

ARTICLE

# Multi-dimensional civic engagement of older Europeans: a latent class analysis

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## Abstract

Civic engagement is increasingly relevant for healthy and active ageing and addressing social exclusion among older people. Current research focuses primarily on formal volunteering, overlooking other ways older people contribute to their families and communities. This study addresses these gaps by recognising civic engagement as multi-dimensional – including associational engagement, informal care-giving, formal volunteering, digital engagement and formal/informal political engagement – and exploring activity combinations among older individuals. Using data from the 2016 European Quality of Life Survey (33 European countries), it examines the civic engagement of 9,031 individuals aged 65+. Descriptive analysis maps their multi-dimensional civic engagement, while latent class analysis identifies distinct engagement profiles and explores which activities are combined. It also investigates the socio-structural and social capital resources associated with each profile. Findings reveal that 32 per cent of older individuals are not engaged in civic activities. Among the civically engaged, five profiles emerge, illustrating varied engagement across multiple activities. Many older people (35.8 per cent) combine several civic activities, albeit in different combinations. Informal care-giving can be found in all profiles; and for a large part of the population, it is their only civic activity, while another profile displays older Europeans engaged in several activities simultaneously. Higher levels of socio-structural resources are associated with greater diversity in civic engagement in later life. Interventions and policies therefore must consider the diverse circumstances and preferences of older people and valorise and include all forms of multi-dimensional civic engagement, including informal care-giving, in policy making.

**Keywords:** ageing; associational engagement; digital engagement; informal care-giving; latent class analysis; multi-dimensional civic engagement; political engagement; volunteering

## Introduction

Civic engagement is an important pillar of social inclusion, encompassing a variety of activities including informal care-giving, associational engagement, political engagement, formal volunteering and digital engagement (*e.g.* Putnam 2000; Seifert and Rössel 2021; Serrat *et al.* 2021a). And yet, research on the civic engagement of older people is limited (Serrat *et al.* 2021a) as it does not take into account its multi-dimensional features (*e.g.* Serrat *et al.* 2021b). To date, formal volunteering among older people has been relatively well-researched (*e.g.* Dury *et al.* 2020; Serrat *et al.* 2021a), whereas other dimensions, like informal care-giving, political engagement, associational engagement and digital engagement, have scarcely been addressed (Cutler *et al.* 2011; Serrat *et al.* 2021a). Furthermore, gerontological research has not considered whether and how people engage in multiple civic activities (Dury *et al.* 2015; Seifert and Rössel 2021; Serrat *et al.* 2021a; Smith 2013). This article aims to fill this gap in knowledge by examining the multi-dimensional civic engagement of older people and the combinations of activities they engage in, to provide a more comprehensive picture of older Europeans' civic engagement. In the literature review, it first discusses the multi-dimensionality of the concept of civic engagement and various theories, and then analyses the predictors associated with the multi-dimensional civic engagement of older people. Last, role extension and overload in relation to the civic engagement of older people are explored.

### *Multi-dimensional civic engagement of older people*

Research on the multi-dimensional civic engagement of older people is crucial as it can promote healthy and fulfilling ageing processes while simultaneously benefiting and strengthening communities (Beard *et al.* 2016; Morrow-Howell *et al.* 2019). This form of engagement is also relevant to the concept of a participatory democracy and to the pursuit of active and/or healthy ageing (Beard *et al.* 2016; World Health Organization 2023). Civic engagement has the potential to address social exclusion by empowering older people to exercise agency, actively participate in community life and contribute to collective decision-making processes, thereby ensuring that their voices are heard (Serrat *et al.* 2018). Although civic engagement has come more to the forefront of gerontological research in recent years, studies remain inconsistent when defining the term civic engagement and the activities it encompasses for older people (Adler and Goggin 2005; Martinson and Minkler 2006; Serrat *et al.* 2021a). The classic interpretation of the concept of civic engagement, coined by Adler and Goggin (2005, p. 239), is 'how an active citizen participates in the life of a community to improve conditions for others or help shape the community's future'. More recently, Serrat *et al.* (2021a, p. 246) defined civic engagement in later life as 'informal and formal activities aimed at seeking better benefits for others, the community or wider society, or influencing collective decision-making processes'. In the literature, civic engagement is generally defined as volunteering and political engagement (*e.g.* Serrat *et al.* 2021b; Van Dijk *et al.* 2015). As different definitions are used to describe these indicators of civic engagement, this article uses the taxonomy proposed by Serrat *et al.* (2021b), including political engagement and volunteering, while adding associational engagement

and digital engagement. Political engagement is taking part in activities that impact decision-making processes. It can be formal or institutionalised (e.g. voting) or informal or non-institutionalised (e.g. protesting), with formal political participation taking place inside, and informal political participation outside, classical electoral democratic systems and organisations like political parties.

Volunteering can be both formal and informal (informal care-giving). Formal volunteering takes place collectively through organisations, whereas informal care-giving involves individual activities aimed at helping people inside and outside the family sphere (Serrat et al. 2021a). Complementing these indicators, this article also includes associational engagement following the concept of civic engagement used by Putnam (2000), who describes civic engagement activities that build social capital, including engaging in organisational activities. Digital engagement is likewise included as an indicator of civic engagement, as civic engagement can take place in the digital space (Seifert and Rössel 2021).

Although these descriptions imply a broad understanding of the concept, some studies consider only political engagement as part of civic engagement (e.g. Burr et al. 2002; van Deth 2016), while others consider only formal volunteering (e.g. Doolittle and Faul 2013; O'Neill et al. 2011). Other research has examined a range of activities that are traditionally included in the definition of civic engagement, including informal care-giving, participation in associations and formal volunteering, without explicitly labelling these activities as civic engagement (Dury et al. 2021). Some civic activities, such as formal volunteering, have been studied more extensively, while others, such as political engagement, informal care-giving and associational engagement, have received much less attention (e.g. Dury, De Donder, De Witte, Buffel et al. 2015; Seifert and Rössel 2021; Strauss 2021). Digital engagement – in this instance being civically engaged in the digital spaces – has so far mostly been ignored as part of civic engagement because it is a relatively new form that includes active involvement in society using modern technology such as the internet (Seifert and Rössel 2021).

### *Role extension and role overload*

Despite the popularity of studies on civic engagement and especially the great diversity of interpretation of the term, substantial questions remain about the diversity of activities that older people engage in simultaneously. In the current literature, two theoretical insights might be relevant when addressing this issue: the role extension (Strauss 2021) and the role overload (Choi et al. 2007; Coverman 1989; Goode 1960) hypotheses. These two hypotheses can be traced back to role accumulation (Sieber 1974), role enhancement (Moen et al. 1995) and role strain theory (Goode 1960), all founded on role theory (Merton 1957). Role theory refers to the behaviour that people exhibit based on their societal roles. Especially older people tend to lose more societal roles than they gain, such as parenthood, a spouse or a professional occupation (Greenfield and Marks 2004). However, this loss of societal roles can be replaced by pursuits like volunteering and informal care-giving (Hämäläinen et al. 2023). As for the role enhancement and role strain hypotheses, additional roles can put a strain on people or, conversely, enhance people's levels of wellbeing by increasing power, prestige,

resources and emotional gratification (Goode 1960; Moen *et al.* 1995; Rozario *et al.* 2004; Sieber 1974).

Based on these role-related theories, the role extension hypothesis argues that older people who are engaged in one type of activity are also more likely to be engaged in other activities (Strauss 2021). This echoes the finding of Musick and Wilson (2008) that being engaged in volunteer work prompts participation in other civic activities. Similarly, Dury, De Donder, De Witte, Brosens *et al.* (2015) and Dury *et al.* (2020) found that associational affiliations positively correlate with volunteering as such activities provide social ties that generate volunteering opportunities. The role extension hypothesis is also illustrated by Serrat *et al.* (2015), who found that political engagement, too, has a positive correlation with volunteering.

Contrary to the role extension hypothesis, the role overload hypothesis states that limited resources or time keep people from engaging in civic activity (Choi *et al.* 2007; Strauss 2021). To participate in a civic activity, like informal care-giving, people need to invest time and energy that cannot be used in other civic activities (Ackermann 2019; Dury, De Donder, De Witte, Brosens *et al.* 2015). Resources that people have are limited – so if they allocate them to one activity, they will lack the resources to commit to other civic activities. Hence, both hypotheses – role extension and role overload – are potentially useful in explaining multi-dimensional civic engagement in later life.

In addition to the role enhancement and role overload hypotheses, it is crucial to acknowledge the fundamental distinction between informal care-giving and other forms of civic engagement. Older adults frequently assume informal care-giving roles owing to familial obligations or external requests (Choi *et al.* 2007). Conversely, they may actively seek civic roles, such as voluntary, political or associational engagement, to replace previous roles and maintain social connections (*e.g.* Le and Aartsen 2022), including offering informal care-giving outside the household (Zhang and Bennett 2024).

### *Predictors of civic engagement*

Predictors that affect people's civic engagement are well-documented (*e.g.* Ackermann 2019; Dury, De Donder, De Witte, Buffel *et al.* 2015; Leedahl *et al.* 2017; Serrat *et al.* 2015). Two theories frequently used to explain why some older people engage in civic activities and others do not are socio-structural resources theory and social capital theory (Dury, De Donder, De Witte, Buffel *et al.* 2015; Dury *et al.* 2020; Einolf and Chambré 2011; Leedahl *et al.* 2017; Serrat *et al.* 2023).

Socio-structural resources theory focuses on individual resources such as educational level, income and health that facilitate civic engagement, as they might provide assets that make it possible for people to participate in civic activities like volunteering (Wilson 2012). In terms of physical health, research on civic engagement indicates that good health is associated with a higher likelihood of being civically engaged (Stopka *et al.* 2022). This is in line with the findings that age-related health problems can pose a barrier for older people to engage in civic activities (Serrat *et al.* 2017). Considering mental health, results point towards a negative association with volunteering (Dury, De Donder, De Witte, Buffel *et al.* 2015). Studies indicate a mostly positive association between education and civic engagement. In particular, higher educational attainment correlates strongly with volunteering and political engagement,

as evidenced by studies such as Ackermann (2019) and Dury, De Donder, De Witte, Buffel et al. (2015). However, contradictory results have been reported for informal care-giving, with higher education showing both positive and negative correlations (Hämäläinen et al. 2023; Ramaekers et al. 2022). Research on income tends to indicate that income is positively associated with participation in civic activities (Serrat et al. 2023).

For social capital theory, the focus lies on social connections and roles that facilitate civic engagement (Coleman 1988; Principi et al. 2012; Putnam 2000). In the civic engagement literature, these variables commonly include employment status and partner status (e.g. Boerio et al. 2021; Dury, De Donder, De Witte, Brosens et al. 2015; Dury et al. 2020; Serrat et al. 2023). The employment status of older people has ambivalent evidence of its promotion of civic engagement (Serrat et al. 2023). While some studies found a positive correlation between being employed and activities of civic engagement such as volunteering (European Foundation for the Improvement of Living and Working Conditions 2017) and political engagement (Boerio et al. 2021), other results indicated a positive association between volunteering and retirement (Van Den Bogaard et al. 2014) or associational engagement and retirement (Van Den Bogaard et al. 2014). Research on social roles, such as partner status, often yields different results. On the one hand, some studies found that partnered people, and especially women, were less likely to volunteer compared to non-partnered people (e.g. widowed or single) (Dury, De Donder, De Witte, Buffel et al. 2015; Quaranta 2015). On the other hand, research by Voorpostel and Coffé (2012) found that partnered women were more likely to volunteer. Additionally, Lancee and Radl (2014) discovered a decline in volunteering rates following divorce. Regarding political engagement, research found that married individuals were more likely to vote than their divorced, never married or widowed counterparts (Purdam and Taylor 2023; Voorpostel and Coffé 2012). Research on informal care-giving suggested that older partnered people were less likely to provide informal care-giving than non-partnered people unless one of the partners within this partnership needed help themselves (Bertogg and Strauss 2020; Boerio et al. 2021; Dahlberg et al. 2018). These findings highlight the nuanced and multi-faceted nature of how social roles can influence various forms of civic engagement. The abovementioned socio-structural and social capital characteristics will be further compared between the various profiles of older people's civic engagement in this study.

### Research questions

Civic engagement is a concept whose multi-dimensionality is often overlooked in gerontological research (Serrat et al. 2021a). Although socio-structural and social capital resources have been identified as critical in explaining various aspects of civic engagement, more research is needed on their importance for multi-dimensional civic engagement. Previous studies have investigated concepts akin to productive engagement and volunteering profiles. However, these studies either focused on the US or other specific countries (e.g. Cheng et al. 2022; Hinterlong 2008; Rojo-Perez et al. 2022), thus overlooking the unique context of the European population, which is characterised by distinct ageing trends, socio-economic factors, policy approaches, historical context and cultural values (Hank and Erlinghagen 2009), or did not include essential

components of civic engagement, such as associational and political engagement, in their analyses (e.g. Cheng *et al.* 2021; Hank and Stuck 2008; van Hees *et al.* 2020).

To gain a more comprehensive understanding of older Europeans' civic engagement, their multi-dimensional civic engagement and the combinations of activities they engage in are examined; this is followed by an assessment of the resources associated with the civic engagement profiles identified. These objectives have been translated into two research questions:

1. What are the profiles of older Europeans according to their participation in multi-dimensional civic engagement?
2. How do these profiles relate to socio-structural and social capital variables?

## Data and method

### Data

For this research, secondary data analysis was conducted using data from the European Quality of Life Survey (EQLS; European Foundation for the Improvement of Living and Working Conditions 2023). The EQLS examines issues such as people's levels of happiness, their degree of life satisfaction and respondents' opinions on how well their societies and public services are run. The EQLS survey was conducted face-to-face using computer-assisted personal interviewing (CAPI) and the sample was drawn through multi-stage, stratified, random sampling (European Foundation for the Improvement of Living and Working Conditions 2016) in 33 European countries (the 28 EU member states and five candidate countries – Albania, Republic of North Macedonia, Montenegro, Serbia and Turkey) (European Foundation for the Improvement of Living and Working Conditions 2017). Ethical considerations of the survey included voluntary informed consent and an interviewer code of conduct, which can be consulted on the EQLS website (European Foundation for the Improvement of Living and Working Conditions 2018, pp. 68–69). Per participating country, 1,000 to 2,000 respondents who lived in private households were interviewed (European Foundation for the Improvement of Living and Working Conditions 2016). This research uses Wave 4, which was collected in 2016 and is the last available wave of EQLS. All respondents were at least 18 years of age and there was no maximum age to participate (European Foundation for the Improvement of Living and Working Conditions 2017). There were in total 36,908 respondents. Respondents younger than 65 were excluded ( $n = 27,440$ ), as age 65 is commonly used in research to define older people (e.g. Kafková *et al.* 2018; Siira *et al.* 2022). Respondents who had missing values for at least one of the six components of multi-dimensional civic engagement used in this study were also excluded ( $n = 437$ ), as missing values can yield deceptive results. This left us with 9,031 respondents in the final sample used. The characteristics of the sample are described in Table 1.

### Indicators of multi-dimensional civic engagement

To identify profiles of multi-dimensional civic engagement of older people, six indicator variables were included. The selection of items representing each of these indicators

**Table 1.** Sample characteristics of older people (aged 65+) in Europe ( $n = 9,031$ )

<i>Indicators of multi-dimensional civic engagement</i>		<i>% (n)</i>
Informal care-giving	Cared for both grandchildren and disabled or infirm family members, neighbours or friends	10.7 (967)
	Cared for grandchildren	26.8 (2,418)
	Cared for disabled or infirm family members, neighbours or friends	12.4 (1,122)
Associational engagement	Participated in social activities of a club, society or association	34.6 (3,126)
Informal political engagement	Engaged in informal political activity in the last 12 months (did unpaid voluntary work through social movements or charities, attended a demonstration, signed a petition, contacted a politician or public official, boycotted certain products)	22.0 (1,986)
Volunteering	Did voluntary work in community and social services or in educational, cultural, sports, professional or other associations in the last 12 months	21.4 (1,935)
Formal political engagement	Did formal political activity in the last 12 months (attending meetings, working or unpaid volunteering for/through a union or political party)	7.2 (650)
Digital engagement	Commented on a political or social issue online	4.0 (360)
<i>Covariates</i>		<i>% (n)</i>
Gender	Male	42.8 (3,864)
	Female	57.2 (5,167)
Age (years)	65–69	34.9 (3,156)
	70–74	25.3 (2,282)
	75–79	20.5 (1,847)
	80–84	12.3 (1,111)
	85–89	5.5 (497)
	90+	1.5 (138)
Migration background	Native-born	93.0 (8,403)
	Foreign-born European	3.1 (276)
	Foreign-born non-European	3.9 (352)
<i>Socio-structural resources</i>		
Education	Lower secondary or primary	50.4 (4,555)
	Upper secondary or post-secondary	31.1 (2,808)
	Tertiary	18.5 (1,668)
Perceived economic situation	No problems making ends meet	54.5 (4,918)
	Problems making ends meet	45.5 (4,113)

(Continued)

**Table 1.** (Continued.)

<i>Covariates</i>		<i>% (n)</i>
Self-rated health	Good	38.3 (3,457)
	Less than good	61.7 (5,574)
<i>Social capital resources</i>		
Employment	Retired	90.5 (8,175)
	Employed/self-employed	4.5 (408)
	Other	5.0 (448)
Partner in the household/ living together	Yes	50.0 (4,516)
	No	50.0 (4,515)
<i>Number of civic activities per respondent</i>		<i>% (n)</i>
No civic activities		32.0 (2,889)
1 civic activity		32.2 (2,910)
2 civic activities		15.2 (1,371)
3 civic activities		10.3 (933)
4 civic activities		6.5 (588)
5 civic activities		3.0 (279)
6 civic activities		0.7 (61)

Note: Rounding up the percentages might yield added percentages slightly higher than 100%.

was based on the cited literature and the availability of items in the EQLS (European Foundation for the Improvement of Living and Working Conditions 2023). Work by Serrat *et al.* (2021b) and Di Gessa and Grundy (2017) was used to identify items for informal care-giving; by Serrat *et al.* (2021b) to identify items for formal volunteering and informal and formal political engagement; by Dury, De Donder, De Witte, Brosens *et al.* (2015) and Putnam (2000) to identify items for associational engagement; and by Seifert and Rössel (2021) and Smith (2013) to identify the item for digital engagement.

For the first indicator, associational engagement, one general question was asked: ‘How frequently do you do each of the following? Participate in social activities of a club, society or association.’ The answer was indicated on a Likert scale; if the respondents indicated that they participated, regardless of frequency, they were considered engaged. For the second indicator, digital engagement, the dichotomous question was asked: ‘Have you commented on a political or social issue online in the last year?’ The remaining indicators of multi-dimensional civic engagement – volunteering, informal care-giving, and formal and informal political engagement – were constructed using multiple items. If a person answered yes to one of these items, they were considered as engaged in the indicated activity. The third indicator, volunteering, was dichotomised using three items asking respondents: ‘Did you do unpaid voluntary work in the following organisations in the last 12 months: (a) community and social services (*e.g.* organisations helping the elderly, young people, the disabled or others in need); (b) educational, cultural, sports or professional associations; (c) other voluntary



organisations.’ The fourth indicator, informal care-giving, was constructed from three items from one question asking: ‘In general, how often are you involved in any of the following activities outside of paid work?’ The first of these items asks participants how often they do ‘caring for and/or educating your grandchildren.’ The other two items ask how often respondents do ‘caring for disabled or infirm family members, neighbours or friends under age 75’ and ‘caring for disabled or infirm family members, neighbours or friends aged 75 or older.’ Respondents could answer using a Likert scale with the options ‘Every day’, ‘Several days a week’, ‘Once or twice a week’, ‘Less often’, ‘Never.’ The items were combined into one variable with four answer options: (a) no informal care-giving; (b) caring for disabled or infirm family members, neighbours or friends; (c) caring for grandchildren; (d) caring for both. As fifth indicator, the informal political engagement variable was constructed using five dichotomous items based on the following questions: (a) Did you do unpaid voluntary work through social movements (for example environmental, human rights) or charities (for example fundraising, campaigning) in the last 12 months? And, over the last 12 months, have you done any of the following activities: (b) attended a protest or demonstration; (c) signed a petition, including an email or online petition; (d) contacted a politician or public official (other than routine contact arising from the use of public services); (e) boycotted certain products? The sixth and last indicator of multi-dimensional civic engagement, formal political engagement, was measured using two dichotomous items: ‘Did you do unpaid voluntary work through political parties or trade unions in the last 12 months?’ and ‘Did you attend a meeting of a trade union, political party or political action group over the last 12 months?’ It is important to note that if the respondents took part in one sub-item of the indicators for multi-dimensional civic engagement, they were considered as being engaged in that indicator.

### **Covariates**

The descriptive statistics of the covariates are presented in [Table 1](#). Age, gender and migration background are used as control variables ([Ackermann 2019](#)). Gender is dichotomous with female and male as options, while age is a self-made categorical variable with the following categories in years: 65–69, 70–74, 75–79, 80–84, 85–89 and 90+. Respondents’ migration background was measured with the use of one variable: ‘What country were you born in?’ This variable was recoded into three answer profiles: native-born, foreign-born European, foreign-born non-European. For socio-structural resources, education was measured with the question: ‘What is the highest level of education you completed?’ Educational level was recoded from nine into three groups in EQLS based on the International Standard Classification of Education (ISCED) 2011 codes: lower secondary or primary (ISCED 0–2), upper secondary or post-secondary (ISCED 3–4) and tertiary (ISCED 5–8) education ([European Foundation for the Improvement of Living and Working Conditions 2023](#); [Eurostat 2022](#)). To measure respondents’ perceived economic situation, the following question was asked: ‘A household may have different sources of income and more than one household member may contribute to it. Thinking of your household’s total monthly income: is your household able to make ends meet?’ The six answer options were dichotomised into easily (very easily, easily, fairly easily) and with difficulty (with some

difficulty, with difficulty, with great difficulty). To assess self-rated health, a five-point scale (very good, good, fair, poor, very poor) was used to answer the question: 'In general, how is your health?' The variable was dichotomised into good health (very good, good) and less than good health (fair, bad, very bad). For social capital covariates, the work situation was assessed by evaluating the economic status codes filled by respondents in the EQLS 2016 questionnaire ('Which of these profiles best describes your situation?'). The 12 response alternatives were recoded into three: retired, employed (or self-employed) and other (unemployed, permanently sick or disabled, homemaker, other). Respondents' partner status had two answer options: the partner lives in the same household or there is no partner in the household.

### *Analytical strategy*

Descriptive statistics were used to display the sample's characteristics and to identify their level of multi-dimensional civic engagement. To answer Research Questions 1 and 2, that is, to determine whether there exist unobserved and diverse groups of older people based on their diversity in participation in civic engagement, latent class analysis (LCA) was utilised (Weller *et al.* 2020). Research that studies multi-dimensional concepts (*e.g.* social exclusion; Van Regenmortel *et al.* 2018) uses LCA to keep the distinction between the different components. This study uses a three-step LCA (Weller *et al.* 2020) in the program Latent GOLD 6.0 (Vermunt and Magidson 2021). First, a latent class model is built for a set of indicator variables. Second, the cases are assigned to latent classes. Third, the latent classification scores from Step 2 are related to external variables of interest (Bakk and Vermunt 2021). The three-step model is used as it makes more intuitive sense to first construct a latent class model before connecting it to covariates or distant outcomes (Nylund-Gibson and Choi 2018; Vermunt 2010; Weller *et al.* 2020). Latent GOLD 6.0 corrects the classification error to avoid bias (Vermunt and Magidson 2021). To account for the occurrence of local maxima, multiple starting points (500) and iterations (2,000) were used throughout all steps of the analysis (Vermunt and Magidson 2016). From these multiple starting points and iterations, Latent GOLD automatically shows the best-fitting model.

In Step 1 of the three-step method, a latent class model was estimated for the indicators of multi-dimensional civic engagement. In this process, the fitting indicators and class sizes were determined. During this first step of the analysis a one-class model was estimated, and then classes were added until a model was found that best met the fit indices. As older people who do not engage in any civic activities are included in the LCA, the 'known class' function was used to group the non-engaged into one class. Multiple fit indices as well as the theoretical understanding of civic engagement were taken into account (Nylund-Gibson and Choi 2018). Model fit was explored using the following statistical criteria: the BIC (Bayesian information criterion), with a lower BIC indicating better model fit (Nylund *et al.* 2007); the  $L^2$  likelihood ratio goodness-of-fit, with a non-significant Bootstrap p-value indicating whether a model is statistically worse than the model with one class less (Vermunt and Magidson 2016); and the AIC (Akaike information criterion), where a lower value, just like the BIC, indicates a better model fit (Akaike 1974; Weller *et al.* 2020). Class size was also considered when choosing a fitting model. When class prevalence is substantially unequal, classes are typically

difficult to recover, so more than 5 per cent of the sample is desirable per latent class (Nylund-Gibson and Choi 2018). The sample can be considered large enough as the number of respondents is above 1,000 – which is the highest minimum found in the literature that accurately identifies correct models based on the information criteria (IC) and likelihood tests (Aflaki et al. 2022).

In Step 2 the cases were allocated to their most fitting latent classes, based on inclusion probabilities, which is the likelihood that a random case in the sample will fall under any latent class (Naldi and Cazzaniga 2020). The classes were saved and used in further analyses.

In Step 3, covariates (age, migration background, educational level, perceived economic situation, subjective health, employment status, having a partner in the household) were related to the latent classification scores saved in Step 2 (Vermunt and Magidson 2020), through a multi-nominal logistic regression (Vermunt and Magidson 2016). The findings of the pairwise Wald tests (created during the multi-nominal logistic regression in Step 3) were used to see whether the profiles of multi-dimensional civic engagement differed significantly in terms of the covariates.

## Results

### *Participation of older Europeans in multi-dimensional civic engagement*

Within the entire sample ( $n = 9,031$ ), one-third (32.0 per cent) of the surveyed population did not participate in any civic activities. Roughly another third (32.2 per cent) participated in one activity. This implies that 35.8 per cent of the sample was engaged in more than one civic activity. Table 1 shows that when more civic activities are combined, people are less likely to be in that group (e.g. only 0.7 per cent were engaged in six different civic activities).

Informal care-giving was the most prevalent indicator of civic engagement, at 49.9 per cent: taking care of grandchildren was the most popular activity, displayed by 37.5 per cent of the sample. Formal political engagement was less common, with 7.2 per cent attending meetings or working or volunteering for a union or political party. As for digital engagement, 4.0 per cent commented on political or social issues online.

### *Profiles of older people based on their multi-dimensional civic engagement*

An LCA was performed and, based on the lowest BIC indicator, the six-class model was selected ( $L^2 = 228,870$ ;  $p < 0.001$ ;  $df = 201$ ;  $AIC = 53,729.289$ ;  $BIC = 54,106.035$ ) (Nylund-Gibson and Choi 2018; Weller et al. 2020). It is important to note that none of the other fit criteria pointed towards a six-class model (Table 2). Inconsistent findings across fit indicators are common in LCA models (Weller et al. 2020). The six-class model was preferred over the seven-class model, not only because the six-class model had a lower BIC value but also because the seven-class model had a profile representing less than 3 per cent of the population. This is not desirable as classes are typically difficult to recover when class prevalence is substantially unequal (Nylund-Gibson and Choi 2018).

The LCA identified the following six distinct profiles of civic engagement among older people:

**Table 2.** Model fit indicators of latent class analysis on multi-dimensional civic engagement ( $n = 9,031$ )

	BIC (LL)	AIC (LL)	Npar	L <sup>2</sup>	Bootstrap p	Class.Err.	Entropy R <sup>2</sup>
1-class	59,948.833	59,891.966	8	17,802.676	0.000	0.000	1.000
2-class	58,490.678	58,369.835	17	4,941.416	0.000	0.000	1.000
3-class	55,245.076	55,060.257	26	1,613.839	0.000	0.051	0.891
4-class	54,588.747	54,339.952	35	875.534	0.000	0.096	0.821
5-class	54,240.220	53,927.450	44	445.031	0.000	0.084	0.845
6-class	<b>54,106.035</b>	53,729.289	53	228.870	0.000	0.051	0.910
7-class	54,154.535	53,713.813	62	156.468	0.000	0.081	0.882
8-class	54,147.881	53,643.183	71	106.765	0.000	0.055	0.923

Notes: Lowest BIC is bolded.

BIC: Bayesian information criterion; AIC: Akaike information criterion; LL: log likelihood; Npar: number of parameters; L<sup>2</sup>: the likelihood ratio goodness-of-fit value; classification error; Entropy R<sup>2</sup>: entropy coefficient of determination.

1. *Non-Engaged* (Profile 0)
2. *Informal Care-Givers* (Profile 1)
3. *Association-Engaged* (Profile 2)
4. *Volunteers* (Profile 3)
5. *Politically Engaged* (Profile 4)
6. *Diversely Engaged* (Profile 5)

Table 3 shows the profiles of multi-dimensional civic engagement and the likelihood of being engaged in multi-dimensional civic activities per profile as well as the overall likelihood of engagement of the sample.

As noted before in the descriptives, 32.0 per cent of older European people did not participate in any form of civic engagement. They can be found in Profile 0, the Non-engaged. The first profile, the *Informal Care-Givers*, comprised 22.9 per cent of the sample. They had a low likelihood of participating in civic activities other than informal care-giving: 0.9 per cent in associational activities, 0.1 per cent in informal political engagement, 1.2 per cent in formal political engagement, 0.1 per cent in volunteering and 0.3 per cent in digital engagement. However, there was a high likelihood of caring for grandchildren (62.2 per cent); caring for disabled or infirm family members, neighbours or friends (21.2 per cent); or both (16.6 per cent). Especially the likelihood of caring for grandchildren was twice as high compared to the other profiles (see Table 3).

The second profile, the *Association-Engaged*, represented 12.3 per cent of the sample and was characterised by a strong emphasis on associational engagement (100 per cent likelihood; overall 34.6 per cent likelihood). However, this profile had lower engagement in other civic activities, with a 30.4 per cent likelihood of being engaged in caring for grandchildren; a 10.9 per cent likelihood of caring for a disabled or infirm family member, neighbour or friend; and a 10.2 per cent likelihood of doing both. Participation in other civic activities was very unlikely, with only 0.1 per cent volunteering, 0.8 per cent digitally engaged, 2.9 per cent formally politically engaged and 0.1 per cent informally politically engaged.

**Table 3.** Likelihood of being involved in multi-dimensional civic engagement: profiles from the latent class analysis ( $n = 9,031$ ; in %)

	Profile 0	Profile 1	Profile 2	Profile 3	Profile 4	Profile 5	Overall
Class size	32.0	22.9	12.3	11.7	11.5	9.6	
<i>Informal care-giving</i>							
No informal care-giving	100.0	0.0	48.5	38.7	44.8	25.8	50.1
Cared for disabled or infirm family members, neighbours or friends	0.0	21.2	10.9	18.7	13.1	26.5	12.4
Cared for grandchildren	0.0	62.2	30.4	29.3	29.1	21.0	26.8
Cared for both grandchildren and disabled or infirm family members, neighbours or friends	0.0	16.6	10.2	13.4	13.1	26.7	10.7
<i>Associational engagement</i>							
No	100.0	99.1	0.0	30.2	53.8	10.1	65.4
Yes	0.0	0.9	100.0	69.8	46.2	90.0	34.6
<i>Informal political engagement</i>							
No	100.0	99.9	99.9	74.6	13.4	6.4	78.0
Yes	0.0	0.1	0.1	25.4	86.6	93.6	22.0
<i>Volunteering</i>							
No	100.0	99.9	99.9	0.3	97.0	2.3	78.6
Yes	0.0	0.1	0.1	99.8	3.1	97.7	21.4
<i>Formal political engagement</i>							
No	100.0	98.8	97.2	93.6	85.2	57.1	92.8
Yes	0.0	1.2	2.9	6.4	14.8	42.9	7.2
<i>Digital engagement</i>							
No	100.0	99.7	99.2	98.7	86.9	77.6	96.0
Yes	0.0	0.3	0.8	1.3	13.1	22.4	4.0
Country range in class-membership	5.5 <sup>1</sup> –58.5 <sup>2</sup>	5.8 <sup>3</sup> –47.6 <sup>4</sup>	1.6 <sup>5</sup> –22.2 <sup>6</sup>	1.2 <sup>5</sup> –21.2 <sup>7</sup>	1.4 <sup>8</sup> –30.0 <sup>1</sup>	0.4 <sup>9</sup> –32.6 <sup>1</sup>	

Notes: Rounding up the percentages might yield percentages slightly higher than 100%.

Profile 0: Non-engaged; Profile 1: Informal Care-Givers; Profile 2: Association-Engaged; Profile 3: Volunteers; Profile 4: Politically Engaged; Profile 5: Diversely Engaged.

<sup>1</sup>Sweden, <sup>2</sup>Bulgaria, <sup>3</sup>Germany, <sup>4</sup>Serbia, <sup>5</sup>Turkey, <sup>6</sup>Denmark, <sup>7</sup>Netherlands, <sup>8</sup>Romania, <sup>9</sup>Slovakia

The third profile is identified as the *Volunteers* and comprised 11.7 per cent of the sample, focusing primarily on volunteering activities. There was a high likelihood

(99.8 per cent) of volunteering within this profile. Compared to the first two profiles, individuals in this profile were more active in other civic activities. Associational engagement was prevalent, with a 69.8 per cent likelihood of engagement; informal care-giving was also common, with a 61.3 per cent likelihood. While digital engagement (1.3 per cent likelihood) and formal political engagement (6.4 per cent likelihood) were still not common, informal political engagement (25.4 per cent) was more likely, even higher than the sample's overall likelihood of engagement in informal political activities (22.0 per cent likelihood).

The fourth profile, the *Politically Engaged*, represented 11.5 per cent of the sample. People in this profile had a relatively high likelihood of engaging in both formal (14.8 per cent likelihood; overall 7.2 per cent likelihood) and informal (86.6 per cent likelihood; overall 22.0 per cent likelihood) political activities. There was a 46.2 per cent likelihood of participating in associational activities, while volunteering had only a 3.1 per cent likelihood. This profile also had a 29.1 per cent likelihood of being engaged in caring for grandchildren and a 13.1 per cent likelihood of caring for disabled or infirm family members, neighbours or friends. The likelihood of providing care for both grandchildren and disabled or infirm individuals was also 13.1 per cent.

The fifth and last profile is the *Diversely Engaged*, representing 9.6 per cent of the sample. Older people in this sample showed a relatively high likelihood of engagement in all indicators. Volunteering (97.7 per cent likelihood), associational engagement (90.0 per cent likelihood) and informal political engagement (93.6 per cent likelihood) were particularly prominent in this profile. Additionally, digital engagement had a 22.4 per cent likelihood and formal political engagement had a 42.9 per cent likelihood – the highest among all profiles, surpassing even Political Engagement (14.8 per cent likelihood; overall 7.2 per cent likelihood). Despite their high likelihood of being involved in multiple indicators of civic engagement, the older people in this profile also had a high likelihood of informal care-giving. They were less likely to care solely for grandchildren (21.0 per cent likelihood), but more likely to care for both grandchildren and disabled or infirm family members, neighbours or friends (26.7 per cent likelihood; overall 10.7 per cent likelihood).

The findings also demonstrate the diversity observed across countries, with notable differences observed between the *Non-engaged* group (5.5 per cent in Sweden to 58.5 per cent in Bulgaria) and the less diverse patterns seen within the *Association-Engaged* and *Volunteers* profiles (respectively, 1.6 per cent in Turkey to 22.2 per cent in Denmark and 1.2 per cent in Turkey to 21.2 per cent in the Netherlands). It is noteworthy that Sweden showed a 30.0 per cent likelihood of being part of the *Politically Engaged* profile and a 32.6 per cent likelihood of being part of the *Diversely Engaged* profile, while only showing a 5.5 per cent likelihood of being Non-engaged.

### Comparing profiles on covariates

Table 4 shows the relation between the profiles and the covariates. According to the Wald tests, fitting into the six civic engagement profiles was significantly associated with gender (Wald = 37.19;  $p < 0.001$ ), age (Wald = 269.21;  $p < 0.001$ ), migration background (Wald = 22.99;  $p < 0.05$ ), educational level (Wald = 431.27;  $p < 0.001$ ), perceived economic situation (Wald = 286.23;  $p < 0.001$ ), self-rated health

**Table 4.** Probabilities of covariates of socio-structural resources on multi-dimensional civic engagement: latent class analysis ( $n = 9,031$ ; in %)

	Profile 0	Profile 1	Profile 2	Profile 3	Profile 4	Profile 5	Overall
Class size	32.0	22.9	12.3	11.7	11.5	9.6	
<i>Gender*</i>							
Male	40.1	37.5	45.1	44.9	49.8	50.3	42.8
Female	59.9	62.5	54.9	55.1	50.2	49.7	57.2
<i>Age (years)*</i>							
65–69	25.6	38.5	35.0	39.6	42.9	42.4	35.0
70–74	22.4	28.1	21.6	24.8	28.1	30.0	25.3
75–79	22.4	19.9	22.0	20.6	16.4	18.1	20.5
80–84	17.7	9.9	12.6	10.0	8.1	7.5	12.3
85–89	9.7	2.9	5.5	3.5	4.0	1.9	5.5
90+	2.3	0.7	3.3	1.5	0.5	0.2	1.5
<i>Migration background***</i>							
Native-born	92.6	92.8	94.6	93.5	93.1	92.6	93.1
Foreign-born European	2.8	2.3	2.7	3.0	4.1	4.8	3.1
Foreign-born non-European	4.5	4.9	2.7	3.5	2.8	2.7	3.9
<b>Socio-structural resources</b>							
<i>Education*</i>							
Lower secondary or primary	62.6	58.8	46.3	45.3	33.7	21.7	50.4
Upper secondary or post- secondary	27.8	30.7	34.8	33.7	35.4	30.3	31.1
Tertiary	9.6	10.6	19.0	21.0	31.0	47.9	18.5
<i>Perceived economic situation*</i>							
No problems making ends meet	41.3	42.8	64.8	66.4	70.0	79.6	54.5
Problems making ends meet	58.7	57.2	35.2	33.6	30.0	20.4	45.5
<i>Self-rated health*</i>							
Good health	25.5	31.4	46.0	48.5	50.6	60.0	38.3
Less than good health	74.5	68.6	54.0	51.5	49.4	40.0	61.7
<b>Social capital resources</b>							
<i>Employment*</i>							
Employed	2.7	2.9	5.8	4.0	7.3	10.1	4.5

(Continued)

Table 4. (Continued.)

	Profile 0	Profile 1	Profile 2	Profile 3	Profile 4	Profile 5	Overall
Retired	91.7	89.5	91.1	92.7	89.4	86.8	90.5
Other	5.6	7.6	3.1	3.3	3.3	3.0	5.0
<i>Partner in household*</i>							
No	61.3	42.5	52.1	48.3	43.1	38.2	50.0
Yes	38.7	57.5	47.9	51.8	56.9	61.8	50.0

Notes: \* $p < 0.001$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.05$ .

Rounding up the percentages might yield percentages slightly higher than 100%. All covariates are included simultaneously.

Profile 0: Non-engaged; Profile 1: Informal Care-Givers; Profile 2: Association-Engaged; Profile 3: Volunteers; Profile 4: Politically Engaged; Profile 5: Diversely Engaged.

(Wald = 157.35;  $p < 0.001$ ), employment status (Wald = 29.84;  $p < 0.001$ ) and whether the partner lives in the household (Wald = 117.84;  $p < 0.001$ ).

Both the *Non-engaged* (62.6 per cent) and the *Informal Care-Givers* (58.8 per cent) exhibited a higher percentage of individuals with lower secondary or primary education compared to the overall percentage (50.4 per cent). By contrast, the *Association-Engaged* (46.3 per cent) and *Volunteers* profiles (45.3 per cent) had a lower percentage of individuals with lower secondary or primary education, and the *Politically Engaged* (33.7 per cent) and *Diversely Engaged* (21.7 per cent) profiles had an even lower percentage. Higher educated individuals were more prevalent in the *Diversely Engaged* group (47.9 per cent) and among the *Politically Engaged* (31.0 per cent) compared to the overall likelihood (18.5 per cent). For perceived economic situation, *Non-engaged* (58.7 per cent) and *Informal Care-Givers* (57.2 per cent) were more likely to experience financial difficulties compared to the other profiles. Conversely, the *Diversely Engaged* had the highest likelihood of having no financial difficulties, with 79.6 per cent of the profile reporting no financial hardships, exceeding the overall percentage (54.5 per cent). For health, the *Non-engaged* had a higher likelihood of belonging to the group with less-than-good health (74.5 per cent) compared to the overall percentage (61.7 per cent) as well as *Informal Care-Givers* (68.6 per cent). Conversely, the *Association-Engaged* (46.0 per cent), *Volunteers* (48.5 per cent) and *Politically Engaged* (50.6 per cent) profiles were relatively more likely to not have less than good health. The *Diversely Engaged* profile stood out with the highest likelihood of having good health, at a self-reported 60.0 per cent.

In terms of social capital resources and employment, the *Non-engaged* had the lowest employment rate, at 2.7 per cent, followed by the *Informal Care-Givers* with 2.9 per cent. The *Politically Engaged* profile (7.3 per cent) and the *Diversely Engaged* profile (10.2 per cent) had relatively higher employment rates compared to the overall likelihood of 5.4 per cent. *Informal Care-Givers* were most likely to belong to the 'other' category, at 7.6 per cent (overall 5.0 per cent). The 'other' category included individuals who are not retired but are also not employed owing to various reasons such as being a homemaker or being unable to work. The remaining profiles had a lower likelihood of belonging to this 'other' employment group: *Non-engaged* (5.6 per cent), *Association-Engaged* (3.1 per cent), *Volunteers* (3.3 per cent), *Politically*



*Engaged* (3.3 per cent) and *Diversely Engaged* (3.0 per cent). Additionally, compared to the overall percentage of 50.0 per cent, the *Non-engaged* (61.6 per cent) and the *Association-Engaged* (52.1 per cent) were more likely not to have a partner in the household. On the other hand, the other four profiles were more likely to have a partner in the same household: *Informal Care-Givers* (57.5 per cent), *Volunteers* (51.8 per cent), *Politically Engaged* (56.9 per cent) and *Diversely Engaged* (61.8 per cent).

## Discussion

To gain insight into whether older people engage in multiple civic activities simultaneously, this article studied profiles of their civic engagement to determine which civic activities are combined. It also identified the socio-structural and social capital characteristics of older people who belong to these created profiles.

Six distinct profiles were identified among the older European sample. The biggest engaged profile, the *Informal Care-Givers*, participated mostly in only one activity, namely informal care-giving. The *Association-Engaged* had a high likelihood of associational engagement but still showed more than a 50 per cent likelihood of participating in informal care-giving too. Both these profiles had a low likelihood of participating in any other type of civic engagement. Although the share of informal care-giving was high in this study, research suggests that helping behaviour might be underestimated since some people do not recognise or acknowledge their role as informal care-givers (Verbakel 2018). Furthermore, owing to the data at hand, informal care-giving was studied in this research, thus overlooking other forms of informal helping behaviours such as giving financial or emotional support, and other pro-social behaviours (e.g. Dury et al. 2023; Pego and Nunes 2018; Serrat et al. 2021a). Future gerontological research on informal helping behaviours should acknowledge other types of contributions made by older people themselves, an issue that is still relatively unexplored.

The *Volunteer*, *Politically Engaged* and *Diversely Engaged* profiles evidenced involvement in multiple civic activities simultaneously, but in accordance with their profile name, each with a focus on different aspects of civic engagement. The people in these three more diversely engaged profiles all still showed a relatively high likelihood of engagement in informal care-giving, reiterating the importance of this dimension when studying the civic engagement of older people. The profile that stood out the most in terms of simultaneous engagement was the *Diversely Engaged*. With 9.6 per cent of the sample belonging in this 'super-engaged' profile, a considerable number of older Europeans are civically engaged in several activities simultaneously.

The more diversely engaged profiles support the extension theory (Strauss 2021), which may be explained by the fact that older people involved in volunteering and political engagement are more likely to be involved in other civic activities as well – or, as Musick and Wilson (2008, p. 460) put it, 'participation breeds participation'. Moreover, older people who actively participate in these civic activities appear likely to develop social networks that might encourage their engagement in additional civic activities (Putnam 2000; Verba et al. 1995).

Nevertheless, informal care-giving and associational engagement do not necessarily result in engagement in other civic activities, as evidenced by the *Informal Care-Giver*

and *Association-Engaged* profiles. The results from the *Informal Care-Giver* profile, specifically, are consistent with the role overload theory as these older people are mainly engaged in one activity. It is plausible that the intensity of care-giving is high, which may prevent informal care-givers from engaging in other forms of civic activity (e.g. Bertogg and Strauss 2020; Strauss 2021). This is in line with Dury, De Donder, De Witte, Brosens *et al.* (2015), who found informal care-giving to have a negative relationship with endeavours like formal volunteering and associational activities. As informal care-giving is often done out of a feeling of responsibility or is demand-based, they can cause care-giving burdens because of stressors and perceptual factors (Hermansen 2016; Lai 2010). Nevertheless, it is intriguing that the *Association-Engaged* profile did not show involvement in activities beyond associational engagement or informal care-giving, contrary to the conclusions reached by Dury, De Donder, De Witte, Brosens and colleagues (2015), who suggested a correlation between associational engagement and volunteering, albeit in a study focused on Flanders, the northern part of Belgium. Additional research is warranted to explore this discrepancy. Considering this variety in simultaneous engagement of older people, formal political engagement (7.2 per cent) and digital engagement (4.0 per cent) stood out as the least practised activities. The low percentage of political engagement may be attributed to the measurement used, which did not include voting, a common form of civic engagement for older people (Melo and Stockemer 2014). Serrat *et al.* (2017) identified obstacles to retaining older people in political organisations, including lower means to participate (health, age, time availability), motive-related hindrances (losing interest in the organisation's mission, shifting priorities, fulfilling initial goals), organisational problems (change in philosophy) and the perception of non-necessity of their contribution. This might explain the low percentage of formal political engagement in this study.

Regarding digital engagement, older people appeared less active compared to younger age groups (65–69: 7.8 per cent; 90+: 1.3 per cent). The data for this study was collected in 2016, though, and more recent data could yield different results owing to increasing digital use among older individuals. Additionally, the study's measurement of digital engagement was limited to one item, whereas recent studies assess multiple forms of digital engagement, such as forwarding tweets/emails and participation in online political discussions (Rudnik *et al.* 2020).

Out of all the profiles, the *Non-engaged* had fewer resources, such as lower education, lower perceived economic situation, poorer health and older age, compared to the other profiles. This strengthens the notion that having fewer socio-structural and social capital resources can be an obstacle to being civically engaged. However, after the *Non-engaged* profile, the *Informal Care-Givers* were shown to have the fewest resources. This aligns with other research suggesting that informal care-giving is less dependent on income and socio-economic status, as it is often in response to specific requests for assistance (Hermansen 2016). On the other hand, the *Volunteer*, *Politically Engaged* and *Diversely Engaged* profiles evidenced higher levels of socio-structural resources. The *Politically Engaged* and *Diversely Engaged* showed higher educational level and younger age, in line with studies linking education to political engagement, volunteering and informal care-giving (e.g. Dury, De Donder, De Witte, Buffel *et al.* 2015; Hämäläinen *et al.* 2023; Nie and Hillygus 1996; Verba *et al.* 1995). The causal mechanisms between

educational level and political engagement and volunteering have been extensively studied, including the meaning of higher status, political socialisation and skills acquisition (Musick and Wilson 2008; Willeck and Mendelberg 2022). The *Diversely Engaged* reported even better health, income and educational levels than the *Politically Engaged*, which could explain their higher likelihood of being digitally engaged, as research suggests that the resources of older individuals are crucial factors in predicting their digital engagement (Kebede et al. 2022)

Older people in the *Politically Engaged* and *Diversely Engaged* profiles were also more likely to be employed, which is consistent with findings suggesting a positive correlation between employment and political engagement in older people (Boerio et al. 2021). An important note to the current study is that the measurement of formal political engagement included trade union activities, which are typically more prevalent among employed individuals. By contrast, the study found that volunteering and working may have a substitution effect, with volunteering requiring more time investment than certain forms of political engagement (Bertogg and Strauss 2020).

### Limitations

This study is not without limitations. Parallel to previous research, the choice was made to examine engagement versus non-engagement instead of time invested, which prevents us from making conclusions about the intensity of respondents' civic engagement (e.g. Dury, De Donder, De Witte, Brosens et al. 2015; Serrat et al. 2023). This decision was made as not all items were documented with a measurement of intensity (European Foundation for the Improvement of Living and Working Conditions 2023). Another limitation is that there might be potential overlap among the six indicators of multi-dimensional civic engagement. The overlap was allowed to accentuate the multi-dimensionality of older people's activities (Leedahl et al. 2017). An example of overlap is the distinction between digital and informal political engagement. Digital engagement might also be considered part of informal political engagement, although in this study the indicators were considered separately.

Regarding the generalisability of the current article, it is important to consider the measurement of the indicators of civic engagement described in the methodological section, as levels of engagement might be affected by the way they are measured. For instance, informal care-giving includes various forms of care, including the provision of care to disabled or infirm family members, neighbours or friends, as well as the care of grandchildren. While separating these forms of informal care-giving might produce different profiles, we chose to combine them as they all respond to a request for care-giving. The authors also were not able to separate care-giving within and outside the household, making it redundant to separate the types of care-giving in general (Di Gessa and Grundy 2017; Schmidt et al. 2016; Serrat et al. 2021a). This distinction of informal care-giving is important as care-giving within the household is often less voluntary (Choi et al. 2007) and less frequently combined with other civic activities (Strauss 2021) compared to care-giving outside the household.

In addition, a study by Abraham et al. (2009) found that surveys on topics such as volunteering tend to overestimate other pro-social activities owing to there being

a strong link between the reasons for volunteering and the reasons for taking part in the survey, which can lead to response bias. It is also worth reiterating that the data presented in this study was published in 2016 and that the level of civic engagement among older people may have changed since then. The selection of this dataset over similar databases was based on the inclusion of multi-dimensional civic engagement variables.

The use of LCA analysis appears to be advantageous in identifying different profiles of civic engagement of an older population. However, forthcoming research could broaden its scope by incorporating additional resource covariates like available time and energy to identify supplementary resources and their influence on multi-dimensional civic engagement. Including not only micro-level but also meso-level (living environment) and macro-level (socio-political context) resources may add valuable insights (Serrat *et al.* 2020). Given the significant variations observed across the European countries in this study, alongside the well-documented diversity in political cultures within Europe (*e.g.* Hank and Erlinghagen 2009), future investigations could examine the nuanced differences across Europe to provide a more comprehensive understanding of the dynamics at play.

## Conclusion

Articles such as the present study play a vital role in broadcasting the contributions of older European individuals in civic engagement, revealing diverse profiles and identifying associated resources diversifying civic engagement. The main finding of this study emphasised how varied civic engagement is among this sample of older people. The study specifically showed that a subset of older people evidences high levels of civic engagement by taking part in a variety of activities simultaneously. It is noteworthy that a sizeable section of the sample participated in a smaller number of civic activities simultaneously. Remarkably, even among those engaged in fewer civic activities, there is substantiated engagement in informal care-giving. This study suggests the possibility that some older people may experience role overload, where their commitment to intense helpful behaviours may cause them to scale back on other civic activities. The discovery of these unique profiles highlighted the complex interactions among diverse civic engagement strategies and deepens our knowledge of older people's civic engagement. These results suggest the need for targeted interventions to foster civic engagement among older adults, taking into account the circumstances and preferences of the diverse older population.

The profiles evidenced that less-explored aspects in the civic engagement literature such as informal care-giving constitute a significant part of older people's societal engagement, indicating that both researchers and policy makers need to value and include informal care-giving when studying or promoting civic engagement among older people. Digital engagement also necessitates further attention as future research and practice should consider barriers to older people's digital engagement, by developing interventions tailored to the older population towards ensuring opportunities to engage digitally – given that digitalisation is increasingly influencing civic engagement among older adults.

Additionally, this study contributed to the existing literature on identifying socio-structural and social capital resources linked to specific civic engagement profiles. Policy makers and political and other civic organisations should dedicate additional efforts to reach groups that are less touched by certain civic activities and are thus underrepresented in aspects like the political sphere. Especially older people with lower educational levels, poorer subjective health and lower perceived economic situation – while their efforts in associational engagement and informal care-giving should not be underestimated – need to be approached in alternative ways for other civic activities, as the current endeavours do not seem to favour their inclusion in activities beyond those they already perform.

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