



# Gender inequalities in social club participation in Europe: the role of women's empowerment at the country level

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## Abstract

This study examines gender inequalities in the degree of engagement in social clubs of older people and how women's participation relates to their empowerment at the country level. Combined individual-level data from the Survey of Health, Ageing and Retirement in Europe (SHARE) and country-level data from the Women's Political Empowerment Index (WPEI) are used in analyzing 41,185 non-working individuals aged 65–84 across 19 countries. Multilevel regression analyses are conducted to address these aims. We detect notable between-country variations in levels of participation. Substantial differences in the WPEI reflect marked contextual cross-country differences in gender equality. In roughly half of the 19 countries, no gender differences in social club participation are detected; however, women are more likely to participate in social clubs in the more gender-egalitarian countries of France, Denmark, Luxembourg and the Netherlands, whereas in three countries – Italy, Czech Republic and Croatia – more men than women participate in social clubs. Cross-country gender differences in social club participation point to the importance of cultural factors in influencing opportunities for active ageing.

**Keywords** Social inequalities · Social participation · Women's political empowerment index · Country context

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## 1 Introduction

Promoting active ageing, that is, encouraging older people to live independent, healthy lives, is today a major social challenge faced by all ageing societies. Indeed, recent research has shown that the fostering of “active” ageing, understood to include the promotion of social engagement or participation, ensures that seniors involved in such social activities are better protected against certain health risks (i.e. those associated with retirement) and physical inactivity than those who are not thus engaged (Gil-Lacruz et al., 2018).

A recently reported scientometric analysis identifies “active ageing” and “gender” as two of the issues attracting most research interest in the literature conducted at the nexus between ageing population and society (Mahmood and Dhakal 2023). Here, continuing in this line of study, we focus our attention on gender differences in the participation of older adults in social clubs (defined as sports, social or other kinds of clubs) – deemed to constitute a highly relevant form of social participation (Putnam et al. 1993) – in 19 European countries. The involvement of older people in these and similar activities has been found to have a wide range of positive outcomes, including improved health and a better quality of life (Di Gessa and Grundy 2014; Siegrist and Wahrendorf 2009; Veenstra 2000). Yet, in the presence of gender inequalities in social participation, these benefits are unlikely to be equally distributed among men and women.

The countries we consider here vary in terms of their prevailing attitudes toward gender equality and in terms of the gender gaps that have been shown to characterize different domains. While previous research has examined gender inequalities in household labor (Fuwa 2004; Hank and Jürges 2007), few studies have focused on gender inequalities in social participation at older ages (Avital 2017). We contribute to the literature by raising two innovative research questions: (1) Are there gender inequalities in participation in social clubs at older ages in Europe? (2) If so, do these gender differences vary across countries as a function of women’s empowerment at the macro level? To answer these questions, we used micro-level data from the Survey of Health, Ageing and Retirement in Europe (SHARE) combined with macro-level data from the Women’s Political Empowerment Index (WPEI) provided by the Varieties of Democracy (V-Dem) project.

Here, we focus on participation in social clubs. We exclude other activities, such as volunteering, given the latter’s similarities to caregiving, a typically “female-type” of activity (Bordone & Arpino 2018). Thus, women are not expected to be particularly discriminated in the participation to volunteering and may find sufficient opportunities to volunteer, especially for certain tasks (Fyall and Gazley 2015). Indeed, previous studies have not found any significant gender differences in volunteering among older individuals (Hank 2011); in fact, welfare systems appear to have some influence on volunteering (Sánchez-García et al. 2022). In contrast, participation in social clubs, an individual-oriented pastime, might be perceived as a more “male-type” of activity. We expect that in more traditional contexts – without the participation of women being formally forbidden – many social clubs for older people (e.g. sports clubs, card playing clubs, etc.) are mostly frequented by men. However, in contexts characterized by increasing degrees of gender equality, women are today more empowered to decide how they wish to spend their leisure time and, as a result, participation in social clubs has become more gender equal.

The relevance of examining gender differences in social participation lies in the latter’s potential benefits for the participants’ health and wellbeing. If women present lower levels

of participation than men in social clubs, they suffer a comparative disadvantage, which in turn may contribute to inequalities in their health and wellbeing (Arpino and Solé-Auró 2019). In this regard, previous studies have demonstrated that voluntary participation in social activities is crucial for an individual's physical and mental health (Gil-Lacruz et al., 2018; Tomioka et al. 2017a). Indeed, given that participation in social clubs is generally completely voluntary – unlike other activities, such as certain cases of community organizations (Tomioka et al. 2017b) – we would expect women's empowerment to play a particularly relevant role. Thus, in contexts of greater empowerment, women are not only freer to participate in society, they also have more power to decide to become involved in activities they find interesting and satisfying, such as those offered by social clubs that are characterized by being neither “obligatory” nor by operating to traditional gender norms.

Against a general backdrop of population ageing across Europe, and in country contexts that continue to be characterized by (varying magnitudes of) gender inequality, the aim of this study is to document gender differences in social club participation and how they vary according to country-level contextual factors. To do so, we consider the frequency of participation of those aged between 65 and 84 in social clubs in 19 European countries, controlling for individual characteristics and accounting for country-level gender inequality. Although there is a large extant literature examining the individual and contextual determinants of social participation, few studies to date have focused their attention on gender inequalities, especially as regards social club participation. Moreover, to the best of our knowledge, this is the first study to test the moderating role of country-level women's empowerment in the relationship between older people's gender and social participation. Here, we use a country-level measure of women's empowerment that has not been used to study older people's social participation, in particular, or active ageing, in general. Moreover, and of particular relevance here, by drawing on historical data we account for the level of gender inequality to which individuals have been exposed throughout most of their adulthood, rather than measuring it solely at the time of the survey.

The analytical strategy we adopt comprises three steps: First, we perform a descriptive analysis of gender inequalities in social club participation across countries; second, we estimate logistic regression models to assess the extent to which individual characteristics explain gender inequalities in social participation; and, third, we use two-level (random effects/multilevel) logistic regressions to test statistically the extent to which gender inequalities in social participation vary according to the level of women's empowerment in each of the 19 countries considered. This test is based on a cross-level interaction between gender (at the individual level) and women's empowerment (at the country level). The use of a multilevel model is required due to the nested structure of the data (Arpino and Aassve 2014) with individuals within countries. Multilevel regression is an appropriate statistical technique for analyzing hierarchical data of this nature because it takes the non-independence of individuals within countries into account. Multilevel models, moreover, are able to handle variables measured at different levels; thus, they allow the simultaneous study of micro- and macro-level determinants of older people's social participation across and within countries and facilitate the testing of cross-level interactions.

The rest of the paper is organized as follows. Section 2 outlines the study's theoretical framework. The data and methods are presented in Sect. 3. Section 4 reports our empirical findings and Sect. 5 discusses them. Finally, Sect. 6 concludes.

## 2 Theoretical framework

### 2.1 Older people's social participation after retirement and its benefits

Older people's active ageing and, more specifically, their social participation has received growing research attention due to the implications they have for ageing societies. Thus, several recent studies have examined patterns, correlates and consequences of active ageing (Arpino and Bellani 2022; Arpino and Solé-Auró 2023; Ates et al. 2022; Boerio et al. 2023; Bordone & Arpino 2022; Kantachote and Wiroonsri 2023; Rojo-Perez et al. 2022; Tanskanen et al. 2022), while social participation has been shown to slow down cognitive decline and to have a positive impact on subjective wellbeing, health, autonomy and survival (Carr et al. 2015; Di Gessa and Grundy 2014; Han et al. 2017; Gottlieb and Gillespie 2008). Indeed, social participation may also increase social networks and provide a sense of purpose and meaning in life (Thoits 2012).

Here, we opt to focus on participation in social clubs at post-retirement ages (65+) for several reasons. The transition to retirement is one of the most important life course events experienced by older adults, representing both a change and a redefinition of an individual's life, roles and identity (Moen et al. 2000). The transition may imply losing or paring down certain relationships, as well as a reduction in physical activity and cognitively stimulating tasks (Carter and Cook 1995); yet, remaining actively involved would appear to be especially important when people are no longer in the labor market. According to Hersch (1990), leisure activities may become more important in a person's life on retiring as they provide a means of managing their free time. Social participation gives retired people the opportunity to be physically active, socialize with other people and learn new things. Indeed, it has been found to be particularly important for retirees in predicting life satisfaction (Harlow and Cantor 1996) and maintaining good cognitive functioning (Lee et al. 2019).

More specifically, we focus our attention on gender inequalities in the social club participation of individuals at post-retirement ages given that labor market participation is strongly gendered, especially among older cohorts (Van Dijk and Van Der Lippe 2001), and this might shape participation (as regards both magnitude and the gender gap) in different activities once retired (Avital 2017). The implication is that had we opted to report gender inequalities in social participation pre-retirement, gender differences would have been strongly driven by labor market participation (indeed, our preliminary research – not reported here, but available upon request – confirms this).

### 2.2 Gender inequalities in older people's social participation

Given the reported benefits of social participation, it is crucial that we have a better understanding of its individual and contextual determinants. To date, several studies have made significant contributions in this respect (Arpino and Solé-Auró 2019; Bolano and Arpino 2020; Hank and Stuck 2008; Lancee and Radl 2014; Whitley et al. 2018). More specifically, Avital (2017) examined gender differences in the social participation of older Europeans and how they relate to country-level factors, including a country's expenditure on culture and recreation. However, to the best of our knowledge, this is the first study to examine the extent to which gender inequalities in the participation of older people in social clubs is related to country-level gender (in)equalities.

Gender inequalities have typically been examined in relation to health and survival, it being well documented that women live longer (Oksuzyan et al. 2008) and that genders gaps in health and mortality depend on a complex interrelationship between the social, behavioral and epidemiological context of an individual's geographic location (Crimmins et al. 2011, 2019). Yet, gender differences in active ageing would benefit from further investigation and while some studies have looked at differences across European countries (Hank and Stuck 2008; Hank 2011) and at the determinants of active ageing, including gender differences in specific countries (Bukov et al. 2002), previous work has rarely considered the intersection between gender and country differences in social participation.

### 2.3 Main contribution: women's political empowerment and participation in social clubs

This study examines differences in gender inequality in social club participation across a set of European countries. Previous studies have reported evidence of differences in gender inequality in the division of household labor of older people across European countries. For example, Hank and Jürges (2007) found a more egalitarian division of household labor in more gender egalitarian countries as measured by the United Nations (UN) Gender Empowerment Measure (GEM). The norms of more traditional countries, in which the importance of the family is stressed, do not favor the equal division of tasks by gender: men are expected to go out to work; women are expected to stay home and take care of the family. Thus, older women are considerably more likely than their male counterparts to be engaged in the intensive provision of care to kin and less so in paid work (Arpino and Bordone 2018; Bordone & Arpino 2018). Thus, in line with the general literature on gender inequalities in active ageing, we formulate our first hypothesis:

*H1 Gender inequalities in social participation are present to varying degrees in all countries. More specifically, women participate less than men in social clubs.*

Gender differences in social participation may be attributable to mechanisms operating at the micro (individual), meso (e.g., household) and macro (e.g., country) levels. In many societies, women have lower levels of education, income and labor market participation because of their traditional roles as caregivers, factors that may also contribute to increased poverty and worse health at older ages (Cambois et al. 2016). In line with Bukov et al.'s (2002) findings in Germany, we expect differences in social participation by gender to be partially explained by differences in the socio-economic status (e.g., education) and health of men and women. Thus, we formulate our second research hypothesis as follows:

*H2 Gender inequalities in social participation are reduced when gender differences in socio-economic and health variables are controlled for.*

In line with Hank and Jürges (2007) and Fuwa (2004), who examined gender inequalities in household labor, here we consider women's empowerment as a measure of contextual gender equality. However, rather than employing the UN's GEM we opt to exploit the WPEI, given its certain empirical advantages. Indeed, the WPEI, which is available for a wide range of countries and time periods, enables us to account for the contextual gender (in)

equality experienced by respondents throughout their life course, and not simply at the time of the survey. This is important because gender inequalities at older ages are likely to be the consequence of socialization to gender norms during both childhood and subsequent adulthood. As Foster and Walker (2013) point out, such a perspective recognizes that “life experiences, inevitably organized by social relationships and societal contexts, powerfully shape how people grow older”. WPEI is also highly correlated, when available, with other gender equality indexes (Kolk 2019).

The political empowerment of women is a crucial societal process in the promotion of development and progress. In the construction of the WPEI, women’s political empowerment is defined as a “process of increasing capacity for women, leading to greater choice, agency, and participation in societal decision-making” (Sundström et al. 2017). Women’s empowerment accounts for their ability to make choices in different areas of their lives, including becoming members of associations and freedom as to how to spend their free time. The WPEI not only consider women’s legal rights but also violations of their rights embedded in the informal culture that may confine them to family roles and limit their freedom of movement. The WPEI also takes into consideration the existence of a basic level of control among women over the resources that might facilitate their participation in the activities of clubs or associations. Women’s empowerment may imply encouraging men to perform more typically female activities (e.g. provision of care) and encouraging women to take up more typically male activities (e.g., participation in social clubs). All in all, women living in countries with higher values on the WPEI have a greater capacity to influence decision-making, enjoy a greater freedom of choice and participate more readily in society. We, therefore, expect to find less gender inequality as regards social club participation at older ages in association with higher WPEI values. As we highlight below, the 19 countries considered here present considerable variation in their WPEI values and also in the dynamics of the index over the respondents’ life course. Thus our third, and main, hypothesis can be formulated as follows:

*H3 Gender inequalities in social participation are lower in countries characterized by higher levels of women’s political empowerment.*

### 3 Research design

#### 3.1 Data

We draw on data from the SHARE, a multidisciplinary, longitudinal survey conducted to improve the understanding of ageing among Europeans aged 50 and over (Börsch-Supan et al. 2013). The SHARE data collection instruments and study design have been harmonized to facilitate European comparisons of health, family circumstances, socio-economic characteristics and social and family networks across countries. We combine data from the fourth (2011), fifth (2013) and sixth (2015) waves, to guarantee a sufficient sample size by country. Thus, although respondents may have participated in up to three waves of the survey, we only considered the first observation (wave) for each individual. We did not consider previous waves because the question about participation in social clubs was not the same (or

absent in the third wave). We did not use the seventh wave because, for most individuals, it only gathered retrospective information (SHARELIFE), while the eighth wave was interrupted by the COVID-19 pandemic. We opted not to exploit the longitudinal dimension of SHARE here because our aim was to highlight gender inequalities and cross-national differences; however, future studies could usefully focus on how these differences have evolved over time.

As our aim is to analyze individuals in the period of their lives following retirement (common age of 65), and given the low prevalence of engagement in social activities after the age of 85 together with the reduction in the sample size at the age of 85 onwards, our analysis is restricted to individuals aged 65–84 in Austria, Belgium, Croatia, Czech Republic, Denmark, Estonia, France, Greece, Germany, Hungary, Italy, Luxembourg, the Netherlands, Poland, Portugal, Spain, Slovenia, Sweden and Switzerland. We also exclude those individuals who after the age of 65 remain in the labor market (about 3% of the sample). The final sample comprises 42,659 individuals (19,813 males and 22,846 females) and the country sample sizes range, in the case of women, from 379 in Luxembourg to 2,115 in Estonia and, in the case of men, from 390 in Luxembourg to 1,739 in Spain.

## 3.2 Variables

### 3.2.1 Outcome variable: social participation

Our outcome is a dichotomous variable with a value of 1 for respondents who declared participating in a sports, social or other kind of club at least “almost weekly” and 0 for those reporting a lower frequency (including those who reported not participating at all).

### 3.2.2 Socio-demographic control variables

We account for socio-demographic and health factors that are likely to be associated with both gender and social participation and which might be influenced by the WPEI. We add these variables sequentially to the regression models. Our independent socio-demographic variables include age as a continuous variable; marital status (married or in partnership – reference, never married, divorced or widowed); number of children; and type of living area (“rural” =1 for respondents living in rural areas, =0 otherwise). These control variables are incorporated into the model given their likely association with gender inequalities and social participation.

We consider three educational groups based on the level of education achieved using the International Standard Classification of Education (ISCED): “low” (corresponding to ISCED 0–1, no or primary education and ISCED 2, lower secondary education; reference), “medium” (ISCED 3–4, higher secondary education) and “high” (ISCED 5–6, tertiary education).

### 3.2.3 Health controls

We also control for several measures of health at the baseline (fourth wave, 2011) to account for the respondents’ initial health status. First, we create a unique variable that represents the number of co-morbidities: *hypertension, diabetes, cancer, lung disease, heart disease*

and stroke. Additional covariates included the number of limitations with basic activities of daily living (ADL limitations) (six activities), representing the ability to provide self-care, and difficulties with instrumental activities of daily living (IADL limitations) (seven activities), representing the ability to live independently. We add controls for activity limitations with a single question captured by the Global Activity Limitation Indicator (GALI). We used a binary variable taking a value of 1 for those that declared themselves to be “*Limited, but not severely*” or “*Severely limited*” because of health in the activities people usually do and 0 for respondents reporting themselves not to be limited. Finally, controls for symptoms of depression are measured using the EURO-D scale ranging from 0 to 12, higher values indicating the presence of more symptoms.

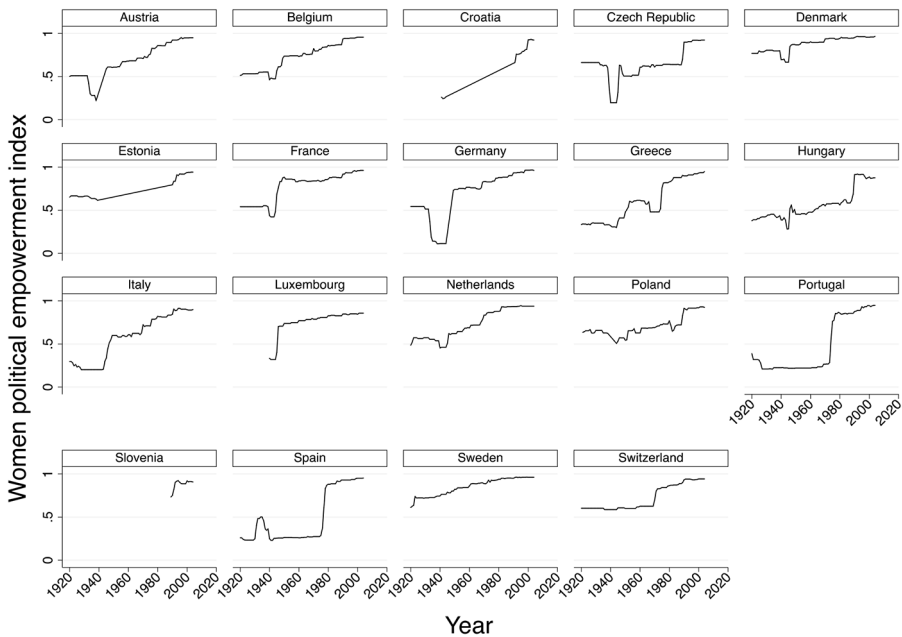
### 3.2.4 Explanatory variable: country-level women’s empowerment

Our measure of women’s empowerment is derived from the WPEI, which forms part of the Varieties of Democracy (V-Dem) project (Coppedge et al. 2019). The V-Dem website ([www.v-dem.net](http://www.v-dem.net)) offers detailed information about its freely downloadable data as a contextual measure of the degree of opportunities available to women in a given country. The WPEI is based on yearly information and is a multifaceted measure of women’s civil liberties, civil society participation and political participation across the world (Sundström et al. 2017). A high index value (close to 1) is indicative of the greater capacity of women to influence decision making, make free choices and participate in society (whereas a value close to 0 indicates the contrary). As such, we expect to find smaller gender inequalities in social participation in countries characterized by higher WPEI values.

The WPEI is among the most comprehensive measures of women’s empowerment available, thanks to the long time series available and the index’s across time variability, two features that are not always present in other gender equality indexes (see Kolk 2019, for a discussion of the WPEI’s advantages). Thus, we are able to measure exposure to contextual gender equality over the life course and the way in which it influences differential social participation in later life. For each respondent, we calculated the average WPEI value in his/her country of residence during the first 40 years of life (0 to 40 years of age). We did not extend the period of life course any further because doing so meant losing some countries and/or increasing the amount of missing data on the WPEI. Thus, the index measures the contextual gender (in)equality experienced by all respondents in the same period of their life course, independently of their age at the time of the survey. It is our contention that this approach is better than considering an alternative measure of gender equality at the time of the interview, that is, an index that seeks to capture the country context in a specific year and/or moment. The approach we implement accounts for the context in which the respondent grew up, especially during the first few decades of life, which we believe to be a stronger determinant of the interiorization of social norms and, as a consequence, more influential of such behaviors as social participation.

Figure 1 shows the distribution of the WPEI in the set of 19 European countries for the period 1920 to 2015. There are substantial differences in the WPEI values across these countries, closely reflecting the contextual situation of each country over the course of the last century. In Denmark and Sweden, for example, the WPEI values were already high at the beginning of this period. World War II (WWII) caused the political empowerment for women in the majority of these countries to slump (the case, for instance, of Austria,





**Fig. 1** Distribution of the Women’s Political Empowerment Index (WPEI) from 1920 to 2015 in 19 European countries. (Source: Women’s Political Empowerment Index (WPEI) developed under the Varieties of Democracy (V-Dem) project (Coppedge et al. 2019))

Czech Republic, France, Germany and Spain). In Spain, in addition to WWII, we also see the effects of the political dictatorship over a period of almost 40 years, during which the WPEI remained low and stagnant. A similar pattern is presented by Portugal. However, in the last year considered here (2015), all 19 countries present relatively high index values, the cross-country variability having been considerably reduced compared to earlier periods. This means that if we had opted to measure gender inequality by taking the latest WPEI values into account, we would have overlooked the different normative contexts experienced by older adults during their life course. For three countries – Croatia, Luxembourg and Slovenia – the WPEI is not available for the whole period (1920–1985), meaning that for (some) individuals in these countries it was not possible to measure their political empowerment for the same period as that considered for the rest of the sample (i.e. the first 40 years of life). In a subsequent robustness check, these individuals were excluded.

### 3.3 Statistical analysis

To address our research aims, our analytical strategy comprises three steps. First, we perform a descriptive analysis that provides summary statistics of the participation of men and women aged 65 to 84 in social clubs and we show the yearly distribution of the WPEI from 1920 to 2015 across our set of 19 European countries.

Second, we estimate a logistic regression model to assess the effect of an individual’s characteristics on gender inequalities in social club participation for each country sepa-

rately. We account for individual characteristics that may in part explain gender inequalities in social participation through other gender inequalities, i.e. differences between women and men that manifest themselves in other dimensions, such as education and health, which in turn are associated with social participation. We consider three models in which we gradually incorporate additional control variables: Thus, Model 1 estimates the effect of gender controlling only for age; Model 2 includes all the socio-demographic variables described above; and, finally, Model 3 incorporates, in addition, the health variables. To facilitate the interpretation of results, we report the average marginal effect of the variable of interest, i.e. gender, in percentage points (p.p.) for each model. The separate models estimated for each country in this step of our analysis provide initial evidence as to how gender gaps in social club participation vary across the countries considered and whether this variation is related to the country-level value of gender inequality as measured by the WPEI.

In the third and final step of our analytical strategy, we run a further test aimed at determining statistically the association between the country-level WPEI and the gender gap in participation in social clubs at the individual level. This step involves a multilevel logistic regression in which we pool all the European countries considered. More specifically, we estimate a two-level model with individuals nested within countries. At the individual-level, we include, together with the gender dummy variable, all the control variables mentioned above. At the country-level, we account for the WPEI indicator. Finally, we include a cross-level interaction term between the gender dummy variable and the WPEI indicator to test whether the effect of gender on social club participation (i.e., gender inequalities) varies according to the country-level value of the WPEI. All statistical analyses were performed using Stata 15 software.

## 4 Results

Table 1 reports the sample size and the summary statistics of social club participation of men and women after the age of retirement in each country, ranked according to the WPEI index. The WPEI values reported in Table 1 are the average of the individual WPEI values. The latter vary within each country depending on the respondents' year of birth. Table 1 confirms that, even when considering the average WPEI values, there is substantial variation across countries. Denmark and Sweden lead the country distribution with scores in excess of 0.9, indicating that women in these countries have experienced greater political empowerment than women in other countries. Spain and Portugal are ranked 18th and 19th, respectively, on the WPEI with values around 0.55.

Over half the sample (54.1%) comprises women and, indeed, women outnumber men in 18 of the country samples, the exception being Luxembourg. In Denmark, over 45% of both genders reported participating in social clubs (followed at some distance by the Netherlands, with a little over 37%), while in five countries (Poland, Greece, Portugal, Estonia and Hungary in the case of both genders; and Croatia and Czech Republic in that of women) social club participation is below 10%. Participation in the rest of the countries ranges from 10 to 30% with some variation in the order of the countries by gender.

Participation in social clubs is gendered, with more men than women engaging in this activity on a weekly basis; however, the intensity of these differences, and even the direction, differs across countries. Denmark is the only country to present a marked gender gap

**Table 1** Sample size and summary statistics of social club participation in each country ranked according to the WPEI index, for men and women aged 65–84

Country	WPEI	Sample size			Participation in Social Clubs: at least weekly			
		Total	Men	Women	Men	95% CI	Women	95% CI
Denmark	0.911	1,679	800	879	45,1	[41.6, 48.5]	52,0	[48.7, 55.3]
Sweden	0.896	2,760	1,301	1,459	29,2	[26.7, 31.6]	25,5	[23.3, 27.8]
Estonia	0.879	3,104	1,194	1,910	5,9	[4.6, 7.2]	9,2	[7.9, 10.5]
Slovenia	0.878	2,319	1,048	1,271	18,8	[16.4, 21.2]	11,5	[9.7, 13.2]
France	0.846	2,649	1,152	1,497	21,3	[18.9, 23.6]	23,7	[21.6, 25.9]
Belgium	0.800	2,906	1,334	1,572	22,6	[20.3, 24.8]	17,6	[15.7, 19.4]
Germany	0.800	2,600	1,335	1,265	24,9	[22.6, 27.2]	23,2	[20.9, 25.5]
The Netherlands	0.796	3,525	968	1,015	37,4	[34.4, 40.5]	37,7	[34.7, 40.7]
Luxembourg	0.776	762	386	376	18,1	[14.2, 21.9]	19,6	[15.6, 23.6]
Austria	0.775	2,503	1,069	1,434	19,3	[16.9, 21.7]	13,2	[11.4, 15.0]
Switzerland	0.763	1,618	776	842	26,8	[23.7, 30.0]	20,6	[17.8, 23.3]
Croatia	0.756	1,050	487	563	10,5	[7.8, 13.3]	3,6	[2.0, 5.1]
Poland	0.731	882	401	481	1,4	[0.2, 2.5]	1,4	[0.4, 2.5]
Italy	0.698	3,211	1,563	1,648	12,7	[11.0, 14.3]	4,4	[3.4, 5.3]
Greece	0.682	2,214	1,016	1,198	3,6	[2.4, 4.7]	2,6	[1.7, 3.5]
Czech Republic	0.658	3,272	1,429	1,843	16,5	[14.6, 18.4]	9,4	[8.1, 10.8]
Hungary	0.611	1,242	536	706	7,9	[5.6, 10.1]	2,9	[1.7, 4.2]
Spain	0.551	3,525	1,684	1,841	13,0	[11.4, 14.6]	9,6	[8.3, 11.0]
Portugal	0.546	906	427	479	3,3	[1.6, 5.1]	6,2	[4.0, 8.4]
All countries	0.760	41,185	18,906	22,279	18,8	[18.2, 19.4]	15,6	[15.1, 16.0]

Source: SHARE 2011–2015

Note: WPEI value represents the average index value from birth until the year in which the respondent turns 40

Note: Appropriate weights are used

in favor of women of about 7 p.p. In contrast, there are marked gender inequalities in the opposite direction in the cases of Austria, Croatia, Czech Republic, Italy, Slovenia and Switzerland (between 6 and 8.3 p.p. in each instance). In some cases, the gender gap is especially marked. For example, in Italy the percentage of men involved in social clubs almost triples that for women (12.7 vs. 4.4%). Other countries show smaller or almost null inequalities.

Table 2 shows the marginal effects of the independent gender variable as derived from logistic regression models for weekly social club participation, by country, and for Europe as a whole. The marginal effects can be interpreted as gender inequalities in social participation in terms of p.p. (women vs. men). In general, we find significant gender inequalities in social club participation for Europe as a whole and across a number of European countries. In Model 1, which controls solely for age, significant gender inequalities range from  $-8.0$  p.p. in Italy to 7.8 p.p. in Denmark (compared to  $-2.7$  p.p. for the pooled group of 19 European countries). Austria, Belgium, Italy, Switzerland, Czech Republic, Slovenia, Croatia and Spain all present significant negative marginal effects, which indicates that women are less likely than men to participate on a weekly basis in social clubs. Only Denmark, Estonia and France present significant positive marginal effects, indicating that females are more likely than men to participate on a weekly basis in social clubs. As Model 1 controls only for age, these “raw” gender gaps are clearly similar to the descriptive data presented in Table 1.

**Table 2** Gender inequalities (GI; marginal effects of gender) in participation in social clubs each week as estimated by logistic models

Country	M1: Gender Inequalities		M2: Independent Variables		M3: M2 + Health Variables	
	Margins GI in p.p.	Sig.	Margins GI in p.p.	Sig.	Margins GI in p.p.	Sig.
Denmark	7.75	***	8.86	***	8.14	**
Sweden	-2.99		-3.30	*	-3.06	
Estonia	3.73	***	2.24	**	2.52	**
Slovenia	-6.14	**	-2.89		-2.17	
France	3.01	*	3.55	*	4.45	**
Belgium	-4.55	***	-4.35	**	-3.23	**
Germany	-0.86		1.54		2.61	
The Netherlands	1.07		2.44		4.27	*
Luxembourg	3.01		6.71	**	7.70	***
Austria	-5.53	***	-3.72	**	-2.73	
Switzerland	-5.74	**	-3.73	*	-3.39	
Croatia	-6.46	***	-4.87	**	-4.39	**
Poland	0.18		-0.00		0.13	
Italy	-8.04	***	-8.03	***	-7.33	***
Greece	-0.90		-0.76		-0.44	
Czech Republic	-6.39	***	-4.91	***	-4.25	**
Hungary	-4.94		-4.35		-2.25	
Spain	-2.98	*	-3.44	**	-1.74	
Portugal	3.20		-0.37		0.08	
Europe	-2.66	***	-1.01		0.15	

Source: SHARE 2011–2015

Note: The control variables included are Model 1 (M1): female+age; Model 2 (M2): socio-demographic variables; Model 3 (M3): M2+health variables. Countries are ranked by average WPEI values

Marginal effects of gender express the difference in terms of predicted probabilities between women vs. men

Sig. = Statistical significance: \*\*\* $p < 0.01$ ; \*\* $p < 0.05$ ; \* $p < 0.1$

As mentioned above, when discussing the descriptive statistics presented in Table 1, gender inequalities are sometimes substantively quite strong and not only statistically significant.

Model 2 incorporates our socio-demographic control variables. In some countries, introducing these controls significantly reduces gender inequalities (the cases, for instance, of Austria, Croatia, Estonia and Czech Republic). However, gender inequalities in favor of men persist, above all in Italy. Meanwhile, gender inequalities in favor of women increase in Denmark (from 7.8 to 8.9 p.p.) yet disappear in Slovenia. In Luxembourg, significant positive gender differences emerge, indicating that socio-demographic variables matter and, when accounted for, gender inequalities in social club participation increase.

Finally, when incorporating the health control variables (Model 3), we continue to detect significant gender inequalities in social club participation in both directions. For example, women are more likely to participate in social clubs in certain countries, including France, Denmark, Estonia, Luxembourg and the Netherlands, where accounting for health inequalities has a particularly strong impact. In other countries, men are more likely to participate

in social clubs even when controlling for health (the case, for example, of Italy, Belgium, Czech Republic and Croatia).

Following the same analytical strategy (three additive models) as above, Table 3 shows how the country-level WPEI moderates the gender gap in social club participation at the individual level for the pooled European countries. Given that the WPEI indicator is centered on its mean, the coefficient of the female dummy variable refers to the effect of gender in a country with average WPEI. This coefficient is negative and statistically significant indicating that women have a lower probability of weekly participation in a social club. In contrast, the statistically insignificant coefficient of the WPEI indicator suggests that, in the case of men, the WPEI does not impact on the probability of weekly social club participation. Finally, the most interesting coefficient is that presented by the interaction term, which is statistically significant, pointing to the existence of a moderating effect of the WPEI on individual-level gender inequalities. The fact that the interaction coefficient is positive is consistent with results in Table 2: gender inequalities (in favor of men) are reduced as the WPEI increases, and may even become favorable for women at very high levels of the WPEI (but note, that the negative coefficient for women has to be summed to the positive coefficient of the interaction).

Table 3 also highlights interesting findings as regards the control variables. Having never been married, having a higher number of children, living in rural areas, requiring help with personal care, having a lower level of education and being in worse health are negatively associated with the probability of social club participation.

As discussed in the Research Design (Sect. 3), by way of a robustness check, we ran our analyses a second time but now excluding individuals for which the WPEI was not available

**Table 3** Estimated multilevel logistic regression coefficients (with 95% confidence intervals) for participating in social clubs each week, Europeans aged 65–84

Variables	Model 1		Model 2		Model 3	
	Coefficients	Sig.	Coefficients	Sig.	Coefficients	Sig.
Female	-1.69	***	-1.53	***	-1.29	***
WPEI Index	0.37		0.28		0.14	
Female * WPEI index	1.93	***	1.81	***	1.58	***
Age	-0.05	***	-0.04	***	-0.03	***
<i>Marital Status</i>						
Never married			-0.55	***	-0.49	***
Divorced			-0.06		-0.01	
Widowed			0.00		0.05	
N° of children (mean)			-0.04	**	-0.03	**
Rural			-0.08	**	-0.08	**
Provision of help with personal care			-0.31	***	-0.20	***
<i>Education</i>						
Middle			0.20	***	0.16	***
High			0.66	***	0.58	***
N° of co-morbidities					-0.04	**
ADLs					-0.20	***
IADLs					-0.24	***
GALI					-0.30	***
Depressive symptoms ≤ 4					0.29	***

Source: SHARE 2011–2015. Sig. = Statistical significance: \*\*\* $p < 0.01$ ; \*\* $p < 0.05$ ; \* $p < 0.1$ .

for the first 40 years of their life. This implied dropping all Slovenian respondents and some individuals from Croatia (629) and Luxembourg (481). The results obtained (available upon request) were very similar to those presented in Tables 2 and 3.

## 5 Discussion

Social participation is critical for ageing well (Bowling 2005). Indeed, active engagement in social activities has been found to have positive effects on a range of outcomes, including cognitive functioning, subjective wellbeing, health and social networks (Carr et al. 2015; Di Gessa and Grundy 2014; Han et al. 2017; Gottlieb and Gillespie 2008; Thoits 2012). To date, gender inequalities in the social participation of older people have received little attention in the literature, which is unfortunate because marked gender inequalities have been observed among these cohorts with respect to several outcomes, including their health, mortality (Crimmins et al. 2011, 2019) and economic condition (Cambois et al. 2019).

Here, we contribute to the scant literature on gender inequalities in social participation at older ages by examining these gender differences among individuals of post-retirement age (aged 65–84) across 19 ageing European countries. To the best of our knowledge, this study constitutes the first attempt at examining the role played by country context in gender inequalities in social participation. Specifically, we measure the context in which individuals lived during the first 40 years of their life course using an index (the Women's Political Empowerment Index, WPEI) that measures women's civil liberties, civil society participation and political participation.

Overall, we have found considerable heterogeneity (i.e. notable between-country variations) in the level and direction of gender inequality in social participation; moreover, these findings should contribute to understanding how we might best reduce gender inequalities in the ageing process. In the case of the logistic regression model controlling only for age, we found gender inequalities in social participation in favor of men in Austria, Italy, Switzerland, Czech Republic, Slovenia and Croatia. Only in Denmark and Estonia were the inequalities in favor of women. These findings, therefore, only provide partial support for hypothesis 1, given that women do not participate significantly less than men in social clubs. When we incorporated the socio-demographic controls, gender inequalities were reduced in Austria, Croatia and Czech Republic. Moreover, while they persisted in Italy, they emerged in both France and Luxembourg, and increased in Denmark (in favor of women). Finally, when controlling for health variables, women were found to participate in social clubs more in France, Denmark, Luxembourg and the Netherlands, while the participation of men was found to be higher in Italy, Czech Republic and Croatia. Here, our findings confirm hypothesis 2 for most countries, insofar as we detected smaller gender inequalities, sometimes presenting an opposite sign (in favor of women), when we added controls. Overall, the findings from our final model show no gender differences in participation in social clubs in about half the countries considered. However, we see that women are more likely to participate in social clubs in countries with greater gender equality, most notably France, Denmark, Luxembourg and the Netherlands; while in three countries, Italy, Czech Republic and Croatia, with relatively low WPEI values, men participate more than women in social clubs. Thus, overall our findings confirm our primary expectation – and this represents our main contribution to the literature – that gender inequalities are smaller in countries in which women's

political empowerment is greater, with marked differences in the WPEI reflecting substantial contextual cross-country differences in gender equality. We are aware that globally no country has yet to fully attain gender equality; however, our findings suggest that some Scandinavian countries, including Denmark, plus the Netherlands, France and Luxembourg lead the way in closing the gender gap. As such, our findings have important implications for policy makers and institutions interested in promoting (equal opportunities for) active ageing. Our study shows the importance of cultural factors in shaping gender inequalities in active ageing and suggests that investment and information campaigns should foster a more equitable allocation of resources and opportunities for men and women. Such interventions are crucial for closing the gender gap that has such a marked impact on opportunities for active ageing and, in turn, far-reaching implications for better wellbeing.

Certain limitations inherent to the study reported herein may arguably have affected some of its outcomes. Our measure of social participation is based on self-reports, which can lead to the introduction of a certain bias given that participants might under- or overestimate their subjective characteristics. A further possible selection bias is attributable to the fact that we opted not to exploit the longitudinal dimension of SHARE data, our aim here being rather to highlight gender inequalities and cross-country differences. Although, having said that, the use of longitudinal data can also result in the introduction of an element of bias given that some participants might drop out or die during follow-up.

Our results suggest several avenues for future research that will have implications for improving the wellbeing of our society when targeting gender inequalities. First, future studies could usefully seek to identify the micro- and macro-level factors that contribute to explaining the gender gaps and their heterogeneity across countries in association with different public social policies and welfare regimes. Second, it would be interesting to examine how these differences have evolved over time. Finally, a recent study found that educational inequalities can partially account for different levels of active ageing (Arpino and Solé-Auró 2019). In this same vein, ageing research might usefully address the implications of gender inequalities in active ageing that were documented in this paper for gender inequalities in the health and wellbeing of older adults.

## 6 Conclusion

Our findings have important implications for policy-makers concerned with promoting the active participation of older people in society. First, given the benefits of social participation in terms of health and wellbeing and the substantial gender gaps reported here, gender inequalities in social participation should be monitored and contrasted with inequalities in other dimensions. Second, we report that while, in most countries, men are more likely than women to participate in social activities, the opposite also holds true for a handful of countries. This points to the need to consider gender differences in context. Thus, while in some countries, actions aimed at stimulating women's participation in social activities should be encouraged, in others, this may not be required or it might even be necessary to promote men's participation.

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## Declarations

**Conflict of interest/competing interests** None.

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