to each participant recruited. At the end of each interview, all participants were emailed a code to redeem a £30 e-voucher as a thank you for taking part in the cognitive interviews.

Tables 1 and 2 below summarise the details of the recruited sample. There were a small number of discrepancies with recruitment when participants were screened during the interviews compared to when they were recruited by Propeller. Upon screening, all quotas on gender, age and relationship history were met and quotas which included less digitally confident people were exceeded.

\(^1\) These participants are not discussed at length in this report, as they were tested with new questions related to the parental home, not discussed here.
Table 1 Cogability sample composition

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age</th>
<th>Device type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>Women</td>
<td>18-30</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>

Quota set

Total when screened by Propeller

Total when screened by interviewers

2.5. Fieldwork

Interviews were carried out by researchers experienced in the selected cogability testing methods. Participants were trained to 'think aloud' at the beginning of the interview, i.e., to talk to the interviewer through their thought processes when hearing and answering a question. They were then asked to use this technique when answering the survey questions. ‘Think aloud’ probes are useful in providing the participant freedom in their thoughts and answers about the survey and encourage unanticipated issues with the survey potentially unforeseen by the researcher.

Directed probing questions were used after completion of the survey to explore participants’ responses further and assess their understanding of the questions. Interviewers used a semi-structured topic guide to ask the follow-up probes and to explore emerging issues not including in the testing protocol if they were relevant to test aims.

All participants were interviewed on Zoom. Participants were asked to share the screen of their laptop or mobile device whilst they completed the online survey. All interviews lasted approximately 1 hour, and interviews were video recorded through Zoom with the participants’ consent. Procedures for testing were approved by the NatCen Research Ethics Committee prior to fieldwork being undertaken.

After the interviews, the video recordings were reviewed and notes summarising the interviews were written into a matrix in Excel for each interview. Think aloud data and findings from each of the scripted
probes were recorded. Data could thus be read horizontally as a complete case record for an individual, or vertically by question, looking across all cases. Once the matrix was completed, the data in the matrix were reviewed thematically. A debriefing session was organised after fieldwork had concluded where the interviewers presented the initial findings.

3. Findings

3.1. Life history summary tables

The respondents were first asked a series of ‘life history’ questions, of which responses to these questions were then fed into a summary screen table. A list of questions that were probed in the cogability testing, which related to the summary screen table, are shown in Appendix A. Examples of dates collected earlier in the questionnaire, that were shown in the summary table, included:

- The date they started living with a partner
- The date they got married
- The dates children were born

The participants did not need to use their children’s legal names, and could use nicknames or pseudonyms (e.g., see LHI24 in Appendix A). All dates were asked in the format of [MM/YYYY], the same format displayed in the summary table. Participants could enter ‘00’ if they did not want to enter the month.

For example, one of the questions asked to the respondent was as follows:

**Figure 1 - DEM28b (If married to current partner)**

The response from DEM28b is assigned in chronological order according with other life history questions, and presented to the participant as illustrated in Figure 2 below. The summary screen provided a timeline of important life events with respondent’s lives, with the dates shown comprised from previous questions within the survey. In this example, the response from DEM28b corresponds to 10/2012 ‘Married current partner’.

When viewing the summary table, approximately half of the participants appeared to read the summary screen in detail, with the other half appearing to skim-read, which was evidence by the limited time spent on the summary table page. Skim-reading or speeding are found to be fairly prevalent in web surveys (Baker et al., 2010; Conrad et al., 2017; Zhang et al., 2014).
In relation to the date questions which populated the summary table, when participants were asked about the accuracy of these dates, participants provided mixed responses. Some participants felt they were unsure of the specific dates, for example many were confident of the year but not the month. In resolving their uncertainty, many of these respondents estimated a month either by putting ‘00’ or by entering an approximate month they felt the date might have been on, for example they knew the event happened in summer, so entered the month as July ‘07’. However, not all respondents took this approach, with other respondents expressing that they were very unsure of the dates and had ‘made-up’ a date to enter, despite a ‘Don’t Know’ option being readily available. For example, a respondent said that these were “Frustrating questions”, and they guessed the answers, believing that most people would do the same. Another respondent said that they had to guess their partner’s date of birth. Across all participants in our interviews, there were limited uses of ‘Don’t Know’ options, suggesting that participants were more likely to estimate dates than not answer at all.

In general, participants felt it was very clear how they would go about amending the dates within the summary table, with most participants explicitly stating, ‘you would type over the existing date’. This is demonstrated in Figure 3, below.

Although we found evidence of inaccurate dates within the cogability tests, we found only limited evidence of participants changing any incorrect or missing dates, with only one participant changing their responses at the summary table. No other participants opted to change or amend any dates, even when they had identified that they had entered previous dates incorrectly. When these participants were asked why they had chosen not to amend incorrect dates, participants generally expressed that they would be unwilling to share this personal information. Therefore, more work is needed to address this issue and to understand the reasons for not changing the incorrect dates when needed.
Whilst some participants liked the summary table i.e., one participant felt it was nice to see their life story presented to them, others found that the presentation and information within the summary table made them feel uncomfortable. For example, one respondent “did not find the summary useful because looking at the dates they said it made them think why they needed the information and they would perhaps be tempted to delete this information” (Female, age group 31-45). In relation to the way the table was presented, some respondents felt the design was a little impersonal, with one respondent saying: “it comes across a bit business-like when you are actually talking about people’s lives” (Male, age group 31-45 years, 3 partners, no children).

This respondent further expanded by saying they would prefer these dates to appear embedded into a paragraph of prose. For others the main issue was with volume of information displayed within the table, with participants feeling that when the information they had provided was displayed all at once on screen it felt a little invasive. Amongst these participants, there were clear privacy and security concerns, with participants feeling unsure of why they were providing their personal information and what their information would be used for. With these respondents, no privacy concerns were discussed when initially providing this information within the life history section of the questionnaire, but the privacy concerns were expressed at the summary table screen. One participant upon seeing the summary table expressed that if this was not an interview, they would have deleted all the information they had provided within the table as they found it too intrusive, with this respondent saying “is Big Brother watching you?” (Female, age group 46-59 years, 2 partners, 2 children).

3.2. Break-offs and life history summary tables

Reasons for break-off

Within the cogability testing interviews, some participants found the life histories section to be intrusive due to the personal nature of the question material. Specifically, some participants raised concerns around sharing personal information regarding their children, such as the names and date of birth of their child, even though participants did not need to provide the child’s actual name, or their full date of birth. These participants felt uncomfortable providing this information whilst being unaware of what their data was being used for, with a subset of participants claiming that they would drop out of the survey because they were unclear about how their data would be used. This was a general notion held by participants with any number of children, regardless of the age or gender of the participant.

A slightly smaller set of respondents found the life histories section to be repetitive due to reoccurring questions that were triggered when respondents had to provide information surrounding multiple family members or partners. If a respondent had a large family or multiple previous partners, they were required to answer multiple questions about each of these individuals; questions which were often repeated per person. This caused frustration for those with larger families and/or multiple previous partners which in turn led to a few occasions wherein the question text was not read correctly, and answers were inputted incorrectly. In addition, a few respondents noted that they would likely drop off from the survey due to the repetitive nature of the life histories section and length of time it took up.

Some respondents felt they were asked questions that did not apply to them. Specifically, this centred around questions based on the respondent’s children’s living situation, wherein respondents were asked where a child lived and how often they stayed in the same household together. These questions were asked irrespective of whether the respondent had a relationship with the child (who could be an ex-partner’s child) or whether the child had moved out of the respondent’s household. Building upon this, within the questions themselves, there were no answer categories that allowed respondents to communicate that their child had moved out of the parental home. As such, respondents who had older
children who had moved out of the family home, felt these questions to be redundant as they did not consider their situation. This ultimately led to many respondents refusing the question or selecting ‘don’t know’ as their answer within the categories provided. This finding could also be an artefact of the test methods used, as some of the additional routing used in the GGS to prevent parents of adult children from seeing these questions were not applied in the shortened cognitive test instrument.

Changes to the final questionnaire based on cogability user testing

In response to some of these issues, NatCen recommended the following solutions which were then implemented in the final survey. With regards to the intrusive nature of some of the questions, we implemented a specific help text box to explain the reasoning behind the collection of personal information, to 10 questions which could have been perceived as intrusive by the participant. An example of help text is provided in Figure 4 below. This information aimed to reassure participants and inform them of the purpose of the research.

*Figure 4 – Help text added to potentially intrusive questions*

In collecting information about the participants’ children (e.g., LH124), the term ‘pseudonym’ was replaced with a clearer worded statement ‘a nickname, number, or initial’. A help text was also created before the question, stating “The names or initials you provide here are used only in later questions for clarity to help you know which questions are being asked about each child. All names or initials provided will be deleted at the end of the interview.”

To address respondents’ frustration with being asked non-applicable questions, we added a series of filters to the set of questions asking about each child. For example, a filter was included to question LH131 “Is [the person] currently living in the same household with you?”. The ‘child contact’ questions were* not* asked to parents who answered “Yes, always” and their child was under 18 years old, or if the parents responded “I don’t know anything about this child/person”. This skipped over irrelevant questions for these participants, such as the question “How many nights does [the person] spend in your household on an average week?”.

In particular, some participants expressed frustration regarding the questions about children of ex-partners. If participants did not have a relationship with a child, or the child was deceased, at the first mention of this child participants were given the option to not provide any further information about this child. Once participants selected this response option, they were not asked any additional looped questions about this child, which in turn helped to streamline the survey and minimise any distress for the respondent.
4. Summary and discussion

This study provides new qualitative findings about using a summary table while collecting life history information in web-based surveys. Most GGS surveys have been conducted face-to-face with the aid of an interviewer, resulting in high quality fertility and partnership histories (Vergauwen et al., 2015). The UK GGS, however, is one of the few that has attempted to collect data completely online. Although break-off rates in the GGP web pilots were comparable to studies which are half as long (Emery et al., 2022), the collection of complicated life history sections were still of concern. This study adds to our knowledge whether a summary table could further improve data quality in self-completed web surveys. In particular, we aimed to examine whether data quality can be improved by reminding people of their entered dates and asking whether their information was correct.

We found that the cogability testing raised some unexpected issues about these tables, such as little participant interest in amending incorrect information and significant concerns over privacy. Some participants even said they would withdraw their data after seeing it presented in a table. Because of these issues, we were concerned that the summary tables would not improve data quality and may potentially increase survey break-off risk. However, we recognise that our sample size of participants was small and further evidence is needed to conclude whether summary tables can be useful.

Privacy concerns were highlighted as a common reason for both data quality issues and break-offs by some interviewees (about a third of participants). When participants’ answers were provided in the summary table format, some participants did not amend their dates because they became unnerved by the presentation of their personal information. Although there were no privacy concerns discussed initially in the life history questions list, privacy concerns were expressed at the summary table screen. This suggests that the way participants’ responses are displayed may illicit thoughts or behaviours in participants. For example, Bay-Cheng (2017) found that participants who responded to a digital sexual life history calendar, on top of a baseline survey about their sexual history, exhibited higher sexual esteem compared to participants who did not. The authors found that the life history calendar allowed more self-reflection for participants, giving them a new perspective to their sexual experiences. However, they also found that one participant had difficulty revisiting difficult past experience (e.g., heartbreaks). Our findings suggest that the summary tables may be eliciting the latter, reminding respondents about difficult experiences. Our findings are also unique because while calendars are usually implemented to capture participants’ responses, our summary table is merely a reconstruction of the respondent’s previous answers.

Some participants also found the life histories section to be intrusive, especially with regards to information about their children, which lent greater potential for break-offs. This is in line with Glasner et al. (2015) who found that landmarks did not reduce break-off rates. We also found that using a summary table did not improve respondent’s likelihood to report potentially sensitive information, in contrast with studies such as West et al. (2022) which found that web LHCs improved responses about sexual histories and contraception. It could be that respondents are more forthcoming with their own information, but less so with information about others (e.g., their ex-partners). We also found that privacy concerns may stem from lack of clarity about how participants’ data is used, but it is unclear if including a specific help text would improve participants’ general view about the summary tables. In the final survey, we included a help text which clarifies that nicknames, letters, or initials can be used instead of real names, all of which will be deleted at the end of the survey. We also implemented an additional text about privacy in the final survey, but evidence about whether these text boxes reassure respondents are scarce. An experimental study by Jäckle et al. (2022) using the UK Understanding Society Innovation Panel found that participants are less likely to consent to data linkage online than in face-to-face interviews because they are more concerned about privacy and the security of their data when completing the survey online. The authors also found
that willingness to consent is the major driver, as simplifying the readability of the consent request raised understanding but did not increase consent, nor was it driven by the selection of different types of people into web or face-to-face interviews. More work is needed to understand the implication of these findings in the specific context of summary tables tested by this project.

5. Future research

Given the interest in utilizing summary screens and calendars in online social surveys, more work is needed to understand issues associated with privacy expressed by some respondents during cogability testing. For instance, it is unclear why participants were unwilling to alter or fill in any missing dates, even when they knew the date they had previously entered was incorrect. Further research is needed and larger scale testing is required to establish whether different types of summary tables are useful in online surveys, and if yes, what can help to improve their functionality.

The issues around privacy and security concerns need to be investigated and addressed. Privacy concerns do not only raise the likelihood of break-offs, but could potentially affect data quality through a higher risk of satisficing. Help screens and prompts can remind participants of the reasons for collecting and displaying this information, and may provide reassurances of confidentiality that the summary screen display format will not be used for any purposes other than to help the participant remember important life event dates. However, evidence about the effectiveness of prompts is still scarce and future studies should examine whether such prompts can also help improve break-offs. In addition, future work could investigate whether any break-off occurs at these tables in a larger, more representative sample, and whether there is any evidence from paradata of participants amending responses as a result of the summary screens.

The impact of the COVID-19 pandemic has led to an opportunity to move to online surveys in a relatively short period of time, with evidence that it is possible to establish and transition to high quality surveys and data collection online (Maslovskaya et al., 2022). Despite such opportunities, online surveys can also pose challenges depending on the device used, the survey design, and optimization of the surveys, among others. Given the rapid transformation and uptake of new technologies, coupled with the rise in internet access to diverse populations, researchers should continue to explore innovative ways of collecting data online, with a particular focus on user-oriented solutions.

6. References


7. Appendix

7.1. Appendix A: Life histories questions which underwent cognitive testing

DEM21 (All)

We are interested in both opposite and same sex partnerships who you have been in a relationship with. Do you have an intimate partner now even if you don’t live with them?

☐ Yes
☐ No
☐ Don’t know
☐ Refuse

[Back] [Save and Continue]
DEM22a (If has current partner)

DEM22 (If has current partner)

When was your partner born? [MM/YYYY] If you are unsure of the precise date, please provide your best estimate (e.g. enter 00 for the month, if you are not sure of the month but know the year).

☐ Don’t know

☐ Refuse

How did you and your partner meet?

☐ Through work

☐ In education (School, University, College etc.)

☐ At church or equivalent

☐ Online dating

☐ Other online setting

☐ At a pub, bar, nightclub

☐ Through a social organization, gym or volunteer group

☐ At a private party or social event

☐ Through friends

☐ Through family

☐ Other

☐ Don’t know

☐ Refuse
DEM28b (If married to current partner)

When did you marry? [MM/YYYY] If you are unsure of the precise date, please provide your best estimate (e.g. enter 00 for the month, if you are not sure of the month but know the year).

☐ Don’t know

☐ Refuse

Back  Save and Continue

DEM30b (If current partner lives in same household)

When did you and he/she first start living together? [MM/YYYY] If you are unsure of the precise date, please provide your best estimate (e.g. enter 00 for the month, if you are not sure of the month but know the year).

☐ Don’t know

☐ Refuse

Back  Save and Continue

DEM31 (If current partner does not live in same household)

When did this relationship start? [MM/YYYY] If you are unsure of the precise date, please provide your best estimate (e.g. enter 00 for the month, if you are not sure of the month but know the year).

☐ Don’t know

☐ Refuse

Back  Save and Continue
DEM41 (If children with current partner)

Have you and your partner had biological children together? (If you are in a same-sex partnership, are you the biological parent?)

- Yes
- No
- Don't know
- Refuse

DEM42 (from DEM41) (If children with current partner)

Have you and your partner had biological children together? (If you are in a same-sex partnership, are you the biological parent?)

- Yes
- No
- Don't know
- Refuse

How many biological children have you had together?

- Don't know
- Refuse

Back  Save and Continue
DEM43 (If children with current partner)

Have you and your partner adopted children together? (if you are in a same-sex relationship have you adopted your partner's child(ren)?)

- Yes
- No
- Don't know
- Refuse

DEM44 (from DEM43) (If children with current partner)

Have you and your partner adopted children together? (if you are in a same-sex relationship have you adopted your partner's child(ren)?)

- Yes
- No
- Don't know
- Refuse

How many children have you adopted with your partner?

- Don't know
- Refuse
DEM45 (If has current partner)

Has your partner had any children of her/his own?

- Yes
- No
- Don’t know
- Refuse

DEM46 (from DEM45) (If current partner has own children)

Has your partner had any children of her/his own?

- Yes
- No
- Don’t know
- Refuse

How many children has she/he had with another partner?

- Don’t know
- Refuse
LHI08 (If children with previous partner)

Have you and Partner A had children together?

- Yes
- No
- Don't know
- Refuse

How many children have you had together?
If this was a same-sex relationship, please only consider your own biological children that were born when you were together.

- [ ]
- Don't know
- Refuse

LHI20 (Child summary statement)

Based on the information you have provided you had 1 biological children, 0 adopted children and 1 stepchildren. Is this correct?
Please also include children who passed away.
A stepchild is a child of a partner or an ex-partner from a relationship they had before you.

- Yes
- No
- Don't know
- Refuse
LHI24 (If children)

To help us keep track, please provide the names of all these children, starting with the oldest. You can use pseudonyms if you prefer and this information will be deleted at the end of the interview.

Name of Child

- Don't know
- Refuse

LHI32 (If children)

Where does the child stay the rest of the time?

- With biological parent
- With grandparents or other relative/s
- With adoptive, foster parent/s
- Boarding school
- In care or other
- Don't know
- Refuse
Child contact questions

LHI33 and LHI33u (Child contact questions)

How often do you look after Child B?

- Never
- Don’t know
- Refuse

times a...

- Week
- Month
- Year
- Don’t know
- Refuse

LHI33alt AND LHI33altf (Child contact questions)

How often do you look after CHILD A?

- Weekly
- Monthly
- Yearly
- Don’t know
- Refuse

And how many times do you look after CHILD A during the above period?

- Never
- Don’t know
- Refuse
LHI39a (Child contact questions)

How often do you meet with CHILD A in person?

- Weekly
- Monthly
- Yearly
- Don't know
- Refuse

Back  Save and Continue

LHI39au (Child contact questions)

How many times a week do you look after Child B?

- Never
- Don't know
- Refuse

Back  Save and Continue

Contact Us  Confidentiality
LHI39b and LHI39bu (Child contact questions)

How often do you have contact with Child B by phone, mail, email or any other electronic means?

- Never
- Don’t know
- Refuse

Times a...

- Week
- Month
- Year
- Don’t know
- Refuse

Child’s health questions

LHI36 (Health Q’s – If child lives with R always, most or some of the time)

For the past six months at least, to what extent has Child B been limited because of a health problem in activities people usually do? Would you say they have been...

- Severely limited
- Limited, but not severely
- Not limited
- Don’t know
- Refuse
LHI37 (Health Q’s – If child lives with R always, most or some of the time)

How is Child B’s health in general?

- Very good
- Good
- Fair
- Bad
- Very bad
- Don’t know
- Refuse
7.2. Appendix B: Screening questionnaire provided to Recruitment Agency

**Introductions and Recruitment Conversation**

- My name is [NAME], and I am looking for volunteers to take part in an interview with NatCen Social Research.
- NatCen is an independent not-for-profit organisation, and they are carrying out this project for the University of Southampton on a research project called the Generations and Gender Survey (GGS).
- The aim of the project is to help University of Southampton test their survey by doing some cogability user-testing interviews. We want to make sure that the survey questions and survey instructions are clear and easy to understand before the main survey is sent to thousands of people.
- The survey is about how families have been changing over the years. It collects information on how different generations make choices about when to move out from their parents, when to move in with a new partner and when to have children.
- This project is being carried out purely for research purposes. It will not be used for marketing, and your details will not be shared with other organisations.
- Taking part will involve a video call where you will be asked to share your devices screen with the interviewer. Instructions for using the video call platform Zoom will be provided. Interviews will last around 1 hour, and everyone who takes part will receive a £30 Love2Shop e-voucher as a thank you.
- With your permission, the interview will be recorded. We treat all information that you give in strict confidence, in accordance with the General Data Protection Regulation 2018 (GDPR). Personal details such as your name and contact information will be kept confidential, held securely by NatCen Social Research and the University of Southampton, and will not be used for any purposes beyond this research project. The interview audio recording will be shared with the University of Southampton.
- Findings from the study will be written up into notes and a set of recommendations for the University of Southampton, but no names or other identifying information will be included in these. NatCen will delete your personal details after the project has finished.
- Participation is entirely voluntary, which means we rely on the goodwill of people to take part. Most people who take part enjoy it. **Would you be interested in taking part?**
- **IF NO:** Thank and close.
- **IF YES:** Before proceeding, can I just check some information with you? We are trying to get a spread of different people for this study, so I’d just like to run through a few questions with you to see whether you match our criteria.
- **PLEASE ASK ALL SCREENING QUESTIONS ON THE NEXT PAGE.**
Screening Questionnaire

1. What is your gender?
   - Male
   - Female
   - Other

2. How old are you?
   - 18-30
   - 31-45
   - 46-59

3. Which of these devices do you use to access the internet?
   - Smartphone/tablet
   - Laptop/PC
   - Neither

   IF NEITHER TO Q3: DOES NOT MEET ELIGIBILITY CRITERIA, THANK AND CLOSE

4. Are you currently living with a spouse or partner (either a boyfriend or girlfriend)?
   [If Yes] - Including your current spouse or partner how many intimate partners have you lived with in your lifetime?
   [If No] - How many intimate partners have you lived with in your lifetime?
   - None or one partner
   - Two or more partners

5. How many children have you had, by children we mean biological children, adoptive children or stepchildren?
   - None or one
   - Two
   - Three or more

   IF ANSWERED ‘TWO’ OR ‘THREE OR MORE’ TO Q5 ASK Q6:

6. How many partners have you had these children with?
7. Do you currently live with either of your parents?

- Yes
- No

- IF NONE OR ONE TO Q4 **AND**
- ‘NONE OR ONE’ OR ‘TWO’ TO Q5 **AND** ‘
- ONE’ TO Q6; **AND**
- NO TO Q7, THEN: DOES NOT MEET ELIGIBILITY CRITERIA, THANK AND CLOSE
- IF ‘TWO OR MORE’ to Q6 THEN: CHECK QUOTA

8. How confident are you in using your smartphone or computer to do new things?

- Very confident
- Confident
- Not that confident
- Not confident at all

CHECK QUOTAS.

- VERY CONFIDENT/CONFIDENT = MORE DIGITALLY CONFIDENT
- NOT THAT CONFIDENT/NOT CONFIDENT AT ALL = LESS DIGITALLY CONFIDENT

9. Can I just check, do you have internet access in order to take part in an online video interview via Zoom?

[IF NECESSARY: INSTRUCTIONS FOR DOWNLOADING AND USING ZOOM WILL BE SENT IN ADVANCE OF THE INTERVIEW]

- Yes
- No

IF NO: DOES NOT MEET ELIGIBILITY CRITERIA, THANK AND CLOSE
10. Would you be comfortable with a researcher from the University of Southampton observing your cogability user-testing interview?

Yes [ ]
Yes [ ]

• GO TO QUOTA SHEET. DO WE NEED TO INTERVIEW THIS PERSON?
• YES --> Ask next question
• NO --> THANK PARTICIPANT FOR TIME [OR ASK THEM TO ACT AS A ‘RESERVE’ IF THEY ARE AVAILABLE AT SHORT NOTICE TO STAND IN.]

11. Can I just check, are you able to take part in an interview over video call at one of these times? SHOW WHAT TIMES ARE REMAINING.

   o YES → Book in a time and ask next question
   o NO → THANK PARTICIPANT FOR TIME AND CLOSE

Read out: Any personal details will be kept confidential and held securely by NatCen Social Research. The information you provide will not be used for marketing purposes or any purposes beyond this project. NatCen will securely delete your personal data from its systems within six months after the project has finished.

12. COLLECT PARTICIPANT’S CONTACT DETAILS

<table>
<thead>
<tr>
<th>First name</th>
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<tbody>
<tr>
<td>Surname</td>
</tr>
<tr>
<td>Telephone no.</td>
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<td>Email</td>
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13. Read out: If you believe we have not complied with your data protection rights you can contact NatCen at dpo@natcen.ac.uk. You also have the right to lodge a complaint with the Information Commissioner’s Office at: Information Commissioner’s Office, Wycliffe House, Water Lane, Wilmslow, Cheshire, SK9 5AF, Telephone - 0303 123 1113, or online.

14. To finish, can I check if you have any final questions for me about this project? Are there any adjustments we could make to make it easier for you to participate in the interview?

15. Thank you very much for your time today. You will receive confirmation of your appointment and the link to join the Zoom call in due course.

END OF SCREENING QUESTIONNAIRE.

SEND CONFIRMATION OF APPOINTMENT.