Data Brief:
The Generations and Gender Survey second round (GGS-II)

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1. Introduction

Demographic change is one of the megatrends confronting countries around the world (Ezeh, Bongaarts and Mberu, 2012; European Commission 2021). In countries with advanced economies, several decades of (very) low levels of fertility (Lesthaeghe, 2010) coupled with longer life expectancy have been associated with population decline and population aging with far reaching consequences for economy and society (Bujard, 2015; Harper, 2014). Moreover, low levels of fertility in the midst of the gender revolution (England, 2010; Goldscheider, Bernhardt and Lappérgård, 2015) have fundamentally transformed how women and men organize labor force participation, housework, and childcare. Collectively, these trends have altered people’s living conditions, experiences, family and work arrangements, resulting in more de-standardized and complex life course and family dynamics. The scientific challenge is to identify and capture these complexities and the associated demographic changes in order to understand their causes and consequences. For the social sciences to respond to this challenge, cross-nationally comparable micro-level data are essential.

As an international research infrastructure, the Generations and Gender Programme (GGP) provides high-quality, open-access data about population and family dynamics. The main component is the Generation and Gender Survey (GGS). It is a cross-national panel survey on life-course and family dynamics of individuals aged 18-79 years. With its longitudinal design, including both retrospective and prospective information, the GGS tracks the experiences and changes that individuals go through in their personal lives, such as leaving the parental home, union formation and dissolution, parenthood, and many more opportunities and challenges individuals face in their lives.

The GGS currently consists of two rounds of data collection. The first round (GGS-I) was launched in 2004 as a three-wave panel study with three-year time intervals. It has collected information from over 200,000 individuals aged 18 to 79 from 19 countries and made important contributions to the social sciences as a unique longitudinal data resource on families and life course trajectories (Gauthier, Cabaço and Emery, 2018). The second round of data collection (GGS-II) started in 2020 with a revised questionnaire, enhanced survey design, and refreshed samples. It has the same longitudinal design as the GGS-I: one baseline wave and two follow-up waves with a three-year time interval.

The goal of this article is to present the GGS-II baseline wave (wave 1). We first present the development of GGS-II, followed by a presentation of the questionnaire design. Next, we describe the data collection cycle of the GGS-II, including fieldwork design, data coverage and the process of data harmonization. We then demonstrate an important tool for browsing the data and metadata, as well as how to access the micro-level data. Finally we describe the potential impacts of GGS-II and its future developments.

2. The path toward GGS-II

The Generations and Gender Programme was initiated in the year 2000 under the umbrella of the United Nations Economic Commission for Europe (UNECE). The development of the GGS was built on a longstanding tradition of demographic surveys that began in the 1970s. The Family and Fertility Survey (FFS), carried out in the 1990s in several European countries, was the direct predecessor of
the GGS-I. The GGS-I was a unique and innovative data source at the time. It incorporated several of the FFS’s innovations but extended the age coverage from 18-49 to 18-79, added a panel dimension, in addition to strengthening the gender dimension and the relationship between generations as key components to understanding life course and family dynamics.

Specifically, it sets out to address important questions on family formation and dissolution such as the dynamics of partnership, the process of childbearing, and the timing of home leaving, as well as on how family members maintain their relationships via financial, physical, or mental support. It was also the only comparative panel study that covers a wide age range of the core adulthood and has a significant coverage of Central and East European countries. Numerous comparative research projects, publications in high-impact journals, and advances in theory development in different scientific disciplines have made use of the GGS-I data (Gauthier, Cabaço and Emery, 2018; Vikat et al., 2007).

Nevertheless, there were some drawbacks and limitations. Mainly, the GGP was organized in a decentralized structure with country teams being solely responsible for data collection and processing of GGS-I. This decentralization resulted in considerable country variations in the compliance to the core questionnaire and fieldwork design, as well as time-consuming post-harmonization efforts (Emery and Caporali, 2019). In addition, GGS-I was conducted using face-to-face interviews, which is challenged by the increasing amount of labor costs. Recent advances in survey methodology have shown other problems in conducting face-to-face interviews, such as interviewer effects and the stagnant or even declining response rate (Millar and Dillman, 2011; Emery et al., 2019).

To address these challenges and shortcomings, the GGP introduced two major changes prior to the launch of GGS-II. First, it implemented a more centralized structure that included the use of a centrally coded questionnaire and common fieldwork operation. This ensures closer collaboration between national teams and the GGP headquarter, resulting in greater compliance with the questionnaire and fieldwork design. Second, it carried out a pilot study in three countries (Croatia, Portugal, Germany) in 2017 to test the feasibility of mixed-mode data collection (‘push to web’ approach) (Emery et al., 2019). This pilot study revealed that GGS is feasible for Computer-Assisted Web Interviews (CAWI). The response rate as well as the nonresponse bias in the push-to-web design were comparable to the face-to-face control group (Lugtig et al., 2022; Piccitto, Liefbroer and Emery, 2022). In addition, in light of the empirical findings of the pilot study on, for instance, break-off pattern and device, minor adjustments in the survey design were made to make GGS-II more suitable for web interviews (Emery et al. 2023).

3. GGS-II baseline questionnaire

The GGS-II baseline (wave 1) questionnaire is theory-driven and multidisciplinary. It includes core elements that are essential to the GGS such as retrospective fertility and partnership histories as well as family dynamics. To reflect and respond to recent societal and scientific changes, the baseline questionnaire has been enriched with new concepts and enhanced measurements of classic theories. Table 1 presents the structure of the GGS-II baseline questionnaire, kep concepts and the new elements in each module.
3.1. The theoretical framework of the GGS-II baseline questionnaire

The GGS-II baseline questionnaire (Gauthier et al., 2021) builds on the life course perspective (Elder, 1994) and its multidisciplinary extension (Bernardi, Huinink and Settersten, 2019). The life course perspective is a framework to understand the multiple paths that men and women take throughout their lives, as well as the connections between roles that people may hold in different areas of their lives (e.g., work and family). GGS-II adopts a multidisciplinary extension of the life-course research, which allows for a broader understanding of the life course from the perspectives of social psychology, economics, sociology, and epidemiology.

Central to the life-course perspective is the notion of life-course transition and ‘linked lives’. Life-course transition is a major change in people’s roles. Key life-course transitions captured in GGS-II are leaving the parental home, union formation and dissolution, parenthood, and retirement. The timing and the sequence (ordering) in which these transitions take place are central to the understanding of individual life trajectories as well as the causes and consequences of these life-course transitions.

The ‘linked lives’ notion posits that men’s and women’s lives are embedded in a network of social relationships such as parents, partners, children, and others. The GGS-II covers the relationship with the current partner and intergenerational relationships across multiple generations from the respondents’ perspective, providing insights into partnership stability, upward and downward intergenerational solidarity. This concerns the relationship between (1) young adults and their parents, (2) adult and their own children as well as their older parents, (3) older adults and their adult children, grandchildren, and parents.

3.2. Survey content

The GGS-II baseline questionnaire (Gauthier et al., 2021) covers a wide range of topics with a focus on fertility and partnership histories, family structure, division of household tasks, gender roles, work-life balance, intergenerational exchanges, transition to adulthood, and health and wellbeing. These topics are covered in nine sections in the GGS-II baseline questionnaire: Demographics, Life Histories, Fertility, Household, Generations, Health and Wellbeing, Work, Income, and Attitudes.

Demographics: in this section, detailed information on the respondent’s demographic characteristics, such as age, gender, education and migration background, as well as on the current partner or spouse is included. For each transition event in the life-course, for instance, graduating from school, marrying or starting cohabitation with the current partner, the timing of the transition is captured (month and year). Apart from this, new questions are added in light of recent societal and technological changes. For example, with the booming of mobile technology, people nowadays are much more comfortable with meeting online and are in general spending more time on the internet. Digitalization diversifies the way of union formation and maintaining relationship (Legewie and Fasang, 2021). New items on, for example, digital contact and meeting online, are added to capture such trends. In addition, given increased migration flows (Abel and Sander, 2014), items on mobility and integration including intention to move or migrate, places lived before, reasons for moving, and language used at home are added.
Life Histories: at the core of the GGS, detailed date information on the history of union and family formation and dissolution is covered. To capture the timing and sequence of important life-course events, both the starting and ending year and month of previous relationships (cohabitation or marriage) and birth year and month of children are asked. Considering the recent changes in family complexity, e.g. more single parents, step-families, the (growing) acceptance of LGBTQ+ community, and the increase of same-sex legal unions, new items on shared custody and diverse family formation and childcare arrangements are also added. This includes, for example, whether children are living in the same household as the respondent. If not or only part of the time, where the child stays the rest of time, information on the frequency of looking after the child (night spent per week) as well as the frequency of digital contact (by phone, email, etc.) is included. Next to the information on biological children, information on step-children, adopted-children, as well as children born through surrogacy is covered.

Fertility: fertility intentions are the main focus of this section, including the intention to have a (another) child in the next three years and the intention to have a (another) child at all. A new answer category “unsure” is added in the middle of the balanced scale from “definitely yes” to “definitely not” to better capture the reality and complexity of intention formation, especially among younger cohorts (Bhrolcháin and Beaujouan, 2015). Related to fertility intention, fertility preference, which is measured by general and personal ideal family size, as well as pregnancy intendedness are included. To better reflect potential postponed parenthood and the reasons for that, fertility window, reasons for infertility, and fertility treatment are covered. In addition, the GGS-II questionnaire included several items to measure the Sustainable Development Goal indicators (SDGs, see Hák, Janoušková and Moldan, 2016). The SDG indicator of unmet family planning needs (SDG 3.7.1) can be estimated by combining information on sexual activity, contraceptive use, fertility intention and fecundity (Koops, 2022). The questionnaire also measures the SDG indicator of gender equality from the perspective of sexual and reproductive health and rights (SDG 5.6.1) with two new questions on sexual autonomy and contraceptive autonomy. In addition, the question on healthcare autonomy is also added in the Health and Wellbeing section to capture the SDG 5.6.1. GGS-II is already recognized as an official data source in UNFPA’s Demographic Resilience Programme to monitor progress towards achieving the Programme of Action of the International Conference on Population and Development (ICPD).

Household: to capture the household structure of the respondent apart from their coresidential partner and children, detailed information on co-resident (and temporarily away) household members including their demographic characteristics, main activity, and health situation is covered. To reflect care arrangement and family solidarity, the exchange of help and informal support between the respondent and other household members on household and childcare tasks is covered as well as relationship satisfaction. Among older people, living alone or in a household with family support becomes an important determinant of their mental and physical well-being (Merz and Huxhold, 2010). This is reflected in the household structure and exchange of support that are captured by the GGS-II. Combining information on the gender division of childcare tasks, level of satisfaction with such division and the decision-making process, the GGS-II provides data to estimate gender equality and power dynamics within the household (Perry-Jenkins and Gerstel, 2020).

Generations: inter- and multi-generational relationships are at the core of this section, which includes relationships between adult children and their parents, as well as between grandparents and grandchildren. To measure individual socioeconomic background and the intergenerational
transmission of socioeconomic resources, information on parents’ education, their migration background as well as their occupation (ISCO-08) when the respondent was 15 years old are included. In addition, since fertility behavior and demographic behavior can be transmissible across generations as well, questions on parents’ age of having their first child, number of children the parents have, as well as new questions on whether the parents were married or divorced are included.

**Health and Wellbeing:** the baseline questionnaire captures both physical and mental health. It also includes questions on both subjective and objective health conditions. Height and weight information is captured, as well as the information on health limitation in conducting daily activities. Psychological wellbeing is a focus of this section, which is captured by asking respondents to rate their level of happiness, loneliness and depression. The six-item loneliness scale developed by Gierveld and Tilburg (2006) is used to measure the mental wellbeing of the respondent. Emotional exchange within one’s social network is also measured by asking with whom the respondent discusses important matters.

**Work:** economic activity is the main focus of this section including employment status, occupation (ISCO-08) and working hours. Work-life balance is captured by a series of standard questions, such as whether or not the respondent is too tired to do necessary chores after work. The GGS-II also captures work satisfaction and has new questions on commute time and working from home. A growing literature has highlighted the impact of uncertainties on life-course transitions especially for younger cohorts (Andersson, Dahlberg and Neyer, 2020; Vignoli et al., 2020; Vignoli, Tocchioni, and Mattei, 2020). The GGS-II addresses this scientific discussion by adding new questions on stability of employment and potential job loss for respondents as well as their partner to measure economic uncertainties.

**Income:** closely related to work, the financial situation of the respondent as well as the entire household is the focus of this section. In addition to questions on income, property and wealth, questions on subjective evaluation of the financial situation and potential changes in the near future are added to better capture the complexity and construction of financial stability. Another important way to estimate individual and household financial situation is through the measure of economic deprivation. The GGS-II, therefore, added new questions to capture material and social deprivation, which follow the new indicators of deprivation implemented by the EU in 2014 (Guio, Gordon and Marlier, 2012).

**Attitudes:** the attitudes towards gender norms and diversity are at the core of this section. GGS-II incorporated items from large cross-national comparative values surveys, such as the World Value Survey (WVS wave 7, 2017-2022), to capture people’s gender values towards diversity in family forms, such as cohabitation, divorce and working mothers and fathers. To capture attitudes towards family-work balance and the gendered division of childcare, questions on the ideal working hours of a mother and a father with a young child are added. In addition to gender attitudes, general trust, ability to plan one’s future and religiosity are included to capture the potential vulnerability of the respondent.
Table 1. An overview of the design of GGS-II baseline questionnaire

<table>
<thead>
<tr>
<th>Questionnaire Modules</th>
<th>Key concepts</th>
<th>New elements in GGS-II compared to GGS-I</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographics</td>
<td>Demographic characteristics; Education and current activity; Basic information on the current partner; Education of the current partner</td>
<td>Internet use; online dating; mobility and integration of migrants</td>
</tr>
<tr>
<td>Life histories</td>
<td>Partnership histories; fertility histories</td>
<td>Shared custody; frequency of digital contact with biological parents; “Unsure” as response category in intending to have children; SDG items (sexual autonomy; contraceptive autonomy); reasons for infertility; fertility window</td>
</tr>
<tr>
<td>Fertility</td>
<td>Fertility intention; General and personal ideal family size</td>
<td></td>
</tr>
<tr>
<td>Household</td>
<td>Basic information on the household members; Relationship satisfaction; Division of household tasks;</td>
<td>Frequency of childcare; Paid and unpaid help with households tasks</td>
</tr>
<tr>
<td>Generations</td>
<td>Date of birth/death of biological parents; Frequency of contact; Relationship satisfaction; Siblings; Education and occupation of the co-resident parents during childhood</td>
<td>Parents’ marital status; childhood mobility; physical limitations of the parents</td>
</tr>
<tr>
<td>Health and Wellbeing</td>
<td>Life satisfaction; Subjective and objective health evaluation</td>
<td>Healthcare autonomy</td>
</tr>
<tr>
<td>Work</td>
<td>Employment status; Hours worked per week</td>
<td>Stability of employment; Working from home</td>
</tr>
<tr>
<td>Income</td>
<td>Type of income; Total household income</td>
<td>Perceived financial stability; material and social deprivation</td>
</tr>
<tr>
<td>Attitudes</td>
<td>General trust; Religiosity; Attitudes towards intergenerational relationship</td>
<td>Gender values (new items)</td>
</tr>
</tbody>
</table>

4. Data collection and management

The GGS-II data are the result of a joint work of the GGP Central Coordination Team and the national team of each GGS country. The GGS-II data life cycle consists of planning and preparation, fieldwork, data harmonization and documentation, and data dissemination. In GGS-II, centralized operation is a key feature. This is to minimize but also systematically document variations among countries during fieldwork, reduce data releasing time and enhance user experience when merging datasets.

4.1. Fieldwork design in GGS-II

To ensure high-quality data that is comparable across all participating countries, there are specific standards and requirements for data collection that each country must adhere to. The requirements for the fieldwork are outlined in the GGP Technical Guidelines (GGP, 2023). It is the responsibility of
the country team to ensure that the fieldwork design adheres to the Technical Guidelines (GGP, 2023), and this is closely monitored and supervised by the Central Coordination Team. Any country deviation should be discussed and approved by the Central Coordination Team before the fieldwork starts.

- **Sampling method:** A probability sampling method is required for each participating country to allow for inter-country and time-dependent intra-country comparison. In practice, country teams decide together with the Central Coordination Team on the best suitable sample design and implementation strategy for their country context. This discussion includes aspects like the sample frame (individual or household), frame coverage, unit selection method, and stratification.

- **Target population:** The target population of the GGS-II is the resident non-institutionalized population within a specified age range. The standard age range of the GGS is between 18 to 79. However, if a representative survey on older population exits in the country, the age range can be reduced to 18 to 59. Moreover, a small proportion of the target population, particularly those residing in remote areas, may be excluded from the GGS due to practical constraints, however, this proportion shall not exceed 5% of the total target population covered by the sampling frame.

- **Sample sizes:** the target net sample size in GGS-II baseline wave should aim for reaching 10,000 respondents when the age range is 18-79 and 7,000 respondents when the age range is 18-59. This is to maintain a sufficiently high number of participants in the further course of the GGS-II panel, and a large enough sample of people in subgroups. Response rate varies across countries and it differs by data collection mode and panel maintenance strategies (Watson et al. 2018). Therefore, it is the responsibility of the country team to obtain a sufficient gross sample to achieve the aimed net sample size.

- **Mode of data collection and incentive:** the GGS-II is designed as a mixed-mode survey. The Technical Guidelines (GGP, 2023) specify that all data collections have to include a web component and include an additional mode (preferably CAPI). The actual proportion of respondents in each mode can be decided by the countries with a minimum of 10 percent in each (main mode and supplementary mode). In certain circumstances, a single mode can be used. The decision on which mode to use is often based on practical considerations, such as internet penetration and speed, whether an individual sampling framework is available, and research budget. The Covid-19 pandemic prevented some countries from carrying out CAPI interviews, hence they offered only CAWI (or CAWI and PAPI). A main challenge of conducting a web survey is how to engage respondents to achieve higher cooperation as no interviewer is present during the interview. In light of extensive research in survey methodology on the positive role of incentives on engaging respondents (Toepoel, 2012), the Central Coordination Team encourages countries to include both an unconditional and a conditional incentive in online interviews. In practice, not all countries had the budget to do so. Some countries conduct incentive experiments in a pilot study to advance their knowledge on the feasibility of a web survey and the best incentive scheme.

4.2. **Data resource and coverage**

In GGS-II, the geographical coverage has expanded further beyond Europe. In addition to European countries, GGS-II covers countries and territories in Central Asia, East Asia, and South America. As of
2023, twenty countries/territories have participated or have secured funding for conducting GGS-II baseline wave (wave 1). Figure 1 shows an overview of the GGS countries/territories in GGS-I and GGS-II up until mid-2023. In addition, more countries are in the planning phase of conducting GGS-II baseline wave.

Figure 1. An overview of GGS-I and GGS-II (baseline wave) countries/territories

Notes: 1. The GGS-I countries/territories where data have been harmonized are included. Austria and Russian Federation participated in GGS-I wave 3, but the harmonized data are currently not available. 2. Belarus, Kazakhstan and Latvia are included as GGS-II countries.

Two main types of sampling frames have been used in GGS-II, i.e., population registers with individual names as sampling element (Austria, Croatia, Denmark, Estonia, Finland, Germany, Italy, Netherlands, Norway, Sweden) and area sampling with addresses or dwellings as sampling element (Argentina [Buenos Aires], Belarus, Czech Republic, France, Hong Kong SAR, Kazakhstan, Latvia, Moldova, Uruguay, United Kingdom). There are two main types of sampling methods in relation to the sampling frame. Simple random sampling is used in countries that have individual names as the
Countries that have addresses as the sampling element adopted multistage sampling. Within each stage, the units are selected using probability proportional to size sampling method. Finally, one respondent within each household is selected using the last birthday method. United Kingdom used stratified random probability sampling to select household addresses and last birthday method to select the respondent.

Table 2 lists detailed information of the twenty countries/territories that have conducted or will soon conduct GGS-II baseline wave regarding net sample size, age range, response rate, data collection mode, and the time span of data collection. The majority of the GGS-II countries/territories use CAWI as the primary mode of data collection. In Germany and Sweden, an offline self-monitored mode (PAPI, Paper and Pencil Interviews) was used in addition to CAWI as a fallback plan to reduce survey non-response and potential recruitment or selection bias. In France, CATI (Computer Assisted Telephone Interviews) will be used as an additional mode next to CAWI. A few countries such as Moldova and Argentina (Buenos Aires) mainly or only conducted face-to-face interviews using CAPI because of low-level internet penetration and unstable internet connections.

Response rates vary across countries and territories. A number of factors may be related to the variation in response rates, such as the sampling framework, mode of data collection, number of reminders, incentive scheme, culture, and other societal elements. Several countries conducted a pilot study to investigate the effect of incentives on response rate (Czech Republic, Estonia, France and Hong Kong SAR). For example, in the Hong Kong SAR pilot, respondents were randomly assigned to nine incentive groups. It was found that a combination of unconditional and conditional monetary incentive (supermarket voucher) produced the highest response rate. In the Hong Kong SAR GGS-II baseline wave, this incentive scheme was then implemented. In the Netherlands and the United Kingdom, an incentive experiment was conducted in the first phase of data collection, so that the best optimal incentive scheme could be chosen for the remainder of the fieldwork.
<table>
<thead>
<tr>
<th>Country</th>
<th>Net sample size</th>
<th>Age range</th>
<th>Response rate</th>
<th>Mode</th>
<th>Data collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina (Buenos Aires)</td>
<td>2,433</td>
<td>18-79</td>
<td>41%</td>
<td>CAPI</td>
<td>Aug – Dec 2022</td>
</tr>
<tr>
<td>Austria</td>
<td>8,265</td>
<td>18-59</td>
<td>38%</td>
<td>CAWI</td>
<td>Oct 2022 – Mar 2023</td>
</tr>
<tr>
<td>Belarus</td>
<td>9,994</td>
<td>18-79</td>
<td>76%</td>
<td>CAPI</td>
<td>Apr – Nov 2017</td>
</tr>
<tr>
<td>Croatia</td>
<td>5,000*</td>
<td>18-54</td>
<td>28%*</td>
<td>CAWI</td>
<td>May – Jun 2023</td>
</tr>
<tr>
<td>Czech Republica</td>
<td>5,583</td>
<td>18-69</td>
<td>17%</td>
<td>CAWI, CAPI</td>
<td>Oct 2020 – Jul 2022</td>
</tr>
<tr>
<td>Denmark</td>
<td>8,269</td>
<td>18-49</td>
<td>20%</td>
<td>CAWI</td>
<td>Mar – Jun 2021</td>
</tr>
<tr>
<td>Estoniaa</td>
<td>8,992</td>
<td>18-59</td>
<td>29%</td>
<td>CAWI</td>
<td>Oct 2021 – Feb 2022</td>
</tr>
<tr>
<td>Finland</td>
<td>3,388</td>
<td>18-54</td>
<td>17%</td>
<td>CAWI</td>
<td>Oct 2021 – Mar 2022</td>
</tr>
<tr>
<td>Francea</td>
<td>10,000*</td>
<td>18-79</td>
<td>34%*</td>
<td>CAWI, CATI</td>
<td>In preparation</td>
</tr>
<tr>
<td>Germany</td>
<td>22,281</td>
<td>18-50</td>
<td>21%</td>
<td>CAWI, PAPI</td>
<td>Jun 2021 – Feb 2022</td>
</tr>
<tr>
<td>Hong Kong SARa</td>
<td>5,088</td>
<td>18-59</td>
<td>32%</td>
<td>CAWI</td>
<td>Feb – Mar 2023</td>
</tr>
<tr>
<td>Italy</td>
<td>10,000*</td>
<td>18-59</td>
<td>NA</td>
<td>CAWI</td>
<td>In preparation</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>14,857</td>
<td>18-79</td>
<td>93%</td>
<td>CAPI</td>
<td>Apr – Oct 2018</td>
</tr>
<tr>
<td>Latvia</td>
<td>2,298</td>
<td>18-79</td>
<td>57%</td>
<td>CAPI</td>
<td>Sep – Nov 2018</td>
</tr>
<tr>
<td>Moldova</td>
<td>10,044</td>
<td>15-79</td>
<td>50%</td>
<td>CAPI</td>
<td>Jan – Dec 2020</td>
</tr>
<tr>
<td>Netherlands</td>
<td>7,000*</td>
<td>18-59</td>
<td>29%*</td>
<td>CAWI</td>
<td>Oct 2022 – Mar 2023</td>
</tr>
<tr>
<td>Norway</td>
<td>5,031</td>
<td>18-54</td>
<td>33%</td>
<td>CAWI</td>
<td>Nov – Dec 2020</td>
</tr>
<tr>
<td>Sweden</td>
<td>8,082</td>
<td>18-59</td>
<td>27%</td>
<td>CAWI, PAPI</td>
<td>Mar – Aug 2021</td>
</tr>
<tr>
<td>Uruguay</td>
<td>7,245</td>
<td>18-79</td>
<td>42%</td>
<td>CAPI, CAPI</td>
<td>Oct 2021 – Oct 2022</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>7,723</td>
<td>18-59</td>
<td>15%</td>
<td>CAWI</td>
<td>Aug 2022 – Jan 2023</td>
</tr>
</tbody>
</table>

Notes:
1. Net sample size include respondents who completed at least the first two modules (Demographics and Life Histories);
2. Taiwan has conducted a pilot study in CAWI mode in January 2023.
3. * estimated number. Croatia and the Netherlands are in field in the mid 2023. The net sample sizes and response rates in these two countries are estimated based on the data that have been collected so far. France and Italy are preparing for fieldwork. The net sample sizes are targeted sample size based on prior knowledge. The response rate in France is estimated based on the French pilot study in 2022. 4. a. Pilot survey has been conducted before conducting the baseline wave.

### 4.3. Data harmonization

After the fieldwork has been completed, the Central Coordination Team processes the raw data. The dataset from each country is prepared in such a way that it is harmonized with the other datasets to reduce the need for users to post-harmonize the data. Only the most necessary edits are made to the dataset to keep the original quality of the data. Moreover, the Central Coordination Team produces design weights and post-stratification weights using Iterative Proportional Fitting (Kolenikov, 2014) based on the most recent and reliable information on population figures provided by the country teams on five items: age, gender, region, level of education, and marital status. By adding post-stratification weight, within-country and cross-country-comparative research become more reliable.
5. Data tool and access

The meta-data of GGS-II is stored in the GGP Colectica Portal (https://ggp.colectica.org/), which follows the standard of Data Documentation Initiative (DDI Lifecycle or DDI-L). This is a useful tool for documenting and for potential users to browse the GGS data online before requesting access to the micro-data. Via this online platform, called the GGP Colectica Portal, potential users can check the questionnaire in the national language. It also contains a list of all variables in the dataset. For each variable, the question text, response options, missing value codes, and filter conditions, as well as descriptive statistics are shown. Moreover, in the portal, all other relevant meta-data about the fieldwork can be found, such as, gross sample size, sampling frame, mode of data collection, and period of data collection.

The GGS-II micro-level data is released by the Central Coordination Team via the GGP user portal. To access it, researchers need to register as users on the GGP website (https://www.ggp-i.org/), where they can download the respective user agreement for signing. This is to make sure that the GGS data is used only for scientific purposes. After submitting the signed user agreement, the user will gain access to the micro-data in Stata, SPSS and Excel data format, which can be downloaded directly from the user space. It is possible to apply for access to a single GGS-II baseline wave (or a pilot) country or multiple countries. When a considerable number of GGS-II baseline wave countries become available, the Central Coordination Team will also release a consolidated data file combining all GGS-II baseline wave countries.

6. Potential impact and future developments

Researchers and policy makers can make use of the GGS-II micro-level data in several ways. In general, GGS-II is a valuable resource to understand the complex and dynamic link between demographic changes and life course and family dynamics in the participating countries (Fadel, Emery and Gauthier, 2020). In particular, GGS-II is unique as it provides valuable insights into the most vulnerable groups in society and their life course and family circumstances, such as individuals with a migrant background, single mothers, or youth not in education, employment, or training (NEET), because of the large sample sizes. Additionally, data from GGS-II on gender inequalities in paid and unpaid work can reveal which circumstances and policies contribute to exacerbating or minimizing these inequalities. This can aid in shaping policy discussions on topics such as work-life balance, women’s return to work after childbirth, and fathers’ involvement in childcare.

Moreover, the expansion of GGS-II beyond Europe to countries in Latin America (Uruguay, Argentina [Buenos Aires]) and China (Hong Kong), allows for comparing the development of family, population, and gender equality at a global level. So far, most population and fertility research focused on Western Europe or North America while phenomena like the gender revolution, demographic transition, and population aging take place globally. For example, recent research has highlighted the lack of support for classic theories like gender equity theory (McDonald, 2000) and other gender revolution theories (England, 2010, Esping-Andersen, 2009, Goldscheider, Bernhardt and Lappégård, 2015) in explaining various social phenomena in other societies (Kan, et al., 2022). The GGS-II allows researchers to carry out cross-national comparative research and test theories developed in industrialized western societies in other social contexts where data has previously been unavailable (Kan et al, 2022; Leocádio et al, 2023).
Looking ahead, GGS-II is designed to be a panel survey with one baseline wave and one or two follow-up waves with three-years time intervals. Norway, for instance, being among the very first countries that carried out the baseline wave in 2020, is preparing for a follow-up wave that can start early 2024. The data collection of the baseline wave has started in many countries in 2022 and 2023 meaning that the follow-up wave of many GGS-II countries will likely start around 2026. In 2023 there was a call among the GGP user community for contributions to the follow-up questionnaire (wave 2) to address innovative research topics and react to the needs of GGP users. These future developments allow GGS-II to continue contributing to the scientific community by providing researchers with longitudinal data on population dynamics, such as changes in fertility, longevity, and migration, impact the lives of individuals and families, as well as the realization of demographic intentions.
7. References


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8. Notes

1. The other data product of the Generations and Gender Programme includes Harmonized Histories, an international comparative dataset created through harmonizing data from existing fertility surveys and Contextual Database, which offers open access to comparable, aggregated contextual data on, for instances, demographic, economic and policy indicators at the country level. For more information, please see the GGP website (https://www.ggp-i.org/).

2. Two countries, Kazakhstan and Belarus, started a new round of data collection in 2017/2018. They used a transitional version of the questionnaire. Latvia conducted a small-scale survey in 2018 following Kazakhstan. We included these countries as part of the GGS-II countries.

3. Germany is an exception. They used a multi-stage sampling procedure as residents of Germany are registered in local registration offices.