



# Introducing the Worldwide Age Representation in Parliaments (WARP) Dataset

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QoG THE QUALITY OF GOVERNMENT INSTITUTE Department of Political Science University of Gothenburg Box 711, SE 405 30 GÖTEBORG April 2022 ISSN 1653-8919 © 2022 by Daniel Stockemer and Aksel Sundström. All rights reserved. Introducing the Worldwide Age Representation in Parliaments (WARP) Dataset Daniel Stockemer Aksel Sundström QoG Working Paper Series 2022:3 April 2022 ISSN 1653-8919

## Abstract

Research increasingly highlights the social group composition of decision-making bodies in politics. Beyond issues of gender and ethnicity, an emerging literature focuses on age groups. The absence of young adults in elected legislative assemblies is a democratic deficit with potentially severe repercussions. Yet, research is rarely able to address the issue of age group representation systematically, because we are lacking empirical information on the age distribution in parliaments. The Worldwide Age Representation in Parliaments (WARP) dataset remedies this dearth of data. It provides information about the numerical presence of age groups in parliaments, spanning across the globe and over time. It includes age data on legislators, such as the share of young or older Members of Parliament (MPs). The dataset also reports measures that compare the presence of a certain age group of legislators in relation to the same age group in the general population of a given country. Moreover, it includes gendered figures, such as the presence of young female MPs. The WARP dataset contains data for more than 700 elections in 149 countries and is freely available. It allows for a novel type of analyzes, that makes use of the age composition of legislatures.

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#### Introduction

About twenty-five years ago, Norris (1997) described the composition of parliaments around the world as follows: legislators tend to be men, members of the country's ethnic majority group, wealthy, and middle-aged or older. Over the past years, some aspects of this picture have changed. While still miles away from being representative of the socioeconomic or demographic traits of the population, many parliaments across the globe have become more diverse over the past decades, not the least having a larger share of women present in national decision making (Tripp and Kang 2008; Arendt 2018; Sobolewska et al. 2018). Yet, the same shift has not happened with age representation. The presence of young adults – those aged 35 years or below – has not increased over the past decades and continues to hover around 10 percent of legislators globally. The share of young adults in legislatures is about one to three when compared to ratio they constitute in the general voting age population (Sundström and Stockemer 2021).

Compared to the study of other outgroups in politics, research on youth representation in parliament and other elected bodies is still at its infancy, but growing. Among others, studies have started to tackle youth representation in certain regions and countries, including South Asia (Joshi, 2015), Morocco (de Paredes and Desrues, 2021; Belschner, 2021), Tunisia (Belschner, 2021; Dobbs, 2020), Ghana (Gyampo, 2013), the United States (Curry and Haydon 2018) and in the European Parliament (Stockemer and Sundström, 2018a; 2019). In addition, studies have started to look at youth representation in parliaments across countries (e.g. Stockemer and Sundström, 2018; IPU 2018; 2021), however only with a limited temporal and geographical scope. Yet, what the field is missing is a comprehensive dataset on age group representation in legislatures that spans across countries and time. In this article, we introduce such a dataset: The Worldwide Age Representation in Parliaments (WARP) dataset.

#### The importance of studying age group representation

Part of the reason why studies on age group representation – or youth representation, in particular – are still not as widespread as studies on other outgroups, such as women or ethnic minorities, is possibly because youths' outgroup feature is temporary on the individual level (in contrast to other outgroups, whose identity rarely change). From such a perspective, youths' absence from decision-making bodies might not be as much of an injustice as the exclusion of women or ethnic minorities (see discussion in Phillips 1998). In addition, political experience, which often is associated with being of older age, is still one of the main criteria for judging the 'quality' of elected officials (see Krook and Nugent 2018). However, we argue that such reasoning is premature and can think of at least three good reasons why young adults ought to have a higher presence in decision-making institutions.

First, according to the resemblance theory of representation, representative government should be a microcosm of the broader society. According to Heywood (2013, p. 201) legislators should be "drawn from all groups and sections in society (in terms of social class, gender, age and so on), and in numbers that are proportional to the size of the groups in society at large. Partly adhering to this logic, we believe that young adults as a group have interests that differ from that of older cohorts. Examples of intergenerational differences in interests could include climate change policies, educational policies and public spending priorities more broadly. We also note that younger cohorts tend to hold different views in issues such as legislation on abortion, same sex marriage, or the legalisation of cannabis. Given that so few young politicians sit at the decision-making table, existing political cleavages do not fully capture these interests (c.f. Mansbridge 2015). The Inter-Parliamentary Union (IPU) (2018, p. 21) aptly summarizes this argument: "Youth make up a substantial share of the population and should therefore participate wherever political decisions are being taken."

Second, there is growing evidence of linkages between descriptive and substantive representation. As early as 1967, Pitkin suggested that the outgroup size in parliament influences how this outgroup is represented in parliament. Recent studies confirm that more young adults in positions of power might lead to a better representation of the young cohorts in society.<sup>1</sup> McClean (2019) as well as Bailer et al. (2021) finds that, compared to older politicians, young politicians are more likely to actively support issues important for youth, such as the environment or specific public spending priorities.<sup>2</sup> In the words of the IPU, "without [youths] active participation, the laws passed may be detrimental to their interests, both today and in the future" (IPU 2018, p. 21). To name a few policy areas, young people – in the aggregate – have other agendas in matters like gun control, education, or same sex marriage than older ones. And in the years and decades to come, long-term issues such as global warming will affect young people more than older ones. Without adequate group representation, youths' interested are much less likely to be voiced in parliaments. Scholars have connected the lack of young legislators to the issue of intergenerational justice (Tremmel et al. 2015).

Third, we suggest that the lack of youths' presence in parliaments and other elected bodies feeds into a vicious cycle of youth alienation (Stockemer and Sundström 2018b, 2022). Three components reinforce this cycle; young adult' absence in decision-making bodies, their low political interest and their low rates of electoral participation. For example, because of youths' low electoral participation, political parties do not stand to gain much from catering to the needs of youth, something which further entices politicians to continue to ignore issues affecting youth (see Berry 2014), leading to even more political disengagement, and the continuation of the negative spiral (Henn and Foard 2014). Discussing what ways there are to break such cycles, Lupia and Philpot (2005) suggest that if we could "present politics in ways that are more relevant to young voters, the current decline in their political interest levels may be slowed, stopped, or perhaps even reversed." Echoing Briggs (2017), we believe that youth today will have a difficulty in relating to politics if they are absent from the ranks of representatives. We therefore propose that increasing the share of young legislators could be one way to break this cycle. For example, the presence of young legislators could lead to the symbolic representation of youth, giving them the feeling of fair representation, with relevant issues on the agenda, which might then encourage youth to be more engaged in formal types of politics.

<sup>&</sup>lt;sup>1</sup> For example, Meserve et al. (2009) finds that young politicians behave differently than their senior colleagues (e.g., they are more likely to deviate from party positions).

<sup>&</sup>lt;sup>2</sup> In a similar vein, but focusing more on older voters, Magni-Berton and Panel (2021) note that older people tend to vote for older representatives, who they see as more likely to defend their interests.

#### Why do we need a comprehensive dataset on youth representation in parliament?

A nascent vein of literature on outgroup representation suggests that youths' lack of representation in parliament is a serious problem, both normatively and empirically. Normatively, the literature increasingly discusses the policies (e.g., youth quotas or term limits in holding office ) that countries and parties can adopt to improve the presence of youth in decision-making bodies (e.g. Tremmel et al. 2015; Joshi and Och 2021). More empirically, we get a better and better picture of the magnitude of youths' underrepresentation. Yet, except for some exceptions (see Stockemer and Sundström 2018b; Krook and Nugent 2018), most studies still have a regional or country specific focus (e.g. Joshi 2013; 2015; Belschner 2021).<sup>3</sup> To get a more comprehensive picture of youths' (under) representation in parliament we are in need of studies that compare youth representation over time, and across continents. What is currently also missing is a comprehensive dataset that allows researchers to do so.

The only systematic data-collection with information on age of Members of Parliaments (MPs) is the "IPU Parline Database (2021): Historical Data on Age of Members of Parliament" that starts in 2014. After each election the IPU sends a questionnaire to each parliament, asking the parliamentary office to indicate how many members (split by gender) are in the following ten age brackets: 18 -20, 21-30, 31-40, 41-45, 46-50, 51-60, 61-70, 71-80, 81-90, 91 and over (see questionnaire in IPU 2018, p. 45). Based on this information the IPU then calculates the mean age in a parliament, as well as the percentage of young MPs aged 30 or under, 40 or under, as well as 45 or under at the beginning of each parliamentary term. The IPU also calculates the percentage of men and women in each age bracket for the most recent election, but does not report this figure for all elections in the historical dataset.

The data collection by the IPU is laudable, as it provides researchers a first tool to compare youth representation across a growing number of countries systematically. However, the IPU dataset also suffers from some shortcomings. The first shortcoming is that there seems to be systematic verification of the data provided by the parliaments. In fact, each parliamentary officer fills in the number of people in each age bracket. At least for some countries, the IPU should engage in some background checks by comparing the numbers provided in the questionnaire with the individual bibliographies of MPs. For example, for the election to the National Assembly in Bulgaria we have calculated an average age of 47 years. However, this compares to an average age of 50.1 years in the IPU dataset, pointing to the need of such verification. In addition, the figure for the mean age is a very rough estimate in the IPU dataset, since the IPU calculates it from distributions in ten categories (the age brackets) and not the precise age of MPs.

Second, the IPU is not transparent about its coverage rate. For example, the data for the lower House of Bosnia and Herzegovina for 2019 is based on 15 MPs from a total of 42 MPs. At the least, the IPU should flag such data-points as less trustworthy and provide the coverage rate for each election. Third, the cut-off points for youth might not make the most sense. The IPU uses the cut-off points of 30, 40, and 45 years of age to denote young parliamentarians. Yet, they are missing the cut-off point of 35, which is one of the most widely used in the literature including in IPU reports (see Joshi 2013; 2015; IPU 2018; Stockemer and

<sup>&</sup>lt;sup>3</sup> For work on representation that has studied the intersection of age and gender, see Sundström and Stockemer 2019b, 2019c, 2020.

Sundström 2019). Fifth, several indicators such as the median age is missing. Perhaps even more importantly, there are no measures available online that compare the ratio between young adults in parliament and the share of youth in the general population.

#### Information included in the WARP dataset

To collect our data, we used a different but also more time-consuming approach than the researchers from IPU: We looked at individual bibliographies of members of parliament. In more detail, we tried to retrieve a full list of parliamentarians, including their date of birth and gender data, for as many parliaments for as many years as possible. To collect these data, we systematically checked every parliamentary website and contacted every parliament across the globe. We also used the website EveryPolitician (http://everypolitician.org/) to retrieve data on age and gender. The information on EveryPolitician is web scraped from parliaments' websites and has a coverage spanning over time.<sup>4</sup> When possible, we scraped data from 1949 until the most recent election. Election data after 2019 exclusively come from the national websites of parliaments, given that EveryPolitician stopped collecting data after 2019.

In total, we could compile data for more than 700 elections in 149 countries. We restricted our data collection efforts to the lower houses in bicameral systems. The dataset we have is unbalanced. For some countries such as Canada or Turkey, we have data since the 1945, for others such as Zimbabwe, we only have data for a more recent election. The dataset provides four types of data;

1) The mean and median age of representatives in the national parliament (lower house where applicable) for each country. These two measures of central tendency provide an overview of youth representation in the respective country.

2) To measure youth representation more succinctly, we included three different measures; the share of representatives aged 30 years, 35 years and 40 years or under, respectively. These three measures capture different benchmarks of what constitutes a young MP (see IPU 2018; Joshi 2013, 2015; Krook and Nugent 2018). It is also worth noting that someone who is 40 years at the beginning of a parliamentary term is 44 or 45 at the end of such a term. By setting the benchmark to 40, we thus also included the most inclusive definitions (see IPU 2021), which consider MPs at or under the age of 45 as young. As a point of comparison, and to provide a full picture of the ages of all representatives we also added the percentage of representatives aged 41-60 years as well as 61 years or above, respectively.

3) We also included the percentages of female representatives separately to disaggregate the data by gender and to understand the intersection of age and gender when it comes to political representation. The indicators measure the percentage of women in each age category of the total women. These additional calculations present users with information on how the representation of the different age brackets is different for women.

4) As the final set of measures, we included five versions of the Age Representation Index (ARI), for the different age categories in our data. In detail, we created the following five indices; ARI 30, ARI 35, ARI

<sup>&</sup>lt;sup>4</sup> The EveryPolitician data provides individual data for every politician per parliament. There is no aggregated data set and data is hence difficult to access for users that wish to include such information in their analyses.

40, ARI 41-60 and ARI >60. The ARI is a relative measure that considers the age distribution of the voting age population. To calculate the ARI for the age group 35 years or under, we take the share of legislators in a national parliament aged 35 or under and divide this number by the share of this age group in the adult voting age population (i.e. 18 to 35 years).<sup>5</sup> Because countries have contrasting age distribution in their population's general demographic structure, the ARI is useful for comparing youth representation between countries. For example, in both the US and Ghana, fewer than 5% of MPs are aged 35 and under. At first glance, the two are quite comparable. However, their ARI 35 differs: this is because Ghana has a population in the age bracket 18 to 35 years that is more than double the size of this cohort in the US. In all, this means that young people in Ghana face much more severe underrepresentation in politics than young people in the US.

In addition to these main measures, we provide information on the coverage rate, and election date. Our dataset also includes information on country codes and other types of identifiers that enable users to merge this information on other datasets.

#### What can researchers do with the WARP dataset?

The Worldwide Age Representation in Parliaments dataset is the largest and most comprehensive dataset on youth representation in existence. It is a primary tool for researchers, policy actors and the public to get updated and historical information on age group representation in national legislatures. Among others, the dataset allows users to graph youth representation over time. For example, Figure 1 illustrates that youth representation has not improved over the past 30 years. During this time span, between 2 and 3 percent of the MPs have been 30 years or younger, when elected, less than 10 percent aged 35 years or younger, and less than 20 percent have been 40 years or younger when elected. The dataset also offers information on different age groups in parliament relative to their share of the voting age population in society. For instance, Figure 2 pinpoints that in parliaments between 2015 and 2019, the age group 41 to 60 is overrepresented at a ratio of more than 2 to 1. In contrast, all other age groups face underrepresentation (including the group above 60 years). It is also telling that the age group above 60 years has higher representation than the age group 40 and under. Another feature of the dataset is that it allows users to retrace women's representation within different age brackets.

The WARP dataset is open to the public and free to download. It will be made available online (see [website link]) and accessible in a manageable format. It will then be updated on an annual basis. Its variables will be structured with country-codes that allow users to merge this information with other relevant datasets.

#### Conclusion

<sup>&</sup>lt;sup>5</sup> Data on population is taken from the United Nations. We use the same approach as Sundström and Stockemer (2021), assuming for some countries where population data is only available in quintiles, that each age group of these quintiles is of equivalent size.

There has been a strong increase in research on the legislative presence of politically marginalized groups – such as women, ethnic minorities, and LGBTQ+ people – in recent years. An important factor enabling this body of empirical research is the accessibility of data on legislatures' composition and related aspects, such as data on quota adaptation policies (Ruedin 2009; Hughes et al. 2019; IPU 2021). In contrast, the absence of young adults in legislatures remains a severely understudied factor; a feature that we are convinced is a partly a result of a lack of empirical figures. We hope that the introduction of the Worldwide Age Representation in Parliaments (WARP) dataset will help us remedy this scarcity of data and will contribute to lay the foundation for further research in youth representation. The dataset is user friendly Researchers can easily merge it with other data on electoral processes such as electoral system types or general macro-level indicators such as GDP per capita. In this sense, this dataset is a starting point for further studies on youth representation. We also hope that our efforts increase awareness within the political science research community about age as an important factor of representation.

# **Figures**

FIGURE 1. DEVELOPMENT OF YOUTH REPRESENTATION OVER TIME IN 149 COUNTRIES

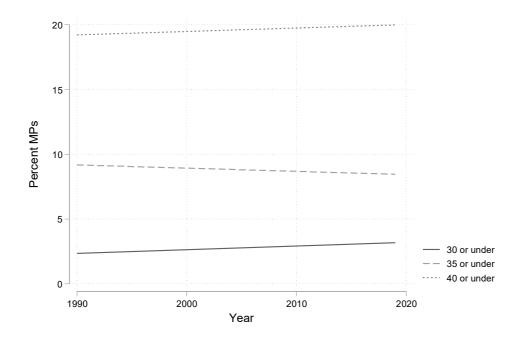
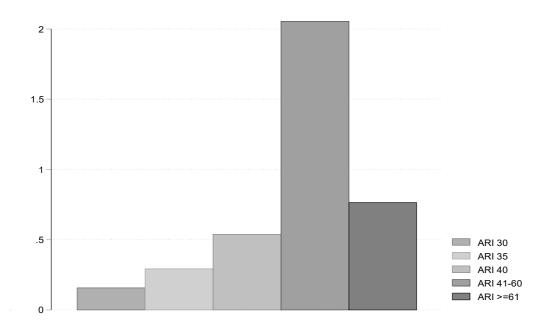


FIGURE 2. AGE GROUPS' REPRESENTATION IN PARLIAMENTS RELATIVE TO THE SHARE OF AGE GROUPS IN GENERAL POPULATIONS, GLOBAL SAMPLE 2015- 2019EVELOPMENT OF YOUTH REPRESEN-TATION OVER TIME IN 149 COUNTRIES



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