SURVEY FUTURES

SURVEY DATA COLLECTION METHODS COLLABORATION

Working Paper 23:

How often does the 'wrong' person complete the questionnaire in self-completion surveys with named samples? Cross-national evidence from the European Social Survey and Generations and Gender Survey

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How often does the 'wrong' person complete the questionnaire in self-completion surveys with named samples? Cross-national evidence from the European Social Survey and Generations and Gender Survey

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Abstract

Invitations to participate in a self-completion survey are often mailed to a sample of individuals. The mailings might include a unique access code or link to an online questionnaire or a paper questionnaire (or both). When completed questionnaires are received, it is typically assumed that they have been completed by the correct person, but this may not always be the case. Once the mailing has been opened, the survey organisation has little control over who within the household completes the questionnaire. We assess how frequently the 'wrong' person completes a questionnaire and in what circumstances. We use data from national self-completion surveys in nine European countries, across two major international survey programmes (European Social Survey and Generations and Gender Programme), in which an informative sampling frame provides demographic information about the intended respondents. We compare the frame data with survey responses and conclude that the intended respondent completes the questionnaire in almost all cases. For one of the two survey programmes, we are additionally able to compare results to a face-to-face version of the survey in the same countries and thereby ascertain whether the 'wrong' person completes the survey more or less often when it is administered by self-completion compared to interviewer-administered completion.

Keywords: European Social Survey; Generations and Gender Survey; population registers, respondents, selection

1. Introduction

Self-completion surveys have some notable advantages over interviewer-administered surveys. They are much less costly to carry out and can generally be administered in a shorter space of time and can therefore provide more timely results. For many years self-completion suffered from substantially lower response rates than interviewer-administered surveys as interviewers play an important role in motivating and assisting sample members to participate. Recent years, however, have seen renewed interest in self-completion surveys, as it has become harder to successfully carry out face-to-face interview surveys for a variety of reasons. These include changes in respondent behaviour following the Covid-19 pandemic, with respondents being less willing to have interviewers in their homes, as well as reductions in the interviewer workforce. Self-completion surveys can be online-only or can involve a combination of web questionnaires and paper questionnaires, acknowledging a variety of preferences and abilities amongst sample members.

One limitation of self-completion surveys, however, is that researchers have little control over who completes the questionnaire. If a questionnaire is completed by someone other than the intended respondent, there is a potential for samples to become distorted and sample-based estimates therefore biased.

In the situation where the only suitable sampling frame is one of addresses or dwellings, rather than individuals, researchers must provide instructions regarding who at the address should complete the questionnaire. Often a random selection is required, and in this situation the scope for completion by the wrong person is clear. Consequently, researchers have put some effort into evaluating how often the wrong person completes the questionnaire (Koch, 2018; Olson, Stange & Smyth, 2014; Williams, 2015) and developing methods to minimise the prevalence of wrong respondents (Lynn, 2020; Olson & Smyth, 2017). However, when a sampling frame of named individuals is used, comparable research to evaluate how often the questionnaire is completed by the ‘wrong’ person does not appear to have been undertaken, even though this could affect survey results. With this article we aim to fill that knowledge gap. Information on how often the wrong person completes a questionnaire, and the characteristics of sample cases where this occurs, could help to inform decisions about whether and how to routinely check for incorrect respondents, and how to subsequently treat and report cases believed to be incorrect. Information about the extent and nature of incorrect respondents in named individual samples will also provide a point of comparison for address-based samples, where the extent of incorrect respondents is likely to be greater.

2. Background

Many surveys have access to an individual-level sampling frame and are, therefore, able to select a sample of named individuals. We refer to this as a named sample. Self-completion surveys with a named sample usually involve sending an invitation to participate in the survey to each sample member. The invitation may be sent by mail, either including a paper questionnaire or including a web-link or a QR code or both to enable online completion ("push-to-web"), or may be sent by email if the frame includes email addresses. These invitations are usually addressed personally ("Dear John Smith") and use the second-person singular when referring to completing the questionnaire ("We would be grateful if you would complete the survey"). The clear intention is that the questionnaire should be completed by the person to whom the invitation is addressed. However, beyond this instruction in the invitation letter, the survey organisation has no control over who completes the questionnaire. In English and several other languages, "you" could be interpreted as plural, suggesting that anyone in the household could respond. Furthermore, the personalised salutation could be overlooked and the recipient might simply assume that anyone at the address could respond. Such interpretations are perhaps less likely with an emailed invitation than with postal mail, however.

If a questionnaire is completed by someone other than the intended respondent, there is a potential for samples to become distorted and sample-based estimates, therefore, biased. Despite this concern, we have been unable to locate any research that has attempted to quantify how frequently the 'wrong' person completes a survey questionnaire in the case of a named sample (as opposed to the case of address-based samples). Neither does it appear to be common survey practice, at least for cross-sectional surveys of named samples, to attempt to check that the correct person has responded. The aim of this article is, therefore, to fill this knowledge gap and provide information addressing the following research questions relating to self-completion surveys of named samples:

> RQ1: In what proportion of cases is the questionnaire completed by someone other than the intended respondent?
>
> RQ2: Does this proportion appear to vary between countries?
>
> RQ3: In the case of completion by someone other than the intended respondent, what are the characteristics of the actual respondent and the intended respondent, and what effect might this have on sample composition?

This paper is structured as follows: Section 3 discusses the data sources analysed. Section 4 outlines the methods used for the analysis. Section 5 present the findings

and Section 6 discusses their significance, implications and limitations, offering recommendations for survey practice and for future research.

3. Data

3.1 European Social Survey

The European Social Survey (ESS) is a biannual multinational survey focused on studying behaviour, values, and attitudes of Europeans towards various social issues. The ESS has European Research Infrastructure Consortium (ERIC) status and provides high-quality open access data that is widely used by researchers from a range of sectors (Kolarz et al, 2022). So far, 39 countries participated in at least one of the 11 rounds of the survey since it began in 2001. The target population of the ESS are residents of the participating countries, aged 15 and over, regardless of citizenship or nationality. Over the first nine rounds of the survey (2001-02 to 2017-18), all data collection was done by face-to-face interview with respondents in their own home. This changed at round 10 (2019-20), due to the restrictions imposed by the Covid-19 pandemic. In nine countries, face-to-face interviewing proved impossible at this time, and self-administered questionnaires were introduced instead: respondents could fill out a paper questionnaire delivered by mail, or an online questionnaire. Face-to-face interviewing continued to be used as the sole data collection method in the other 22 participating countries: a mixture of self-completion and face-to-face interviewing was not permitted. The ESS returned to sole use of face-to-face interviewing at round 11[1]. Data – including not only questionnaire responses but also call record data and timestamps – are freely available from the ESS Data Portal at https://ess.sikt.no/en/.

3.1.1 Data Collection: ESS Round 10

Of the nine countries that used self-completion methods at round 10, only five used a sample of named individuals; the other four used address-based samples. Our analysis is, therefore, restricted to the five named sample countries, all of which selected their sample from a population register: Spain, Latvia, Poland, Sweden, and Germany. In all cases, an equal-probability sample of persons aged 15 or over (no upper age limit) was selected for the survey. The samples were two-stage clustered samples in Spain and Germany, one-stage samples in Latvia and Sweden, and a mixture of both in Poland (one-stage in cities and two-stage in smaller towns and rural areas), but the sample design is not pertinent to our objectives in this study. The

[1] With the exception of Czechia, where it proved impossible to contract a field agency capable of delivering a face-to-face survey: an exception was granted to allow implementation of a self-completion survey.

responding sample sizes in each country, along with their distributions by age and gender, are shown in the first panel of Table 1.

The survey data were collected between October 2021 and May 2022, with some variation between country in field dates (Table 2). The pattern of invitations and reminders was similar in each country. Each sample member was sent an initial invitation letter by post, followed by three postal reminders to those who had not yet responded at intervals of 7, 14 and 14 days.

Table 1: Age and gender profiles by country; three surveys

	Age			Gender			
Country	15-34	35-54	55+	Male	Female	Other	Total N
ESS Round 10							
Spain %	23.6	35.8	40.6	47.7	52.4	0.0	2,277
Latvia %	24.7	34.2	41.2	41.6	58.4	0.0	986
Poland %	27.0	31.0	41.9	48.6	51.4	0.0	1,972
Sweden %	24.4	26.6	49.1	48.2	51.8	0.0	2,259
Germany %	26.0	29.1	44.9	48.8	51.2	0.0	8,007
Total %	25.5	30.3	44.3	48.0	52.0	0.0	15,501
ESS Round 11							
Spain %	24.4	33.0	42.7	47.5	52.5	0.0	1,835
Poland %	26.1	33.0	41.0	47.0	53.0	0.0	1,414
Sweden %	19.6	28.4	52.0	52.2	47.8	0.0	1,230
Germany %	24.6	29.7	45.7	50.3	49.8	0.0	2,354
Total %	24.0	31.0	45.1	49.2	50.8	0.0	6,833
GGS-II wave 1							
Austria %	37.3	49.4	13.4	40.7	59.0	0.3	8,261
Croatia %	39.8	58.5	1.8	44.3	55.7	0.0	7,482
Estonia %	32.9	52.5	14.5	43.1	56.9	0.0	9,241
Netherlands %	36.7	45.5	17.8	40.0	59.4	0.5	8,075
Total %	36.5	51.4	12.1	42.0	57.8	0.2	33,059

Note: Respondents who did not report gender and/or date of birth have been removed from the analysis: 183 ESS round 10 cases, 42 ESS round 11 cases, and 40 GGS-II cases. There is no upper age limit in ESS; the upper age limit in GGS-II is 59 in Austria, Estonia and the Netherlands and 54 in Croatia.

In Spain and Latvia, the paper version of the questionnaire, along with a prepaid envelope, was sent with the third letter (second reminder). In Poland, the first letter sent to the respondents contained an invitation to participate, a link to the online questionnaire and the paper version with a prepaid return envelope. No further paper questionnaires were sent, instead respondents were encouraged to reach out to the team to request a new copy if the original one was lost or damaged and a paper questionnaire was preferred to an online one. In Sweden, the paper questionnaire

was not sent initially with the invitation but was then sent with the second and third letter along with a prepaid envelope. In Germany, the first letter sent by post was an invitation which included a link to the online questionnaire, and for some participants, namely a random selection of 50% of all target persons older than 60 years, the paper questionnaire with a prepaid return envelope. Another paper questionnaire was included in the third letter sent as a second reminder.

The nature and value of respondent incentives differed by country. There were no incentives nor rewards in Spain. In Latvia, a 7 EUR gift card was issued to the first 1000 people who filled out the questionnaire. Polish respondents received a 10 PLN (approx. 2.4 EUR) gift card as an unconditional incentive with the invitation letter, then people who returned the questionnaire within 3 weeks received a further 80 PLN (approx. 18.9 EUR) gift card, and those who returned the questionnaire after 3, but before 6 weeks, received a 60 PLN (approx. 14.2 EUR) gift card instead. In Sweden, there was an unconditional incentive of a gift card worth 50 SEK (approx. 4.6 EUR) given with invitation letter, then a gift card worth 300 SEK (approx. 27.5 EUR) conditional on completion of the questionnaire. However, if the respondent attempted the online questionnaire before, but didn't finish due to assumed technical difficulties, they were offered a 600 SEK (approx. 55.0 EUR) gift card after the questionnaire's completion. German respondents received 5 EUR in cash with invitation letter, then a conditional incentive of 10 EUR for completing the questionnaire.

It is also important to note that the German national team emphasized in the invitation letters the importance of the right person filling out the questionnaire.

Response rates ranged from 23.3% in Latvia to 39.2% in Poland (Table 2, first panel). Of those who responded, the proportion who completed a paper questionnaire rather than the web questionnaire varied greatly between countries, from 23.2% in Spain to 66.3% in Poland.

Table 2: Summary of data collection features; three surveys

Country	Response Rate (AAPOR RR6)	Age Range	Data collection dates	Mode of response		
ESS Round 10				Web based questionnaire	Paper questionnaire	Total
Spain	35.5%	15+	21-01-2022 - 31-05-2022	1,749	528	2,277
Latvia	23.3%	15+	01-11-2021 - 31-01-2022	748	238	986
Poland	39.2%	15+	25-01-2022 - 25-05-2022	664	1,308	1,972
Sweden	37.9%	15+	10-12-2021 - 17-01-2022	1,336	923	2,259
Germany	37.0%	15+	05-10-2021 - 04-01-2022	5,288	2,719	8,007
Total				9,785	5,716	15,501
ESS Round 11				Face to face interview	Video interview	Total
Spain	39.1%	15+	08-02-2024 - 01-06-2024	1,835	0	1,835
Poland	40.6%	15+	21-10-2023 - 26-03-2024	1,414	0	1,414
Sweden	23.7%	15+	08-03-2023 - 08-12-2023	1,083	147	1,230
Germany	26.7%	15+	09-05-2023 - 21-12-2023	2,354	0	2,354
Total				6,686	147	6,833
GGS-II Wave 1				Web based questionnaire	Telephone questionnaire	Total
Austria	37.5%	18-59	10-2022 – 03-2023	8,261	19	8,261
Croatia*	43.9%	18-54	05-2023 – 07-2023	7,482	0	7,482
Estonia	28.9%	18-59	10-2021 – 02-2022	9,241	0	9,241
Netherlands	29.7%	18-59	10-2022 – 11-2023	8.075	0	8,075
Total				xxx	xxx	33,059

Note: *The GGS-II analysis dataset for Croatia does not include partial respondents so the denominator is then 7,487 and RR5 is 41.6%. For consistency RR6 is presented for all countries.

3.1.2 Data Collection: ESS Round 11

The five countries which used self-completion methods for ESS round 10 returned to face-to-face interviewing for round 11. Latvia has been excluded from our analysis of round 11 data as they switched to a sampling frame of addresses rather than named individuals. Our analysis therefore includes four countries: Spain, Poland, Sweden, and Germany. As at round 10, an equal-probability sample of persons aged 15 or over (no upper age limit) was selected in each country. The sample was a two-stage clustered sample in Spain, a one-stage sample in Sweden, and a mixture of both in Poland and Germany (one-stage in cities and two-stage in smaller towns and rural areas). The responding sample sizes in each country, along with their distributions by age and gender, are shown in the second panel of Table 1.

The survey data were collected between March 2023 and June 2024, again with some variation between country in field dates (Table 4). Each sample member was

sent a letter by post, introducing the survey and explaining that an interviewer would visit to arrange an interview (in Sweden the first contact was made by telephone where possible, following standard practice for face-to-face surveys). Additionally, in Sweden, most sample members (those with a valid phone number on the sampling frame, and those who provided their phone number upon receiving the invitation letter) received an SMS reminder, and in Germany, the reminder letter varied in content depending on whether the previous contact attempt resulted in non-contact or a refusal.

The incentives were very similar to those administered at Round 10. In Spain, there were no incentives given. In Poland, respondents received an unconditional reward of 70 PLN (approx. 16.5 EUR) upon meeting with the interviewer, regardless of whether they refused or took part in the survey. Swedish respondents were given an unconditional 50 SEK (approx. 4.6 EUR) with initial letter, then conditional 300 SEK (approx. 27.5 EUR) after the interview, or 500 SEK (approx. 45.8 EUR) if the respondent participated in an interview after the final SMS reminder. In Germany, respondents received an unconditional 5 EUR with the initial letter, then an additional 10 EUR after the interview was conducted.

Response rates ranged from 23.7% in Sweden to 40.6% in Poland. In Sweden, 12.0% of interviews were conducted via live video interviewing, while all interviews in the other countries were conducted face-to-face (Table 2, second panel).

3.2 Generations and Gender Survey

The Generations and Gender Survey (GGS) is a cross-national longitudinal survey that provides data enabling research on topics such as partnerships, fertility, work-life balance, gender relations, the transition to adulthood, intergenerational exchanges, care, and later life. It forms part of the Generations and Gender Programme (GGP), a social science research infrastructure on families, life course, and demographic change established in 2001 (Gauthier et al., 2025).

The GGS follows the same respondents over three waves across approximately nine years (three-wave panel study with three-year intervals). To date, two rounds of data collection have been conducted. The first round (GGS-I), launched in 2004 collected data from over 200,000 individuals aged 18 to 79 across 19 countries (age ranges vary by countries). It has made significant contributions to the social sciences as a unique longitudinal resource on families and life-course trajectories (Gauthier et al., 2018).

The second round (GGS-II), which began in 2020, retains the same overall design: a baseline wave followed by two follow-ups at three-year intervals. Building on GGS-I, it introduces revised questions, new modules, and different modes of data collection to

address a changing data collection landscape and emerging demographic trends and policy-relevant issues.

More than 25 countries have completed or are preparing to launch GGS-II Wave 1. To ensure cross-country comparability, participating countries follow technical guidelines developed by the GGP Central Coordination team. These include probability-based sampling; the selection of respondents from the resident, non-institutionalised population aged 18-79 (GGS allows countries some flexibility in defining the upper age limit); achieving a net sample of 10,000 respondents (or 7,000 for ages 18-59); the use of a mixed-mode design that includes a web component alongside at least one additional mode (with single-mode designs permitted in special cases); and the provision of unconditional and/or conditional incentives for participation (Gauthier et al., 2025). All data are freely available to registered researchers at https://ggp.colectica.org/item/int.ggp/61d2f47b-521b-4a17-8cc5-8b6609a53872.

3.2.1 Data Collection: GGS-II Wave 1

We use GGS-II data from four countries that use a population register as an individual-level sampling frame: Austria, Croatia, Estonia and the Netherlands. All four countries selected a probability-based sample of residents. Austria, Estonia and the Netherlands targeted residents aged 15-59, while Croatia targeted residents aged 15-54. Austria used a multi-stage sampling design to select participants from the population register, whereas the other three countries used simple random sampling. Sample sizes in each country, along with their distributions by age and gender, are presented in Table 1 (third panel).

The survey data were collected between October 2021 and November 2023 (Table 2). Recruitment and incentivisation practices varied across countries (details for all countries can be found at https://ggp.colectica.org/item/int.ggp/61d2f47b-521b-4a17-8cc5-8b6609a53872). In Austria, selected participants received an invitation letter requesting them to complete the survey online and to provide their email address and telephone number as part of the process. The letter included an unconditional incentive of a 2 EUR coin. Participants who had not completed the survey within one week received a reminder letter, followed by a second reminder if they remained inactive. Respondents who started but did not complete the survey also received reminder letters. Most reminders were sent by post. However, participants who provided an email address on the survey's landing page received reminders by email. Upon completion, respondents were offered a 20 EUR voucher and a thank-you card.

In Croatia, selected sample members received an invitation letter by regular mail, along with an unconditional cash incentive equivalent to 6.64 EUR delivered via postal money order to all individuals in the issued sample. Non-respondents received

up to two reminder letters. No other contact modes such as email, telephone or SMS, were used, and no conditional incentives were offered upon completion.

In Estonia, participants received a personalised invitation letter containing a link to the questionnaire. The letter was sent by email where an email address was available in the register, otherwise, respondents were contacted by telephone, with call attempts spread across different days of the week and different times to increase the likelihood of successful outcome. After the initial invitation, each respondent received up to five reminders. Sub-group-specific response rates were monitored weekly. From the second month of fieldwork onwards, individuals in sub-groups with below-average response rates (including males and non-Estonians) were contacted by telephone. Several types of prize incentives were offered: four main prizes of 2,000 EUR each, twenty 300 EUR shopping e-gift cards, 215 50 EUR shopping e-gift cards, and a collective donation of 6,000 EUR made on behalf of respondents to child and youth welfare charities.

In the Netherlands, fieldwork took place in two phases. Phase 1 ran from November 2022 to early 2023 and involved an incentive experiment on a relatively small sample randomly assigned to different incentive conditions. Respondents received an invitation letter followed by up to three reminders, all sent by post. The first and third reminders were letters, while the second was a postcard. Some participants were offered an unconditional 5 EUR voucher combined with a conditional 10 EUR voucher upon completion, while others were offered a conditional 15 EUR voucher. In later reminders, the conditional incentive was increased to 25 EUR. A subset of non-respondents were randomly contacted by telephone in an attempt to recruit them. However, this approach yielded only 500 completed questionnaires and was, therefore, discontinued. Phase 2 began in April 2023. The results of the Phase 1 experiment informed the contact and reminder strategy. However, as response rates fell short of expectations, a fourth reminder was sent after the summer holidays. The incentive structure remained broadly aligned with the Phase 1 design, including the higher conditional incentive for later contacts.

Fieldwork dates, data collection modes, response rates, and sample sizes are summarised in Table 2, third panel. AAPOR Response Rate 6 (RR6) ranges between 28.9% and 43.9%, with all four countries achieving the minimum required sample size of 7,000 respondents. The distributions of the responding samples in each country by age and gender are shown in the third panel of Table 1.

4. Methods

Analysis is restricted to responding cases, as for these cases self-reported indicators in the survey can be compared with information obtained from the sampling frame. The numbers of such cases are reported in Table 1.

For ESS, indicators of age and sex for the Intended Respondent (IR) are available from the sampling frame for all countries, though the age indicators vary slightly in form. For Latvia, Poland, Spain, and Sweden we have age in whole years at the time of sample selection; for Germany we have age in 10-year age bands for round 10, but age in whole years for round 11. For each Actual Respondent (AR), we have self-reported sex and month and year of birth from the questionnaire data.

For the GGS, the National Coordinator Teams for each country or Central Coordination Team produced flags indicating whether the sex and age of the IR matched the self-reported sex and age of the AR. However, due to privacy concerns, we do not have access to the sex or age of the IR, with the exception of Estonia.

A comparison of the sampling frame and questionnaire variables allows us to compute mismatch indicators for the ESS, whereas these were already available in the GGS datasets. In GGS, they are referred to as '**potential**' mismatch cases, as it is assumed that respondents may have intentionally provided incorrect information. For sex, in both groups of datasets, the mismatch indicator simply takes the value 1 if self-reported sex differs from the sampling frame indicator. For age in the ESS datasets, we first compute age at the time of questionnaire completion by comparing the date the questionnaire was completed to the month and year of birth of the AR. We then compute two alternative mismatch indicators, corresponding to what we will refer to as '**possible'** and '**probable'** mismatches. Allowing for the fact that some sample members could have had a birthday since the sample was selected, our **possible mismatch** indicator for age takes the value 1 if AR's age is at least two years greater than IR age or at least one year younger. With this indicator, most (75% at round 10, and 87% at round 11) of the mismatches consist of cases where the age difference between AR and IR is either 2 or -1. This suggests some uncertainty at the margins, so our **probable mismatch** indicator takes the value 1 if AR's age is at least three years greater than IR's age or at least two years younger, and zero otherwise. For age in the GGS datasets, the potential mismatch indicator takes the value 1 if self-reported age differs from the sampling frame indicator.

In the case of Germany in ESS Round 10, a response is considered a possible mismatch if AR's age is at least two years greater than the upper limit of the age band or at least one year less than the lower limit (e.g. at least 36 or no more than 24 if the IR age band is 25-34). Obviously, we cannot detect mismatches within an age band.

A case is considered a probable mismatch if AR age is at least three years greater than the upper limit of the age band or at least two years less than the lower limit.

The survey data also provides the AR's relationship to all other household members and the month and year of birth of each other household member. In the case of mismatches, we use these variables to examine characteristics of mismatched ARs in both groups of surveys and to compare with the characteristics of the IRs in the ESS.

Respondents who did not provide information on either of the variables of interest, age and gender, were dropped from the dataset for analysis. In ESS Round 10, there were 162 cases where age was not reported by the respondent, and 21 cases with missing gender variable among the data from Poland, Latvia, Spain, and Sweden, but no missing data for IRs in these countries. In Germany, 93 cases of unknown age category at sampling were dropped from analysis, as well as a further 492 and 380 cases where the respondent did not provide information on their age or gender respectively. In ESS Round 11, 37 cases where the respondent did not provide information on age were removed from the data from Poland, Spain, and Sweden. In Germany, the sampling data was missing information on 96 cases on gender, and 253 cases on age. A further 5 German cases were removed due to the respondents not providing information on their age. In the GGS data, a total of 30 respondents across Austria, Croatia, Estonia and the Netherlands did not provide information on gender or age or both.

5. Results

5.1 Prevalence of mismatches

Overall, the proportions of cases that did not match on sex or age or both were low. Regarding sex, mismatches (all available countries combined) between AR and IR constituted 0.9% of ESS cases at round 10, 0.8% of ESS cases at round 11, and 1.4% of GGS cases. Regarding age, 1.2% of ESS round 10 cases are probable mismatches (across the countries for which age in years was available, i.e. excluding Germany) as are 1.2% of ESS round 11 cases, while 2.2% of GGS cases are potential mismatches. If we combine the sex mismatch and age mismatch indicators, the overall proportion of cases that are probable/potential mismatches according to either or both indicators is 1.6% at each of the ESS rounds and 1.8% in GGS-II. The proportion that do not match on either indicator is 0.2% in each of the ESS rounds and 1.0% for GGS. There is some variation between countries in the extent of mismatches. For both sex and age, mismatches are most prevalent in Latvia, Sweden and the Netherlands and least prevalent in Poland and Germany (Table 3).

Table 3: Summary of probable mismatches across three surveys

	Gender	Age	Both	Total
ESS Round 10				
Spain	0.7%	0.7%	0.0%	1.4%
Latvia	0.5%	2.5%	0.7%	3.4%
Poland	0.0%	0.2%	0.0%	0.2%
Sweden	1.2%	1.4%	0.4%	3.0%
Germany	0.0%	0.0%	0.0%	0.0%
ESS Round 11				
Spain	0.5%	1.6%	0.1%	2.2%
Poland	0.0%	1.3%	0.1%	1.3%
Sweden	1.5%	0.5%	0.3%	2.3%
Germany	0.0%	0.6%	0.0%	0.6%
GGS-II				
Austria	0.5%	1.1%	0.5%	2.1%
Croatia	0.2%	1.1%	0.4%	1.7%
Estonia	0.2%	0.6%	0.7%	1.5%
Netherlands	0.6%	2.0%	2.6%	5.2%

While we have already reported that at each ESS round, 1.2% of cases are probable age mismatches, it should be noted that 4.7% at round 10 and 7.6% at round 11 are possible mismatches (Table 4). The majority of those classified as a possible but not probable mismatch have an age difference between AR and IR of exactly 2 years, and these cases are nearly all in Latvia (round 10) and Spain (round 11) (appendix tables A1 and A2 present the age difference distribution separately for each country, for ESS round 10 and round 11 respectively.) Equivalent analysis could not be performed for GGS as the age of the IR is not available.

5.2 Characteristics of mismatches

We next examine the characteristics of IR-AR mismatches. We distinguish between single-person households and multi-person households. In the former case, the explanation of the mismatch cannot be that the ‘wrong’ person in the household has completed the questionnaire. More likely, either the IR has changed address since the sample was selected (so the survey invite was sent to the wrong address) or the respondent has deliberately entered false information.

In ESS Round 10, across all five countries, a total of 2,578 respondents (16.6% of the sample) reported living alone. Amongst them, there are 81 cases (3.1% of single person households) with gender discrepancy and/or with a probable age difference. In Round 11 there were 1,148 respondents (16.8%) living alone. Of those, there are 20 cases (1.7% of single person households) with gender discrepancy and/or with a probable age difference between IR and AR.

Table 4: Age difference between AR and IR; Countries combined; ESS rounds 10 and 11

	Round 10 (self-completion)		Round 11 (face-to-face)	
Age difference (AR – IR)	Number	Percent	Number	Percent
< -40	5	0.1	2	0.0
-40 to -20	13	0.2	4	0.1
-19 to -6	13	0.2	11	0.2
-6 to -3	12	0.2	17	0.3
-2	5	0.1	7	0.1
-1	16	0.2	17	0.2
0	2491	33.2	3,715	54.4
1	4650	62.1	2,596	38.0
2	248	3.3	431	6.3
3 to 5	15	0.2	18	0.3
6 to 19	18	0.2	8	0.1
>20	8	0.1	6	0.1
Total	7494	100.0	6832	100.0

Note: Round 10 based on Latvia, Poland, Sweden and Spain combined; round 11 based on Poland, Sweden, Spain and Germany combined. Equivalent analysis for the GGS-II data is not possible, as explained in the 'Data and methods' section.

In neither ESS round was there a significant difference between male and female ARs in the proportion of gender mismatches (Table 5): 55% of the 64 round 10 gender mismatches involved a male AR, as did 54% of the 35 gender mismatches in Round 11. There is therefore no evidence that for ESS a gender mismatch is more likely to involve a male completing the questionnaire when the IR was female, than vice versa. However, the same is not true for GGS (Table 5, third panel). In Croatia, Estonia, and the Netherlands, gender mismatches are more likely when the AR is female rather than male, which may suggest that women are more likely to complete the survey even when they are not the intended respondents. This difference between ESS and GSS could be related to the subject matter of the survey. In Austria, a high proportion of gender misreports (28.4%) are associated with respondents whose gender is recorded as "other", a category that does not exist in any of the other GGS countries or in the ESS datasets analysed.

Table 5: Prevalence of gender mismatches by gender across three surveys

	AR male	AR female	Total
ESS Round 10			
Spain	0.7%	0.7%	0.7%
Latvia	1.7%	0.9%	1.2%
Poland	0.0%	0.0%	0.0%
Sweden	1.9%	1.4%	1.6%
Germany	0.0%	0.0%	0.0%
ESS Round 11			
Spain	0.6%	0.6%	0.6%
Poland	0.0%	0.1%	0.1%
Sweden	2.0%	1.5%	1.8%
Germany	0.1%	0.0%	0.0%
GGS-II			
Austria	1.0%	0.6%	1.1%
Croatia	0.4%	0.7%	0.5%
Estonia	0.5%	1.2%	0.9%
Netherlands	1.1%	4.5%	3.2%

No clear overall pattern emerges regarding the nature of age mismatches. The AR was younger than the IR in 54% of the 89 probable mismatches at ESS Round 10 and in 55% of the 74 mismatches at ESS Round 11. There is therefore no evidence that ARs are more likely to be younger than the IR or vice versa, nor is there any evidence that this pattern differs between self-completion and face-to-face modes of data collection. This analysis could not be replicated for GGS as age of IR is not known.

As with gender, age misreports are more common among female respondents than among males in Croatia, Estonia and the Netherlands (Table 6). Unlike gender, age misreports are also more common among female respondents in Sweden.

Further investigation of mismatches on gender and on age suggest that, in Austria, 13.6% of gender mismatches are outside the age range of the target population, compared to 4.7% in the Netherlands, 8.5% in Estonia, and only 2.4% in Croatia (see appendix table A3). Of the age mismatches, 10.6% in Austria, 5.3% in Croatia, 9.8% in Estonia and 7.8% in the Netherlands fall outside the survey age range (see appendix table A4). For the ESS countries, there were no cases of age falling outside the survey age range, likely reflecting the much broader eligible age range for ESS.

Table 6: Prevalence of age mismatches by gender across three surveys (percentages)

	AR male	AR female	Total
ESS Round 10			
Spain	0.7	0.7	0.7
Latvia	3.4	2.6	2.9
Poland	0.2	0.1	0.2
Sweden	1.6	2.0	1.8
Germany	0.0	0.0	0.0
ESS Round 11			
Spain	1.5	2.0	1.7
Poland	1.4	1.3	1.3
Sweden	0.5	1.2	0.8
Germany	0.6	0.5	0.6
GGS-II			
Austria	1.7	1.4	1.6
Croatia	1.3	1.7	1.5
Estonia	1.1	1.5	1.3
Netherlands	3.0	5.6	4.5

As the number of cases of probable mismatch on both gender and age was small (17 at ESS Round 10 and 7 at ESS Round 11), little can be concluded about the nature of these cases. We note only that the AR was younger than the IR in 18 of these 24 cases (11 out of 17 self-completion and 7 out of 7 face-to-face) and that the AR was female in 15 of the 24 cases (8 out of 17 self-completion and 7 out of 7 face-to-face).

In the case of ARs who do not live alone, but do not match the profile of the corresponding IR, it is likely that someone else living at the same address filled out the survey. By comparing the characteristics of the IR to the reported characteristics of the members of the household of the AR, we are able to identify the likely relationship of the IR to the AR. Though numbers are small, we see suggestive evidence in Table 7, that completion by a parent or a non-relative is more likely with self-completion, while completion by a sibling is more likely with face-to-face interviews.

For GGS, it is not possible to identify the relationship of the IR to the AR in all cases. But for two-person households with a mismatch for either sex or age, we can infer who the IR might be by examining the characteristics of the other household member (i.e., the person other than the AR). We find (analysis not shown) that the other household member is most frequently a partner (91.5% of cases) or a child (over 18 as younger children were excluded from the analysis) (3.5%). This is perhaps unsurprising as the vast majority of 2-adult households consist of partners.

Table 7: Relationship of IR to the AR; ESS Rounds 10 and 11

Relationship of IR to AR	Round 10 (self-completion)		Round 11 (face-to-face)	
	Number	%	Number	%
Husband/wife/partner	13	31	4	20
Son/daughter/step/adopted/foster	4	10	0	0*
Parent/parent-in-law	1	2	0	0
Brother/sister/step/adopted/foster	13	31	14	70**
Other non-relative	10	24	1	5*
Refusal	0	0	1	5
No answer	1	2	0	0
Total	42	100	20	100

* 0.01 < P < 0.05; ** P < 0.01

6. Discussion and Conclusions

Many high-quality surveys have increasingly adopted self-completion modes of data collection, in which no interviewer is present to verify that the respondent is the individual selected from the individual-level sampling frame. While self-completion approaches offer a number of advantages, including lower costs and reduced interviewer effects, they also raise concerns about the possibility that questionnaires may be completed by someone other than the intended respondent. Such respondent substitution can threaten data quality and undermine the validity of survey estimates if it occurs systematically. In this context, it is important to assess the prevalence and characteristics of incorrect respondents in surveys based on individual-level sampling frames. The analysis presented in this paper contributes to this evidence base by examining the extent of potential respondent mismatches in both self-completion and interviewer-administered survey settings in ESS and GGS.

The reassuring message from our analysis of data from large-scale general population self-completion surveys of named samples in nine countries is that we find little evidence of questionnaires having been completed by someone other than the intended respondent, and furthermore little evidence of any systematic differences between actual and intended respondents in the small proportion of cases where these appear to be different people. In six out of nine countries, fewer than 1.0% of respondents were of a different gender to the intended respondent, and only in Netherlands (3.1%) did this proportion exceed 2.0%. Mismatches on age were only slightly more prevalent with the proportion below 1.0% in three countries and exceeding 2.0% only in Latvia (3.2%) and Netherlands (4.6%).

Furthermore, for the four countries where we could make a direct comparison between a face-to-face interview survey and a self-completion survey, we found no

evidence that the survey was systematically more likely to be completed by the 'wrong' person in self-completion mode. In fact, in three of the four countries the proportions of mismatches on age and gender were lower with self-completion mode of data collection.

In the small proportion of cases where it seems likely that someone other than the intended respondent completed the questionnaire, we observed few systematic differences between actual and intended respondents: it appears to have been slightly more likely that a male respondent replaced a female intended respondent in Latvia (ESS), while the reverse was true in the Netherlands and Estonia (both GSS). In six countries the relative prevalence of the two scenarios was similar. ESS evidence suggested that the actual respondent was more likely to be a parent of the intended respondent or a non-relative in self-completion mode than with face-to-face interviewing, while in face-to-face the actual respondent was more likely to be a sibling. For GGS, the relationship between actual and intended respondent in case of apparent mismatch could only be determined in the case of two-adult households where, unsurprisingly, most actual respondents were the spouse or partner of the intended respondent.

For surveys that have switched from face-to-face interviewing to self-completion methods or which are considering doing so, reassurance can be provided that a substantial increase in the prevalence of 'incorrect' respondents is unlikely. More generally, survey data users can be confident regarding this particular aspect of data quality: the vast majority of respondents appear to indeed be the intended respondent.

For cross-national surveys where a mix of named samples and address samples is inevitable due to variation between countries in types of sampling frames available, the findings presented in this article for named samples can be used as a baseline against which to compare the performance of within-household selection methods for address samples (Reece and Lynn, 2026).

A remaining issue is what to do with 'wrong' respondents once they are detected. Should they be removed from survey data sets or retained? And how should they be reported? The difficulty here is that standardised practice would require standardised information. However, surveys will inevitably differ in the information they have available to assess the likelihood of a respondent being the 'wrong' one. Consequently, some surveys will detect very few 'wrong' respondents, simply because they are unable to make the assessment in most cases, while surveys with more complete information will detect more. Our recommendation is that a flag variable should be added to data sets to indicate that a respondent is likely 'wrong,' accompanied by guidance to analysts in technical reports that they should test the sensitivity of their results to including or excluding these respondents. This will also

require two sets of weights to be produced, corresponding to inclusion and exclusion of these respondents. Survey technical documentation should include a clear description of how the indicator was derived and what it means.

Finally, we must note a number of limitations of our study. First, we only have data from nine European countries. There is no guarantee that self-completion surveys will perform similarly well in all other countries, though the heterogeneity of the countries in our study should provide some confidence in the robustness of the findings. Second, the ESS and GSS differ in important respects, notably the age range of the target population and the survey topics. This means that findings for the five ESS countries are not directly comparable with those for the four GSS countries. Again, however, the similarity of the findings between surveys that are quite different can be interpreted as suggestive of the robustness of the conclusions. Third, the lack of direct access to register data for GSS countries has limited our ability to replicate analyses across both surveys and has meant we have had to rely on ESS alone for direct comparisons of the characteristics of actual and intended respondents in the case of mismatch for larger households. Finally, in the German ESS dataset we were unable to detect mismatches within age bands due to the way the age variable was recorded. Replication and extension of our research, particularly for additional countries and different survey topics, would be valuable, especially if richer sample frame information would be available for all cases and comparable to survey responses, for example on citizenship, education or employment.

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REFERENCES

Gauthier, Anne H., Siyang Kong, Olga Grünwald, Martin Bujard, Arianna Caporali, Vytenis Juozas Deimantas, Tom Emery, Wojciech Jablonski, Judith C Koops, Arieke Rijken, Almut Schumann (2025). The Generations and Gender Survey: a cross-national longitudinal resource, *European Sociological Review*, Volume 41, Issue 6, December 2025, Pages 983–1001, https://doi.org/10.1093/esr/jcaf005

Gauthier, Anne H., Susana Laia Farinha Cabaço and Tom Emery (2018). Generations and Gender Survey study profile, *Longitudinal and Life Course Studies*, Volume 9, Issue 4, October 2018, Pages 456–465. https://doi.org/10.14301/llcs.v9i4.500

Koch, A. (2018) Within-household selection of respondents. Chapter 5, p.93-111, in Advances in Comparative Survey Methods (ed.s T.P. Johnson, B.-E. Pennell, I.A.L. Stoop & B. Dorer), Wiley.

Kolarz, P., Vinnik, A., Krcal, A., de Ruiter, A., Beckers, D., van Wijk, E., Karsten, E., Dijkstal, F., D'hont, J., Sutinen, L., Simmonds, P., Nausedaite, R., Cimatti, R. and Traag, V. (2022) SUSTAIN-": Impact study of the European Social Survey. Available at https://www.europeansocialsurvey.org/sites/default/files/2023-06/ESS-Impact-Study-2.pdf.

Lynn, P. (2020) Evaluating push-to-web methodology for mixed-mode surveys using address-based samples, *Survey Research Methods* 14(1): 19-30.

Olson, K. & Smyth, J. (2017) Within-household selection in mail surveys: Explicit questions are better than cover letter instructions, *Public Opinion Quarterly* 81(3): 688-713.

Olson, K., Stange, M. & Smyth, J. (2014) Assessing within-household selection methods in household mail surveys, *Public Opinion Quarterly* 78(3): 656-678.

Reece N. & Lynn P. (2026) 'Methods for within-household selection in self-administered push-toweb surveys: an experimental comparison', Survey Futures Working Paper no. 21. Colchester, UK: University of Essex. Available at https://surveyfutures.net/working-papers/.

Williams, J. (2015) Investigating the feasibility of sampling all adults in the household. TNS BMRB Report. Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/466925/The_Community_Life_Survey_Investigating_the_Feasibility_of_Sampling_All_Adults_in_the_Household_FINAL.pdf

Appendix: Supplementary Tables

Table A1: Age difference between AR and IR by country, ESS Round 10

	Spain		Latvia		Poland		Sweden	
Age difference (AR – IR)	N	%	N	%	N	%	N	%
< -40	0	0.0	3	0.3	0	0.0	2	0.1
-40 to -20	0	0.0	11	1.1	0	0.0	2	0.1
-19 to -6	2	0.1	2	0.3	0	0.0	8	0.4
-5 to -3	1	0.0	0	0.0	1	0.1	10	0.4
-2	0	0.0	1	0.1	0	0.0	4	0.2
-1	5	0.2	3	0.3	1	0.1	7	0.3
0	72	3.2	148	15.0	123	6.2	2,148	95.1
1	2,176	95.6	573	58.1	1,841	93.4	60	2.7
2	8	0.4	233	23.6	4	0.2	3	0.1
3 to 5	8	0.4	2	0.2	1	0.1	4	0.2
6 to 19	5	0.2	4	0.4	0	0.0	9	0.4
>20	0	0.0	5	0.5	1	0.1	2	0.1
Total	2,277	100	986	100	1,972	100	2,259	100

Table A2: Age difference between AR and IR by country, ESS Round 11

	Spain		Poland		Sweden		Germany	
Age difference (AR – IR)	N	%	N	%	N	%	N	%
< -40	0	0.0	1	0.1	1	0.1	0	0.0
-40 to -20	3	0.2	0	0.0	0	0.0	1	0.0
-19 to -6	3	0.2	2	0.1	2	0.2	4	0.2
-5 to -3	7	0.4	2	0.1	5	0.4	3	0.1
-2	4	0.2	2	0.1	1	0.1	0	0.0
-1	9	0.5	2	0.1	1	0.1	5	0.2
0	118	5.4	1,053	74.5	1,217	99.0	1,327	56.4
1	1,271	69.3	335	23.7	1	0.1	989	42.0
2	405	22.1	5	0.4	1	0.1	20	0.9
3 to 5	6	0.5	8	0.6	0	0.0	1	0.0
6 to 19	3	0.2	3	0.2	0	0.0	2	0.1
>20	3	0.2	1	0.1	0	0.0	2	0.1
Total	1,835	100	1,414	100	1,229	100	2,259	100

Table A3: Age distribution of gender mismatch cases by country, GGS

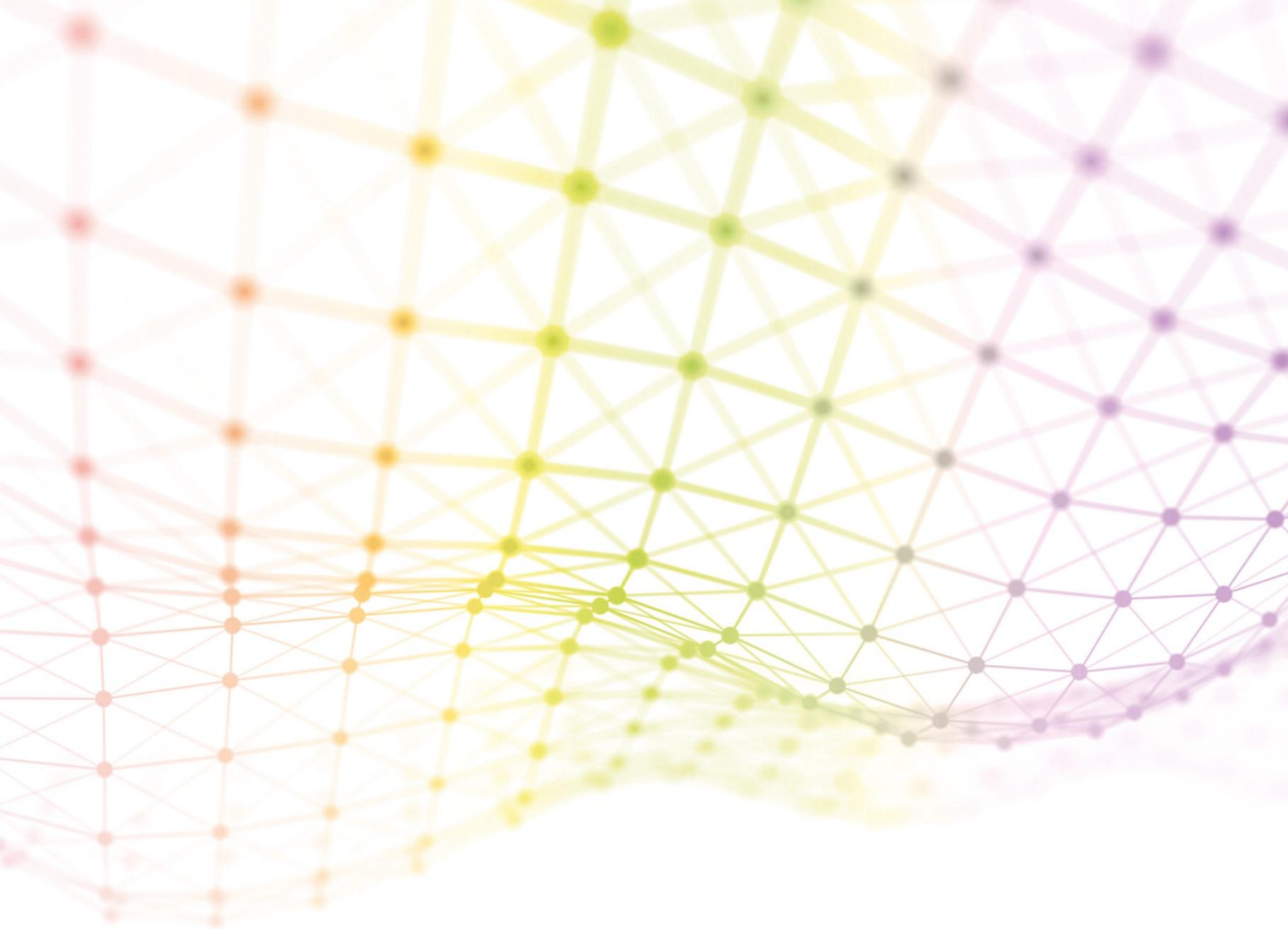
Reported Age	Austria		Croatia		Estonia		Netherlands	
	N	%	N	%	N	%	N	%
Under 18	2	2.3	0	0.0	0	0.0	4	1.6
18-24	17	19.3	10	24.4	2	2.4	30	11.8
25-29	13	14.8	4	9.8	3	3.7	30	11.8
30-34	9	10.2	3	7.3	13	15.9	38	15.0
35-39	9	10.2	6	14.6	8	9.8	31	12.2
40-44	7	8.0	6	14.6	11	13.4	25	9.8
45-49	8	9.1	7	17.1	15	18.3	30	11.8
50-54	9	10.2	4	9.8	15	18.3	26	10.2
55-59	4	4.5	1	2.4	8	9.8	32	12.6
60-64	6	6.8	0	0.0	4	4.9	5	2.0
65-69	1	1.1	0	0.0	2	2.4	2	0.8
70-74	2	2.3	0	0.0	0	0.0	1	0.4
75 or over	1	1.1	0	0.0	1	1.2	0	0.0
Total	**88**	**100**	**41**	**100**	**82**	**100**	**254**	**100**

Note: Shaded cells are outside of the eligible age range for the survey

Table A4: Age distribution of age mismatch cases by country, GGS

Reported Age	Austria		Croatia		Estonia		Netherlands	
	N	%	N	%	N	%	N	%
Under 18	2	1.5	0	0.0	1	0.8	7	1.9
18-24	16	12.1	25	22.1	5	4.1	60	16.1
25-29	18	13.6	12	10.6	7	5.7	34	9.1
30-34	18	13.6	12	10.6	15	12.3	48	12.9
35-39	15	11.4	11	9.7	17	13.9	37	9.9
40-44	10	7.6	17	15.0	22	18.0	37	9.9
45-49	14	10.6	16	14.2	18	14.8	46	12.3
50-54	19	14.4	14	12.4	17	13.9	36	9.7
55-59	8	6.1	5	4.4	9	7.4	46	12.3
60-64	7	5.3	0	0.0	6	4.9	9	2.4
65-69	1	0.8	1	0.9	2	1.6	6	1.6
70-74	2	1.5	0	0.0	1	0.8	4	1.1
75 or over	2	1.5	0	0.0	2	1.6	3	0.8
Total	**132**	**100**	**113**	**100**	**122**	**100**	**373**	**100**

Note: Shaded cells are outside of the eligible age range for the survey



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