COUNTING HOW MANY CHILDREN PEOPLE WANT: THE INFLUENCE OF QUESTION FILTERS AND PRE-CODES

EVA BEAUJOUAN[1]

ABSTRACT: *The Generation and Gender Surveys (GSS) are now widely used to study family, notably fertility, partnerships and fertility intentions, as evidenced by the number of recent papers using the data. The quality of the fertility and partnership histories has been evaluated and found reasonable in a majority of European countries. However, the quality and cross-country comparability of fertility intentions across all GGS countries has not yet been assessed. In the context of a broader piece of work on aggregate intended family size in Europe, we present the general structure of questions on intentions in the original questionnaire template, and a cross-national comparison of actual setups. Using two examples, we assess how pre-filters and response categories can affect (a) the proportion of persons declaring that they wish to remain childless, and (b) the mean number of children intended. We provide advice on dealing with intention questions in current studies and recommendations for future surveys. Overall, we propose simplification of the questions concerning the intended number of children, and to dissociate the questions on short-term and life-long intentions.*

Keywords: Generation and Gender Surveys, data quality, fertility intentions, family size, Europe

1. INTRODUCTION

As a result of a recent attempt to describe life-long fertility intentions at the macro level across European countries (Beaujouan, Sobotka, et al. 2013), we discovered several shortcomings in the comparability of data on life-long fertility intentions across countries and over time. It appeared that the method by which respondents were asked about the total number of children intended was not comparable across surveys, for instance the Fertility and Family Surveys (FFS) and Generation and Gender Surveys (GGS), but more importantly across GGS country surveys. One of the reasons appeared to be the variety of the questions used as filters and asked prior to the question on additional number of intended children. Another reason appeared to be a result of differences in the

[1] Wittgenstein Centre for Demography and Human Capital (IIASA, VID/ÖAW, WU), Vienna Institute of Demography/Austrian Academy of Sciences, email: eva.beaujouan@oeaw.ac.at.

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pre-codes used for these questions. Here, we explore variations in the pre-filters and response categories across surveys and their consequences in terms of comparability when dealing with intended family size and other questions on intentions.

Studies on intentions generally cover two perspectives: the short term, related to the realisation of intentions within a certain time frame, and the long term, related to life-long intentions, their change over the life course and the overall fit of completed fertility with the number of children intended earlier on in life. Analysis of intentions and the number of children a respondent wishes to have is a challenging endeavour. High levels of uncertainty (Bernardi, Cavalli and Mynarska 2010; Morgan 1982; Ní Bhrolcháin and Beaujouan 2011) and frequent individual changes in the answers given to these questions (Iacovou and Patricio Tavares 2011) make results unstable and highly sensitive to the way questions are asked. Sensitivity to question wording is heightened by the diversity of concepts related to family preferences, for instance (societal) ideal family size, but also desires, intentions and expectations regarding the future number of children. Translating the questions into other languages adds an additional layer of ambiguity (Harkness and Schoua-Glusberg 1998; Weinreb and Sana 2008).

Previous studies have shown that in general the questionnaire design and the order and formulation of the questions influence the results obtained (Iarossi 2006; Mathews et al. 2012; Schwarz and Strack 1991; Tourangeau and Smith 1996). In addition, results also depend on filters and on category labels (or pre-codes) (Poe et al. 1988; Schaeffer and Presser 2003; Young 2012). Questions on intentions certainly do not depart from these observations, and (for instance) the proportion planning to remain childless or the intended family size could depend on the filters and pre-codes of the survey questions. In looking at a repeated British survey (Centre for Population Change GHS database 1979–2009), Ní Bhrolcháin and Beaujouan (2011) observed that introducing the possibility of uncertain answers ("Probably yes", "Probably not") into a question on intentions (coded yes/no) greatly reduced the number of people answering "Don't know". In addition, it is possible that the proportions giving positive or negative answers and also the intended family size were affected. It is therefore incumbent on researchers to try and understand if and how the filters and pre-codes affect the answers to the questions on intentions. This is important because diversity in the ways questions on intentions are posed in GGS surveys could raise concerns about the comparability of results. Moreover, researchers' perceptions of societal phenomenon across countries, such as number of intended children and voluntary childlessness, etc., could be biased as a result of survey design.

In order to understand possible issues of comparability across the GGS surveys, we need to measure the direct incidence of questionnaire design on the

distribution and average number of children intended. We start by describing the variety of ways that questions on fertility intentions have been asked in the GGS questionnaires so far. We then check whether a pattern in the frequency of missing and "Don't know" (DK) answers emerges, depending on the response categories in the intention question in the FFS and GGS. We then use the CPC GHS data series to (1) estimate how the proportion of women who say they do not intend to have any child varies with the change in the response categories available to a question on long-term intentions, and (2) calculate the range in the number of children a woman says she intends to have depending on the pre-codes of the previous filter variable. We finally comment on which set of questions appears most suited to asking questions on fertility intentions in order to simplify the questionnaires and increase survey comparability.

2. THE CASE OF THE GGS SURVEYS

2.1 Concepts

GGS questionnaires originate from the Generation and Gender Project, an ambitious and successful project which aims to develop and exploit a series of standard panel surveys around the world, accompanied by a contextual database furnishing a series of economic and population indicators. The researchers involved in the project proposed a standard questionnaire that – if adopted uniformly by all countries – would ensure international comparability of results (Vikat et al. 2007). "The GGS aims at international comparability by providing the survey design, common definitions, a standard questionnaire, and common instructions that each participating country should follow" (Vikat et al. 2007). Harmonisation involves the colossal task of several researchers producing a uniform set of variables across countries (Kveder and Galico 2008).[2] Overall, apart from some country-specific concerns (Kreyenfeld et al. 2013), the data appear to ensure a good level of comparability regarding family events (Neels et al. 2011) and GGS is now widely used.

However, the complexity of the questionnaire and country specificities (resulting from harmonisation with previously existing surveys for inclusion in time series, etc.) have resulted in considerable heterogeneity in the way some questions are posed. In this paper we focus on the section concerning fertility intentions. Questions on intentions were conceived in the GGS according to three main ideas (Vikat et al. 2007). The first was using the "Prospective focus" of the survey (three-year interval up to the next wave) to implement the Theory

[2] Information on filters and routing applied during the harmonisation process for specific variables are available on request by emailing ggp@nidi.nl. In this paper we use the original intention variables before harmonisation.

of Planned Behaviour (behaviour reflects individuals' informed decisions) in Miller and Pasta's framework (Miller and Pasta 1995). The panel was used to ask questions at the first wave on intentions in a reference time window, and then in the following wave about the events that could have happened regarding these intentions. The second idea was to introduce degrees of certainty into the questions, as a result of research suggesting that intentions are subject to uncertainty (Schaeffer and Thomson 1992; Thomson and Brandreth 1995). Finally, regarding intended family size, the team decided to adopt a parity-specific measure by asking for the additional number of intended children.

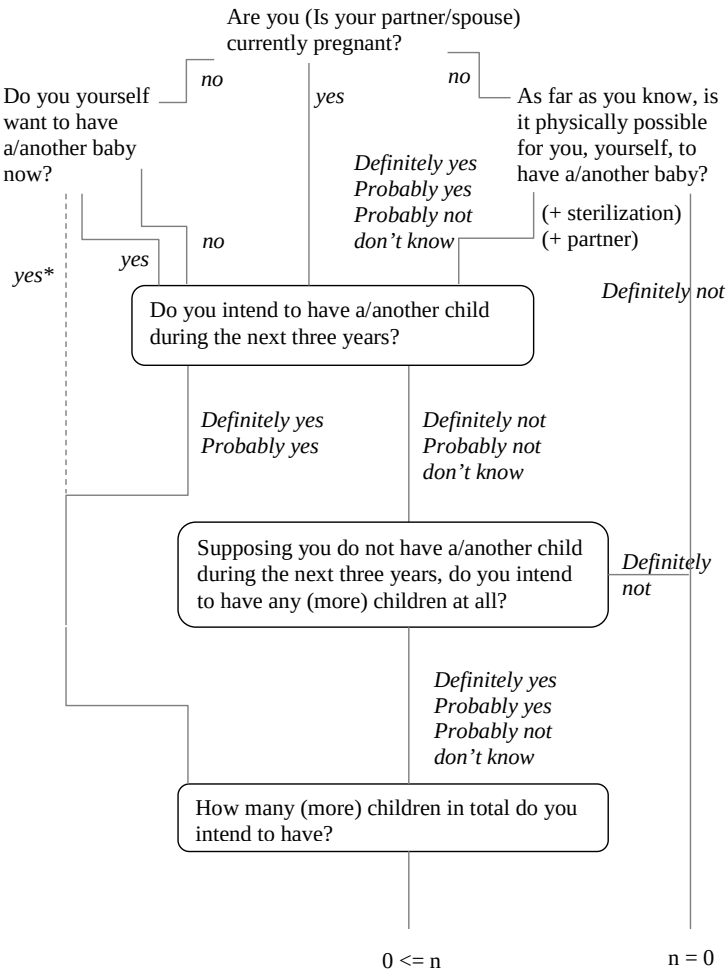
2.2 The questions and filters

Figure I provides the suggested layout in the standard questionnaire for questions on fertility intentions; the actual sequence of questions is available in the Appendix. The questions that relate directly to intentions are circled. The others are those used as a pre-filter in at least one country. We will return to them in the next section.

Short-term intentions were asked with the question: "*Do you intend to have a/another child during the next three years?*" and possible responses were "Definitely yes", "Probably yes", "Probably not", "Definitely not" and "Don't know". Long-term intentions were asked with the question: "*Supposing you do not have a/another child during the next three years, do you intend to have any (more) children at all?*" and the pre-codes for the answers were the same as for the short-term question. The third question, concerning the additional number of children intended, was only asked if the respondent gave a positive or uncertain answer to the first or second question. The remaining "Definitely not" responses were filtered out and attributed a value of zero.

The first two questions can be combined to obtain life-long fertility intentions. However, combining the answers to these questions is complex, and the second question is a *conditional* one: it is perfectly possible that people adjust their answers depending on the answer they have already given to the first question (Schaeffer and Presser 2003), and it is quite likely that a combination of short- and conditional long-term questions does not equal one overall long-term question on intentions.

An additional layer of complexity is added by asking about the number of *additional* children intended (in the standard questionnaire), and not the *total* number. The *total* number of children intended is strongly dependent on the quality of the declarations concerning the number of own children in the survey and the quality of the responses on own children varies from country to country (Neels et al. 2011).



Note: The circled questions are in the fertility intentions part of the survey, while the other questions are all potential filter questions from the preceding fertility block. Questions on intentions were asked of men and women except for Estonia.

* In theory, "*Do you yourself want to have a/another baby now*" should not be used as a filter, but because it was present in one country's survey design it is included here. The question on intention to adopt is not presented, because it is generally not accounted for in the calculation of mean intended family size (as a result of it not being available in other surveys).

Figure I

Simplified diagram of the questions on childbearing intentions, as suggested in the GGS standard questionnaire

2.3 Consequences of complexity

Overall, the set of questions used to ascertain intentions is long and includes many filters. Filters are good because they avoid asking respondents unnecessary questions. However, repeated filtering on interrelated questions could pose a threat to the quality of the survey. It is important that all the GGS country questionnaires are implemented in the same way for reasons of comparability, and that there is as little space as possible for error. Nevertheless, as we shall see the original questionnaire has been implemented quite inconsistently across countries. In addition, each country translated the questionnaire into its own language. This creates additional ambiguity that we also explore here via one of the filter questions.

2.3.1 Country exceptions and pre-codes for the main questions on intentions

The exceptions to the standard questionnaire in the 'intentions block' are numerous (Table 1). In most countries answers to the short-/long-term intentions questions include uncertainty: "Definitely not", "Probably not", "Probably yes", "Definitely yes" (four-category coding). In France and Germany an additional explicit "Don't know" pre-code was added. However, in Hungary, the Netherlands and Norway intention questions were coded "Yes", "No", "Don't know", and in Australia the question was not asked at all. In the first three countries the time dimension also disappeared, i.e. short- and long-term intentions were not differentiated.

The cause of this heterogeneity is the incorporation of the GGS into pre-existing survey series or in a survey planned beforehand. In the case of Hungary, the national survey that would become the first wave of the GGS was carried out in 2001, before completion of the model questionnaire: it was used for improving the questionnaire together with two pilot surveys in the Russian Federation and the United Kingdom. In the Netherlands, the survey was adapted from the Fertility and Family Survey series (OGV). In Australia the GGS corresponded with the fifth wave of HILDA, and in Norway it was integrated into the Life course, Generation and Gender study (LOGG). In Italy the Family and Social Subjects (FSS) survey was also adapted to fit the GGS, and some questions remain closer to the national survey: there are no pre-filters for intention questions and the total number of children is asked instead of the additional number.[3]

Additionally, in the countries where pre-codes allow uncertainty, the question "*How many (more) children in total do you intend to have?*" was asked if

[3] Country-specific documentation concerning harmonisation is available upon request directly from the country harmonisation teams.

the respondent answered "Probably not", "Probably yes" and "Definitely yes" to the previous questions, except in France and Poland where it was not asked if the answer was "Probably not" (Sebille and Régnier-Loilier 2007). For the remaining categories the number of (additional) children wanted was set to zero.

The variation in the pre-codes from one survey to another could have several consequences. First, when allowing explicitly a "Don't know" answer the proportion of "Don't knows" is generally higher than when allowing only a substantive response (Poe et al. 1988). Second, allowing declaration of positive or negative uncertainty allows respondents to express ambivalent feelings (Schaeffer and Thomson 1992), and this could change the overall distribution of positive and negative responses. Since it is a priming question for the number intended, it could also change the numbers declared in this last question: the preceding question and the answer given to it seem to shape attitudes towards the following question (Schaeffer and Presser 2003).

Countries where the question was framed exactly as it was in the original survey have the highest response rates, with the proportion of missing and "Don't know" responses ranging from between 2 and 5.5 per cent for the two first questions on intentions (Table 1).[4] We could not distinguish between missing and "Don't know", because they were not coded separately or distinctively in most countries.[5]

Regarding the *intended family size* variable, we notice that Belgium, Estonia, Romania and Australia have very high levels of missing or "Don't know" (up to 44 per cent). These appear highly age dependent, and we cannot explain them by simply looking at the regular pre-filters. It is possible that a non-identifiable filter has been applied, or that a high proportion of people did not give an answer on the number of intended children, though these proportions appear too high to support this second possibility.

Again, in countries providing uncertain response categories in four pre-codes to the preceding questions, the proportion of missing or "Don't know" on the *intended family size* variable ranged from 0.2–3.2 per cent (omitting the countries with very high levels of missing data). In the Netherlands, Hungary and Norway this proportion ranged from 5.2 to 17.3 per cent.

Overall, the response rates to the intention questions were somewhat lower in all the countries clearly allowing a "Don't know" answer (which includes France and Germany).

[4] With the exception of Belgium (7.5 per cent) and Estonia (10.5 per cent).

[5] In the countries studied here the code sometimes differed for missing and "Don't know". However, this is true in only a few countries and these detailed variables are currently not available in the harmonised database. The raw version of the intention variables is available on request by emailing ggp@nidi.nl.

Table 1
Characteristics of the questions on intentions and intended family size: Age range, pre-codes, time window for first question, percentage of missing values and "Don't know" answers, and other comments

	Age U = 18–50	Pre-codes "Do you intend…"	Time window?	% miss/DK "Do you intend…" *	% miss/DK number intended *	Other comments
Australia	18–45	–	*No*	–	**27.7**	Starts directly with number intended
Austria	18–45	4-cat	Yes	5.0	0.9	
Belgium	U	4-cat	Yes	7.5	**44.1**	
Bulgaria	U	4-cat	Yes	3.6	1.8	
Estonia	21–45	4-cat	*No*	10.5	**31.6**	Women only; asked a range; not precise whether additional or total
France	U	4-cat + DK	Yes	*11.0*	3.2	Additional number not asked of PN
Georgia	U	4-cat	Yes	4.5	0.4	
Germany	U	4-cat + DK	Yes	*10.0*	12.5	Problem with fertility histories
Hungary	21–45	*Yes, No, DK*	*No*	***4.6***	***5.2***	
Italy	U	4-cat	Yes	3.2	3.2	Ask total and not additional number intended
Lithuania	U	4-cat	Yes	5.4	2.8	
Netherlands	18–45	*Yes, No, DK*	*No*	***16.6***	***17.3***	
Norway	U	*Yes, No, (DK)*	*No*	***7.5***	***5.4***	No DK category in the questionnaire
Poland	U	4-cat	Yes	2.0	2.3	Additional number not asked of PN
Romania	U	4-cat	Yes	2.6	**41.1**	
Russia	U	4-cat	Yes	4.21	1.05	

Source: Generation and Gender Surveys (V4.1), variable of additional number of children intended before harmonisation.

Abbreviations: DK stands for "Don't know", miss for missing. 4-cat stands for the standard four-category coding (DN, PN, PY, DY) with DN="Definitely not", PN="Probably not", PY="Probably yes", DY="Definitely yes". In two countries the DK option was proposed explicitly together with the 4-category pre-codes.

* Proportions are given for eligible women aged 20–44, equivalent proportions for men are available on request. The proportion of missing and "Don't know" in the fourth column are calculated by combining the answers to the first two questions on intentions (see Figure I for details of the questions). The proportion in the fifth column, the variable of number intended, may be lower or higher depending on whether the people answering "Don't know" to the preceding question have been asked or not for their intended number.

2.3.2 A variety of pre-filters before the main questions on intentions

Questions asked before the intentions section were used to select who would be asked the questions on intentions. There was a basic filter based on the age of the respondent (and of the partner if relevant), as well as on the sex of the partner in some countries. A question on *very short-term expectations* was asked in the fecundity section: "*Do you yourself want to have a/another baby now?*" ("Yes", "No", "Not sure"). It was used as a positive filter only in France (all persons stating "Yes" were added to the "Definitely yes" category of the short-term intention question). Questions on the perceived ability of the respondent (and of his/her partner) to have children were also used as filter questions, and finally on whether the respondent (and his/her partner) had been sterilised. Pregnancy was used to try and adapt the questions to the state of the woman, though in Germany pregnant women were not asked about their intentions.

Table 2
Answers to the question "Do you yourself want to have a/another baby now?" (women 20–44) and observations on country specificities regarding this question

	Childless women			Comment on wording	Used as a filter?
	Yes	No	Not sure		
Australia				*Question not asked*	N/a
Austria	16	84	0	*Now* underlined, DK instead of not sure, not coded (99)	No
Belgium	20	76	5	As in main questionnaire	No
Bulgaria	52	37	10	"Personally" instead of "yourself"	No
Estonia				*Question not asked*	N/a
France	12	85	3	Are you currently trying to have a child?	Yes
Georgia	–	–	–	As in main questionnaire, but filter issue	No
Germany	42	58	0	"Don't know" instead of "Not sure", not coded (-8)	No
Hungary				*Question not asked*	N/a
Italy				*Question not asked*	N/a
Lithuania	25	59	16	As in main questionnaire	No
Netherlands				*Question not asked*	N/a
Norway	21	76	3	Currently ("Don't know" instead of "Not sure", but coded 3)	No
Poland	26	64	10	As in main questionnaire	No
Romania	36	55	9	Questionnaire not available (as in main questionnaire)	N/a
Russia	51	38	12	Do you yourself would like to have a (another) child?	No

An interesting observation arises regarding the question on "*Do you want to have a baby now"* (Table 2): this question seems to have been interpreted in a variety of different ways. For instance, in France it appeared to ask whether the respondent was currently trying to become pregnant. There, the proportion of persons responding "Yes" is very low, like in Austria where the *now* had been underlined. In other countries the time reference was emphasised less, and in Russia there was notably no time reference at all. In Russia the proportion answering "Yes" is very high, and the question had certainly been perceived as a life-long intentions question. We cannot interpret exactly what the question sounded like in these different languages, but the fact that the re-translation into English saw a word change suggests that the meaning was not always exactly the same in all countries.

Questions concerning fecundity and sterilisation were other important prefilters of the section on intentions. Here again, we observe a wide variety of ways of posing questions, of options available to respondents and whether the answers were used as a filter for the intentions section (Table 3). In some surveys those who responded that they were infecund were not asked about their childbearing intentions. This can be problematic when calculating the average number of children intended. Indeed, considering that infecund people intend no child assumes that they have renounced having any child, which is not necessarily true (as persons aged 20–39 who know that they cannot have a child are mostly those who have already tried and thus originally wanted to have children). On the other hand, considering that their intentions are the same as the intentions of the others (by ignoring infecund persons in the calculations, for instance,) would not take account of the fact that they have probably corrected their intentions downwards. Still, it might seem inappropriate to ask persons who know they cannot have babies whether they want one or not. By contrast, taking a partner's infecundity or sterilisation as a filter appears at least partly irrelevant as the possibility of medical treatment or finding a new "fertile" partner cannot be ruled out.

Table 3
Answers to the question "Some people are not physically able to have children. As far as you know, is it physically possible for you, yourself, to have a/another baby?" (idem for partner), and "Have you been sterilised or have you had an operation that makes it impossible for you to have a child/more children?" (idem for partner) and a note on whether each question was used as a filter for the intentions section

	Fecund	Partner fecund	Sterilised	Partner sterilised	% definitely not fecund	Same % 35–44
Australia	not asked	not asked	filter	filter		
Austria	not a filter	not a filter	not a filter	not a filter	5.5	9.9
Belgium	not a filter	not a filter	not a filter	not a filter	5.1	10.2
Bulgaria	not a filter	not a filter	not a filter	not a filter	2.8	5.1
Estonia	transformed	not asked	not asked directly	not asked	4.8	5.0
France	transformed, filter	filter	filter	filter	3.8	7.8
Georgia	not a filter	not a filter	not a filter	not a filter	10.3	17.1
Germany	filter	not a filter	filter	not a filter	8.0	11.8
Hungary	not asked directly	not asked	not asked	not asked	2.6	4.4
Italy	not asked	not asked	not asked	not asked		
Lithuania	not a filter	not a filter	not a filter	not a filter	3.0	5.8
Netherlands	not asked	not asked	not asked	not asked		
Norway	transformed	transformed	not asked	not asked	7.6	13.4
Poland	not a filter	not a filter	not a filter	not a filter	0.6	0.9
Romania	n/a	n/a	n/a	n/a	5.6	9.0
Russia	not a filter	not a filter	not a filter	not a filter	6.0	11.4

Source: Generation and Gender Survey V4.1 + crude variable of additional number of children intended.

Overall, the complexity of the questionnaire about intentions seems to open a door to a series of problems of comparability and error. As we have seen, some countries exhibit elevated levels of missing values and/or unusable answers; this could stem from mistakes when implementing the filters in the country questionnaire and this is more likely to occur in a complex setting. Harmonising the data is also difficult in these conditions, and errors can occur when deriving the harmonised variables, as it requires applying the right country-specific filters and attributing zero to people who have been filtered out because they cannot have children (for the additional number of children intended), etc. Overall, in a comparative context a questionnaire design that does not leave a margin for error seems preferable, because leaving these margins of error could result in an accumulation of small inaccuracies that threaten the overall quality of the data.

3. INSIGHTS FROM OTHER SURVEYS

Exploration of the GGS section on fertility intentions reveals important heterogeneity between questionnaires. However, we have not explored the effect of the variety of coding on actual measurements. If this effect is not significant, then the heterogeneity across surveys could pass for simple survey variability. If it is significant, however, then we should be careful to use only countries with equivalent sets of questions in international comparisons.

We take as a first example the calculation of the proportion of childless women saying they intend to remain childless in the FFS and GGS surveys. We do this to provide a sense of how taking into account "Don't know" responses can affect results. We then take a more substantive example that directly demonstrates the impact of the introduction of uncertain coding for the intention questions on, for example, the proportion intending to remain childless and the mean intended family size.

3.1 The FFS and GGS

In the FFS pre-codes were restricted to "Yes", "No" and "Don't know" for the question "*Do you want to have another child/children of your own some time?*" The frequency of "Don't know" answers ranges from 7–19 per cent in 16 out of 22 FFS countries (results not shown here). Overall, the proportions of missing and "Don't know" responses are higher than in the GGS surveys, with uncertain response categories (Table 1). However, they are in the same range as the GGS exceptions, which coded their answers in the same way as the FFS. Unlike the GGS, we can differentiate the missing values and the "Don't know" responses in the FFS, and can see that in some countries a large majority of the values not indicated are "Don't know", while in others they are missing. Whether "Don't know" responses are used or not by the respondent might be a country-specific reaction to that type of question, but it is much more likely that the choice comes down to interviewer instruction: whether or not the interviewer has been asked to explicitly propose "Don't know" as an option. As previously mentioned, when people are allowed to choose a "middle of the road" answer they are much more likely to choose this option (G. Bishop, Oldendick and Tuchfarber 1983). Conversely, not having this option sometimes forces people to answer purely hypothetical or fictitious events (see G. F. Bishop, Tuchfarber and Oldendick 1986). A pre-code that includes "Don't know" increases the proportion of "Don't know" responses compared with when this option is not available. The overall distribution of answers is therefore modified artificially by the availability of choice, and notably affects the proportion of

women intending to remain childless. Evidence concerning interviewer instructions should shed light on differences between countries.

So, can we interpret the trends from FFS to GGS on the proportion of childless women who want a child (Table 4, columns 2 and 6)? We notice that there are fewer "Don't know" responses in countries where "Don't know" was not proposed, i.e. in most countries introducing uncertainty ("Certainly yes" and "Certainly not"). As a result, if one considers that the introduction of uncertain codes does not change the balance between positive and negative answers, then the proportion of all women not intending a child should be larger in GGS-type surveys than in FFS-type surveys. Indeed, on the whole the share of negative answers is reduced where there are more "Don't know" responses. On the other hand, missing data are included in the denominator in the GGS because we cannot differentiate them from the "Don't know" responses, which leads to under-evaluating the proportion. Overall however, the proportions of "Don't know" responses in the FFS were higher than the proportion of missing and "Don't know" in GGS. This leads us to conclude that the first bias might be stronger, and that decreasing trends between the surveys in calculated intended childlessness would thus accurately be negative though under-estimated, while positive trends might be fictitious due to the change in the question.

In comparing proportions in the FFS and GGS (columns 2 and 6), we can see that while the proportion of childless women wanting to have no more children was lower in the second period in most countries, the trend increased in France, Germany and Italy. We cannot say whether this positive trend is real or fictitious using the information we have available. Overall, the changes do not look particularly consistent from one dataset to another. For instance, it does not appear plausible that in Lithuania and Estonia the percentage intending to remain childless dropped between the 1990s and the 2000s from levels higher than nine to levels ranging from one to five. The strong decrease also appears somewhat surprising in other eastern European countries, though we can propose two reasons for this: first, recovery from a period of high political uncertainty, and second, with the delay in age at first birth more childless women still expect to have children. Finally, it is surprising to see that France has higher levels of childlessness intentions than Austria in the latest period, despite it having a much lower level of childlessness. The jump between the 1990s and the 2000s in France seems to confirm that this country has problematic intention data in the GGS, at least for childless women.

Overall it appears theoretically and empirically difficult to draw conclusions on expected childlessness and their trends using these data. In the GGS we can only give a range of expectations, and in both sets the high variation in the proportion coded "Don't know" is an alarming feature.

Table 4
Proportion of childless women aged 20–39 who do not intend to have a child, in %, calculated including or excluding the "Don't know"/missing data in the denominator, in FFS (1990s) and in GGS (2000s)

	FFS		GGS			
	No		Definitely not (no)		Definitely + Probably not	
	Excluding DK	Whole sample	Excluding missing/DK	Whole sample	Excluding missing/DK	Whole sample
Austria	15.8	15.8	5.6	5.2	13.8	13.0
Belgium	23.2	22.9	14.5	13.3	23.1	21.1
Bulgaria	10.6	10.0	5.2	4.9	6.8	6.4
Estonia	9.4	9.4	1.8	1.7	2.2	2.0
France	9.2	8.7	16.1	14.0	17.4	15.2
Germany	21.9	15.1	18.2	15.6	24.3	20.9
Hungary	*4.1*	*3.8*	*7.5*	*6.9*		
Italy	4.8	4.5	5.1	4.9	9.8	9.4
Lithuania	12.0	9.3	1.4	1.4	4.6	4.3
Norway	*6.6*	*6.0*	*14.7*	*13.5*		
Poland	39.3	29.9	4.8	4.6	12.9	12.6

Source: Fertility and Family Survey (1990s); Generation and Gender Survey V4.1.

Reading note: In the Belgian FFS the percentage of women who answered "No" to the question on intentions, when excluding the "Don't know" responses from the denominator (i.e. keeping only 'substantive' answers) is 23.2 per cent. Among all women, including those who answered "Don't know", the proportion is a little smaller (22.9 per cent).

3.2 Trend disruption in Great Britain: Do numbers depend on the preceding question?

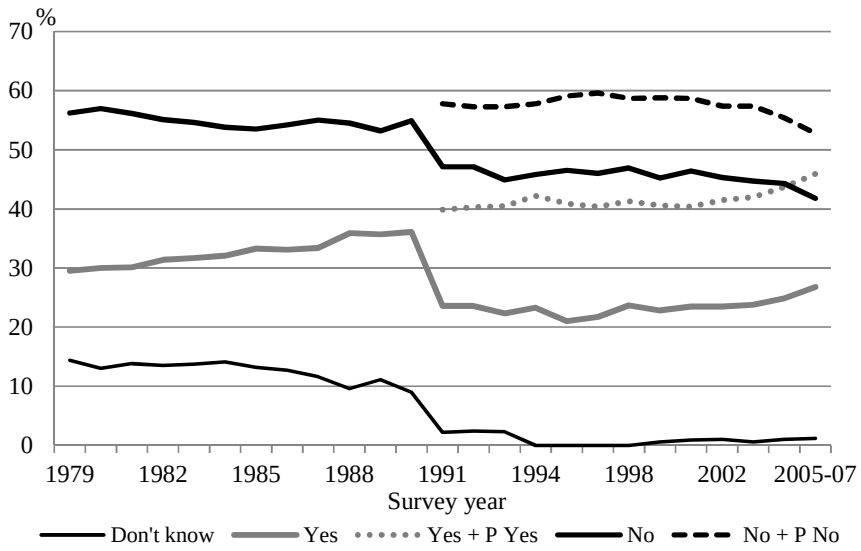
Given these observations, we need to assess the impact of a change in the filtering questions on the calculated number of intended children. We assume that knowing or not knowing the numbers intended by the "Don't know" responses could already play a role in this, since including or excluding them already had an impact on the proportion intending no child in Table 4. The introduction of additional uncertain pre-codes could also have an impact. We will verify these two assumptions using the General Household Survey ESRC CPC series (Beaujouan, Berrington et al. 2013; Beaujouan, Brown and Ní Bhrolcháin 2011). In this data series, intentions questions changed between 1990 and 1991.

Up to 1990:

"*Do you think that you will have any (more) children at all (after the one you are expecting)*?" ("Yes", "No" or "Don't know")

If “Yes” or “Don’t know”, “*How many children do you think you will have born to you in all [including those you have already (who are still alive) (and the one you are expecting)]*?”
From 1991:
“*Do you think that you will have any (more) children at all (after the one you are expecting)*?” (“Yes”, “Probably yes”, “Probably not”, “No”, “Don’t know”)
Persons answering Don’t know are probed for a more precise answer, and then all persons having answered “Yes” or “Probably yes” are asked:
“*How many children do you think you will have born to you in all [including those you have already (who are still alive) (and the one you are expecting)]*?”

Figure II shows the proportions relating to these response categories. We already see that the introduction of uncertain pre-codes reshuffles the answers.



Source: General Household Survey ESRC CPC series (Beaujouan, Berrington et al. 2013). See also: Ní Bhrolcháin, M. and Beaujouan, É. (2011).

Figure II
Distribution of the responses to the question on intention to have a child in a British survey series, 1979–2005/7, women 18–44

In order to estimate the impact we group the two years before and the two years after the change. Though we can see a general positive trend for the “Yes” and a negative trend for “Don’t know”, there is no clear trend for “No”.

For "Yes" there is no trend in the additional number of children intended (curve not shown here), so we can assume that there would be no significant difference between the two years before and the two years after the change if no change took place. We will discuss the possible implications of this assumption afterwards. First, we calculate the proportion of women aged 18–44 intending no further children, and as in the GGS, the proportion of childless women (aged 18–34) that seem to intend to remain childless according to the pre-codes for the first question. As a second step, we calculate the additional number of children intended in these two groups, and estimate to what extend the result is influenced by the same pre-codes.

As in GGS there is a direct effect of adjusting for "Don't know" responses on the *proportion intending no (more) children* when pre-codes are "Yes", "No" and "Don't know" (Table 5): the proportion jumps from 54 to 60 per cent among all women and from 13 to 15 per cent among childless women. There are several options available for comparing the proportion before and after the change depending on the research question.

If we try to isolate who is really certain to not want a/another child – i.e. including "Don't know" in denominators, and leaving 'probables' out of the numerator in the second period – then the proportion not wishing to have (more) children at all decreases drastically among all women (54 to 47 per cent) and childless women (13 to 7 per cent). This confirms that the "No" code in the three-category option certainly does not correspond to the "No" code in the four-category option in the General Household Surveys (GHS). As a consequence, the "Definitely not" in the four-category option of the GGS certainly does not correspond with the "No" category of the FFS and of the GGS exceptions (and maybe even less than in the GHS given the "definite" aspect of the GGS primary option).

Alternatively, if we relax the definition of not wanting a/another child to a simple negative intention then we can group all the negative responses and reduce the observation to those giving a substantive answer (thus excluding "Don't know"). Under these conditions we don't see a strict change depending on the response categories: 60/59 for all women, 15/16 for the childless ones (Table 5). Any other choice before and after the change gives large differences in intentions, and having the "probably" option modifies the proportion intending to remain childless. This again confirms the lack of clarity of the concept and highlights the importance of paying attention to implementation of these options in surveys. Moving on to the additional number of children intended, it is interesting to see that in the GHS those who responded with "Probably not" have not been asked for a number. In other words, they are considered as having responded with a definite "No", and are attributed zero. We also do not have the number intended among those responding "Don't know" after the

change, but given their proportion this should have only minor impact on the results.

Table 5
Intentions not to have (other) children just before and just after the change, for (a) women aged 18–44, (b) childless women aged 18–34

All women 18–44	Before (1989–90)	After (1991–92)	
Yes	36	24	40
Probably yes		17	
Probably not		10	**58**
No	**54**	**47**	
Don't know	10	2	2
% no more child	(no)	(no)	(no + Pnot)
ignoring DK	**60**	**48**	**59**

Childless age 18–34	Before (1989–90)	After (1991–92)	
Yes	73	50	82
Probably yes		32	
Probably not		9	**16**
No	**13**	**7**	
Don't know	15	2	2
% no more child	(no)	(no)	(no + Pnot)
ignoring DK	**15**	**7**	**16**

Source: General Household Survey ESRC CPC series.

Note: among all women aged 18–44, 36 per cent answered they wanted more children, 54 per cent no more children, and ten per cent didn't know before the change in the pre-codes of the intention question. So 54 per cent wanted no more children on the whole sample, but this rises to 60 per cent when we count only those who provided a "substantive" answer.

The additional number of children intended drops from 0.81 to 0.77 between the two periods among all women when "Don't know" responses are included (Table 6). It similarly drops from 1.92 to 1.85 among the childless. When excluding "Don't know" responses from the calculations before the change (i.e. assuming that those who answered "Don't know" generally behave like other respondents) the number of intended children appears to be stable over the change among all women, but it is clear that this assumption does not make sense in this group, as "Don't know" responses expect 1.43 children while the average of the others is 0.77. Among childless women the drop remains about the same, regardless of whether we include "Don't know".

Table 6
Additional number of children intended just before and just after the change, (a) women aged 18–44, (b) childless women aged 18–34

All women 18–44	Before (1989–90)		After (1991–92)
Yes	1.97	1.97	2.05
Probably yes			1.72
Probably not			0
No	0	0	0
Don't know	1.43		
All	**0.81**	**0.77***	**0.77**
Confidence interval	(0.78 – 0.84)	(0.73 – 0.8)	(0.73 – 0.8)

Childless age 18–34	Before (1989–90)		After (1991–92)
Yes	2.28	2.28	2.34
Probably yes			2.04
Probably not			0
No	0	0	0
Don't know	1.82		
All	**1.92**	**1.93***	**1.85**
Confidence interval	(1.85 – 1.98)	(1.85 – 1.98)	(1.78 – 1.91)

Source: General Household Survey ESRC CPC series.

Note: among all women aged 18–44, those answering "Yes" wanted on average 1.97 more children, the ones answering "No" zero, and the ones answering "don't know" 1.43 before the change in the pre-codes of the intention question. This represents an overall average of 0.81 more children wanted. If we do not take into account those answering "Don't know", then it represents an average of 0.77 more children.

* Excl. DK.

As expected, among those who respond that they want to have a child, those who are more uncertain express a desire to have fewer children. When they state a number, those responding "Don't know" desire even fewer, as they consist of a mix of positively and negatively unsure people. Additionally, those who answer "Probably yes" seem to give a lower number than if they had answered "Yes": there seems to be a priming effect. Indeed, to maintain the same number intended among all the "Yes" responses, persons with "Probably yes" responses should have declared that they want 1.86 children (instead of 1.72) for all women and 2.2 (instead of 2.04) for childless women.[6] It is possible that

[6] The entry of a part of "Don't know" (before the change) into the "Probably yes" category reinforces the results. We take the example of women aged 18-44: the positive and the negative category each get four per cent from "Don't know" after the change, and two per cent remain in "Don't Know". Four out of ten are thus supposed to have said zero before the change (because they went to "No" after), and to compensate and get the average 1.43 for all

women who have been pushed into a category (e.g. said "Yes" despite not being sure) provide an answer that does not correspond with their intentions, but instead to what they see around them or to a societal ideal. When given the opportunity to express their uncertainty, they reflect it in the number they give.

To conclude, different methods of filtering questions on intended family size do have an effect on calculations, and filters sometimes diminish the ability of the researcher to test various hypotheses by lack of availability (for instance numbers for the "Probably not" and "Don't know").

4. CONCLUSIONS AND DISCUSSION

How far can we go in cross-country comparisons using the GGS? Even if we cannot assume that the results of the British data series can be replicated elsewhere, there is a strong possibility that the distribution of intentions, as well as number of children intended, cannot be compared when the response categories of the question on short-/long-term intentions are coded differently. Hungary, the Netherlands and Norway coded them "Yes", "No" and "Don't know", and this cannot be compared *a priori* with the other countries that show uncertain pre-codes, and neither can Australia where the question was not even asked. However, the impact on the intended number of 'certain' versus 'uncertain' pre-codes for this question can be considered reasonable (0.1 to 5 per cent in the British data series). Additionally, in the GGS the "Probably not" respondents were asked for their intended number in most countries (apart from France and Poland), unlike in the British survey. This could diminish the gap somewhat. By contrast, changes in the pre-codes from 'certain' to 'uncertain' have a much more substantial effect on the proportion intending to remain childless (a 40 per cent decrease to 25 per cent increase, depending on the basis for calculation).

In addition to the variation in pre-codes, we have described the considerable heterogeneity in the way questions and filters have been implemented in each country, and this type of issue cannot be solved with mere imputations. This adds a layer of ambivalence concerning the use of the intention section for comparative purposes. However, comparisons remain possible by selecting sets of countries that do not show uncommon pre-filters, or a particularly high level of missing and "Don't know" responses – i.e. around ten countries. Moreover, depending on the research question, and by carefully selecting the pre-categories used in the calculation of mean intended family size, some general

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"Don't know", the future "Yes" respondents would have had to declare to want 2.6 children. To maintain this number the new "Probably yes" group would have had to declare even higher intentions. The 2.6 also does not seem rational, and there already seems to be an influence on the category of the number declared.

numbers should still be comparable despite this heterogeneity. The sensitivity analysis based on the British General Household Survey could be very helpful in justifying such choices.

A simplified questionnaire design would avoid filter errors and heterogeneity in responses seen between countries. Of course, and as we have seen, national data producers have their own constraints and reasons for introducing heterogeneity, as evidenced by French adaptation of the survey (Sebille and Régnier-Loilier 2007). In this case budgetary and legal constraints limited the possibility of adhering to the format of the standard questionnaire. In addition, the desire to keep the length of responding to the survey to less than one hour was an important factor in deciding about whether to suppress questions and add filters.

The choice of the questions and categories depends on the research objectives. Assuming that the two main research questions are: "*Do people realise their short term intentions?*", and "*How many children do people intend to have across countries?*", I would recommend a two-stage question to improve the chances of cross-country comparability.

First, I would suggest keeping the same pre-codes that allow uncertainty for the short-term question, which would (1) maintain the time perspective in the framework of a panel, and (2) be well-suited for short-term studies because we know that opinions expressed more clearly are more likely to be realised (Cavalli and Klobas 2013).

In life-long perspective, however, it would be better to remove the conditional question on intentions after the short-term question. Instead, one unique question could be kept in by asking about the total number of children the person intends to have, for instance: "*To conclude, (in addition to the children you already have and the one you are expecting) how many (more) children do you intend to have, (including adopted children)?*" This question could be asked without a filter on short-term intentions. It could also be asked for the total number instead of the additional number, so as to keep it independent of errors in the fertility section.

As noted, it would be inappropriate to ask a woman who has said she cannot have children whether she wants them. One way to handle this would be to add adoptions to biological children (as suggested in the tentative question shown above), and we could therefore also ask infertile women this question. If this solution were not adopted then I would not recommend filtering on the ability of the partner to have children and the age and sex of the partner, as this seems quite out of date. This would considerably simplify the setting up of the questionnaire, so that it would no longer rely on prior information about the partner and thus diminish chance of error. The intentions of couples could be asked independently if they remain a research question *per se*.

It is also important to ascertain the purpose behind the question in the fecundity section: "*Do you want to have a baby now?*" It does not seem to have been interpreted the same way in every country, and often seems to have been considered a simple fertility intention question. However, being the first question of the fecundity section, and otherwise constituting a duplicate of the intention questions, it might have been a question about whether the respondent (or the partner) was currently trying to become pregnant.

The importance of being clear on the pre-codes and (remaining) filters is the last important conclusion. It could be a good idea to write the instructions for interviewers at the same time as the standard questionnaire so as to harmonise the way questions are asked in all countries. In particular, it seems important to carefully consider how "Don't know" responses are dealt with, for example whether they are listed in pre-codes or as options for the interviewer if the respondent doesn't know. "Don't know", missing and not concerned answers should also be easily differentiated in the post-coding. Currently, country-level information is necessary for reconstituting the whole series of filters and to construct the variables used for analysis accurately. For instance, in this study people filtered out because they had been sterilised had to be recovered (by the researcher) into the "No" category. The overall reconstitution is somewhat difficult when dealing with 15 GGS countries.

Further research ideas also emerge from this exploration regarding measurement of fertility preferences. We know that responses to intention questions cannot always be taken for granted (Ní Bhrolcháin and Beaujouan 2011). A question that measures uncertainty could be added after the main questions, so as to try and assess whether the person has ever thought about the topic before, and how realistic she thinks her intention is. Such a type of query has been made in the Austrian GGS, where people are asked to assess how much their intentions depend on how ready they feel. To deepen exploration of change over the life course, we could imagine questions on whether the person is waiting for a specific event before having a child, how easily the person might change her mind, or which changes in circumstance might make her change her mind (an example of this type is given by the French Fertility intentions Survey, 1998). For people working on voluntary childlessness the best solution would be to ask a question directly on the issue. For instance, in the Netherlands respondents were asked about whether they really wanted to remain voluntarily childless.

Finally, monitoring of fertility behaviours remains an important objective for demographers, and intentions are clearly part of this. Continuity in the asking of questions on intentions is necessary for studying trends, but they could also be coupled with other questions. For instance, personal ideals appear to be an important counterpart to intentions, and they are in some way 'constraint-free' intentions. So studying them alongside intentions would improve our

understanding of individual-level coherence and the assimilation of constraints. In the context of contemporary low fertility, it could also be a useful complementary factor for understanding countries' fertility orientations. Alternatively, the "situated ideal" (ideal family size for a person of the same milieu, with the same resources, and asked in almost all French fertility surveys) is another interesting feature, because it seems to accurately reflect the aggregate final cohort fertility, at least in France (Beaujouan and Toulemon 2013). Other topics and international research regarding fertility preferences are emerging, and the first rounds of the GGS provide fertile ground for the constitution of innovative research questions in future surveys.

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REFERENCES

Beaujouan, É., Berrington, A., Lyons-Amos, M. and Ní Bhrolcháin, M. (2013): User Guide to the Centre for Population Change GHS database 1979-2009. *Centre for Population Change Working Paper 44*.

Beaujouan, É., Brown, J. J. and Ní Bhrolcháin, M. (2011): Reweighting the General Household Survey 1979-2007. *Population Trends 145*, 119–145.

Beaujouan, É., Sobotka, T., Brzozowska, Z. and Neels, K. (2013): Education and sex differences in intended family size in Europe, 1990s and 2000s. In *Changing families and fertility choices*. Oslo, 6-7 June.

Beaujouan, É. and Toulemon, L. (2013): When a poor index becomes a good proxy: On the predictive value of individual fertility preferences at the cohort macro-level. In *IUSSP International Population conference*. Busan, Korea, 26-31 August.

Bernardi, L., Cavalli, L. and Mynarska, M. (2010): A child ?... Maybe : Uncertain fertility intentions and subsequent behavior. In *From Intentions to Behavior:*

Reproductive Decision- Making in a Macro-Micro Perspective Conference. Vienna, 2–3 December.

Bishop, G. F., Tuchfarber, A. and Oldendick, R. W. (1986): Opinions on fictitious issues: The pressure to answer survey questions. *Public Opinion Quarterly 50*, 240–250.

Bishop, G., Oldendick, R. and Tuchfarber, A. (1983): Effects of filter questions in public opinion surveys. *Public Opinion Quarterly 47*, 528–546.

Cavalli, L. and Klobas, J. (2013): How Expected Life and Partner Satisfaction Affect Women's Fertility Outcomes: The Role of Uncertainty in Intentions. *Population Review 52*(2), 70–86.

Fertility and Family Survey. n.d. Available from http://www.unece.org/pau/ffs/ffsdata.html

Generation and Gender Survey. n.d. *V4.1*. Retrieved April 17, 2012, from http://www.ggp-i.org/data/data-access.html

Harkness, J. and Schoua-Glusberg, A. (1998): Questionnaires in translation. *ZUMA-Nachrichten Spezial* 87–126.

Iacovou, M. and Patricio Tavares, L. (2011): Yearning, learning and conceding : Reasons Men and Women Change Their Childbearing Intentions. *Population and Development Review 37*(1), 89–123.

Iarossi, G. (2006): The Power of Survey Design: A User's Guide for Managing Surveys, interpreting results, and influencing respondents. World Bank Publications.

Kreyenfeld, M., Hornung, A. and Kubisch, K. 2013. The German Generations and Gender Survey: Some Critical Reflections on the Validity of Fertility Histories. *Comparative Population Studies 38*(1), 3–28.

Kveder, A. and Galico, A. (2008): *Guidelines for cleaning and harmonization of Generation and Gender Survey data*.

Mathews, P., Sear, R., Coast, E. and Iacovou, M. (2012): Do preceding questions influence the reporting of childbearing intentions in social surveys? In *Population Association of America Annual Meeting*. San Francisco, 3–5 May.

Miller, W. B. and Pasta, D. J. (1995): Behavioural intentions: which ones predict fertility behaviour in married couples. *Journal of Applied Social Psychology 25*(6), 530–555.

Morgan, P. S. (1982): Parity-Specific Fertility Intentions and Uncertainty - the United States, 1970 to 1976. *Demography 19*(3), 315–334.

Neels, K., Vermant, G. and De Winter, T. (2011): Quality of demographic data in GGS Wave 1. In *GGP User Conference*. Budapest, 23–24 May.

Ní Bhrolcháin, M. and Beaujouan, É. (2011): Uncertainty in fertility intentions in Britain, 1979–2007. *Vienna Yearbook of Population Research 9*, 99–129.

Poe, G. S., Seeman, I., McLaughlin, J., Mehl, E. and Dietz, M. (1988): "Don't know" boxes in factual questions in a mail questionnaire: effects on level and quality of response. *Public Opinion Quarterly 52*, 212–222.

Schaeffer, N. C. and Presser, S. (2003): The science of asking questions. *Annual Review of Sociology 29*(1), 65–88.

Schaeffer, N. C. and Thomson, E. (1992): The Discovery of Grounded Uncertainty: Developing Standardized Questions about Strength of Fertility Motivation. *Sociological Methodology 22*(1992), 37–82.

Schwarz, N. and Strack, F. (1991): Context Effects in Attitude Surveys: Applying Cognitive Theory to Social Research. *European Review of Social Psychology 2*(1), 31–50.

Sebille, P. and Régnier-Loilier, A. (2007): Aménagements du questionnaire Generations and Gender Surveys en France (vague 1). *Documents de Travail de l'Ined 144*.

Thomson, E. and Brandreth, Y. (1995): Measuring fertility demand. *Demography 32*(1), 81–96.

Tourangeau, R. and Smith, T. W. (1996): Asking Sensitive Questions: The Impact of Data Collection Mode, Question Format, and Question Context. *Public Opinion Quarterly 60*(2), 275.

Vikat, A., Spéder, Z., Beets, G., Billari, F. C., Bühler, C., Désesquelles, A., … Solaz, A. (2007): Generations and Gender Survey (GGS): Towards a better understanding of relationships and processes in the life course. *Demographic Research 17*, 389–440.

Weinreb, A. A. and Sana, M. (2008): The Effects of Questionnaire Translation on Demographic Data and Analysis. *Population Research and Policy Review 28*(4), 429–454.

Young, R. (2012): *Don't know responses in survey research*. PhD dissertation, Pennsylvania State University.

APPENDIX: *selected questions from the standard GGS questionnaire*

Preliminary filter questions

Note: The scheme below is designed to skip questions on current pregnancy and fecundity for female Rs 50 or older and male Rs with partners 50 or older and for Rs who have never had sexual intercourse with a person of the opposite sex.

Ask from women:

6.02 I now would like to continue with some questions on pregnancies and having children. Are you currently pregnant?

Ask from men who have a female partner, either co-resident, see Household Grid, or nonresident, see 3.10:

6.02. I now would like to continue with some questions on pregnancies and having children. Is your partner/spouse currently pregnant?

Ask from men without a partner:

6.02. I now would like to continue with some questions on pregnancies and having children. Do you know of any woman who is currently pregnant by you?

Interviewer Instruction:
If the answer "yes" is obtained from a man without a partner, use "she" instead of "partner" or "spouse" in the questions on current pregnancy.

1 – yes..... →□continue with 6.03
2 – no..... →□***go to 6.11***
3 – maybe, do not know yet..... →□***go to 6.11***

(Asked non-pregnant women/men whose partner is not pregnant)

6.11 Do you yourself want to have a/another baby now?

1 – yes
2 – no
3 – not sure

6.12 Some people are not physically able to have children. As far as you know, is it physically possible for you, yourself, to have a/another baby?

1 – definitely not ..... →□continue with 6.13
2 – probably not..... →□continue with 6.13
3 – probably yes..... →□***go to Interviewer Check before 6.15***
4 – definitely yes..... →□***go to Interviewer Check before 6.15***
97– do not know..... →□***go to Interviewer Check before 6.15***

6.13 a. Have you been sterilised or have you had an operation that makes it impossible for you to have

a child/ more children?
1 – yes 2 – no → go to 6.14

b. In what month and year did this operation occur?
month |___|___| year |___|___|

Interviewer Check: Does R currently have either a co-resident partner (see Household Grid) or a non-resident partner (see 3.10)?
yes → continue
no → go to 6.22

6.16 Do you think it would be physically possible for your current partner/spouse to have a child of his/her own if he/she wanted to?
1 – definitely not.....→ continue with 6.17
2 – probably not.....→ continue with 6.17
3 – probably yes.....→ go to 6.18
4 – definitely yes.....→ go to 6.18
97 – do not know.....→ go to 6.18

6.17 a. Has your partner/spouse ever been sterilised or had an operation that makes it impossible for

him/her to have a child/ more children?
1 – yes ↓ 2 – no → go to 6.18

b. In what month and year did this operation occur?
month |___|___| year |___|___|

Interviewer Check: Look at answers to 6.12 and 6.16.
Answer to either 6.12 or 6.16 is* '1 – definitely not' ..→ *go to 6.23
No such answer given.....→ continue with 6.20

Questions on intentions

Asked if answer to 6.12 is not 1

6.22 Do you intend to have a/another child during the next three years?
1 – definitely not
2 – probably not
3 – probably yes
4 – definitely yes

Asked if answer to 6.12 is 1 or to same question about partner (6.16) is 1

6.23 Do you intend to adopt a child or apply for adoption or take a foster child during the next three years?

1 – definitely not
2 – probably not
3 – probably yes
4 – definitely yes

Interviewer check: Did R answer 3 or 4 to either of the previous two questions?

yes……..→ go to 6.25
no ……..→ continue

6.24 Supposing you do not have a/another child during the next three years, do you intend to have any (more) children at all?

1 – definitely not ..... →***go to 6.27***
2 – probably not ..... →***go to 6.26***
3 – probably yes..... → continue with 6.25
4 – definitely yes ..... → continue with 6.25

6.25 Would you prefer your first/next child to be a boy or a girl?

1 – boy
2 – girl
3 – it does not matter

6.26 How many (more) children in total do you intend to have?

_____ children